THE EFFECT OF IN-STORE TV ON CUSTOMER-BASED BRAND EQUITY

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Abstract

Title:	The effect of in-store TV on customer-based brand equity
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Keywords:	In-store marketing, brand equity, atmospherics, in-store TV, store environment
Thesis purpose:	The purpose of the study is to provide empirical evidence if the exposure to in-store TV in retail stores does effect customer-based brand equity of the advertised product. The aim is to verify if a causal relationship between in-store TV and brand equity exists.
Methodology:	The underlying research philosophy of this thesis is positivism. A cross-sectional research design and a deductive approach to theory are used. The quantitative data consists of structured observations and structured interviews with a sample size of n=169. A control group was used to be able to compare brand equity levels.
Theoretical perspective:	The main theories can be classified into in-store environment and brand equity. In-store environment includes atmospherics. Brand equity refers to customer-based brand equity and its measurement.
Empirical data:	The empirical work was performed in the Swedish supermarket ICA Kvantum Mobilia in Malmö. Consumers that passed the in-store TV were observed and afterwards surveyed with a questionnaire. A comparison of consumers that viewed the TV with those who did not, makes it possible to analyze and compare customer-based brand equity.
Conclusion:	The findings indicate that in-store TV can in fact influence customer-based brand equity. A causal relationship between the two objects of study is confirmed. The brand equity dimension that showed a significant impact is uniqueness.

Table of contents

CHAPTER 1 – Introduction

The decrease in traditional mass media advertising has lead to search for new ways to reach consumers. Traditional channels like TV and print suffer from effectiveness and even new media channels like the Internet make it hard to reach a big audience (Egol & Vollmer, 2009). This development seems to be very beneficial for retailers, since their in-store environment offers a new media channel that is of increasing interest for marketers. In combination with their increase in channel power, retailers are in a favorable position, as they have the full control over the in-store environment of brands (Kessler, 2004). For consumer brand manufacturers this has certain implications as they have to rely on retailers for their in-store brand communication.

The main reason that makes retailer's in-store environment so attractive is the fact that the consumer is reached in the moment of truth, when the final purchase decision is made at the point of sale (Beatty & Ferrell, 1998). In addition, it is well acknowledged in the literature that a huge percentage of buying decisions are made in-store (e.g. Abratt & Goodey, 1990; McGoldrick, 2002). Research has shown that impulse purchases can present between 27 and 62 percent of store purchases (Bellenger et al, 1978; in Beatty & Ferrell, 1998). Furthermore, the audience reach of retail stores is remarkable because everyone has to do grocery shopping (Egol & Vollmer, 2009). With these factors in mind, it is not surprising that in-store marketing becomes an attractive supplement channel to traditional ones.

In addition, the technological development is a critical factor for the rise of in-store marketing (Egan, 2007). Digital in-store displays and TV's provide retailers with more sophisticated solutions that transform the store environment into a media channel. It is assumed that more advanced technologies especially for the point-of-sale are established in the future, which will lead to higher efficiency in using this medium for marketing purposes (Ibid.).

The growing interest in in-store marketing emphasizes the relevance of this topic but also the need for further insights. Non-academic research has predicted that in-store marketing has a bright future. The consultancy firm Deloitte (2007) investigated the future development of in-store marketing and recognized that it will play a more prominent role in the marketing mix. Another study by Booz & Company came to similar findings, stressing that in-store marketing can increase the effectiveness of marketing campaigns (Egol & Vollmer, 2009). Further evidence for the increasing interest is the P.R.I.S.M (Pioneering Research for an In-Store Metric) project established by Nielsen In-Store and the In-Store Marketing Institute (The Nielsen Company, 2007). Through close collaboration with retailers and brand manufacturers, the aim is to generate new insights on the effective use of this type of marketing. Especially, justifying the effectiveness of in-store marketing is an area where further research is desirable (Ibid.).

In this thesis, the area of interest is a specific form of in-store marketing. In-store TV is a contemporary technology in the retail environment that is established in more and more retail stores. When talking about in-store TV it is referred to digital flat panel screens that are located at the point of sale inside the supermarket. The screens can either be portable or fixed installations, showing content such as price advertisement or product commercials. In Sweden the ICA Group, one of the leading retail store chains in the Scandinavian countries, equipped all its 120 retail formats ICA Kvantum with digital displays (ZetaDisplay, 2009). Since the research study is conducted in Sweden, an ICA supermarket is used for the empirical investigation as no other retailer has such an advanced in-store TV network. To get a better understanding of the research scope, the problem is presented and discussed in the next section.

1.1 Problem discussion and research question

In-store TV is a relatively new instrument and this is also reflected in the academic literature. However, some aspects of in-store TV have already been investigated. Newman, Dennis & Zaman (2006) studied how in-store TV can improve the store image of retailer and enhance the consumer experience. The main aspect was to explore the potential effect of this instrument on the selling environment. Another study addressed the reaction and attitude of different gender and age groups towards in-store TV screen at the point-of-sales (Jørgensen, McCartney & Wallenborn, 2007). Furthermore, the impact on impulse purchase and the variation in male and female behavior was researched (Qayyum & Thi Khuyen, 2007). A research project for the Swedish retail store ICA after implementation of in-store TV displays found, that sales for advertised products increased between 40 and 800 percent (ZetaDisplay, 2009).

In-store TV can be categorized under the theoretical work of atmospherics. Atmospherics refers to controlled stimulus in the retail store environment that can influence consumer behavior (Akhter, Reardon & Andrews, 1987). In the research stream of atmospherics, the most salient aspect is the potential influence on sales (Turley & Milliman, 2000). Therefore, it is not surprising that first studies on in-store TV investigated also the impact on sales. Being aware of the limited knowledge about effects of in-store TV that goes beyond sales, Jørgensen et al. (2007) investigated consumers' attitude towards in-store TV.

The scope of this thesis is to explore other potential achievements of in-store TV screens. More specific, it is looked at possible influence of in-store TV on brand equity of consumer products. Research on sales promotions in the store environment by Palazón-Vidal & Delgado-Ballester (2005) revealed that this instrument can in fact build customer-based brand equity. In addition, literature on brand equity suggests that any marketing activity can potentially enhance brand equity (Keller, 1993; Yoo et al, 2000).

Traditionally, brand building has been done with the help of mass media advertising like television but it has been shown that mass media is ineffective and inefficient (Joachimthaler & Aaker, 1997). The rise of in-store TV technology could thus provide a new form for building lasting impressions of consumer products.
In that regard, the topic addresses two important issues in the use of in-store TV. On the one hand, studying the relationship between in-store TV and brand equity helps to determine the potential of this instrument. That means, it is explored if it is mainly a sales driver or a stimuli that can derive more benefits. On the other hand, the effectiveness of using in-store TV for building customer-based brand equity is assessed. Based on this problem discussion the following research question emerges:

"Does in-store TV stimulus in a retail environment has an effect on customer-based brand equity of consumer products?"

1.2 Purpose

The purpose of this thesis is to empirically investigate if in-store TV has an effect on customer-based brand equity. That means, the focus is on the causal relationship between in-store TV stimuli and customer-based brand equity. The study aim is to reveal if in-store TV can build brand equity and if so, what specific dimensions are influenced.

Besides studying brand equity which is done on the attitudinal level, the behavioral reaction in form of purchase behavior when confronted with the TV is explored. Considering the behavioral aspect serves two purposes. First, it helps to make sure that consumers are surveyed that have passed the TV. Second, it has to be excluded that in-store TV solely elicits impulse purchases without affecting customer-based brand equity. This is necessary as previous studies have revealed that in-store TV can cause impulse purchase behavior.

Since it is intended to investigate a causal relationship, a quantitative research strategy is employed in form of structured surveys and structured observations. The method ensures that solely the effect of in-store TV on consumer-based brand equity is measured, therefore excluding other variables. The literature suggests that stimuli in the store environment but also antecedent variables, referring to factors that influence consumers before entering the store, do influence consumer's attitude and behavior in-store. Consequently, excluding these makes sure that in fact the intended relationship is investigated.
Relevant theories of in-store marketing and in-store environment are used to establish a conceptual framework which guides the research. This framework does also include the aforementioned variables.

The study is performed in a real life setting, an ICA Kvantum retail supermarket that has various in-store TVs. Consumers are observed in order to see if they look at the TV or not. For the structured survey a questionnaire is used that is filled out by consumers. The questionnaire facilitates to measure the consumer-based brand equity. Moreover, consumers are divided into two groups, people that see the in-store TV and those that pass the TV but do not pay attention to it. By doing so, it is possible to measure the difference in brand equity of those groups and determine their variation on the brand equity dimensions.

As until today no academic contribution has been done to investigate this relationship, generated findings are expected to have high relevance. The theoretical contribution is the understanding of a cause-effect relationship with in-store TV as being the cause and brand equity as the effect variable. The research broadens the current theory of in-store TV as stimulus in retail environments. Overall, it contributes to the research stream of in-store environment and atmospherics as well as to brand equity building.

From a practical point of view, more retailers equip their retail environments with TV solutions but it is not evident what potential they have besides driving sales. On the one hand, further empirical data provides an enhanced understanding on how to use the in-store TV instrument in the retail environment of supermarkets. On the other hand, the issue if brand manufacturers can use TV to build brands in-store and to what extent, is explored. As discussed in the introduction, the traditional media channels are loosing reach which makes brand managers think about alternatives. The findings of this thesis can thus, guide brand manufacturers in their decision making on using in-store TV advertisement for their brands.

1.3 Outline

The first part of this thesis gives an introduction to the topic of the study as well as some background information about the current development in that area. After that, the relevance for the thesis subject is addressed, ending with the research question that is to be answered. As final part of chapter 1, the purpose is outlined which states the objective of this study and the main steps necessary to accomplish it.

In Chapter 2 the theoretical foundation is presented and discussed, which covers all relevant literature regarding the research topic. Within the context of in-store environment it is elaborated on atmospheric stimuli, and in particular point-of-purchase and in-store TV screens. This is followed by insights into the concept of consumer behavior caused by in-store stimuli. After that, theory concerning customer-based brand equity is explained followed by influential variables in- and outside the store, that might have an impact on the study.
Based on the theory a conceptual framework is developed. In the conceptual framework all relevant theoretical concepts are discussed and interrelated. By means of a conceptual framework model it is possible to create a construction which allows measuring in-store TV effects on customer-based brand equity. Hypotheses which are to be tested evolve from the conceptual framework as well. The further steps in this thesis are guided by the established framework.

In the next chapter 3, the research methodology required to measure the proposed concept is stated and discussed. In the beginning considerations regarding the research philosophy are elaborated, followed by the chosen research design and research strategy. Rather extensive it is discussed which methods are appropriate to use for collecting the data. The respective sampling technique and data processing are further aspects of relevance. Finally, issues regarding the overall reliability, validity and general limitations of the research are presented.

Chapter 4 deals with the empirical findings derived from the research in the ICA supermarket. The statistical data is presented and analyzed to provide a better understanding of the meaning. This emerges into a discussion of the empirical finding in light of the research question at hand.

Finally, in chapter 5 the general conclusion of this thesis is stated followed by theoretical and practical implications derived. In the last part, some thoughts are given for further research in the area of in-store TV which might be of relevance.

CHAPTER 2 - Theoretical Framework

The purpose of the theoretical framework is to give the reader an overview of relevant concepts used in this thesis, in relation to the research question. Different concepts of in-store marketing, which refers to marketing instruments in retail stores (Zentes, Morschett & Schramm Klein, 2007) are discussed. The starting point is the in-store environment and its application as marketing tool. After that, atmospherics within the store environment are addressed. Since the intention is to study the influence of in-store TV at the point-of-sale, the concepts of point-of-sale and in-store TV within the retail environment are subsequently presented. Then, the influence of consumer behavior through the use of environmental stimuli is investigated. Afterwards, theory on brand equity is specified and it is defined which brand equity model is seen as most applicable for this research. Finally, the conceptual framework and the responding hypothesis are presented based on the discussed theory, which serves as foundation for the empirical study.

2.1 In-store environment

The two fundamental objectives of in-store marketing can be defined as facilitating the search process for customers and create a positive store atmosphere (Zentes et al. 2007). The rapid development of large stores emerged into the need to consider store environments as a whole, offering a shopping experience to consumers, that is attractive and convenient at the same time (McGoldrick, 2002). Already decades ago it was investigated that shopping is more than its utilitarian function of obtaining tangible products (Martineau, 1985 in Wright et al., 2006). More and more, shopping is about experience as well as enjoyment and thus, of hedonic value (Ibid.). Stores are therefore increasingly converted into a 'retail interactive theatre' as response to the current experience economy, in which consumers demand a more experiential retailing (Mahler, 2000 in McGoldrick, 2002: 453). According to Zentes et al. (2007) experiential retailing refers to the in-store environment offering a pleasurable and memorable sensory experience, which aims to convert shopping as being exciting, interactive, and enjoyable for the consumer. The focus of in-store environment lies not solely on the store itself, but also on interacting with customers, adding to an overall stimulating experience and finally, to increase purchases within the store (McGoldrick, 2002).

According to Hu & Jasper (2006) a retailer's store can even be regarded as a place for socializing. Consumers are more likely to shop in a store with in-store displays of graphics with social meanings, leading to an overall competitive advantage of the store (Ibid.). Wright, Newman & Dennis (2006) argue that consumers actually feel empowered when they are able to enjoy the consumption process. Consumer empowerment comprises the concept that through stimuli in the store an environment is created, where consumers want to stay longer, increase purchases, are more satisfied and finally enhance impulse purchases (Ibid.).

A pleasant in-store environment can enhance the overall image of a store, forming the source for competitive advantage (Burt & Carralero-Encinas, 2000). Store image furthermore depicts the basis of retail brand equity which is elaborated at the end of this chapter (Ailawadi & Keller, 2004). Although the relevance of store image in retailing is undoubted, its definition is still discussed in academic literature. Various retailer attributes have been studied which could possibly influence the overall store image such as product variety and quality, appearance of the store, behavior of employees, price level, promotions and so on (Ailawadi & Keller, 2004). Other researchers categorize these attributes more broadly into location,

service, merchandise and dimensions related to store atmosphere (Lindquist, 1974; Mazursky & Jacoby,1986; in Ailawadi & Keller, 2004). In general, it comprises a combination of tangible and intangible dimensions (Burt & Carralero-Encinas, 2000), whereas Ailawadi & Keller (2004) refer to the five dimensions access, in-store atmospherics, price and promotion, cross-category product/service assortment and within-category brand/item assortment which are based on more recent research regarding that topic. As the purpose of this thesis is to study effects of in-store TV on customer-based brand equity, it has to be taken into account that in-store TV screens as element of in-store atmospherics could possibly alter the overall store image either in a positive or negative way. This argument is further stressed by Berry (1969; in McGoldrick, 2002: 184) who brings forward that "*an image is the result of differential reinforcement in the context of a given stimulus or set of stimuli*". To better understand the concept of in-store atmospherics, the various stimuli and atmospherics found in the in-store environment are elaborated in more detail below.

2.1.1 Atmospherics

The term atmospherics refers to stimuli in the store environment which have a direct influence on consumers purchase behavior (Akhter et al., 1987). In-store stimuli are defined as promotional techniques like point-of-purchase displays, price-off promotions, in-store demonstrations etc., which assist consumers in making purchases but also elicit (impulse) purchases (Abratt & Goodey, 1990). Kotler (1973) was the first to define the term atmospherics as intended control and structuring of cues in the environment (in Turley & Milliman, 2000). A distinction is made between two types of shopping motives. Task completion has utilitarian motives, which means buying necessary items whereas recreational shopping has hedonic motives, and refers to leisure time shopping or store browsing (Zentes et al., 2007). However, no matter what the underlying motive is, store atmosphere is in both cases important (Ibid.).

By manipulating atmospherics, retailers are able to influence consumer behavior. Well managed atmospherics can command attention, convey a store image and influence service expectations (Yani-de-Soriano & Foxhall, 2006). Furthermore, McGoldrick and Pieros (1998) propose that atmosphere is a medium that affects purchase behavior by creating attention, generating a message and producing an affect. While attention and message contribute to consumers general decisions of selecting a store, producing affect is about influencing shopping behavior within the store (Ibid.)

Realizing that consumers get influenced by physical stimuli at the point-of-purchase alludes to the necessity of creating influential atmospheres, as essential part of a retailers' marketing strategy (Ibid.). The atmosphere created by the store environment is usually perceived through the sensory channels of sight, sound, scent and touch (McGoldrick & Pieros, 1998). That means visual, aural, olfactory, tactile and gustatory elements influence the consumer perception of the store environment (Ibid.). Previous research revealed the impact of atmospheric stimuli such as music, crowding and color, on the variables time spent, sales and impulse buying of consumers (Turley & Milliman, 2000). According to Turley & Milliman (2000) atmospheric stimuli can be classified more narrowly and therefore, be divided into the four categories: *exterior* such as entrances and building architecture, *interior* like scent, sound and temperature, *layout & design* including among others space design and merchandise placement and lastly *point-of-purchase & decoration variables* (Turley & Milliman, 2000). A fifth category, the *human variables* like for example crowding and employee characteristics, is considered in this literature stream as well (Ibid.). Nonetheless, in this context the variable

of point-of-purchase and decoration is considered as most relevant due to the fact that our scope is in-store TV screens at the point-of-purchase.

2.1.2 Point-of-purchase and decorations

Turley and Milliman (2000) define point-of-purchase and decorations as an atmospheric variable, existing of products as well as point-of-purchase displays, signs, cards, posters, any decorations on the wall and teletext messages. All types of promotion instruments used at the point-of-purchase can be summarized under this umbrella. Considering the aforementioned definition of in-store stimuli, it seems plausible to put forward that all these promotional tools can be defined as such.

Displays are among the most used stimuli at the point-of-purchase. McGoldrick (2002) noticed a general shift away from window displays to a store's overall display potential, as in-store displays support a rather intimate and exciting atmosphere. Various studies investigated the effectiveness of displays in-store. By investigating 14 empirical studies in this research area, Turley and Milliman (2000) revealed that through the use of point-of-purchase displays, sales in supermarkets could be increased by about 388%. Wilkinson et al. (1981 in McGoldrick, 2002: 476) conclude that "*The effect of increasing shelf space was negligible compared to the sales effect of building a special display*". Further it has been investigated that signs and displays function as important information carrier which can influence consumers' purchase behavior. Brands are more likely chosen where signs or displays provide slightly more information, over brands of equal quality with less or non-existing information (Turley & Milliman, 2000). Another evidence for the impact of displays on consumers is described by Areni, Duhan & Kieker (1999). The authors expose that rearranging wine displays by region and not by color or variety increases the salience of the region criterion within consumers' product choice (Ibid.).

Having investigated empirical studies of atmospherics that effect consumer behavior, Turley and Milliman (2002) emphasize the need for future research on the effectiveness and impact of in-store TV screens on consumer behavior and sales. However, as has been revealed, the impact of atmospheric stimuli at the point-of-purchase on consumers is manifold. In the next part, in-store TV as one of the main object of this thesis is presented.

2.1.3 In-store TV

In-store TV screens are one of the contemporary developments in retail environments that should support retailers in creating value (Clarke, 2006). The term in-store TV refers in this context to flat-panel screens that can be found in retail stores at the point of sales of products. The retailer Wal-Mart has one of the most advanced in-store TV networks which is used for news, weather, entertainment and advertising (Petrecca, 2007). It is argued that in-store TV has the advantages of reaching a huge audience and delivering customized content in a buying situation at the point-of-sale (Ibid.)

Clarke (2006) suggests the use of in-store TV is especially useful to enhance the store experience. Besides providing information, plasma TV screens can increase pleasure and potentially other emotions that can change consumer's perceived image of retail stores (Newman et al., 2006). The perspective that product messages and colorful displays do in fact influence the atmosphere, delivers further evidence of the importance of the inanimate selling environment (Ibid.). Another research study on in-store TV in a shopping mall stated findings

that the TV screens had a positive influence on consumers perception of the shopping environment (How and Why, 2004). Plasma TV screens are a highly effective form of media that can be used as advertising or information providing medium, to enhance customer experience (Newman et al., 2006). In selling environments, the strategic use of TV should help optimizing the information rate and convey relevant information (Ibid.).

Based on these findings it can be ascertained that in-store TV is an external stimuli in the store environment. The main purpose of in-store TV is to provide information in form of entertainment or advertising. Like other stimuli it can provoke positive emotions by generating a pleasant atmosphere, with an approach behavior as response (Newman et al., 2006).

However, it has to be acknowledged that in general not all groups might perceive in-store TV in the same way. Newman et al. (2006) stated that especially groups of older and senior people perceived TV screens in some cases as disturbing rather than entertaining.
One of the key issues of in-store marketing and especially in-store TV is to define and measure their actual effectiveness. As a response, the P.R.I.S.M (Pioneering Research for an In-Store Metric) project was founded by Nielsen In-Store and the In-Store Marketing Institute (The Nielsen Company, 2007). In collaboration with leading manufacturers and retailers it is aimed at generating new insights of in-store marketing with regard to traffic, sales, demographics and marketing influences (Ibid.). The academic literature on the effectiveness of in-store TV is also somewhat limited. Only few researchers have addressed possible influences of in-store TV (e.g. Newman et al., 2006). Above all, the impact on customer-based brand equity has not been addressed yet. Thus, the intention of this thesis is to investigate the effectiveness of in-store TV screens to build brands in-store. It is explored how in-store TV does influence customer-based brand equity of consumer brands in retail stores. In the current academic literature, no research was found that has addressed this issue so far. This seems rather surprising, as the importance of in-store marketing is acknowledged and as mentioned before, retailers start building up their own TV networks in-store.

2.2 Consumer Behavior

Consumer behavior in retail stores is about the decision making process that occurs before the product is bought and expressed by the actual choice (Hoffman & Turley, 2002). Consumer's purchase behavior can be affected by external and internal factors (Diehl & Terlutter, 2006). External factors affect an individual from the outside, while internal factors refer to the inner processes that have an impact on the individual (Ibid.). As the focus of this research is on in-store atmospherics, it is mainly dealt with the external factors that affect consumer behavior.

It has been shown that the in-store environment exerts a very strong impact on the consumer behavior by influencing choice (Zentes et al., 2007). Especially, the environmental stimuli that can be controlled and manipulated by retailers and their resulting impact on consumer behavior are of importance. Hoffman & Turley (2002) found a strong relationship between atmospherics and the response in consumers shopping behavior. In this paragraph the question on how consumers react when confronted with in-store stimuli at retailers is explored, which determines the link between atmospherics and customer behavior.

The use of atmospherics to influence consumer behavior derived from the theory of environmental psychology (Hoffmann & Turley, 2002). With the help of the stimulus-organism-response (SOR) model, environmental effects on consumer behavior can be

explained. The model illustrates that the influence of a stimuli (e.g. in-store promotion) on an organism (e.g. customer) leads to a certain response or outcome (Hoffmann & Turley, 2002). The cognitive and affective response of customers to the store environment is mainly determined through the combination of the in-store stimuli and personality variables of the customer (Donovan and Rossiter, 1982; in Zentes et al., 2007).

Physical or social stimuli are considered to affect the emotional state and in that way influence behavior (Yani-de-Soriano & Foxall, 2006). It is argued that in order to provoke an emotional reaction, a certain rate of information is necessary (Wright et al., 2006; Newman et al, 2006). Information that has been proven to provoke an emotional reaction of consumers is for instance aroma, music and video screen media (Wright et al. 2006).
The three main emotional responses that mediate consumer behavior are pleasure, arousal, and dominance (Yani-de-Soriano & Foxall, 2006). Pleasure ranges from happiness to unhappiness, arousal refers to physical activity and mental awareness, and dominance means the feeling of control opposed to lack of control (Ibid.).

When the consumer feels a positive emotional state such as pleasure from stimuli, a positive experience is created which leads to approach behavior (Turley & Milliman, 2000; Zentes et al., 2007). Approach behavior does have a positive impact on aspects such as time spent in-store, impulse buying and sales (Ibid.). Avoidance behavior on the other hand, occurs when stimuli elicit a negative consumer experience (Turley & Milliman, 2000). Avoidance behavior causes a negative consumer reaction which can result in less time spend in-store or decreasing interest for the store environment (Ibid.). Thus, designing stimuli in a way that affects the emotional state of individuals in a positive way will result in a positive behavioral influence and enhanced mood of shoppers (Wright et al., 2006).

When exploring consumer behavior in a retail context, addressing the reaction to atmospherics in form of impulse purchases as behavioral response is imperative. Turley & Milliman (2000) stated that the sales and purchase behavior effects are regarded as the most widely studied variables in the research stream of atmospheric. Impulse purchase can be defined *"as a purchase decision made in-store with no explicit recognition of a need for such a purchase prior to entry into the store"* (Abratt & Goodey, 1990: 111). Research states that a pleasant and highly stimulating store environment causes an increase in impulse purchasing (Matilla & Wirtz, 2008). When consumers are stimulated and excited by in-store stimuli it leads to decreased self-control which effects consumer's ability to resist purchase and think through their actions (Ibid.). Similarly, Abratt and Goodey (1990) suggest that one of the main explanations of impulse purchase is the exposure to in-store stimuli.

2.3 Brand equity

Due to the fact that it is aimed to measure a possible impact of in-store TV stimuli on customer-based brand equity, different perspectives on brand equity as such are discussed. In academic literature the definition of brand equity is still argued (Atilgan, Aksoy & Akinci, 2005). Nonetheless, it can be said that there exist mainly two perspectives of brand equity, a customer-based perspective and a financial perspective (Lassar, Mittal & Sharma, 1995). Whereas the first evaluates a consumer's response to a brand name (Keller, 1993; Shocker et al., 1994, in Lassar et al., 1995), financial brand equity refers to estimating the value of a brand (Anselmsson, Johansson & Persson, 2007). In the context of customer-based equity, Srivastava & Shocker (1991; in Lassar et al, 1995) refer to the two components of brand equity in terms of brand strength and brand value. *"Brand strength constitutes the brand*

associations held by customers... brand values are the gains that accrue when brand strength is leveraged to obtain superior and current future profits" (Lassar et al., 1995: 11). This supports the argument to focus on customer-based brand equity as it precedes and contributes to financial brand equity (Anselmsson et al., 2007). However, in this thesis it is focused on customer-based brand equity since it is aimed at measuring changing consumer perception of brands through in-store stimuli exposure.

Within the framework of customer-based brand equity it is distinguished between a behavioral and a cognitive approach (Silverman et al., 1999; in Rajh, Vranesevic & Tolic, 2003; Myers, 2003). Yoo et al. (2000; in Rajh et al., 2003) present an example of focusing on the behavioral approach and define it as "*the difference in consumer choice between the focal branded product and an unbranded product given the same level of product features.*" (Yoo et al., 2000; in Rajh et al., 2003: 264). The cognitive approach involves different dimensions of consumer perceptions of a brand such as awareness, associations and perceived quality (Myers, 2003). In this context it has to be mentioned that the cognition or perception of a brand is antecedent to behavior. Myers (2003) stresses how thin the line is between cognition and behavior, arguing in favor to incorporate both dimensions. It is therefore also suggested to measure cognitive dimensions of customer-based brand equity by "*judging behaviour to be a consequence of brand equity rather than brand equity itself*" (Lassar et al., 1999). These insights provide crucial information for a suitable measurement approach of brand equity and are elaborated further in the methodology part.

When it comes to the cognitive approach of customer-based brand equity, Aaker (1991) and Keller (1993) are the most known and referred concepts. Their customer-based brand equity models focus both on how consumers perceive and evaluate brands through the investigation of certain knowledge structures like awareness, image and the personality of a brand (Aaker, 1991; Aaker, 1997; Keller 1993; in Esch et al., 2006). Although Aaker's and Keller's perspectives are similar in their essence as they stress the importance of awareness as prerequisite to a strong brand (Anselmsson, 2007), the authors define brand equity dimensions slightly different. While aspects such as quality, image and associations are of relevance in both frameworks, Keller's definition is considerably wider (Ibid.). In order to provide a better understanding both frameworks are discussed below.

Aaker's framework is probably most often cited, since it is considered as most practical and easy to measure (Anselmsson et al., 2007). It comprises the four dimensions: loyalty, awareness, perceived quality and associations (Aaker, 1991). Keller discusses brand equity in a broader sense. He conceptualizes customer-based brand equity as: "*the differential effect of brand knowledge on consumer response to the marketing of the brand.*" (Esch et al., 2006: 99). According to Keller, customer-based brand equity exists if the consumer is aware and familiar with a brand and further, has some positive associations about it (Esch et al., 2006). This concept is based on brand knowledge existing in two different forms: brand awareness and image (Esch et al., 2006; Atilgan et al., 2005). Palazón-Vidal & Delgado-Ballester (2005) underline Keller's argument that brand knowledge is crucial for building brand equity. This knowledge building is depended on "*brand elements, marketing programmes, and the leverage of secondary associations*" (Palazón-Vidal & Delgado-Ballester, 2005: 181). As a consequence brand equity can lead to potential benefits for the company owning the brand (Ibid.). Considering the postulation that brand knowledge is the source of brand equity, Palazón-Vidal & Delgado-Ballester (2005) argue to focus solely on marketing activities as tool in order to build brand knowledge. Due to the fact that brand knowledge involves information linked to the brand like for example attributes, thoughts, benefits, feelings and

experiences, it is stressed that brand knowledge can be affected and changed by the experience of sales promotions (Ibid.). The fact that marketing activities and in particular advertising can be regarded as brand drivers is supported by previous research. Rajagopal (2006) for example advices companies to heavily use advertising strategies in order to build effective brand personalities. A new perspective which seems to evolve in this context is the postulation by Palazón-Vidal & Delgado-Ballester (2005), stressing the positive effects on brand equity through marketing driven brand knowledge building at the point-of-sale. This statement alludes to the assumption that in-store TV could possibly result in similar effects if used as a marketing tool to enhance brand knowledge.

When it comes to the loyalty aspect of customer-based brand equity, Keller and Aaker disunite in their perspectives (Anselmsson et al., 2007). Whereas Aaker considers loyalty as part of brand equity, Keller refers to it as a consequence of a strong brand and its assets (Ibid.). Loyalty is according to Aaker one of the four dimensions of brand equity. Most empirical research is based on Aaker's conceptual framework of customer-based brand equity. Anselmsson et al. (2007) adapted this model to the specific regards of grocery products. Due to the fact that the purpose of this thesis is to study the effects of in-store TV on customer-based brand equity in the grocery retail environment, the adapted model is briefly discussed.

Five dimensions emerge as being relevant for grocery products which are awareness, perceived quality, associations, loyalty and uniqueness (Anselmsson et al., 2007). The main difference compared to Aaker's brand equity model is that uniqueness is an important dimension on its own, rather than part of associations (Ibid.). The brand equity dimensions for grocery products based on Anselmsson et al. (2007) are briefly presented in the following.
Awareness is for grocery products quite essential as consumers need to recognize their brand at the point-of-purchase. The avoidance of uncertainty is also an important aspect of awareness. *Perceived quality* is influenced by intrinsic and extrinsic attributes. Intrinsic cues are related to the ingredients and taste of grocery products. The most important extrinsic cues that influence perceived quality are price, brand name and promotion. *Brand associations* for grocery products can be related to the product itself like country of origin, promotion, health related aspects but also to the company behind the product, its success and social responsibility. In all cases, creating a high level of trust is important as most associations can not be proofed directly. *Loyalty* can be divided into three different types. Behavioral loyalty refers to the repeated purchase. Attitudinal loyalty consists of a favorable attitude and preference towards a product. Finally, cognitive loyalty means that a brand comes to mind when a purchase decision arises. *Uniqueness* is seen among grocery products as especially important due to the extensive product range in supermarkets. In this context, uniqueness is described by customers as being the best, often as illustrated by a special attribute bundle. It has to be acknowledged that the perception of uniqueness is always in comparison to other available brands. This is also true for the other brand equity dimensions.

Although the focus of this research is on customer-based brand equity for consumer products, the retailer brand equity can not be ignored. In a retail setting, the store environment that is made up of tangible and intangible aspects influences the consumer perception and the resulting image (McGoldrick, 2002). The store atmosphere plays a crucial role in building retailer brand equity by creating a strong in-store personality and enhanced experiences (Ailawadi & Keller, 2006). In-store personality consists of various store components and is also defined as the store image (Solomon, Bamossy & Askegaard, 1999). Retailer's image becomes an important foundation of retail brand equity, since the image has an impact on

consumer preferences and shopping behavior (Ibid.). The consumer-based retail equity is in its essence similar to the customer-based brand equity for consumer products, since it is also viewed from a consumer perspective. Pappu and Quester (2006) define *retailer awareness, retailer associations, retailer perceived quality and retailer loyalty* as the main dimensions of consumer-based retailer equity. The same dimensions are determined by McGoldrick (2002), though he includes an additional dimension called "other brand assets" which refers to logo, trademarks, own-brand products, supplier networks and relationships. Overall, both concepts draw on the brand equity dimension developed by Aaker (McGoldrick, 2002; Pappu & Quester, 2006).

Due to the fact that the research at hand about the effects of in-store TV on customer-based brand equity is conducted in retail stores, it is acknowledged that retail brand equity can be potentially altered. The use of in-store TV presents an additional stimulus in the store environment and as such, can potentially influence the perceived in-store personality and experience. Furthermore, the research discussed before on in-store TV screens in selling environments by Newman et al. (2006), revealed that using in-store TV influences consumer perception of the atmosphere. This change of consumer perception does in turn alter the store image positioned in the consumer mind (Ailawadi & Keller, 2006). The store image as overall reflection of a retailer brand has an impact on consumer-based retail equity (Ailawadi & Keller, 2006; Pappu & Quester, 2006).

In addition, a pleasant store atmosphere can also lead to a higher quality perception of private label products as stated by Richardson, Jain & Dick (1996; in Ailawadi & Keller, 2006). The potential implication for this thesis is that when using private label products for the empirical work, the result is expected to be biased. A potential increase in brand equity would be caused by an increased atmosphere and only indirectly through in-store TV. As the intention is to investigate the direct relationship between in-store TV and consumer-based equity, no private retail brand of the store are used.

2.4 Other influences on customer-based brand equity

Within the context of stimuli effecting consumer behavior in the in-store environment it has to be taken into account, that a consumer's purchase process is already influenced before the consumer enters the store. This is in line with the aforementioned postulation that consumer response to a store environment is elicited through in-store stimuli and personal variables (Donovan and Rossiter, 1982; in Zentes et al., 2007). It is further argued that "*shoppers to a larger extent attributed entertaining in-store experiences to customer factors, i.e. to factors that they themselves controlled*" (Bäckström & Johansson, 2006: 418). The personal variables consumers bring with them in the store which can impact the purchase process are also referred to as antecedent states. Solomon (1999: 237) confirms that "*consumer's choices are affected by many personal factors, such as mood, time pressure and the particular situation for which the product is needed*". Hence, it can be assumed that the respective antecedent state could potentially influence how a stimulus is perceived by consumers and if it is perceived at all. Besides that, there are various other possibilities in a purchase environment which could have an impact on the consumer purchase process (Ibid.). Knowing that there are variables which can influence consumers purchase process before entering a store and in the store, it can be assumed that customer-based brand equity could be impacted by other variables than the in-store TV stimulus. In the following antecedent state and purchase environment variables are discussed which are of relevance for the case at hand.

When it comes to the antecedent states of consumers, *time* presents one variable which is of relevance to elaborate. The available time determines the decision making and consumption of consumers (Solomon et al., 1999). That means, a consumer that is not in a hurry and has time available is more likely to search for information in the store environment (Beatty & Ferrell, 1998). Besides that, a consumer's *mood* can impact purchase decisions and is determined by the level of pleasure and arousal (Solomon et al., 1999; Beatty & Ferrell, 1998). Before entering a retail store the consumer is already in a specific mood state. Furthermore, in the store various factors can influence consumer mood (Bäckström & Johansson, 2006). Previous research on in-store TV screens showed that it will enhance consumer's mood and elicit emotions (Qayyum & Thi Khuyen, 2007). It is proposed that when the exposure to in-store TV results in a pleasurable emotional state, customer-based brand equity might have been more likely affected. Also *shopping motives* presents one of the antecedent states consumers can possess. Shopping is an activity that is done for utilitarian or hedonic reasons (Solomon et al., 1999). Identifying the underlying reason for shopping might help to determine the degree of proneness towards in-store stimuli. A consumer with pure utilitarian motives for shopping might ignore stimuli unless the advertised product is needed. This is due to the fact that the task-oriented consumer derives pleasure from the outcome (obtaining the needed product) of the shopping activity (Kaltcheva & Weitz, 2006). When shopping for hedonic reasons, the experience is more important as the shopping activity should bring fun and entertainment (Backström & Johansson, 2006). Consumers with hedonic consumption of the shopping environment emphasize the multisensory, fantasy and emotive aspects of the experience (Ibid.). Furthermore, they obtain rewards from the shopping activity itself and consequently demand a high-arousal environment (Kaltcheva & Weitz, 2006). *Shopping list* as antecedent state is a rather self-explanatory term. Sometimes, grocery shoppers prepare some type of list for major grocery shopping trips, either written or in mental form, or otherwise use store environment cues (Thomas & Garland, 2004). The shopping list is used to explore if the consumer already planned to buy that specific brand or an item of that product category beforehand. The *attitude towards TV screens* is the last relevant variable of consumers potentially being predetermined towards the receptiveness of this medium. In-store TV screens can either be regarded as a source of information or as an atmospheric factor towards which consumers can have positive or negative attitudes (Jørgensen et al., 2007). Previous research has shown that in-store TV is especially appealing to a younger shopper generation (8-26 years) as they like to get entertained most in the store environment and consider TV screens as a useful source of information, whereas some of the older age groups rather dislike in-store TV (Ibid.).

However, also in the purchase environment academic literature refers to various factors which can influence consumer's purchase process. One of these is the *packaging* of a product being considered as brand communication tool that influences brand beliefs and can lead to more favorable brand evaluation (Underwood & Klein, 2002). Furthermore, packaging conveys meaning in form of brand values and can predict consumer's purchase intentions (Limon, Kahle & Orth, 2009). In addition, a product's *price* is an element that attaches certain associations to the brand and influences the perception (Keller, 2001). Moreover, it determines how consumers categorize the brand into low, medium, or high class (Ibid.).

2.5 Conceptual framework

In the conceptual framework, the approach to the study is demonstrated and the main hypotheses are drawn. It is aimed at presenting a concept that helps to solve the research purpose (Easterby-Smith et al., 2008). The previous part of this chapter has reviewed the main theories that seem to be of relevance for this study. There has not been any known research before which addresses the relationship between in-store TV and customer-based brand equity. Therefore, all aspects that seem to be relevant to fulfill the purpose of the study are drawn together. This leads to a better understanding why the chosen approach to the study is suitable and what ideas as well as theories are included. The main aspects for the framework are obviously those that help to measure the concept of brand equity. Therefore, one has to go one step back to be able to measure the actual intended concept.

2.5.1 Excluding influential variables

The reason why variables not related to brand equity have to be measured is due to the fact that these can potentially bias the studies. On the one hand, the receptiveness towards in-store TV can be biased by such variables and on the other hand, brand equity. That means, by excluding these variables it is made sure that the actual relationship and causality is investigated. It avoids biases in the measurement and thus, adds to the validity of the study. All variables that were identified in the literature as being relevant, as they could have an effect on customer-based brand equity or the perception of TV, were determined previously. The main antecedent state variables that are relevant for the case at hand are *time, mood, shopping motives, shopping list*, and *attitude towards in-store TV screens*. Antecedent state variables determine how receptive a consumer will be to in-store TV stimuli when entering the store. This entails that some consumers are due to the influence of the variables more likely to pay attention to the in-store TV, than others. Drawing on the categories of Solomon et al. (1999) there are further variables that influence the consumer in the purchase environment. Of relevance in this research study are the variables *packaging* and *price* which could directly impact the respective brand equity dimensions. Hence, both types of variables are of major relevance and have to be excluded when conducting the research in order to be certain that the source of customer-based brand equity is indeed the in-store TV screen. The following paragraph serves to explain the reason for each variable to be included in the conceptual framework.

It is assumed that a consumer with a lack of *time* is not likely to spend time in front of the in-store TV. Studying this variable helps to exclude the fact that the ignorance of this medium is due to a lack of time. With regards to *mood*, the intention is to explore if in-store TV screens changes customer-based brand equity only due to altering the mood state of the consumer. Under consideration of the respective *shopping motives*, hedonic shoppers have proven to possess of a higher preference for in-store stimuli than utilitarian shopper. In that sense, it is assumed that consumers with hedonic shopping values are more receptive for in-store TV, since they are browsing through the retail environment which makes them more open towards atmospheric stimuli. This would mean that the hedonic motive automatically affects attention paid to in-store TV and thus the customer-based brand equity is not triggered by in-store TV alone. Investigating this variable serves to exclude the possibility that customer-based brand equity caused by in-store TV is more receptive to hedonic shoppers due to their rather multisensory-oriented shopping motive. Furthermore, if the brand purchase was planned in advance, by means of a *shopping list*, customer-based brand equity is already given to some extent. In addition, the purchase decision for the product is taken outside the store, it makes in-store stimuli less attractive for consumers. In case, a purchase from the category is planned

but without specifying a brand before, the change of being affected by in-store TV is seen as higher to other consumers in the store. The likeability to search for environmental cues for products within the particular category seems to be given, and should therefore be excluded. The fact that different *attitudes towards in-store TV* can lead to a negative perception such as "clutter" or positively improve the overall image of the store are crucial aspects to consider when investigating in-store TV stimuli influencing customer-based brand equity. Exploring the general attitudes towards in-store TV screens might reveal if the consumer can be influenced by this stimulus at all. More specific, a predisposition in form of negative attitude towards in-store TV screen is not expected to increase customer-based brand equity. Investigating this variable assists in excluding that customer-based brand equity is not influenced due to a negative attitude towards this stimulus in general.

Finally, it has to be excluded that the product *packing* is the source of increased customer-based brand equity, to ensure that the effect is caused by the in-store TV screen. The same is true for *price* since it influences the association dimension of the customer-based brand equity and therefore depicts a variable that has to be removed.

2.5.2 In-store TV screen as stimulus

The in-store TV screen as stimulus is a key element in this research study and thus a crucial concept to elaborate on. Drawing on the theory of atmospherics, an in-store TV in the retail environment is defined as atmospheric stimulus. This was confirmed by previous research addressing the impact of in-store TV on impulse purchase (Qayyum & Thi Khuyen, 2007). The relation to brand equity is derived from the fact that higher brand equity can generally be achieved by any marketing action (Yoo et al., 2000). In the same way Keller (1993) proposes that customer-based brand equity can be built up with marketing activities like in-store advertising. Since in-store TV can be categorized as marketing stimulus, it is assumed that a potential effect on brand equity derives from it as well. Since the effects caused by in-store TV are investigated, it is essential to include TV in the conceptual framework.

2.5.3 Customer-based brand equity

As main object of this study, the customer-based brand equity concept is essential for the conceptual framework. Research has shown that customer-based brand equity for grocery products can best be measured with the chosen dimension presented in the framework (Anselmsson et al., 2007). The proposed customer-based brand equity concept combines consumer perception (e.g. awareness, brand associations, perceived quality) and consumer behavior (e.g. brand loyalty) which is the main strength of this approach (Cobb-Walgren et al., 1995). Consumer perceptions are a precursor of behavioral action, as behavior is driven by the perception of the brand (Ibid.). Likewise, Keller (1993) states that a consumer's overall evaluation of a brand, the so called brand attitude, is the basis for consumer behavior. Further support comes from the theory of reasoned action (Fishbein & Ajzen, 1975) which proposes that beliefs and attitudes are the precedents of intended and actual behavior (Ibid.).

In fact, brand equity can be used to evaluate the brand building activities and therefore, identify the crucial sources (Aaker, 1996). As the purpose of this research is to investigate this potential effect, the proposed customer-based brand equity concept is significant. This is supported by Vázquez, Belén del Rio & Iglesias (2002: 28) by stating that *"…in order to identify the potential sources of brand equity, the consumer-based analysis of brand equity proves to be critical' "*.

Finally, using a relative measurement of brand equity which means evaluating each individual dimension of brand equity is essential to analyze the potential impact. An absolute measure in terms of calculating a total brand equity score is mainly useful for comparing the overall performance of different brands such as in benchmark studies (Cobb-Walgren et al., 1995).

2.5.4 Consumer behavior response

Integrating the behavioral response as variable in the conceptual framework serves two purposes. First, behavior is a potential reaction that is caused by the exposure of an in-store stimulus and second, it can be used as a control variable.

To start with the first purpose, it is draw on the theory of the stimulus-organism-response (SOR) model. With the help of the SOR model the interaction between atmospherics and consumer behavior is determined (Hoffmann & Turley, 2002). The theory proposes that when a consumer (organism) is confronted with a stimulus a certain reaction is elicited (Ibid.). Consequently, it is expected that the in-store TV stimulus provokes a consumer reaction which can either be approach or avoidance behavior (Turley & Milliman, 2000). Although in the SOR model stimulus follows response, in our conceptual framework the brand equity concept is in between. This is to depict that a direct influence on the brand equity dimension as outcome of the in-store TV exposure, is likely to occur during this interaction.
Additionally, in the previous part it has been clarified that the elements that are presented in the customer-based brand equity model are the precedents of consumer behavior. That means, an increase in brand equity might cause a behavioral reaction. Evidence is given by Cobb-Walgren et al. (1995) who found that higher brand equity showed to be responsible for a greater brand preference and purchase intentions.

The second function of behavior as a control variable is based on the insight that in-store TV can cause impulse purchase behavior. Behavior is not necessary to measure the possible relationship between in-store TV and brand equity per se. It is integrated to give the study a higher validity.
Behavioral response is simplified with three options that can occur after the exposure to the TV: *not buying the product, buying the product – no change in brand equity, and buying the product – brand equity was affected*. This constellation allows using the behavioral response as control variable that facilitates to determine if customer-based brand equity was affected at all. It is necessary to specify this since in-store stimuli have proven to cause impulse purchases as behavioral response (Abratt & Goodey, 1990). Furthermore, previous research has shown that the use of in-store TV can elicit impulse purchase (Qayyum & Thi Khuyen, 2007). Thus, the variable "impulse purchase" is used to find out if the in-store TV simply causes impulse purchases or can actually affect customer-based brand equity. An impulse purchase as response to in-store TV with no change in brand equity would verify, in the context of the study, that the in-store TV stimulus solely elicits purchases. Therefore, the behavioral outcome in the model is a necessary concept as it would strengthen the causal relationship between the in-store-TV and customer-based brand equity.

2.5.5 Conceptual framework model

Since the conceptual framework has already been discussed before, just a small remark on what the two main colors in the back mean. The light pink background at the top shows the variables that might influence the consumer before entering the store. All other aspects do have a light blue background which represents the store environment. That means, these aspects have to be considered when the consumer is in the supermarket.
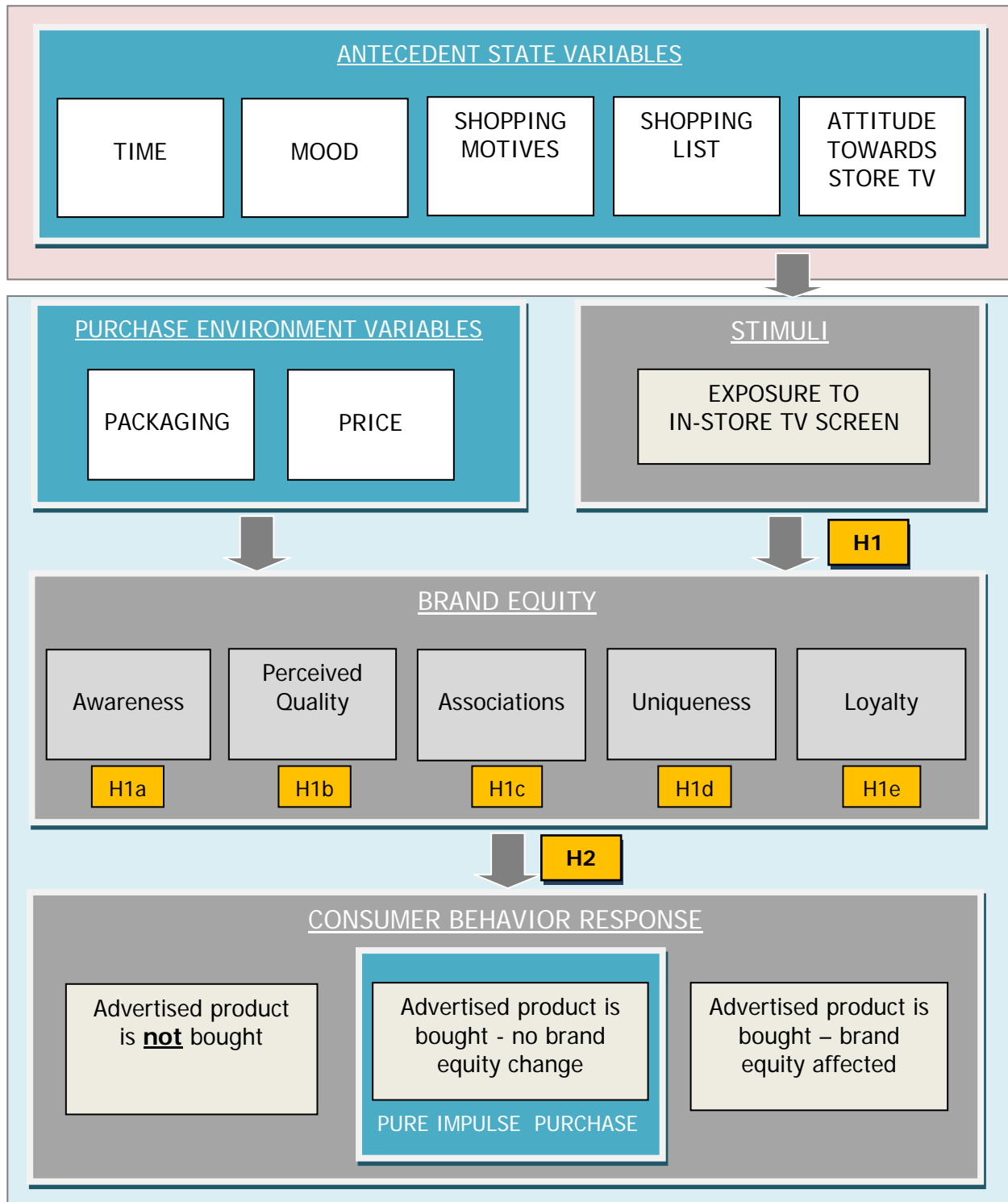

Figure 1: Conceptual framework model to measure the impact of in-store TV on customer-based brand equity

2.5.6 Hypotheses of the conceptual framework

From the conceptual framework presented above the following hypotheses are drawn which are approved or rejected with the help of empirical data. The main hypothesis (H1) for this thesis is presented below with its various sub hypotheses for each brand equity dimension. According to the proposed conceptual framework the exposure to in-store TV might have an effect on the various customer-based brand equity dimensions of the advertised product. The actual affect on each dimension will be tested with the help of various hypotheses (H1 a-e) to determine the strengths and significance. Palazón-Vidal & Delgado Ballester (2005) used a similar construct in their study on sales promotion effects on customer-based brand equity. In line with the view of Keller (1993), they argue that any encounter with marketing communication tools may affect brand equity when it changes the mental brand representation and information that appear in consumer's memory (Palazón-Vidal & Delgado Ballester, 2005).

H1: The exposure to the in-store TV has a positive impact on one or more of the customer-based brand equity dimensions.

- *H1a: The in-store TV exposure increases the awareness level of customer-based brand equity*

- *H1b: The in-store TV exposure increases the perceived quality level of customer-based brand equity*

- *H1c: The in-store TV exposure increases the level of associations of customer-based brand equity*

- *H1d: The in-store TV exposure increases the uniqueness level of customer-based brand equity*

- *H1e: The in-store TV exposure increases the loyalty level of customer-based brand equity*

H2: Product purchase is affected through a change in at least one customer-based brand equity dimension
The second hypothesis is based on the possible reaction when confronted with an in-store stimulus. In case the consumer is exposed to in-store TV and after that buys the products it is assumed that a positive change in customer-based brand equity took place. However, if no change on any of the brand equity dimensions is measured for consumers that purchased the product, evidence is given that the in-store TV solely triggers impulse purchases. Therefore, with the help of this second hypothesis it can be confirmed if a stimulus can help to build brand equity. In addition, the control variable adds validity to the framework as it ensures that the actual relationship is measured.

Both hypotheses are tested against the null hypothesis. The null hypothesis suggests that there is no difference due to the in-store TV. For H1, the null hypothesis proposes that there is no difference in consumer-based brand equity between those that see the TV over those that do not see the TV. In case of H2, the null hypothesis states that there is no change in customer-based brand equity among consumers that buy the product as opposed to those that do not buy it.

CHAPTER 3 - Methodology

The purpose of the methodology chapter is to provide evidence that the research is designed in a systematic and meaningful manner. Further, it gives a deeper understanding of the conducted research and therewith increases the research quality. First, the general philosophical assumptions underlying this research are addressed and the philosophical position taken is outlined. In line with this, the ontological and epistemological considerations are discussed. After that, the research design of the study is presented and discussed. Then, the method of data collection provides insights of a suitable data gathering technique applied. In the end, issues concerning the quality of the research in terms of reliability, validity and generalizability in the light of the research design and method, are presented.

3.1 Research philosophy

In management research it is important to discuss the philosophical assumptions as these influence the research design and quality (Easterby-Smith, Thorpe, Jackson, 2008). The philosophical position helps deciding what kind of empirical data is needed for the specific research problem, and how it can be obtained (Ibid.). Furthermore, methodological choices can be justified by the broader debate on the philosophy of science (Ibid.) Therefore, it is essential to clarify the philosophical position at the beginning of the research.

The two main aspects related to the philosophical position are ontology and epistemology. Both aspects and their main ideas are briefly summarized. Bryman & Bell (2007) suggest that the question of social ontology is concerned with the existence of social entities. The main issue is whether social entities can be considered as external reality that is, having an existence on their own and thus can be studied objectively (Ibid.). The alternative standpoint is that social entities are created through the perceptions and actions of social actors, therefore are not fixed objects but constantly changing (Ibid.). Epistemology is concerned with defining what is appropriate knowledge about the social world and how it can be studied (Ibid.). That means, epistemology consists of certain assumptions about the best way to inquire into the social world (Easterby-Smith, 2008). It is important to recognize the interconnectedness between ontology and epistemology. The questions of social ontology can not be divorced from the ways in which research is designed and conducted (Bryman & Bell, 2007). This confirms the argument that the ontological perspective strongly influences the epistemological decisions (Easterby-Smith, 2008).

The two main philosophical positions at its extreme are positivism and constructionism (Easterby-Smith et al., 2008). An important remark is that although the basic beliefs are rather contrary, in the actual use of research methods and techniques, the borders are less clear cut (Ibid.). Positivism has the ontological assumptions that the social world exists externally and should be studied in that regard objectively (Ibid.). In order to do so, the epistemological position suggests that only objective observation of this external reality produces significant knowledge (Easterby-Smith et al., 2008). In addition, it is argued that scientific models can be applied for the objective research of the social world (Bryman & Bell, 2007). Constructionism in contrast, embeds complete opposite standpoints in the ontological and epistemological considerations. Rather than seeing the world as external reality, the constructionism viewpoint proposes that the social world is constructed by people and their meaning given to it (Easterby-Smith et al., 2008). Therefore, the epistemological approach focuses on interpreting

the social world and the meaning of actions as it is constructed by its social actors (Bryman & Bell, 2007).

In consideration of the explanations given above as well as the research problem of this thesis, a positivist position seems to be most suitable. First, the approach of this research is drawn on existing theory. The theoretical concepts on environmental stimuli, brand equity and so on, have been presented in the previous chapter. Drawing on existing theory is a typical characteristic of positivism (Bryman & Bell, 2007). It is assumed that these theoretical concepts are external realities that can be observed since it was done in previous research (Easterby-Smith et al., 2008). The relationship between theory and research is of deductive nature which means theory guides the research in this thesis (Bryman & Bell, 2007). This is reflected in the conceptual framework which was developed based on existing theory.

Second, the aim is to test theories, in the case at hand, the causal relationship between in-store TV stimulus and customer–based brand equity. Both are seen as defined concepts that can be operationalized into certain variables which allow a quantitative measurement (Easterby-Smith et al., 2008). It is suggested that an observation can be done independent from the observed object which is another assumption of positivism. Finally, the purpose is to collect data that help to predict and control the outcome of using in-store TV. Testing theories and use data for prediction and control are further elements of positivism (Arndt, 1985; Bryman & Bell, 2007).

3.2 Research design

Based on the aforementioned methodological considerations, in the following a research design is proposed. Research design is referred to the totality of methodological choices (Svensson, 2009). This comprises a justification for the methodological choice made in terms of design type and strategy. Furthermore, data collection method and aspects such as generalizability, reliability and validity are discussed.

3.2.1 Design Type

Considering the available alternatives when it comes to research design, under the philosophical assumption of positivism, Easterby-Smith et al. (2008) suggest a cross-sectional analysis. According to them using cross-sectional design enables "*multiple factors to be measured simultaneously and hence potential underlying relationships to be examined.*" (Easterby-Smith et al., 2008: 90). This statement seems to be a good justification for the appropriateness of a cross-sectional analysis in this thesis, as it allows investigating possible relationships between the concepts determined in the conceptual framework of chapter two. To be more precise, Bryman & Bell (2007: 55) define cross-sectional analysis as "*the collection of data on more than one case … and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables … which are then examined to detect patterns of associations*". In order to stress the relevance of cross-sectional analysis for the case at hand, below the definition is applied with regard to the specific requirements of this study.

Studying *more than one case* is essential in employing a cross-sectional design as it leads to variation (Bryman & Bell, 2007). Variation in this context refers to the many individuals who are in the in-store environment of the ICA Kvantum supermarket. Due to the fact that in a supermarket setting all different kinds of people can be encountered, a variation in answers is given. *At a single point of time* involves data to be collected more or less simultaneously (Bryman & Bell, 2007). For the case at hand, data for all variables of the conceptual framework is collected directly from the respondents in the supermarket at the same time by means of questionnaires. *Quantitative or quantifiable data* is fundamental for a standardized and systematic method in order to measure variation between cases and further to investigate associations between the previously defined concepts (Ibid.). To be more specific, by means of cross-sectional design the concept of in-store TV stimuli impacting the brand equity dimensions can be investigated. Influences on customer-based brand equity emerging from other sources than in-store TV stimulus, are excluded by the concept of antecedent states and purchase environment variables. Furthermore, as the conceptual framework illustrates, an impact on the respective brand equity dimensions could possibly result in behavioral action. The concept of consumer behavior response can also be investigated by this research design. In particular, *patterns of associations* are of interest in this study as cross-sectional design allows examining the relationship between these concepts.

3.2.2 Research Strategy

As already clarified above, to provide a variation in answers and to investigate relationships between concepts, a quantitative research strategy is required. Bryman & Bell (2007: 59) argue that "*cross-sectional design has placed it firmly in the context of quantitative research*". Further, the ontological position of positivism comprises theoretical concepts in the external reality to be measured. Since in this case the concept of customer-based brand equity in the retail environment is to be studied, quantitative research enables to measure it as discussed in the conceptual framework model (Bryman & Bell, 2007) and depicts therefore an appropriate choice.

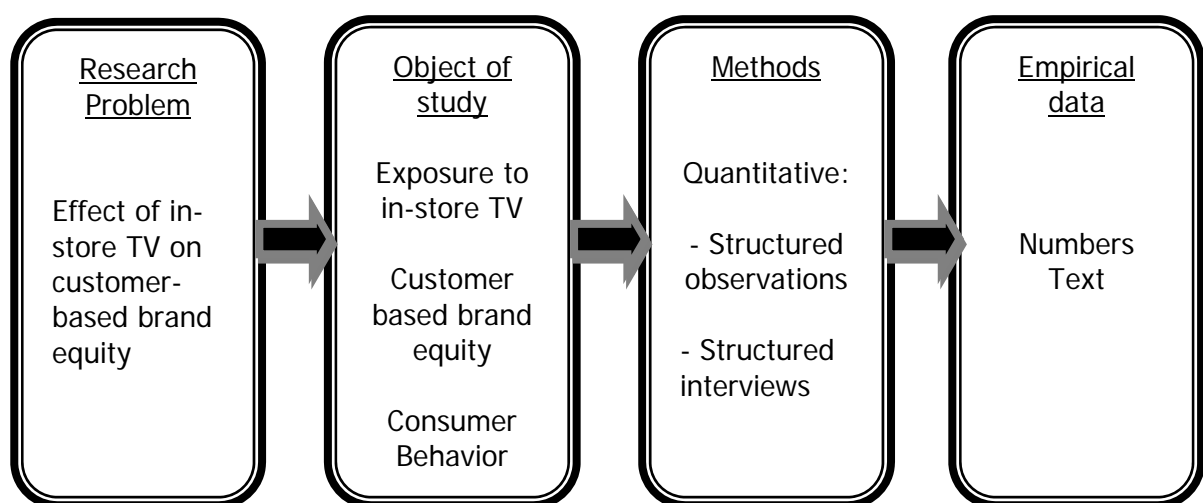| Research Problem	Object of study	Methods	Empirical data
Effect of in-store TV on customer-based brand equity	Exposure to in-store TV Customer based brand equity Consumer Behavior	Quantitative: - Structured observations - Structured interviews	Numbers Text

Figure 2: Illustration of the research approach

3.3 Method of data collection

Recapturing from the discussion in the theoretical framework, the line between cognitive and behavioral brand equity is rather thin. Although this study serves to measure consumers' perceptions of brands triggered by in-store TV, behavior provides an additional indicator for validating if the brand equity change in fact comes from the stimulus. The behavioral reaction in terms of purchase behavior is to be integrated in the study in order to exclude the chance of impulse purchase. Findings further stress that in-store stimuli exerts cognitive and affective consumer response which should hence both be investigated.

According to Easterby-Smith et al. (2008), the best way to acquire data for cross-sectional design is done through surveys. In management research, cross-sectional research is therefore often called social survey design referring to questionnaires and structured interviewing (Bryman & Bell, 2007). However, cross-sectional design is a generally preferred terminology in literature as it is not reduced to questionnaires and interviews, but entails many more research methods such as observations, content analysis or statistics (Ibid.). In order to investigate and answer the research question at hand, primary research is needed. For the data collection a combination of methods within cross-sectional design seems to be appropriate as it allows measuring the relationship between the in-store TV stimulus and customer-based brand equity.

By means of cross-sectional data collection methods, a combination of structured observations (behavior level) and structured interviews (attitude level) is considered as suitable to obtain the required data, on which it is elaborated later in this chapter.

Before gaining a deeper understanding about the methods applied in this thesis, at this point some criteria are determined which are relevant for implementing the research. To these belong criteria regarding the product, the store and the set-up in the store which are crucial for an unobstructed data collection.

With regards to the product it is important to choose one in a category that has a high purchase frequency. This comprises categories with products of daily use such as chemists, dairy, canned or prepared food, sweets and snacks. Categories which are considered by only a small group of consumers or are rarely bought, such as delicatessen, diet/diabetes products or fair trade are not appropriate as this would narrow the sample size tremendously and lead to non-representative results. Also fresh fruits and vegetables are considered as rather inappropriate as the product in focus has to be a brand which is established in the market. Although it is unambiguous which categories to consider, for the product as such some criteria are to be defined. On the one hand, the product in focus should not be a leader in its category. For example, Coca-Cola is an incomparable strong brand which is with no doubt leader in its category. Taking such a product would not really allow to measure a change in brand equity, as this is an already quite distinct and developed brand in the mind of the consumers. On the other hand, private brands can neither be taken, as these products usually involve very low brand equity. Furthermore, in the discussion on retailer brand equity it was concluded that in-store TV might increase the overall store perception, which would lead consumers to perceive the private brands as more favorable.

When it comes to the store, Scandinavians largest supermarket chain ICA which equipped some of its stores with in-store TV screen systems, provide good conditions for conducting the empirical research. Criteria which are important to consider are first of all that the store is equipped with in-store TV screens. The TV screens in-store are to exceed a minimum number whereas too many TV screens in one store enlarge the risk of creating 'noise' so that no clear

messages come across and consumers get irritated by too many messages. Given the situation of various in-store TV screens, the researchers have the possibility to choose the screens with the most appropriate location and products displayed. Besides in-store TV equipment, the supermarket in focus has to be located where a representative sample of the population can be taken. For example, Lund as a location would not necessarily be representative for the Swedish population as many (international) students are encountered. Malmö, the biggest city in Southern Sweden is a much more representative choice. Further it is important that the store is located in a good accessible area with high customer traffic.

For the set-up in the store there are also some criteria to consider, which ensure an accurate collection of data. To these belong that the TV screens are located where many consumers pass. Assortments in supermarkets are usually arranged in a way that consumers are guided through the store, making them pass as many shelves as possible to elicit needs and impulse purchase. Dairy products are for example located in the back of the supermarket to make sure that consumers cross the supermarket for getting products of daily need such as milk or butter. Besides that, the TV screens should be easily visible and recognizable. Screens which are not in eye-height but located in the aisles rather high underneath which consumers walk, are not suitable for the research at hand. Desirable are screens not only located in eye-height, but preferably at the beginning of an aisle where the particular products are stored in the shelves next to it. A further relevant criterion is that the researchers have a good hiding place for conducting the observations where consumers feel not watched and act inhibited. In general, the screens should be located at a rather spacious part of the supermarket. When approaching consumers for conducting interviews it has to be insured that no aisles or ways are blocked while interviewing, to prevent that other customers in the store feel disturbed during their shopping trip.

However, when conducting research, one relies upon the circumstances which are given. In the following it is described and justified how the data collection for this thesis was implemented under consideration of the above mentioned criteria. Due to the fact that the advertisements on the TV screens are scheduled in advance, the researchers had no influence on product and advertisement choice. Nonetheless, for the week the research was scheduled, it was still possible to choose the screens on which the most appropriate product was advertised, as within one store different advertisements are running on the respective screens. The brand in focus of this research was Barnängen shampoo and conditioner, products of the consumer goods manufacturer Henkel. According to the manufacturer, Barnängen is the Swedish brand for body and hair care (Henkel, 2009). Today, Barnängen combines natural ingredients with contemporary Swedish design for a naturally beautiful and confident feeling (Ibid.). This product demonstrates to be an appropriate choice for the case at hand. First of all, it is a product of daily need in a category from which consumers usually buy on a regular basis. Secondly, the brand is established in the market and not completely new to consumers, nor does it seem to be the leader in its category. The fact that the brand is positioned in the mid-price range further confirms to address a broad range of consumers and not small target groups in niche segments.

In terms of the store choice, the observation took place in the store environment of ICA Mobilia in Malmö. ICA Kvantum is a larger supermarket which offers a huge range of everyday food products and special foods (ICA, 2009) and is equipped with a large but still acceptable amount of TV screens that do not create too much 'noise'. In addition a large range of beauty, health and media products is offered (Ibid.). The primary research was executed in the first week of May on two weekdays (Wednesday 6th; Friday 8th) and one weekend day

(Saturday 9th). Previous research has shown that these are suitable days for conducting research in supermarkets (Qayyum & Thi Khuyen, 2007; Jørgensen et al., 2007). A whole trading day was a necessary timeframe to cover all different kinds of shoppers. The observations took place in the time from 9h00 to 19h00 with a break of 45 minutes in between. The break time always varied in order to cover all time periods during these days.

The TV screens were located more in the back of the store, which was still convenient as consumers who wanted to purchase dairy products had to pass the screens. In total, three screens arranged in horizontal order served to advertise the product. Next to it extensive shelves displayed a huge amount of products which consumers could purchase. The set-up was located at the beginning of an aisle which guaranteed good visibility and allowed the researcher to find good hiding places, at two different ends of a main aisle. Furthermore, enough space could be found to approach consumers and conduct the questionnaires, without gaining too much attention from other customers and disturbing other shoppers.

In addition to primary data, it was also made use of secondary data. In order to develop the theoretical foundation, secondary data was essential as a deductive approach towards theory was applied. It was ensured that mainly books and academic articles were taken as secondary sources, but in some cases it was indispensable to include non-academic material such as consultancy reports and trade journals to a certain extent. Scientific articles and books that cover the areas of retail environment, atmospherics, consumer behavior and brand equity were primarily used. It was made sure that academic articles were peer reviewed, due to the fact that it ensures a high quality standard. All articles were retrieved from the databases ELIN, Emerald, and EBSCO as they cover a huge archive of scientific journals.

3.3.1 Structured observation

Behavioral observations are necessary to be able to provide a correct measurement of brand equity as main aim of this study. It is crucial that only customers that pass the in-store TV and then view the TV or not, are included in the study. Through this, it can be assured that the right consumers are included in the structured interviews and the measurement design is reliable. Furthermore, by including observations it can be claimed that in fact the causal relationship between in-store TV and customer-based brand equity is investigated. Thus, structured observations serve as a kind of pre-selection that make it possible to explore the effect of in-store TV.

Furthermore, by means of this method it is also possible to examine consumers' behavior when exposed to the in-store TV screen stimulus. In the conceptual framework the behavioral reaction after TV exposure is stated. The intention is to exclude impulse purchases that might be caused by in-store TV since they are not likely to have an effect on brand equity. In order to exclude this occurrence consumers that view the in-store TV and afterwards buy the advertised product have to be interviewed. That means, only when consumers are monitored it can be recognized if consumers buy the product or not. As a result, brand equity can be measured for the group that buys the product which can then be compared to those that do not buy the product. From a methodological point of view, using observations strengthens the internal validity of the research significantly.

Bryman and Bell (2007: 281) define structured observation as *"method for systematically observing the behaviour of individuals in terms of a schedule of categories"*. An overall advantage of structured observation is the possibility to observe behavior directly which would not be feasible by implementing solely social survey research (Bryman & Bell, 2007).

A limitation of this data collection method comprises that reasons for the specific behavior remain unrevealed. In order to overcome this limitation, structured interviews serve as complementary data collection method.

It is acknowledged that there might have been an ethical issue in observing consumers without their knowledge. However, informing consumers beforehand had biased the results as they would probably not behave in a natural way anymore. To neutralize this aspect, consumer stayed anonymous in the study which overcomes the ethical aspect.

The technique of structured observation also called systematic observation entails the researcher to employ specific formulated rules, for observing and recording the behavior (Bryman & Bell, 2007). In light of the research object, studying consumer behavior is an essential requirement. Keeping track of the consumer behavior triggered by the TV stimulus helps to validate, that a change in customer-based brand equity is actually possible through in-store TV.

How the practical application of structured observations was implemented for this research study is described in the following. On the TV screen a product advertisement was shown for Barnängen shampoo and conditioner that was available on the shelve next to it. Each supermarket customer that passed the TV screen was monitored. The researcher was standing behind a shelve close to the TV to observe the consumer behavior from a distance, so that the consumer did not notice it. It was examined if the consumer recognized and looked at the TV and furthermore, if some kind of behavioral reaction followed. The possible reactions were categorized based on previous research on in-store TV into the following items: A) ignore TV; B) view TV; C) product not in basket; D) product in basket (adapted from Jørgensen et al., 2007). To ensure an accurate record of all accomplished observations, an observation sheet was used and filled out by the researcher during the occurrence. The sheet contained items such as the date and time of the observation and the examined behavior. After the observation the consumer was approached by the researcher and asked if he/she would like to participate in a short survey.

3.3.2 Structured interviews

On the one hand, using structured interviews as data collection method is to measure the dimensions which determine customer-based brand equity. As Doo & Donthu (2001: 2) state "*…consumer-based* means measurement of cognitive and behavioral brand equity at the individual consumer level through a consumer survey". The aim is to examine a possible change in consumers' perception of brands when exposed to in-store TV stimuli, this relationship can be best investigated through purposefully interrogating consumers. With the help of specific questions in the structured interviews, it is possible to study the individual level of the brand equity dimensions. On the other hand, the survey is used to analyze other variables that have to be excluded to ensure that only the relation between in-store TV effects on customer-based brand equity is measured.

Social survey research is of great relevance in cross-sectional design. Structured interviews are thereby a typical form of collecting the required data (Bryman & Bell, 2007). By means of this method each respondent should receive the same interview stimulus as any other respondent, meaning that only comparable answers can be obtained if "*replies are in response to identical cues.*" (Bryman & Bell, 2007: 210). Crucial is therefore to create questions which are very specific and at the same time offer a fixed range of answers. Especially, when

measuring a construct such as brand equity it has to be ensured that there are no variations in its evaluation.

In order to conduct the structured interviews a questionnaire is developed. A questionnaire enables to ask the same standardized questions to the respondents which provides comparable data on the one hand, and on the other hand reduces the risk of errors. Variations in answers are in this context due to a 'real' difference in attitude by the respondent and not a variation due to the interview context (Bryman & Bell, 2007). Providing the respondent with a fixed choice of answers is one mayor aspect of this standardized questionnaire. Making use of a predetermined five point Likert scale is hence considered as rather appropriate not only because it facilitates to standardize the interview but it is regarded as highly useful for measuring attitudes. This approach was also used in previous studies on customer-based brand equity (see e.g. Yoo & Donthu, 2001). Besides that, data collection in form of structured interviews enables easy and efficient processing of quantitative data.

3.3.3 Questionnaire

The first part includes a standard introduction to give consumers a short background of the research and demographic data such as gender and age. The second part is the main part of the questionnaire where various statements are presented. In total, the questionnaire consists of 16 statements. Respondents have to state their level of agreement on a five point Likert scale. Of particular interest is to what extent the in-store TV stimulus causes an increase of the respective brand equity dimensions as hypothesized in the conceptual framework. This requires questions to be asked carefully and indirectly, as it is common for examining attitudes (Östberg, 2009). An example of the English and Swedish version of the questionnaire can be found in the appendix.

The first five questions measure the customer-based brand equity dimensions made up of awareness, perceived quality, associations, uniqueness, and loyalty. In order to achieve a high validity it is drawn on previous customer-based brand equity studies. As these questions have shown to reveal and define the level of brand equity, high credibility is given. The awareness dimension is measured by asking: *"Have you heard of brand X"* (Aaker, 1996; Anselmsson et al., 2007). Perceived quality is elaborated in comparison to alternative products in that category: *"Brand X has a higher quality than alternative brands in this category"* (Aaker, 1996; Anselmsson et al, 2007). Associations are normally measured by providing specific items to be evaluated. In this case it is drawn on research of Yoo & Donthu which provides the following question: *"Some characteristics of X come to my mind quickly"*. Defining the degree of uniqueness of a brand can be assessed by asking: *"The brand has a unique combination of features"* (Anselmsson et al., 2007). The loyalty dimension is directed towards the future purchase intention and identified by this statement: *"I would purchase brand X on the next opportunity"* (Aaker 1996, Anselmsson et al. 2007).

The reason for choosing one question/statement for each brand equity dimensions is due to practical issues. Taking several questions for each dimension would make the questionnaire unnecessary extensive and at the same time, lower the chance of getting enough responses. Consumers are likely to avoid long interviews in a supermarket setting which makes one question per dimension suitable (Anselmsson, 2009). Thus, a questionnaire that covered all the essential content and is quick to fill in for consumer is seen as most appropriate.

The next part of the survey integrates all statements for exploring the antecedent and purchase environment variables. This is necessary to ensure that none of them had a profound impact on the receptiveness of in-store TV or on brand equity as such. For some of the variables, appropriate questions could be used from previous research (e.g. Solomon, 1999), while others are to be developed.

In the end, three questions related to the perception of the TV screens are stated. To these belong if the TV screen was noticed, if consumers could remember the product shown on screen, and if they had bought the product that was presented.

3.3.4 Control group

In general, consumer-based brand equity is evaluated by asking consumers specific question about the brand in focus. This is exactly what is accomplished with the questionnaire used in this thesis. However, one particular aspect in this research is to analyze the effect of in-store TV on the level of brand equity. In order to do so, it becomes apparent that two groups are necessary to determine a change in brand equity. One group which consists of consumers that saw the TV and one group of those that did not. That means, the level of customer-based brand equity of consumers that saw TV over those that did not see the TV can be compared. Therefore, a control group is required to measure the difference that might be caused through the in-store TV exposure. Moreover, the comparison makes it possible to determine if a significant difference exist, excluding accidental causalities.

Although, a control group is mainly used in experimental research design (Bryman & Bell, 2007) it is essential to apply it in this cross-sectional design, to evaluate the effect of in-store TV. With help of this data collection method it is possible to investigate a causal influence of in-store TV by comparing results of customer-based brand equity. This choice of a control group is based on Bryman and Bell's (2007: 45) argumentation that "*possible effects of rival explanations of a causal finding*" can be examined.

In the following it is described how data collection was implemented for the control group of this research study. Basically, the same method of structured observation and structured interviews was used as described earlier. A distinction was made between people that view the TV and people that did not view it. In addition, the TV screen was turned off for half a day. Consumers interrogated during this time period were additionally counted to the group of people that ignored the TV. Assessing and comparing their respective brand equity for the brand would help to define the possible impact of in-store TV. An essential aspect was that all steps and procedures for both groups were done in the same manner, to ensure a consistent comparison of data.

3.4 Sampling

In order to conduct valid research, a sample is taken which is representative for the respective population. Since cross-sectional research design involves various factors to be measured simultaneously to examine potential differences, large samples are usually required (Easterby-Smith et al., 2008). A simple random sample is used for the case at hand. This type of sample represents the most fundamental form of probability sample and implies an equal probability of including each unit of the population. Due to the fact that the research is carried out in a supermarket setting, the condition of encountering all kinds of consumers is given. In consideration of the data analysis technique applied, a simple random sample is an essential precondition (Anderson et al., 2007). Since it is aimed at comparing two populations to

explore if they are different from each other, inferences about the difference between two populations have to be based on samples that are taken independently, which refers to the method of simple random sampling (Ibid.). In the subsequent paragraphs it is elaborated how simple random sampling was applied for conducting the research.

Applying simple random sampling allowed considering every shopper who entered the supermarket and approached the in-store TV screens as potential respondent, which was a necessary requirement. In the ICA Mobilia every customer that passed the TV was observed and after that approached with the survey. Approximately two third of the approached customers were not willing to participate in the survey. That emphasizes also the necessity for using random sampling as otherwise achieving an appropriate sample size had been impossible. In addition, an equal amount of consumers that viewed TV and those that did not see the TV was needed to analyze the difference between both groups.

Furthermore, to make sure that the sample represents the overall population and to avoid a sampling error, the research was always conducted during an entire trading day. A major advantage of this approach implies that all different types of shoppers were covered in the sample. For example, it is known that during the morning mostly elderly people and housewives do their groceries whereas in the late afternoon the majority of the working population enters the supermarket.

A final aspect of the sampling that had to be taken into account was the language barrier between the researchers and Swedish consumers. Although questionnaires for the respondents were in Swedish, in particular elder people were afraid when approached by the researchers and most of the time not willing to participate in the survey. This was especially true for the age group 63+. Nevertheless, during the empirical research in the supermarket it was made sure that all consumers were taken into consideration regardless of their age. All other age groups were slightly surprised when they were approached in English at first but it was no problem to conduct the survey. This is due to the fact that the level of English in Sweden is quite high, as expected by the researchers.

3.5 Data processing

Data processing is crucial for evaluating the research results in a correct and appropriate manner. In this thesis a comprehensive method of data processing was used. In order for the reader to reproduce how data has been processed, it is explained in detail subsequently.

The initial task was to assign numbers to the questionnaires and the observation sheets to be able to match both together and get a complete data set for each participant. After empirical data were gathered, an appropriate method was needed for statistical analysis and meaningful interpretation. Quantitative data is frequently analyzed with the help of computer software like SPSS as it offers various useful techniques (Bryman & Bell, 2007). In order to do so, the data in form of observations and surveys had to be coded first to ensure proper data management. Every question of the questionnaire was coded by assigning a variable number. Furthermore, the reply for each question had to be coded.

The first two variables of the questionnaire were related to demographic criteria. Variable one was gender and the two possible options were male (coded '1') and female (coded '2'). Age was given the code variable two but the response did not need further converted because the age number could simply be transferred. After that, the statements which consumers rated

according to their level of agreement were given a variable number in a sequence order. Due to the multiple-item measure for all statements by means of a Likert scale, the replies in terms of level of agreement could be coded with a number. The response '*completely agree*' was given a five (5) while '*completely disagree*' was given a one (1). That means the higher the score, the higher the degree of agreement. The type of variable that is obtained by a Likert scale is actually ordinal although it is argued that they can be treated as interval/ratio variables (Bryman & Bell, 2007). The variables were classified as interval variable in this thesis since it allowed the most appropriate techniques for data analysis (Anselmsson, 2009). The last three questions of the survey were related to consumer conscious perception of in-store TV and purchase of products shown on screen. Respondents had two answer options, '*yes*' (coded '1') and '*no*' (coded '2').

The observation sheet had to be provided with codes as a next step. It was decided to divide the four behavioral reactions ignore TV, view TV, product not in basket, and product in basket into two variables. The first one was for the perception of the TV including the two options of either '*ignore TV*' (coded '1') or '*view TV*' (coded '2'). As second variable the purchase of the product was used with the items '*product not in basket*' (coded '1') and '*product in basket*' (coded '2').

Once the coding was accomplished, the data was entered into an Excel sheet. The number that was assigned to the questionnaire and observation sheet was also used for the data entry. Entering the data in Excel before transferring the data into SPSS is a recommended procedure (Anselmsson, 2009). After the data were imported into SPSS it was necessary to define the variable type and provide a descriptive meaning, that indicates what each variable stands for. Subsequently, the statistical analysis of the data could be started. A recommended statistical technique for analyzing the data at hand in SPSS is the *t*-test (Ibid.). The *t*-test statistic is a procedure used for making inferences about the difference between two population means (Anderson et al., 2007). It is a useful application for testing hypotheses about the difference of two simple random samples (Ibid.). In this research, the two random samples were made up of people that ignored the TV and those that viewed the TV. The population mean was the reported score in the survey for each individual brand equity dimension. These means were compared for consumers that viewed the TV versus those that did not view the TV. A difference in the mean would lead to confirm or reject the hypothesis that in-store TV can affect consumer based brand equity.

3.6 Reliability, validity and generalizability

The quality of the research can be ensured by taking into account the issue of reliability, validity and generalizability. Reliability and validity refer to "*the quality of the measures that are employed to tap the concepts in which the researcher is interested, rather than matters to do with a research design.*" (Bryman & Bell, 2007: 58). Reliability in this context relates to the consistency of measuring a concept and being therefore a precondition to validity (Bryman & Bell, 2007: 163). A critical aspect for the structured observation in terms of reliability is "*the degree to which two or more observers of the same behaviour agree in terms of their coding of that behaviour on the observation schedule*" (Bryman & Bell, 2007: 291). This issue is referred to as inter-observer consistency and is minimized by means of the very clear cut and unambiguous observation categories defined for this research study. Chances that participants' behavior can not be allocated by the observer to one of the predefined categories is reduced to a minimum, as in the given supermarket setting not too much unpredicted behavior can occur which could be irritating for the observer.

From a more general perspective, validity of the research is provided by structured and standardized processes. Through this standardized approach the error component is kept to a minimum which increases the validity of the measure. Due to predetermined answer scales in the structured interviews, less risk of possible error in variation by interviewers is guaranteed. Accuracy of data processing through a general standardization further stresses the validity of this research.

The internal validity which ensures that in fact the causal relationship is investigated is significantly increased by excluding other potential factors that might bias the results. First, by integrating antecedent and purchase environment variables, possible influences from other sources than the in-store TV can be excluded. Since these variables can potentially influence brand equity but do not come from the TV. Furthermore, consumer's attention towards in-store TV can be distorted. Second, observing consumers and their behavioral reaction is another validity control that serves two purposes. On the one hand, only consumers that really passed the TV and therefore, are entitled to participate in the survey are included. On the other hand, monitoring the behavioral reactions assists in excluding that in-store TV merely causes impulse purchases. The final point is the use of a control group. By comparing the brand equity level of consumers that were exposed to the TV versus those that were not, it is possible to determine statistically a possible variation in brand equity. Taken together, these three aspects help to control that the intended relationship is analyzed and with the consequence of a high internal validity.

Finally, generalizability deals with whether a sample is large enough for results to be generalized (Bryman & Bell, 2007). As previously touched upon, in order for the results to be representative, a sample size is chosen which is representative for the population. A drawback concerning the generalizability of the findings is that only one product is investigated due to practical constrains. Although ICA Mobilia is equipped with several in-store TVs the majority of them are located in the major aisles and at the check-out counter. The problem is that those screens show a full program which includes advertising as well, but only every 5 minutes approximately. That makes it impossible to observe if consumers saw the advertisement or not as he/she could have seen the ad at any of the TV in-store. Since for this research a TV screen is needed that shows the same advertising commercial during the whole day, only one TV set could be considered as being appropriate. The program that is shown in-store is planned in advance and the same for all ICA Kvantum stores in a regional area. In addition, the same TV advertising is shown for a longer period of time, which means it does not change on a daily basis. This is a main constraint for including more than one product in the research.

3.7 Limitations

Making methodological choices also comprises that certain limitations arise for the case to be studied. That means the possible drawbacks of the chosen methods are addressed. In this thesis, data is collected by means of structured observations and structured interviews and possible limitations are discussed below.

As previously mentioned, a limitation which can be identified when it comes to the structured observations is the fact that it is not possible to identify the intentions behind the observed behavior. Thus, this limitation can be relativized by using structured interviews as complementary data collection method which aims to detect behavioral intentions. Further, employing structured observations neglects the context in which a behavior takes place (Bryman & Bell, 2007). With regard to the situation in the supermarket setting, this would

mean that the context in which a purchase is done is not known solely by observations. Therefore, investigating the previously defined variables and in particular consumers' attitudes, is done by means of the interviews.

Structured interviews are also limited to a certain extent. Due to the fact that the research study is implemented by two international students, language barriers might occur. Only those people can be considered in the interviews who dispose of a certain amount of English skills. By providing the questionnaires in Swedish, this limitation is kept to a minimum. Further, as the general level of English in Sweden is relatively high, still a lot of people can be considered for the interviews. The aspect that fixed answer choices are given could also cause possible limitations. First of all, respondents are limited in their choice of answers and might feel forced giving an answer which fits into one of the given answer categories. Secondly, providing fixed answer choices do not engage respondents in active conversations and inhibits rapport building.

Another limitation is related to the advertising itself. The advertising message is defined as a key element for effective advertising and includes elements such as content, structure, format, and source (Decrop, 2007). That means, there exist differences in advertising commercials that makes some more effective and successful than others. This might be an influential factor for the advertising running on the in-store TV as well. More specific, an advertising commercial with a highly effective message might lead to additional attention in terms of consumer views. However, analyzing the advertising message can not be easily accomplished and demands further insight into the effectiveness of advertising. This would go beyond the scope of this research as it is focused on the potential effects of in-store TV as stimuli and thus, the TV being the central object of investigation. Nevertheless, it is seen as necessary to address this issue.

A final remark is the prospective long term effect of advertising. In general, the effects of advertising consist of both, long term and short term effects (Ambach & Hess, 2000). Since the focus of this study aims at evaluating the immediate change of consumer-based brand equity, only the short-term effects are considered. However, the exposure might also yield to long-term effects but these are not covered in this study. In order to do so, another research design and data collection method would be needed which is not feasible in the framework of this thesis.

CHAPTER 4 - Empirical Findings

In the following, the analysis of the empirical data that were gathered during the primary research in the ICA Mobilia in Malmö, are presented and discussed. First, the sample distribution is exhibited to give the reader an overview of the age and gender allocation of the research. After that, the main part consisting of the survey questionnaire and observation results, is outlined. For the data evaluation the statistical techniques in form of a regression analysis and a t-test are applied. Each technique is shortly addressed before the results are depicted.

4.1 Sample distribution

The total sample size obtained in the primary research during the three days in the supermarket is n=168. Although the population consists of all consumers that entered the supermarket, only those that actually passed the observed TV could be taken into consideration. That means some customers that were familiar with the store and did not need products that were located near the screen, used shortcuts to get to the check out counter. That reduced the potential sample significantly. Another factor was that although all consumers could be observed when passing the TV-screen, not everyone was willing to participate in the survey.

However, in the light of the statistical analysis technique applied, the sample size is in fact appropriate. When comparing two populations like in this case, a sample of n=30 per group is already adequate (Anderson et al., 2007). The distribution between people that saw the TV and those that ignored the TV was also relatively equal with 52% for '*ignore TV*' and 48% for '*view TV*'. This is another important requirement of the data analysis with the t-test method.

			Age Groups				
			14-26	27-42	43-62	63+	Total
Gender	Male	Count	9	16	10	1	36
		% of Total	5,4%	9,5%	6,0%	,6%	21,4%
	Female	Count	30	57	42	3	132
		% of Total	17,9%	33,9%	25,0%	1,8%	78,6%
Total		Count	39	73	52	4	168
		% of Total	23,2%	43,5%	31,0%	2,4%	100,0%

Table 1: Sample Distribution by Age and Gender

The distribution of age and gender in the sample are shown in Table 1. About the gender allocation it can be said that the traditional gender roles are supported. Especially, grocery shopping is considered to be mainly a female task which is reflected in previous surveys, where females always outnumbered males (Dholakia, Pedersen, Hikment, 1995). These findings are confirmed but it is also acknowledged that more and more males are participating in grocery shopping.

In terms of age distribution, for male and female the two groups 27-42 years and 43-62 years make up the biggest proportion. In addition, the female group 14-26 years has a huge share in the sample. A minor group is the generation 63+ years since it makes up only a small part for both genders. As addressed in the methodology part, this group was far more reluctant to participate in the survey. It is also salient that a high proportion of consumers in the age group 63+ years do their shopping in the morning between 9h00 and 12h00. On the other hand, people in the age group 27-42 years predominantly visit the supermarket in the late afternoon and evening. Therefore, it was critical that the research was always conducted during the whole trading day. Otherwise, certain groups had been completely ignored and thus, excluded from the research.

4.2 Testing the conceptual framework: variables and hypotheses

The main purpose of testing the conceptual framework is to confirm or reject the proposed hypotheses. This in turn helps answering the research questions of this thesis. Therefore, on the next pages the data generated by means of statistical techniques are illustrated.

4.2.1 Regression Analysis for testing the antecedent states

A regression analysis enables investigating the relationship between one dependent and one or more independent variables (Anderson et al., 2007), and allows measuring how great the particular impact is (Anselmsson, 2009). In academic literature, the terminologies for these variables differ. The dependent variable can also be referred to as criterion variable whereas the independent ones are called predictor variables (Easterby-Smith et al., 2008; Brace, Kemp & Snelgar, 2009). Due to reasons of practicality and consistency, in this thesis the often used terminology dependent and independent variable is used. If more than one independent variable is to be predicted on the score of the dependent variables, it is referred to as multiple regression analysis. For the case at hand, a multiple linear regression analysis was conducted to analyze a possible influence of the antecedent state (independent) variables on in-store TV stimulus (dependent variable). Contrary to non-linear regression, a linear regression analysis is most often used in business research (Anderson et al., 2007) and is therefore considered as an appropriate choice.

To be more specific, the scope of the analysis was finding out if the antecedent state of consumers is an influencing factor for being receptive to the in-store TV at all. Measuring this relationship serves to exclude the possibility of consumers ignoring the stimulus due to a strong influence of the mentioned variables, before even entering the supermarket. By means of this analysis it is aimed to ascertain that a significant relation between the dependent and independent variables can be excluded. Thus, making sure that consumers are receptive to the in-store TV stimulus at all, allows no or only a marginal relationship between dependent and independent variables.

In order to analyze the abstract from the SPSS results which is presented below, the meaning of the relevant values is explained first. The summary model reveals the value for R which is of crucial importance for the analysis. The R-value serves to describe the relationship between dependent and independent variables as expressed in percent. This allows measuring how great the impact is. Values of +1 or -1 would be the highest value possible as this represents a significant linear relationship. Consequently, a low value alludes to a low impact of the independent variables on the dependent. The Beta value which is labeled B and illustrated in

the coefficients table, measures the contribution of each variable to the overall model (Brace et al., 2009). A large Beta value indicates that the respective independent variable has a large effect on the dependent variable (Ibid.). The t- and significance *(p)* values on the right hand-side of the table, show the impact of each independent variable, whereas a large absolute t-value and a small significance value indicate a huge effect of the independent variable on the dependent one (Ibid.). Usually, the higher a t-value is the more significant can also be considered the regression coefficient (Schwager & Turner, 1995). In this context it is relevant to mention that values above 2,0 are evidently significant (Ibid.). Furthermore, for a relationship to be significant the significance value has to be $p=\leq0,05$, otherwise the relationship is too marginal to be valid (Anderson et al., 2007).

Independent variables	Dependent variable: Observed TV attention		
	B	t	Significance
Time pressure	,050	1,519	,131
Positive mood	-,035	-,764	,446
Utilitarian shopping motive	-,059	-1,579	,118
Hedonic shopping motive	-,001	-,022	,983
Shopping list	,086	2,686	,008
Attitude towards in-store TV	,061	1,736	,085
R	0,322		

Table 2: Multiple linear regression analysis for the dependent variable: observed TV attention

Table 2 illustrates the results of the linear regression analysis executed in SPSS. It serves to describe the relation between antecedent state variables and in-store TV stimuli, or more specific whether customers are receptive at all to view the TV or not.

Noticeable is the fact that the significance level, shown in the very right column, for almost all dependent variables is above $p=\leq0,05$. From the overall findings in the table it can be ascertained that a relation between the respective antecedent state variables and whether TV is recognized, can be excluded. Furthermore, the t- and *p*-values predict that the independent variables have no impact on the dependent variable '*observed TV attention*'. The t-values which need to be large to have an impact are in this analysis below 2, whereas the *p*-values which should be relatively small (below 0.05) are too large. The evidence of a low relationship is also supported by the R-value which is in this case 0,104. A percentage of 10.4% indicates once more that the measured relationship is too low and hence insignificant.

The only significant relationship which can be identified is shopping list with a *p*-value of 0,008 (highlighted in blue). Considering the t-value of 2,686, it is further confirmed that a relationship exists as the value is clearly above 2,0. However, 2,686 is still small for a large impact to be valid, so that it can be assumed that no meaningful impact of shopping list on observed TV attention is elicited. This assumption is supported by considering the B-value which indicates a chance of only 8,6 % that a relationship exists. Overall, it can be concluded that consumers who entered the store were not predetermined by antecedent states which could have prevented them from being receptive for the in-store TV.

The same analysis was performed for examining the relationship between the purchase environment variables packaging and price and the respective brand equity dimensions. In this case, each of the five brand equity dimensions has to be considered as dependent variable on which the two independent purchase environment variables could have an influence on. Implementing five multiple linear regression analyses not only allows detecting which of the brand equity dimensions, if at all, are affected most, but makes the results very accurate and specific. Also, the relationship between the purchase environment variables and the brand equity dimensions should be significantly low, in order to guarantee that those are solely increased due to stimuli elicited by the in-store TV. The outcome of the analyses, describing the impact of packaging and price on the brand equity dimensions, is summarized in Table 3.

	Independent variables						
	Packaging			Price			
Dependent variables	B	t	Sig.	B	t	Sig.	R
Awareness	,145	1,554	,122	-,119	-1,433	,154	,140
Perceived Quality	,220	2,905	,004	-,023	-,337	,737	,228
Associations	,176	2,303	,023	,076	1,112	,268	,235
Uniqueness	,199	2,736	,007	,079	1,226	,007	,272
Loyalty	,284	3,221	,002	,150	1,903	,059	,338

Table 3: Summary of multiple linear regression analyses for the dependent variables awareness, perceived quality, associations, uniqueness and loyalty.

The results show that packaging has an effect on the brand equity dimensions perceived quality, associations, uniqueness and loyalty, as the significance values are lower than 0,05 and the respective t-values are above 2,0. As it is known that only extremely large t-values indicate an important impact, in this case a rather small impact is measured. In order to get further understanding about this relationship, the B-values are examined. The B-values for these brand equity dimensions with regard to packaging are still considerable low. For loyalty the highest B-value can be determined which is with 28,4 % a marginal value and does not allude to the fact that a noteworthy relationship exists. Thus, when considering the R-value, the highest percentage of 33,8% of the independent variables impacting loyalty, is also considerable low. Uniqueness is even less influenced whereas perceived quality with 22,8 % is unlikely to be impacted by packaging and price. The considerable low R-values for the four brand equity dimensions with a low significance value indicate that the impact which exists is indeed unimportant.

Price seems to solely have a significant impact on uniqueness, which the significance value of 0,007 clearly indicates. The t-value however is with 1,226 too small for a significant relationship. Furthermore, the low B-value and an R-value of 27,2 % state that the likelihood of uniqueness being effected by purchase environment variables at all, is only given a small chance.

Therefore, it can be excluded that customers are considerably influenced by the purchase environment variables packaging and price. Packaging seems to be a more influencing factor than price. That means, if customer-based brand equity is elicited in a supermarket setting, it is expected to be caused by the in-store TV stimuli since other options have been excluded.

4.2.2 T-test Analysis for testing hypothesis H1

The t-test is a statistical technique useful for testing hypotheses when two independent populations are involved (Anderson et al., 2007). The intention is to compare the population means, for the purpose of inferring the difference between the two groups (Ibid.). The hypothesis that needs to be tested is if the exposure to in-store TV affects the consumer-based brand equity for the advertised product. The first sample population consists of consumers that viewed the TV in the supermarket and the second of those that showed an ignorance reaction. Comparing the means of each brand equity dimension between these groups reveals possible variations in brand equity.

The t-test is performed with SPSS by including the brand equity dimensions awareness, perceived quality, associations, uniqueness, and loyalty. Furthermore, the variable '*observed TV attention*' that classified if consumers view the TV or not, was added. The software conducted the calculation and generated the following output:

Brand Equity Variables	Observed TV attention	Sample Size N	Mean	Standard Deviation	Std. Error Mean
Awareness	View TV	81	4,26	1,12	,124
	Ignore TV	87	4,22	1,17	,125
Perceived Quality	View TV	81	3,67	,84	,093
	Ignore TV	87	3,41	1,02	,109
Associations	View TV	81	3,83	,86	,096
	Ignore TV	87	3,75	1,03	,110
Uniqueness	View TV	81	3,72	,81	,090
	Ignore TV	87	3,44	,98	,106
Loyalty	View TV	81	3,49	1,05	,117
	Ignore TV	87	3,21	1,19	,128

Table 4: Group statistics for brand equity variables and observed TV attention

On the left hand side in Table 4, the consumer-based brand equity variables are depicted and afterwards, the observed reaction towards the in-store TV. The sample size 'n' between both groups is not precisely even but the variation is acceptable for the t-test, as it does not influence the results. From the mean figure the overall score for each dimension as ascertained by the structured survey interviews, can be read. The highest score possible was '5' and the lowest '1'. Awareness gets the most favorable score in both groups, followed by associations, uniqueness, perceived quality, and loyalty. That means, the arithmetic average response to the question for the awareness variable "*I have heard of Barnängen*" is '4' = "agree".

The standard deviation in the next column expresses the response variation of the population (Anderson et al., 2007). For instance, awareness has a standard deviation of around 1 which indicates that going from the mean +1 or -1 standard deviation captures around 68% of all responses. The variation of uniqueness is even more concentrated since the standard variation is below 1.

The group statistics table gives already an overview of the variation between the two samples. However, the actual t-test is necessary to ascertain if these actual differences are meaningful. By means of the significant test it is ensured that the prediction of the test is precise, which means the occurrence is not due to coincidence (Anderson et al., 2007). This confirms that the difference did not occur as the result of a sampling error (Sawyer & Peter, 1983).
The results have to be significant because only then it can be concluded that in fact a disparity is found. In order to prove whether the results are significant or not, the independent sample test is presented in Table 5 that includes the significance levels for each dimension.

Independent Samples Test						
		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Significance (2-tailed)	Result
Awareness	Equal variances assumed	,108	,743	,232	166	,817	
	Equal variances not assumed			,232	165,870	,817	Not Significant
Perceived Quality	Equal variances assumed	2,372	,125	1,752	166	,082	
	Equal variances not assumed			1,764	163,530	,080	Not Significant
Associations	Equal variances assumed	1,126	,290	,545	166	,586	
	Equal variances not assumed			,549	164,361	,584	Not Significant
Uniqueness	Equal variances assumed	3,503	,063	1,999	166	,047	
	Equal variances not assumed			2,013	163,549	,046	Significant
Loyalty	Equal variances assumed	,303	,583	1,650	166	,101	
	Equal variances not assumed			1,658	165,503	,099	Not Significant

Table 5: T-test analysis for all brand equity dimensions

The most important value in Table 5 is the 2-tailed significance test illustrated in the right hand column. A significant level of $p \leq 0.05$ is taken since this is an appropriate level in marketing research (Sawyer & Peter, 1983). This suggests that the probability of the results being caused due to a sampling error is 5%. Therefore, all values that have a significance value of $p \leq 0.05$ or lower show a valid variation between the two populations.

In the following the findings are applied to the hypotheses which lead to the decision of either accepting or rejecting the hypotheses. To test the main hypothesis H1 it has to be started with the sub hypothesis H1a to H1e.

H1a: The in-store TV exposure increases the awareness level of customer-based brand equity.

The results indicate that the difference in awareness of consumers that viewed the TV (*Mean*=4,26, *Standard Deviation*=1,12) over those that ignored the TV (*M*=4,22, *SD*=1,17), has a significance value of *p*= 0,817. Due to the fact that this value is over the accepted value of *p*=0.05, **H1a is rejected**.

H1b: The in-store TV exposure increases the perceived quality level of customer-based brand equity

As shown in the results the variation in the perceived quality of consumers that viewed the TV (*M*=3,67, S*D*=0,84) over those that ignored the TV (*M*=3,42, *SD*=1,02), has a significance value of *p*=0,080. This value is over the accepted limit and thus, **H1b is rejected**.

H1c: The in-store TV exposure increases the level of associations of customer-based brand equity

The discrepancy in associations for consumers that viewed the TV (*M*=3,83, *SD*=0.86) over those that ignored the TV (*M*=3,75, *SD*=1,03), has a significance value of *p*=0,584. Since this value goes beyond the limit, **H1c is rejected**.

H1d: The in-store TV exposure increases the uniqueness level of customer-based brand equity

The results indicated that the difference in uniqueness for consumers that viewed the TV (*M*=3,72, *SD*=0,81) over those that ignored the TV (*M*=3,44, *SD*=0,98), has a significance value of *p*=0,046. This is below the limit and therefore, **H1d is accepted.**

H1e: The in-store TV exposure increases the loyalty level of customer-based brand equity

The variation in loyalty for consumers that viewed the TV (*M*=3,49, *SD*=1,05) over those that ignored the TV (*M*=3,21, *SD*=1,19), has a significance level of *p*=0,99. Due to the fact that in this case the acceptable value is exceeded, **H1e is rejected**.

H1: The exposure to the in-store TV has a positive impact on one or more of the customer-based brand equity dimensions.

Finally, the overall evaluation of H1 is dependent on the sub hypotheses. It was proposed that at least one customer-based brand equity dimension had to be effected in order to confirm that in-store TV has an effect on it. Even though four out of the total of five sub hypotheses are rejected, one is accepted. In consideration of this evidence it can be stated that **H1 is accepted.**

Hypothesis	Measurement	Result
H1	Consumer-based brand equity	Accepted
H1a	Awareness	Rejected
H1b	Perceived Quality	Rejected
H1c	Associations	Rejected
H1d	Uniqueness	Accepted
H1e	Loyalty	Rejected

Table 6: Summary of the results for all hypotheses tested

4.2.3 T-test Analysis for testing hypothesis H2

The aim of the second t-test analysis is to provide evidence for hypothesis H2. It was proposed that when a product purchase does not affect any of the consumer-based brand equity variables, in-store TV solely elicits impulse purchases. The variable '*observed purchase behavior*' together with the brand equity variables were computed in SPSS.

Brand Equity Variables	Observed purchase behavior	Sample Size N	Mean	Standard Deviation	Std. Error Mean
Awareness	Purchase	21	4,29	1,06	,230
	No Purchase	147	4,23	1,15	,095
Perceived Quality	Purchase	21	3,95	,67	,146
	No Purchase	147	3,48	,96	,079
Associations	Purchase	21	3,90	,94	,206
	No Purchase	147	3,77	,95	,078
Uniqueness	Purchase	21	3,67	,80	,174
	No Purchase	147	3,56	,93	,077
Loyalty	Purchase	21	3,90	,83	,181
	No Purchase	147	3,27	1,15	,095

Table 7: Group statistics for brand equity variables and observed purchase behavior

The group statistics indicate that the mean for consumers that purchased the product is somewhat higher on all of the brand equity variables. That means, people that put the product in the basket which in this context is defined as buying the product, evaluated the brand higher in the subsequent survey interview. However, these data alone are not sufficient to determine if in fact there exists a real difference between both samples. Therefore, as in the previous t-test analysis it is crucial to consider the significance level of the variables and compare them to the set limit.

In Table 8, the t-test outcome is shown. A significance level of $p \leq 0,05$ was seen as necessary to exclude sampling errors. Consequently, all variables with a higher level of significance are defined as not relevant.

The results indicate that the difference in awareness of consumers that purchased the product (M=4,29, SD=1,06) over those that did not buy it (M=4,23, SD=1,15), has a significance of p=0,829. For the variation in associations of consumers that purchased the product (M=3,90, SD=0,94) over those that did no purchase (M=3,77, SD=0,95), the level of significance is p=0,542. The analysis of uniqueness of consumers that purchased (M=3,67, SD=0,80) as compared to those that did not purchase the product (M=3,56, SD=0,93), shows a significance level of p=0,571. Since all the describe variables have a p-value that is beyond the set limit of $p \leq 0,05$, the variation in the sample is not significant.

The difference in the variable perceived quality of consumers that bought the product (M=3,95, SD=0,67) versus those that did not (M=3,48, SD=0,96), has a significance of p=0,007. The final variable is loyalty, where the level of significance between consumers that purchased the product (M=3,90, SD=0,83) as compared to those that did not buy it (M=3,27, SD=1,15) presents a value of p=0,004. That proves that the difference in the variables perceived quality and loyalty demonstrates a significant variation as both values are below the limit.

Independent Samples Test		Levene's Test for Equality of Variances		t-test for Equality of Means			
		F	Sig.	t	df	Significance (2-tailed)	Result
Awareness	Equal variances assumed	,234	,629	,204	166	,838	Not Significant
	Equal variances not assumed			,218	27,292	,829	
Perceived Quality	Equal variances assumed	6,045	,015	2,195	166	,030	Significant
	Equal variances not assumed			2,867	33,115	,007	
Associations	Equal variances assumed	,017	,897	,614	166	,540	Not Significant
	Equal variances not assumed			,617	26,154	,542	
Uniqueness	Equal variances assumed	,476	,491	,510	166	,611	Not Significant
	Equal variances not assumed			,573	28,415	,571	
Loyalty	Equal variances assumed	2,203	,140	2,458	166	,015	Significant
	Equal variances not assumed			3,126	32,083	,004	

Table 8: T-test analysis for brand equity variables and observed purchase

H2: Product purchase is affected through a change in at least one customer-based brand

equity dimension

With the help of the t-test results it is now possible to examine whether we can confirm hypothesis H2. The intention of H2 is to exclude that in-store TV screen only elicits impulse purchase. It is argued that when a purchase took place but no brand equity dimension was affected, a pure impulse purchase took place. At the same time, this would mean that in-store TV can not affect customer-based brand equity at all.

The results show evidence that consumers who performed a purchase demonstrate a higher score on the customer-based brand equity variables perceived quality and loyalty. Based on that it can be concluded that hypothesis **H2 is accepted**.

4.3 Discussion of the empirical data

The empirical findings reveal that customer-based brand equity can indeed be affected through in-store TV. This confirms the relevance of implementing research in this rather unexplored area. As discussed throughout this thesis, in-store TV has so far been considered as efficient tool in the store environment whose major purpose is to drive sales. By means of this research study, the potential of in-store TV could be explored, and through the acceptance of Hypotheses 1 and 2 it is confirmed to be a brand equity building tool. However, to give the empirical results further meaning, the outcomes are discussed in the following.

In the first part of this discussion the most significant results with regards to the antecedent state variables are highlighted. For non-biased research results it is essential that these variables predict no large impact on recognizing the in-store TV. Although the SPSS results presented previously provide explicit numbers, it is now of crucial importance to give it an insightful interpretation, taking into account the developments made in the conceptual framework.

Most outstanding is the result of *shopping list* having an influence on whether consumers pay attention to in-store TV. This means that consumers have a written or mental list before entering the store to buy a specific brand or a product within a category. Therefore it can also be talked about planned purchase. The fact that planned purchase shows the only significant, but still very low relationship on the dependent variable, can be explained by the postulation made in the conceptual framework, which implies that previous planning leads to search for environmental cues in-store. Basically, the research results confirm what was anticipated in the theoretical chapter, although the weak values exclude that a valid relationship exists.

Hedonic shopping motives, on the contrary, show the greatest dissonance with regards to a statistically significant relationship. This is a surprising result as academic literature refers to hedonic shoppers as being fun and entertainment seeking when it comes to shopping (Backström & Johansson, 2006). That consumers with hedonic motives are more receptive to view the in-store TV can in this research study not be confirmed. Also, for *utilitarian shoppers* no significant relationship on observed TV attention could be determined. Overall, it is concluded that no matter what shopping motives consumers have in mind when entering a store, chances are alike that the in-store TV is noticed.

Furthermore, *positive mood* is one of the independent variables with a high dissonance for a relationship to be significant. This clearly indicates that positive mood does not necessarily lead to a higher recognition of in-store TV. As consumers were asked about their mood that day, it was possible to investigate how consumers overall mood-state was, even before

entering the store. Although a significant relationship of positive mood on the receptiveness of in-store TV can be excluded, it is still noteworthy saying that through in-store TV consumers' mood might be influenced positively, as it was proposed in the conceptual framework. In order to provide a valid answer, an additional t-test analysis (see appendix) was implemented to compare the groups of consumers who saw the TV and those who did not. The results show that no difference in mood is investigated, which excludes that in-store TV could have functioned as a mood changing medium, causing a possible change in brand equity.

Of crucial insight is also the result that *attitude towards in-store TV* is irrespective to the fact whether attention is paid to the TV. This means, that on the one hand attitude can be excluded as influencing variable, on the other hand a possible explanation is that in general consumers' attitude towards the screens is rather positive. This proposition is made on the basis of an additional frequency distribution table which is found in the appendix. Due to the fact that consumers were asked about their level of agreement with the statement *In general, I like TV screens in supermarkets*; it was possible to determine the overall notion towards this medium in the store environment. The results reveal that 51,2 % of the respondents have a positive attitude towards in-store TV, whereas 29,2 % have a neutral opinion about it and only 29,6 % of the respondents would rather disagree with this statement. Besides being certain that attitude is not impacting observed TV attention, a general positive attitude and acceptance seem to be promising results with regard to using this medium for brand building or store image enhancement.

Lastly, *time pressure* features similar results as the other independent variables, and does not predict a relation on the dependent variable. Taken as a whole, the results assure that consumers when entering a store cannot significantly be predetermined for being not receptive to a TV. However, these findings also reveal, that chances are given that basically every consumer, independent of his or her antecedent states, can be reached by in-store TV.

Being aware that the antecedent states possess no severe impact, there is still the possibility of brand equity being influenced within the store environment that does not emerge from the in-store TV stimulus. The statistical analysis of packaging and price in the previous section that was used to explore a potential influence on awareness, perceived quality, associations, uniqueness and loyalty, shows interesting results on which to elaborate.

Most noticeable is the finding that *packaging* shows a significant but rather low relationship to most of the brand equity dimensions. This result is not surprising, as previous academic research confirmed the influence of packaging on quality. Packaging can not only have an impact on intrinsic quality, but even more important, on extrinsic quality in terms of visual identity and information on the packaging (Zeithaml, 1988; in Anselmsson et al., 2007). Although a relationship of packaging on perceived quality could be determined, on loyalty the impact seems to be even greater. Besides that, for awareness no significant relation could be predicted. These are unexpected results, as it could have been anticipated that packaging would have a rather huge influence on creating awareness, whereas for loyal customers packaging becomes less relevant. For the latter a plausible explanation is that packaging serves for identifying the particular brand. Customers being loyal to a brand get used to its packaging which enables to directly identify the product among others and gives security that the desired brand is purchased.

In this context it is interesting to recognize that *price* effects the brand equity dimensions much less. This implies that consumers are not particularly price sensitive concerning this brand, as the frequency distribution table in the appendix reveals. Due to the fact that the brand equity dimension awareness illustrates to be the lowest probability for being effected by price, it can be argued that price is not necessary decisive criterion to get consumers' attention of the Barnängen brand. Most significantly impacted is uniqueness whereas it can be anticipated that in terms of unique product features, consumers might be willing to pay a higher price for the brand.

However, as discussed previously all these impacts of packaging and price on brand equity are too small for considerably effecting customer-based brand equity in the store environment. Therefore, it is concluded that also in the store environment, a possible change in customer-based brand equity is not influenced by any other source than the in-store TV. Excluding an influence of the antecedent state and purchase environment variables contributes to the overall validity of the research study, as all other possibilities than the in-store TV from which brand equity could be caused, are eliminated.

The findings of the t-test reveal that the uniqueness dimension of customer-based brand equity is significantly influenced by in-store TV. This is somewhat unexpected as it was assumed that mainly the awareness dimension would have been impacted. Advertising is one of the primary communication vehicles to build brands and usually starts with creating awareness (Kapferer, 2008). Although, the investigated brand is not a new product, a difference on the awareness level was expected. Especially, in a crowded retail environment creating awareness is a central role for products to be purchased (Anselmsson et al., 2007). It was assumed that in-store TV would help to cut through the noise and make the brand salient so that consumer could easily recognize it. However, this is not the case in this study since there is no meaningful difference on the awareness dimension between the two samples.

Since the perceived quality dimension is about the perceived quality of consumers rather than the objective quality (Mitra & Golder, 2006), it was believed that it could have been affected. The reason is that perceived quality is build up and strengthened by means of advertising (Villarejo-Ramos & Sánchez-Franco, 2005). Brands that are advertised are perceived by consumers as having a good quality. This perception is most of the times a subjective expectation and not necessarily established on brand experience with the brand (Mitra & Golder, 2006). Therefore, it was assumed that also in-store marketing in form of in-store TV could contribute to the perceived quality level. Nevertheless, this is not confirmed by the findings. In-store TV had no significant impact on the perceived quality dimension of customer-based brand equity.

Brand associations can be established during every encounter with the brand. When brand information like for instance advertising gets processed, it becomes a link to the brand name in consumer's memory with the brand association as outcome (Romaniuk, 2006). Brand associations are primary generated by credible communication (Anselmsson et al., 2007). With that in mind, it was assumed that a change in associations can be elicited through in-store TV. The idea was that when consumers see the product on TV it will activate the existing brand memory, in which brand associations are embedded. Nevertheless, no evidence is found as the consumer that saw the TV did not show significant higher scores on this dimension.

As mentioned before, the uniqueness dimension demonstrates a significant variation caused by the in-store TV. Uniqueness plays a critical role in building brand equity and also appears to be an important factor in achieving price premium (Anselmsson et al., 2007). In this study uniqueness stands for a distinctive feature of the brand and is usually related to a specific attribute of the brand (Ibid.). It seems that in-store TV does not create brand uniqueness per se but it helps a brand to stand out from its competitors. That means in the context of brand equity it helps to distinguish the brand which might lead to a higher perceived uniqueness. A possible explanation might be that the in-store TV acts as cue that adds positively to the brand perception. In the hierarchy of effects model, communication is defined as a cue which initiates a process and can lead to behavioral reaction (Monye, 2000). It is known from psychology that situational cues can activate memory representations of objects which also include brands (Berger & Fitzsimons, 2008). A recent exposure to brands can affect judgment and decision making since people prefer objects they have previously encountered (Ibid). In that sense, it is argued that the TV might act as cue that influences the information processing and leads to a favorable consumer's evaluation of the brand. However, further evidence is necessary to be able to support this assumption.

The final dimension in the brand equity construct is loyalty which is in this context attitudinal loyalty, referring to the intention to purchase the brand next time. Loyalty is a rather complex construct and previous experience with the brand is almost essential. Because it is acknowledged that perceived value and satisfaction lead to loyalty intentions (Johnson, Herrmann & Huber, 2006). It seems obvious that product usage is a requirement in order to influence these aspects and increase loyalty intentions. Due to these facts, it was doubted and seen as rather unlikely that a stimulus like in-store TV could potentially increase attitudinal brand loyalty. This is reflected in the results as no meaningful difference in loyalty scores could be identified.

Overall, the hypothesis H1 is accepted due to the fact that one brand equity dimension is significantly influenced. The notion that an increase in one dimension is sufficient to claim that brand equity is affected, is acknowledged in the literature. Villarejo-Ramos & Sánchez-Franco (2005) conclude that brand equity can be created and maintained by strengthening one of its dimensions. Also, in the most cited concepts of Aaker (1996) and Keller (1993), building brand equity can be due to an increase in any of the construct variables. Therefore, it is not necessary that all dimensions show a change in order to claim that brand equity is influenced.

As a final point, it is important to exclude that in-store TV only serves to elicit impulse purchases and in that regard, does not influence brand equity. In order to do so, hypothesis H2 was tested by comparing the mean of consumers that bought the product against those that did not purchase it. The results in Table 8 indicate that the perceived quality and loyalty show a significant higher score given by consumers that bought the product shown on the in-store TV. Since it was proposed that a purchase which does not show a variation in brand equity has to be excluded, also the second hypothesis could be confirmed.

CHAPTER 5 – Conclusion

At the beginning of this thesis a clear purpose was specified that outlined the scope and object of the study to be investigated. The aim was to explore the effect of in-store TV on customer-based brand equity. In order to do so, a systematic research approach was applied to study the causal relationship between both entities. A quantitative design combining structured interviews and structured observations, turned out to be the best method for collecting necessary data. With the help of the hypotheses and empirical data, the relationship was tested which produced the necessary results to answer the main research question:

"Does in-store TV stimulus in a retail environment has an effect on customer-based brand equity of consumer products?"

In the light of the obtained findings the research question is confirmed with yes, in-store TV does affect consumer-based brand equity. The consumer-based brand equity for the Swedish shampoo and conditioner brand Barnängen, presented significant variations between consumers that viewed the TV and those that did not.
The concept of customer-based brand equity was operationalized into the five dimensions awareness, perceived quality, associations, uniqueness and loyalty. Uniqueness is the main dimension that showed a significant effect caused by in-store TV. For all other brand equity dimension no evidence for a significant relationship was found. The fact that only the uniqueness dimension showed some variation was rather unexpected. Based on the existing literature of marketing and branding, it was assumed that awareness would be the main dimension that could be significantly affected. The overall claim that brand equity was influenced although only one dimension showed a significant relationship, is based on the fact that an alteration in one dimension does denote a brand equity change.

The validity of the findings is emphasized by excluding potential sources of irritation. Through the systematic integration of antecedent state and purchase environment variables the potential effect on brand equity was analyzed. Furthermore, by testing the occurrence of impulse purchases that show no effect on brand equity, it was verified that brand equity was impacted. As other sources could be eliminated it is ascertained that in fact the causal relationship between in-store TV and consumer-based brand equity was analyzed.

Although the results are seen as novel and meaningful, within the context of the study there are also certain limitations that have to be acknowledged. The intention was to study various products but due to practical constrains the findings are limited to one product and one category. Furthermore, the shown advertising content was not included in the study but it is understood that the effectiveness also depends on it. In addition, only the short term effects derived from in-store TV are researched which ignores possible long term effects.
Limitations are not only useful for drawing the boundaries of the findings but are also a source of inspiration for future research areas. The consequential thoughts are presented in the section for theoretical implications of this conclusion.

5.1 Managerial implications

From a managerial point of view, the findings seem to be of high interest for retailers and brand manufacturers alike. The main contribution is that the effectiveness of in-store stimuli on consumer-brand equity could be quantified. That gives an idea of what the potential

outcome of applying this marketing instrument can be. Evaluating the impact of marketing especially when it comes to determine the possible results of marketing activities is still a contemporary issue. In that regard, this study is a first attempt to measure and verify potential effects for the brand by using this marketing technique.

Retailer can provide evidence to manufacturers that in-store TV can be used for building their brands in-store. That is likely to lead to an increasing interest of brand managers to integrate in-store TV in their marketing campaigns. In addition, the power of retailers is further strengthened. They already have the full control over their store environment and with further knowledge about the effective use of in-store marketing instruments, retailers are in a position to offer full service solutions. That means, they could offer their expertise in form of solutions to manufacturers on what instruments best to use in the retail environment to reach specific marketing objectives.

The main implication for brand manufacturers is that they are made aware of the potential of in-store TV. More specific, by knowing what in-store TV can be used for, an efficient and effective use of marketing investment might be achieved. As a consequence, manufacturers might consider their marketing resource allocation in terms of channels used for promoting their brands.

5.2 Theoretical implications

In this thesis, two streams of literature have been mainly utilized. The first stream consist of theories related to in-store environment and as second stream, literature on brand equity was essential. With regard to both literature streams, different perspectives have been discussed in the theoretical framework which formed a solid basis for conducting this research study. However, in the context of store environment, special attention is paid to atmospherics influencing consumer behavior at the point-of-purchase and in particular in-store TV stimulus. Furthermore, when it comes to brand equity, the main focus is on customer-based brand equity for fast moving consumer products. Consequently, theoretical contributions are targeted on these research areas.

Under this consideration, the research has contributed to investigate the causal relationship of in-store TV stimulus and customer-based brand equity. By means of the empirical research a significant relationship could be confirmed. This broadens the perspective on the effectiveness of in-store marketing and directs it into a new and rather unexplored angle. To be more specific, it encourages considering in-store TV not solely as a sales-driving tool, but as one for building brands in-store. From a theoretical perspective an untapped area is explored in which no academic research has been implemented so far. However, the conceptual model developed in this thesis has proven to be suitable for measuring this casual relationship. It adds a valid contribution to the academic research in the related areas as it takes into account existing theory as well as various other types of influences which could impact or bias the overall research results. To these belong the antecedent states and purchase environment variables which were included in the conceptual model. Excluding influences from any other possible source contributes to the internal validity as it guarantees reliable and specific results. Therefore, the model is not only expected to be a useful measurement tool, but an inspiration for further academic research in this field. Although the contribution to customer-based brand equity in a retail setting is evident for the case at hand, it is crucial to mention that in particular the short-term effect of in-store TV stimuli on customer-based brand equity could be ascertained. How effective this brand building tool is with regard to a

long-term perspective remains unrevealed. Thus, by means of this academic contribution it is aimed to have set a foundation for further research in the area of in-store TV and customer-based brand equity, on which it is elaborated in the next paragraph.

5.3 Future research

As already touched upon, the research study at hand serves to encourage further academic research in the discussed area. First of all, it is recommendable to consider consumer goods from various categories to see if there are differences. It might be that some products are more appropriate than others which would address issues concerning the generalizability.

Since marketing and in particular advertising is most effective when employed over long periods, extending the scope of research to a long-term perspective could amplify the effectiveness of in-store TV. This is supported by the notion that brand equity is build over time and should therefore be measured as such. Furthermore, in terms of a complementary marketing communication campaign, it could be provided whether the effectiveness of in-store TV stimulus can be enhanced when supported by other media. As brands are usually advertised in a campaign that is using various promotion channels, it would be interesting to see what role in-store TV can play in such a campaign.

Another idea for further research would be to consider in-store TV as brand building tool with the different stages of the product life cycles. How effective can this stimulus be when a new brand is launched into the market and brand equity has to be built from scratch. In terms of mature brands it would be worth knowing if a change in customer-based brand equity can be elicited at all.

Finally, some general remarks that came up during the empirical research are presented. First of all, it has been noticed that overall most consumers seem to ignore in-store TV screens. The idea that consumers indeed stop and watch what is running on the TV screens, happens very rarely. However, it is acknowledged that many consumers at least have a glance at the TV. Although this happens in most of the cases only for a few seconds, those seem to be effective as otherwise in this research no significant casual relationship could have been confirmed. In case of conducting observations, it is critical for the observers to be extraordinarily careful in judging if consumers have seen the TV or not as this line is very thin.

Secondly, many shoppers of grocery products appear to be not necessarily conscious of what they actually buy as the shopping activity is often completed routinely. This means that consumers rather unconsciously place products in their basket. It can even be argued that when consumers enter the store, they seem to be on 'autopilot mode' in order to accomplish what they have to do at least once a week, grocery shopping. It is crucial to consider this aspect when conducting surveys at grocery retailers as consumers are sometimes not aware of their own purchases.

As concluding remark it can be said that the potential of in-store TV stimulus as a way to build brand equity has to be amplified and should get further attention in research. By means of this thesis a first effort has been done.

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Appendix

1) Items of the questionnaire for the structured interviews

Construct		Measurement Item	Type of Scale
Antecedent States	Time	During this shopping trip I am under time pressure	Likert 1-5
	Mood	Today I am in a positive mood	Likert 1-5
	Shopping motive - utilitarian	I accomplish just what I want on this shopping trip	Likert 1-5
	Shopping motive - hedonic	I truly enjoy this shopping trip	Likert 1-5
	Shopping list	I have already planned to buy this brand before entering the store	Likert 1-5
	Attitude towards TV	In general, I like TV screens in supermarkets	Likert 1-5
Brand Equity	Awareness	I have heard of this brand	Likert 1-5
	Perceived Quality	The brand has a higher quality than alternative brands in this category	Likert 1-5
	Associations	Some characteristics of this brand come to my mind quickly	Likert 1-5
	Uniqueness	The brand has a unique combination of features	Likert 1-5
	Loyalty	I would purchase this brand on the next opportunity	Likert 1-5
Purchase Environment	Price	The price was is the main factor for buying this brand	Likert 1-5
	Packaging	The packaging of the brand is the most appealing thing to me	Likert 1-5
Perception of TV	Recognition	Have you seen the in-store TV screen?	YES/NO
	Memorize Advertising	Do you remember the product that was shown on the in-store TV screen?	YES/NO
	Memorize Purchase	Have you bought the product that was shown on the in-store TV screen?	YES/NO

2) English version of the full questionnaire

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SURVEY TO INVESTIGATE THE EFFECTS OF IN-STORE TV SCREENS ON CONSUMER PRODUCTS

Interviewer (CU/VS) _____   Questionnaire No _____

Background: Hello I'm a Master Student of Lund University. We are currently conducting a survey as part of our Master Thesis about the effects of in-store TV screens on consumer products. Would you be so kind to answer me some questions regarding this? It will only take a few minutes.
(If answer is _yes_: continue with the questions. If answer is _no_: thank participant politely)

Gender: Male   ☐   **Age:** _____
                  Female   ☐

Brand _____

Example: Please rate your personal level of agreement to the following statement like shown in the example below:

Assessment	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
To me grocery shopping is pleasant and entertaining		X			

Assessment	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I have heard of this brand					
The brand has a higher quality than alternative brands in this category					
Some characteristics of this brand come to my mind quickly					
The brand has a unique combination of features					
I would purchase this brand on the next opportunity					
During this shopping trip I am under time pressure					
Today I am in a positive mood					
I accomplish just what I want on this shopping trip					

Page 1

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Assessment	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I truly enjoy this shopping trip					
I have already planned to buy this product before entering the store					
In general, I like TV screens in supermarkets					
The packaging of the brand was the most appealing thing to me					
The price was the main factor for buying this brand					

Have you seen the in-store TV screen?

YES ☐   NO ☐

Do you remember the product that was shown on the in-store TV screen?

YES ☐   NO ☐

Have you bought the product that was shown on the in-store TV screen?

YES ☐   NO ☐

3) Swedish version of the full questionnaire

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Undersökning angående effekterna på användandet av In-Store Tv-skärmar i relation till konsumentprodukter

Intervjuare (CU/VS) _____ Frågeformulär nr _____

Bakgrund: Hej jag är en Masters student vid Lunds Universitet. Jag genomför för närvarande en undersökning angående effekterna av in-store Tv-skärmar på konsumentprodukter som en del av vår Mastersuppsats. Skulle du vilja ta del av denna och svara på några frågor? Det tar bara några minuter.

Varumärke _____

Kön: Man ☐   **Ålder:** _____
       Kvinna ☐

Exempel: Vänligen utvärdera utifrån din personlighet hur mycket eller lite du håller med följande påstående. Se exempel nedan:

Påstående	Håller starkt med	Håller med	Neutral	Håller inte med	Håller definitivt inte med
Att handla livsmedel är för mig trevligt och rogivande		X			

Påstående	Håller starkt med	Håller med	Neutral	Håller inte med	Håller definitivt inte med
Jag har hört talas om detta varumärke					
Varumärket besitter högre kvalitet än alternativa varumärken I denna kategori					
Jag kommer att tänka på vissa kännetecken hos detta varumärke snabbt					
Varumärket har en unik kombination av kännetecken/kännedrag					
Jag skulle köpa detta varumärke vid nästa tillfälle					
Under denna shoppingtur känner jag mig stressad					
Idag är jag på gott humör					

Page 1

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Påstående	Håller starkt med	Håller med	Neutral	Håller inte med	Håller definitivt inte med
Jag kommer endast uträtta vad jag vill under denna shoppingtur					
Jag njuter verkligen av denna shoppingtur					
Jag har redan planerat att köpa denna produkt innan jag gick in i affären					
Överlag uppskattar/gillar jag Tv-skärmar I varuhus/supermarkets					
Varumärkets förpackning är mest lockande för mig					
Priset är den avgörande faktorn vid köp av detta varumärke					

Har du sett Tv-skärmen inne I affären?

JA ☐   NEJ ☐

Kommer du ihåg vilken produkt som visades på Tv-skärmen inne i affären?

JA ☐   NEJ ☐

Har du köpt produkten som visades på Tv-skärmen inne i affären?

JA ☐   NEJ ☐

4) T-test statistics for mood

Group Statistics					
	Observed TV attention	N	Mean	Std. Deviation	Std. Error Mean
Positive mood	View TV	81	3,9877	,90130	,10014
	Ignore TV	87	4,1494	,92169	,09882

Independent Samples Test						
		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Significance (2-tailed)
Positive mood	Equal variances assumed	,915	,340	-1,149	166	,252
	Equal variances not assumed			-1,150	165,594	,252

5) Frequency distribution table for "Attitude towards in-store TV"

Attitude towards in-store TV				
	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	14	8,3	8,3	8,3
Disagree	19	11,3	11,3	19,6
Neutral	49	29,2	29,2	48,8
Agree	64	38,1	38,1	86,9
Strongly Agree	22	13,1	13,1	100,0
Total	168	100,0	100,0	

6) Frequency distribution table for "Price"

Price is the most important aspect for this brand				
	Frequency	Percent	Valid Percent	Cumulative Percent
Strongly Disagree	27	16,1	16,1	16,1
Disagree	38	22,6	22,6	38,7
Neutral	64	38,1	38,1	76,8
Agree	26	15,5	15,5	92,3
Strongly Agree	13	7,7	7,7	100,0
Total	168	100,0	100,0	