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Consumer Behavior

Instigating involvement through consumer-based brand equity
An attitudinal study of consumer-based brand equity and consumer involvement

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Abstract

Recent research on links between dimensions of consumer-based brand equity, as well as links to consumer involvement, has shown that it is a significant predictor of purchase behavior.

The purpose of this dissertation is to explore the affect brands have on consumer involvement. We attempt to investigate how consumer-based brand equity affects the level of consumer involvement.

Based on consumer behavior theory and previous research of these areas, gathered primary data (an empirical investigation of students’ attitudes) is analyzed to gain an understanding of how the aforementioned concepts relate to each other.

The findings indicate that there are correlations between consumer-based brand equity and consumer involvement, and that there is more to investigate in this area. Suggestions for further research include a similar study with more measured variables for each dimension, and analyzing them separately instead of creating indexes.

The results of this dissertation may be useful for marketers and manufacturers of the specific products investigated, as well as products of similar nature, in order to apply focus to the attributes which consumers value most.

Keywords: consumer-based brand equity, brand loyalty, consumer involvement, consumer behavior
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1. Introduction

The opening section of this dissertation clarifies the background of consumer behavior. Furthermore, the problem and the purpose are identified and a research question is developed. The theoretical limitations are then addressed, followed by an outline of the dissertation’s structure.

1.1 Background

Each day individuals make several purchase decisions in products and services. Different purchase situations and individual preferences generate different kinds of behavior. In consumer behavior and consumer decision-making, consumer-based brand equity and the level of involvement are two concepts that are assumed to have considerable influence.

Pappu, Quester and Cooksey (2005) have conducted research on consumer-based brand equity, where they attempt to measure this variable and improve the measurements. Kapferer and Laurent (1985a; 1985b) and Zaichkowsky (1985) were some of the first to attempt to measure consumer involvement. These methods are still used and improved through new research. These research methods stand for the foundation of this dissertation.

According to Quester and Lim (2003), several studies have examined the connection between consumer involvement and brand loyalty, though that the studies have remained conceptual and theoretical, rather than empirical. The authors thereby imply that there is a deficiency in empirical studies in the matter of examining the link between consumer involvement and brand loyalty. In addition, since brand loyalty has an important role in consumer-based brand equity, it is interesting to view this as a whole concept.

One of the problems in the relationship between consumer-based brand equity and consumer involvement is that the research in this area is not sufficient, which Quester and Lim (2003) state in their research. By contributing with further
research concerning this relationship, there are possibilities of presenting additional information.

1.2 Problem
Since there is an uncertainty of the link between brand importance and the level of involvement (Quester and Lim, 2003), a problem in proving this relationship exists. Not much research has been conducted in this area, which is why there is a need for additional exploration. Branding has existed for hundreds of years for the purpose of distinguishing the different competitors’ products. It is important for companies to make the consumer understand the content and structure of their brand, since they have an influence on what choice the consumer makes (Jevons, 2005). This leads to the following question: How do brands affect consumer involvement?

1.3 Purpose
The prominent purpose of this research is to explore the affect brands have on consumer involvement. We attempt to investigate how consumer-based brand equity affects the level of involvement in the consumer. Since only few researchers have attempted this, the purpose is not to discover revolutionary findings, but to add and contribute a deeper understanding of the problem.

1.4 Research question
To investigate the above problem the following research question is proposed:
- How does consumer-based brand equity affect different levels of consumer involvement?

This question provides a line of argument throughout this dissertation.

1.5 Theoretical limitations
This dissertation faces limitations in the theoretical aspects of brands and involvement. One of these limitations is that there are several different theoretical models concerning these concepts, which makes the theoretical learning process
longer and additionally complex. Since there is a vast amount of theories on these
subjects, we cannot be certain that everything is examined and included.

Another limitation that must be affirmed is that most of the examined research is
of American origin. This could implicate that the results of our research might
differ, since there might be attitudinal differences between Americans and
Swedes.

1.6 Outline
This dissertation will follow the below stated outline:

Chapter 2 – Research method
This chapter presents the different selections regarding the methodology of this
dissertation. This includes the research philosophy, research approach, choice of
theory and choice of methodology.

Chapter 3 – Theoretical framework
This chapter is a collection of literature and articles, which are presented as our
theoretical framework. It includes a general view of consumer behavior to gain an
overview of the area we are researching. Furthermore, we describe the specific
areas in consumer behavior, including decision-making and factors involved
within this process. We also discuss theories in low versus high involvement
purchases as well

Chapter 4 – Empirical method
This chapter presents the empirical methods in the dissertation. It begins with
explaining and defining research design and strategy, followed by explanations of
data collection, population, operationalisation, reliability, validity,
generalisability, and response rate, and ends with a description of the
questionnaire
Chapter 5 – Research analysis and discussion

This chapter presents the analysis of our results. The analysis is divided into three segments, index establishment, index comparison and comparison of involvement index and consumer-based brand equity dimension, which are analyzed by presenting statistics processed through SPSS. The results of the analysis are then evaluated and compared to our previously stated hypotheses.

Chapter 6 – Conclusions

This chapter begins by presenting our conclusions, followed by critical reflections, suggestions for future research and practical implications.
2. Research method

This chapter presents the different selections regarding the methodology of this dissertation. This includes the research philosophy, research approach, choice of theory and choice of methodology.

2.1 Research philosophy

Saunders, Lewis and Thornhill (2009) state that research philosophy is related to methods regarding knowledge development; it focuses on the researcher’s views of the world. The three most common research philosophies are positivism, realism and interpretivism. Positivism means that the researcher is an objective viewer of social reality, and that some general conclusions can be made from the researcher’s findings. A positivistic philosophy also concerns research of already existing research findings. Realism means that the researcher views reality as independent from the human mind; meaning that only what can be felt by the human senses is considered reality. Interpretivism means that the researcher considers the human mind and social world too complex to be able to make general conclusions (Saunders et al., 2009).

In our research we have adopted a positivistic philosophy, since we attempt to stay neutral and not affect, nor be affected by, our research subject or collected data. Since we believe that our findings can be generalized to a certain degree and not entirely, the interpretivistic philosophy is also adopted.

2.2 Research approach

Researchers use either deductive or inductive reasoning to find a solution to a specific problem. Deductive reasoning is used if researchers make use of general ideas to proceed to the particular; in other words, make use of constructs as a basis to predict future observations. On the contrary, if researchers reason from the particular to the general, they mainly use inductive reasoning. Inductive research starts with empirical observations and subsequently infers constructs. Researchers
have to use both inductive and deductive reasoning if they are trying to build conceptual models.

We believe, due to the positivistic philosophy and the psychological nature of our research area, that the most suitable scientific approach for our study is a deductive approach. We start, as a deductive approach suggests, with theories, and then form hypotheses, followed by observations, from which we attempt to draw conclusions to confirm our hypotheses. We have decided to use relevant, predetermined theories, as well as previous research, as the foundation for our own research. There are a number of theories concerned with our chosen subject, from which we have chosen the ones we feel are best suited for our research; see chapter 2.3 for our choice of theories.

Once the research question, philosophy, approach is chosen researchers must decide in whether a qualitative or quantitative approach is going to be utilized. Research with an interpretivistic philosophy and an inductive approach commonly uses a qualitative approach. In case of a positivistic philosophy and a deductive approach, a quantitative research is most commonly used (Webb, 1992).

Our dissertation mainly follows a positivistic philosophy and has a deductive research approach, which indicates that a quantitative research observation method is most suitable. Another reason for the quantitative approach is the time horizon, as we feel that quantitative data is faster to analyze.

### 2.3 Choice of theory

This research aims at finding a correlation between consumer-based brand equity and involvement. Therefore, it is of interest to first define what these concepts encompass and then describe the connection between them. This is supported and clarified by theories and research concerning consumer behavior in general, as well as consumer decision making. Regarding consumer-based brand equity, the main basis is proposed by Pappu (2005) and supported by Jensen and Hansen (2006) through brand loyalty. Concerning involvement, the main basis is Kapferer
and Laurent’s (1985b) Consumer Involvement Profiles (CIP), which involves more easily observed facets of consumer involvement than Zaichkowsky's Personal Involvement Inventory (1985, 1994). Research where similar relationships as the one in our research, has also been thoroughly examined. Quester and Lim (2003) examine the link between brand importance and the level of involvement. The theories and findings from this research are of interest to our dissertation.

2.4 Choice of methodology
Our research methodology is somewhat based on what previous researchers of these areas have used. Since these past researches have already been criticized and peer-reviewed, we thereby have some idea of which parts to include and which parts not to include in our own study. We started by studying previous research with similar subjects, to gain a deeper understanding of research in this field, and gave particular consideration to their measurement methods. In chapter 3.4 and 3.5 these different measurement methods have been presented in detail. After conducting a literature review of the research area, we continued by developing a research model. For collecting our data, we decided that the most suitable approach would be a questionnaire, which is shaped in a similar way as previously conducted research in the same field. The collected data is then analyzed in respect of previously developed methods and according to our research objective; for further detail please see chapter 4.5.
3. Theoretical framework

The following section is a collection of literature and articles, which are presented as our theoretical framework. It includes a general view of consumer behavior to gain an overview of the area we are researching. Furthermore, we describe the specific areas in consumer behavior, including decision-making and factors involved within this process. We also discuss theories in low versus high involvement purchases as well.

3.1 Definitions

In this dissertation, the following definitions are used. Erasmus (2001) defines consumer behavior as actions directly involved in obtaining, consuming and disposing of products and services, including the decision processes that precede and follow these actions. The same author also defines consumer decision-making, which consists of behavioral patterns of consumers, which precede, determine and follow on the decision process for the acquisition of need satisfying products, ideas or services. Pappu, Quester and Cooksey (2005) refer to Aaker's (1991) definition of brand equity, defining it as: "a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value of a product or a service to a firm and/or a firm's customers." (Pappu, 2005, p. 144; Aaker, 1991, p. 15). Consumer involvement is defined as a relation between consumer and product, and found to be the relational variable most predictive of purchase behavior (Martin, 1998).

3.2 Consumer behavior

For companies to be able to market products or services successfully, an understanding of how consumers behave and make decisions is required (Simpson, 2001). There are several theories that relate to this area, including economic theories as well as psychological theories.

The research in consumer behavior is a relatively new field, which grew predominantly in the 1960s. Research in this field had little or no history of its
own and marketing researchers obtained a great deal of concepts from other research fields. These fields are named in an article by Smith and Rupp (2003), and consist of “psychology (the study of the individual), sociology (the study of groups), social psychology (the study of how an individual operates in groups), anthropology (the influence of society on the individual), and economics (the study of spending patterns in society)”. Earlier studies in theories regarding consumer behavior were developed through economic theory, for example the concept of where consumers proceed rationally to maximize their satisfaction in the process of purchase. More recent research reveals that consumers are influenced by different types of reference groups, such as family, friends, advertisers and role models. Terms like impulsive purchase, mood, situation and emotion are applied more commonly in concerns regarding consumer behavior. All of these factors combine to form a comprehensive model of consumer behavior that reflects both the cognitive and emotional aspects of consumer decision-making (Kanuk and Schiffman, 2000; Smith and William 2003).

In the literature perspective, Assael (1994) explains consumer behavior as the process of perceiving and evaluating different components of a purchase. Furthermore, he explains that there are two broad influences that decide consumer choice. Firstly, the individual consumer’s needs, consciousness of brand characteristics and awareness to alternatives are of significance in the matter of decision-making. Other factors that influence the choice of brand are the consumer’s demographics, lifestyle and personal characteristics. Secondly, the environment has importance in consumer behavior, which consists of culture, social class and reference groups. Assael (1994) then continues to describe the reason of why information about consumer behavior is of importance. This reason is primarily that the information is valuable for companies to be aware of, which can thereby improve marketing strategies.

Consumer behavior is described by Krugman (1965) as the actions, thought process and perceived outcome, in collaboration with environmental factors, during the course of making a decision, which could result in a purchase.
Some of the factors that are significant in consumer behavior are external environment, demographics and personal characteristics, which are influenced by the consumer’s beliefs, values and attitudes (Li and Zhang, 2005).

3.3 Consumer decision-making
To go deeper into the area of consumer behavior this dissertation will more thoroughly observe the details in, and the process of, consumer decision-making.

The first formal explanation of consumer decision-making was developed by Nicholas Bernoulli about 300 years ago. John von Neumann and Oskar Morgenstern later extended this theory, more known as the Utility theory. It presented that consumers base their decisions on prospected outcomes. Consumers were observed as rational individuals that were capable of estimating the outcomes of different decisions and thereby choosing the most profitable one. Though consumers are relatively good at estimating the outcomes of an event, not all consumers are completely rational, consistent or conscious of all aspects in the process of making a decision. For this reason, the Utility theory has been criticized, but despite its inadequacy, the theory is still considered a dominant paradigm in the concerns of decision-making. Much later, in the 1950s, a new and simpler theory called Satisficing was presented by Nobel Laureate Herbert Simon. This theory had a different approach, instead of, as the Utility theory, finding the best outcome, this theory had the consumer choose what satisfied the needs and then stopped the decision making process. An example of this could be the process of finding an apartment. Two decades later, in the 1970s, a more psychological approach was introduced in the research of consumer decision-making. The Prospect theory was developed by two well-known psychologists Daniel Kahneman and Amos Tversky. They expanded upon the two existing theories and included psychological factors by adding value and endowment (Richarme, 2004).
A large study group, consisting of mainly statisticians and professors from different well-known universities, has presented a model of the decision process. A standard logit model was created, where the probability with which a consumer buys a given product depends on the value perceived and the price of the product. In addition, the importance of price and quality to the consumer is included. Then the aspects of brand loyalty and influence from reference groups are considered. Furthermore, the consumer’s history is involved, for example if there has been any previous purchases of the given product, or if other persons have influence on the consumer (Casas, Chapman, Hunt et al., 2004).

Gordon Foxall (1993, 1993, 1998), who has performed a considerable amount of research in the field of consumer behavior and decision making, has created a model of purchase and consumption, more known as the Behavioral Perspective Model (BPM). It relates an outline of consumer decision-making to different types of environmental consequences. The figure below is a summarized view of the BPM. Firstly, preceding consumer behavior events take place, which form the behavioral setting. This involves physical, social and sequential elements, which generate a particular behavior. Furthermore, previous behavior (consumer’s learning history) of the consumer is considered, which results in either a positive or a negative approach to the purchase. Something that is not included in the figure, that Foxall (1993, 1993, 1998) explains when describing the model, is the consumer’s state variables. These variables portray the consumer’s state, such as mood, monetary ability and health. These factors generate certain behaviors, which result in, according to Foxall (1993, 1993, 1998), three categorized consequences; The hedonic reinforcement, which is the utility or satisfaction of the consumer, the informational reinforcement, which for example portrays the social status gained in the purchase, and the aversive stimuli, which are the costs of consumption.
According to Assael (1995, p. 19) “consumer decision-making is not a single process”, it consists of different steps. They are explained by Gurley (2005) as stages of elements that affect decision-making. Lihra and Graf (2007), state that many authors (Blackwell et al. (2006), D’Astous et al. (2006) and Solomon et al. (2002)) have described the consumer decision-making process consists of a sequence of steps, which begin with the identification of a need and ends with some type of decision or a post purchase evaluation. The sequence of steps is:

- Problem or Need identification
- Information search
- Evaluation
- Selection
- Post purchase evaluation

As presented above, this process has five stages, which is the usual interpretation of this concept (Lihra and Graf, 2007). It can have additional stages with various names and versions. In the stage of need identification, also known as problem recognition, the consumer experiences that there is a need that requires satisfaction. Once the need is identified, the consumer will have to search for information to satisfy it. The next stage involves the process of evaluating on which alternative to choose. Although all stages in this process require consideration, this is where most consideration is done. It may also depend on the
magnitude of the purchase, which will be explained further in section 3.5, on high and low involvement decisions. The selection stage is where the consumer decides on a specific product, which has the most appeal. In the following stage, the transaction is made and finally there will be a post purchase evaluation.

There is some criticism concerning the concept of the decision making process. According to the existing models, all stages occur separately, but in reality, they could just as well occur simultaneously. This can be the case in for example impulsive purchases, where some stages are even left out of the process (Erasmus et al., 2001).

All factors combined form a comprehensive model of consumer behavior that includes both cognitive and emotional perspectives of consumer decision-making (Kanuk et al., 2000; Smith and Rupp, 2003).

3.4 Consumer-based brand equity

Pappu, Quester and Cooksey (2005) refer to Aaker's (1991) definition of brand equity, defining it as: "a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value of a product or a service to a firm and/or a firm's customers." (Pappu, 2005, p. 144; Aaker, 1991, p. 15) Since this dissertation is a study on perceived brand importance and loyalty of consumers, the brand equity in this dissertation is, as Pappu (2005) describes it, consumer-based brand equity.

In an article Belén del Rio, Vázquez and Iglesias (2001) present a definition of brand image: "One generally accepted view of brand image is that, ..., brand image can be defined as perceptions about a brand as reflected by the cluster of associations that consumers connect to the brand name in memory" (Belén del Rio et al., 2001, p. 411).

The term brand image is closely related to consumer-based brand equity, but with one clear exception. According to Pappu (2005), consumer-based brand equity
consists of four dimensions; brand awareness, brand associations, perceived quality and brand loyalty. The three first mentioned dimensions is what Belén del Rio (2001) describes as brand image, whereas consumer-based brand equity also includes the dimension of brand loyalty. Pappu (2005), firstly, describes the brand awareness dimension as, "the strength of a brand's presence in the consumer's mind." (Pappu, 2005, p. 145). Secondly, brand association is referred to as the meaning of a brand for a consumer, such as brand personality and organizational associations. The next dimension, which is closely related to the dimension of brand associations, is perceived quality. This is explained as not the actual quality of a certain brand's product, but the consumers' perception of the quality. The fourth and final dimension of consumer-based brand equity, which is also described as the major component, is brand loyalty. Brand loyalty is shortly described as "the attachment that a consumer has to a brand." (Pappu, 2005, p. 145; Aaker, 1991, p. 39). He goes on further to emphasize that brand loyalty is the major component of consumer-based brand equity. When explaining the relationships between the four dimensions, mentioned above, Pappu (2005) proposes that consumers' perception of quality is associated with brand loyalty. The more brand loyal the consumer is, the more likely it is perceived by the consumer that better quality is offered, vice versa. As, the more superior associations the consumer has for a brand, the more loyal, vice versa. Since brand loyalty is a major component of consumer-based equity, it is of interest to find other definitions and measurements of brand loyalty.

Assael (1994, pp.151-152) describes brand loyalty as a “favorable attitude toward a brand resulting in consistent purchase of the brand over time.” It is stated by Assael that there are two main approaches to brand loyalty. The behavioral approach in brand loyalty is defined by the sequence of purchase, for example, Assael mentions that according to Brown, if the same brand is purchased five times in a row (Assael, 1994; Brown, 1952). The other approach to brand loyalty is the cognitive approach, which includes both attitudinal and behavioral components in measuring brand loyalty.
Jensen and Hansen (2006) explain, in their empirical study on brand loyalty, that simply viewing the behavioral approach in determining brand loyalty is not comprehensive. From the attitudinal perspective, it is more likely that researchers will be able to investigate the factors producing brand loyalty.

Assael (1994) then draws the connection between brand loyalty and product involvement. He explains that a habit of buying a certain brand is not necessarily brand loyalty. Only when comes to a high involvement situation can a purchase be considered brand loyalty. If the decision is made out of habit and where the consumer has little involvement it is signified by inertia (see figure 2, "Four types of consumer behavior").

### 3.5 Consumer involvement

Consumer involvement has been viewed both in terms of product meaning and in terms of consumer-product relationships. For example, involvement has been equated with the importance of the purchase, and has also been used in different involvement profiles based on meaning, value, and the nature of relationships between consumers and product categories. Furthermore, involvement has been defined as a relation between consumer and product, and found to be the relational variable most predictive of purchase behavior (Martin, 1998).

Quester and Lim (2003) also separate involvement into product involvement and purchase involvement, where product involvement is found to be the more permanent (enduring) and consumer-based concept. Quester and Lim (2003) argue that a consumer may be highly involved in a purchase situation without really being involved with, or interested in, the product category or brand that they are purchasing. They also highlight that, in contrast, a consumer may have very low purchase situation involvement due to high product involvement (tied with, for example, brand loyalty). Many researchers have tried to measure product involvement in an "either high or low" manner, despite the risk of oversimplifying complex cause and effects. Furthermore, one should keep in mind that it is not the products themselves that are (or are not) involving; it is the consumer that chooses
to be involved, meaning that product involvement is a consumer response to a given product, not a product’s inherent attributes (Quester and Lim, 2003).

Assael (1994) proposes the above matrix (Figure 2) as an explanatory division of consumer decision-making based on involvement and the degree to which a decision is necessary. The complex decision-making is the traditional view of decision-making (see figure 3, "a model of consumer involvement"), where it is assumed that consumers gather information and thoroughly evaluate it before they act. Brand loyalty, as described in chapter 3.4, is assumed to occur in habitual high involvement purchases.

The inertia (lower right-hand box) in the above matrix is signified by decisions made with little information processing, followed by an evaluation of the brand after the purchase. This is comparable to a consumer who is unwilling to make a
decision, and as long as repeated purchases of the same brand reach a minimum level of satisfaction, the consumer is unlikely to change behavior. Studies have shown that the best way to succeed with products in this part of the matrix is through creation of brand awareness (best accomplished by repeat advertising) to change consumers' beliefs, since beliefs is the primary variable on which consumers act in this part of the matrix (Assael, 1994).

Limited decision-making, making a consumer switch from the previously described inertia, can occur, for example, if a new product is introduced or if the consumer starts seeking variety. However, one should keep in mind that this is based on passive learning, since no active search for information, or brand evaluation, occurs. Generally, the products in this part of the matrix are considered negligible or mundane by consumers (Assael, 1994).

There are, however, ways to look at what makes products important to consumers. Assael (1994) suggests the following conditions for product involvement:

- The product is important to the consumer (tied to consumers' self-image).
- The product (or product category) interests the consumer.
- The product comes with certain risks; for example, there is the technological risk in buying a high-tech product (buying more functions/technology than you will ever know how to use).
- The product has emotional appeal to the consumer.
- The product is associated with a certain group (status).

The above conditions are closely related to what Kapferer and Laurent (1985a; 1985b) list as their conditions for consumer involvement in general:

- Perceived importance of (or personal interest in) the product.
- Perceived risk associated with the purchase:
  - Perceived importance of negative consequences in case of poor purchasing decision.
  - Perceived probability of making such a decision.
Symbolic value of the product, the purchase or the consumption of the product ("self-expressing" or associated value attributed by the consumer).

Hedonic value of the product; for example the product's ability to provide pleasure and the emotional appeal of the product.

The main difference between these two types of conditions is the latter one's addition of situational risk, meaning that the risks and probability of making a bad choice has been taken into account.

Assael (1994) suggests the following model (Figure 3) as a description of what leads to complex decision-making:

![Figure 3. A model of consumer involvement (Adapted from: Assael, 1994, p. 76)](image)

As shown in the model, there has to be a need for a higher level of information processing before a complex decision can or will be made. However, as previously mentioned, some purchases are made without the need for a higher level of information processing; namely, habitual or uninformed purchases made without any real consideration, or without regard to risks (Assael, 1994).
Several ways to try to measure involvement have been developed over the years; various scales have succeeded or supplemented each other, and one widely used scale is a uni-dimensional generic scale initially developed by Zaichkowsky in 1985 (Martin, 1998).

The Personal Involvement Inventory is designed to measure a person’s involvement with products, advertisements or purchase decisions (Zaichkowsky, 1985). It originally consisted of 20 items, but was later revised and narrowed down to 10 items by the original author (Martin, 1998; Zaichkowsky, 1994). However, this way of measuring includes other factors than just the consumer involvement, which is the focus of this dissertation.

Kapferer and Laurent (1985b) also developed a recurrent means to measure consumer involvement (Quester and Lim, 2003), briefly mentioned above. It is centered on the same four conditions listed above (perceived importance, perceived risk, symbolic value and hedonic value), and is measured in accordance with their article "Measuring Consumer Involvement Profiles".

3.6 Research model
The above literature review provides a brief summary of what occurs within the consumers’ mind during a purchase decision-making process. We have chosen to emphasize on the concept of the consumers' level of involvement. Furthermore, it highlights the relationship between involvement and consumer-based brand equity. It is in our interest to explore the nature of this relationship, by conducting an attitudinal empirical investigation, and find implications on how much consumer-based brand equity affects involvement in product categories of different involvement levels.

Similar research of the complex relationship between involvement and different aspects of brands has already been conducted. Quester and Lim (2003) states that more research needs to be done in examining the link between product involvement and brand loyalty. Their research even lends support from previous
findings that a relationship exists (Quester, 2003; LeClerc and Little, 1997, and Iwasaki and Havitz, 1998). We thereby believe that there is no question whether there is an existing relationship or not. The previous research of Quester and Lim (2003) tested this relationship with two products, ballpoint pens and sports shoes/sneakers, and stated that their choice of products limited their results. It is thereby in our interest to study this relationship, although with a slightly different aspect, as we include other dimensions of brand equity and with other types of products. We believe that our research consequently can provide and add more depth in the research already presented of this relationship, as well as increase the understanding of it and how it, in turn, affects decision-making. It also provides more material for future research.

We attempt to measure the correlation between consumer-based brand equity and involvement by examining different parts of these two concepts. However, some parts of these concepts are more prominent than others, for example (as mentioned in chapter 3.4) brand loyalty is considered the dominant factor of consumer-based brand equity. Therefore, most of the questions concerning consumer-based brand equity in this dissertation are derived from brand loyalty.

To measure all of the different dimensions and factors within both consumer-based brand equity and involvement in rigorous detail, and then compare these to each other, would require a lot more time than we have at our disposal. We have therefore chosen to try to generalize these different dimensions somewhat, into the two chosen concepts, to reach our main research question: "how does consumer-based brand equity affect involvement?" By doing this, the process of examination and analysis is more widely applicable and feasible. More concretely, questions are asked on the sub-categories (dimensions) of consumer-based brand equity and involvement (see Figure 4, "Research model", below), which we then examine by looking at how much they add to the relation between consumer-based brand equity and involvement.
Since consumer-based brand equity measures the importance and the favoring of a specific brand for a consumer, we desire to retrieve information about this. This is done by asking questions that are related to consumer-based brand equity and its dimensions. By measuring consumers’ attitudes towards different product categories, in terms of consumer-based brand equity, we hope to find a connection between the aforementioned factors and gain a better understanding of how different brands affect different (high- or low-involvement) purchase decisions. Since brand loyalty is a major component of consumer-based brand equity, we feel that it is of importance to emphasize on this. There is however, an importance to measure the other dimensions as well, since there are connections between them all. This is explained further in the chapter, 3.4, on consumer-based brand equity. Apart from measuring consumers’ attitudes towards consumer-based brand equity, measurements in the level of involvement, within the different product categories are essential.

More specifically, in our research we are to, firstly, examine the respondents’ demographical aspects, to gain some important variables needed for comparisons. These will include questions on sex, age and occupation. Next follows the core part of our research, where two product categories, which we choose as our representative products for assumed varying levels of involvement, are presented; followed by an investigation of the involvement of each individual in the given product category. Then we move on to examine the individual's perceived consumer-based brand equity in each given product category (presuming a purchase has been made recently, or will occur in the near future).

The data acquired is analyzed to give an idea of how important the brand is to consumers, within the chosen product categories, as well as to find connections in consumer-based brand equity and the level of involvement the respondents feel related to their respective brands in the different product categories. This provides implications of how important brand management can be in varying levels of involvement purchases; primarily in the examined product categories, but also in product categories of similar nature.
Figure 4. Research model (Adapted from Pappu, 2005, p. 145 and Laurent and Kapferer, 1985, p. 43)

The above figure is an illustration of our research model, and shows the different dimensions of the two concepts we are studying. It is also shown that we are focusing on the effects consumer-based brand equity has on consumer involvement.
4. Empirical method

This chapter presents the empirical methods in the dissertation. It begins with explaining and defining research design and strategy, followed by explanations of data collection, population, operationalisation, reliability, validity, generalisability, and response rate, and ends with a description of the questionnaire.

4.1 Research design and strategy

Webb (1992) states that research is to be divided into three main categories: exploratory, descriptive and causal, all of which are equivalent to different types of situations. The exploratory research is most useful in early stages of a subject, when the level of uncertainty is high. This makes it a flexible way of conducting research. The purpose of descriptive research is to provide more accurate and valid information in a subject, normally where exploratory research has already been conducted. As Webb (1992) describes it, exploratory research finds something of interest directs the camera towards it, whereas descriptive takes the photograph. Descriptive research is the most commonly performed research. Causal research refers to research that has the purpose of determining a relationship between two variables, which consists of three main states. State one is when there is proof to infer that variable A causes an effect in variable B. Although the relationship is not proven, an assumption is done. State two is when there is adequate proof to propose that the effect of variable B was caused by A. State three, which is the most difficult one to prove, removes all other effects or sources of action that can infer and then tests the relationship between A and B.

Our research is an attempt to determine the relationship between consumer-based brand equity and involvement, which makes it a causal research. Concerning the three states of causal research, our research does not intend to prove the relationship, but to make an inference. Since our variables consist of different dimensions, it is in our interest to obtain data of these dimensions to build a general idea of the variables.
The data that is acquired is analyzed to obtain information of how important the brand is to consumers, as well as to infer connections in consumer-based brand equity and the level of involvement the respondents feel in relation to the respective brands in the different product categories.

4.3 Data collection

The data collection is divided into two types of data, secondary data and primary data. Secondary data is data that has already been collected, for example data from previous research (Webb, 1992). Primary data is the collected data, which exclusively answers questions regarding the research objectives. Obtaining primary data can be divided into four methods, survey research, qualitative, experimental and observation. Surveys are structured data collection methods, for example personal interviews, mail interviews and questionnaires. Qualitative research is more unstructured interviews, with more open answers. Experimental research is where an experiment or a manipulation of a situation is conducted to test the research objective. Observation is where behavior is observed, which is preferable, rather than to interview about the respondent’s behavior (Webb, 1992).

Concerning our research, the secondary data that is considered derives from previous research in the areas of consumer-based brand equity, brand loyalty and involvement. The primary data in our research consists of data retrieved from a questionnaire, which is a type of survey research. It is a structured list of questions, where knowledge about attitudes and behavior is obtained. The reason why a survey is most appropriate for our research is that the results can be generalized and at the same time be supported by previous research. Other reasons for choosing a survey as data collection method is that they are time and cost efficient. It is time efficient in the way that the time to collect and analyze the data is shorter and more convenient. A disadvantage though is that the answers available for analyze may not be as detailed as in, for example, an open interview.
4.4 Population
Population is a collection of all possible respondents appropriate for answering the research objective (Webb, 1992). Our research population was found using convenience sampling, which is non-probability sampling technique. This type of sampling can be carried out quickly and the cost is minimal. However, on the negative side, the sample may include unknown and enigmatic quantities of inaccuracy and/or bias. Our research population consists of students found dwelling on the campus area of Högskolan Kristianstad.

4.5 Operationalisation
To accomplish the research objective, to investigate the relationship between consumer-based brand equity and level of involvement, we are to answer the following research question: How does consumer-based brand equity affect purchases of different involvement level?

A questionnaire was developed in coordination with previous research (Zaichkowsky, 1985, Kapferer and Laurent, 1985, Quester and Lim 2003 and Pappu, 2005). The questionnaire and hypotheses are consequently influenced by the above-mentioned authors' research.

The products we have chosen to help us investigate how consumer-based brand equity affects purchases of different involvement level are chosen on the basis of theories' definition of high and low involvement products. Cellphones and toothpaste are the respective products. We also believe that these are products which everyone in our population has purchased, which means that the response rate is not affected by the fact that the consumer has never made a purchase of that particular product.

Our intention in this operationalisation is to define unclear concepts and variables, which consequently turn into measurable factors. The hypothesis deriving from our research question is:
H1: Consumer-based brand equity has a positive effect on involvement (that is high consumer-based brand equity results in high involvement).

What we mean with consumer-based brand equity, explained in the theoretical framework (3.4), is that it consists of four dimensions, brand awareness, brand associations, perceived quality and brand loyalty. In other words, consumer-based brand equity is the importance of a brand, as perceived by a consumer. Questions are asked on each dimension:

- Brand awareness is measured by observing whether the consumer perceives to be brand aware, that is if the consumer perceives to know a lot about brands in the given category.
- Brand associations is measured by observing whether it is of importance for the consumer that a certain brand can be associated with a certain kind of positive attribute or feeling.
- Perceived quality is closely related to brand associations, since it is something that is associated with the brand. Thereby, this is measured by observing whether one brand is perceived as superior regarding quality.
- Brand loyalty is measured in different ways. Firstly, since it is the most important part of these dimensions of consumer-based brand equity and, secondly, since there are different ways of measuring it, according to previous research (Quester and Lim, 2003 and Assael, 1994; Brown, 1952). Consequential purchases and the consumers' attitudinal view of brand loyalty are measured.

What we mean with involvement, as explained in the theoretical framework (3.5), is that it consists of four dimensions:

- Perceived importance of (or personal interest in) the product is measured by asking the consumer if he/she has an interest in the product category.
• Perceived risk associated with the purchase is measured by asking the consumer if he/she perceives any risks involved in purchasing the given product.

• Symbolic value of the product is measured by observing the responses to questions regarding self-expression and if the consumer associates certain types of consumers with the given products.

• Hedonic value of the product is measured by observing the responses to questions regarding perceived pleasure derived from the purchased product.

These different dimensions together form what Kapferer and Laurent (1985a; 1985b) described as consumer involvement, and can be measured to some extent by using their Consumer Involvement Profile model. Questions are asked on each dimension to try to create a good view of how involved consumers are with different types of products. However, due to limitations in the statistical analysis software used, and a lack of time and knowledge on how to properly correct these limitations, we were forced to create an index of consumer involvement to be able to make comparisons and regression analyses. This is not optimal, but should be able to provide a functioning indicator as to where consumers rank on the complete Consumer Involvement Profile scale (Kapferer and Laurent, 1985b).

The definition of "effect" in our research hypothesis (H1) is that we measure the consumers' involvement and examine whether it is greater or lower depending on consumer-based brand equity, as well as determine the main factors of why this is the case.

4.6 Reliability
Reliability is explained by Webb (1992) as the degree of which a scale of measurement delivers consistent results. The results should be free of random error, between different groups and times, to be viewed as reliable. To assure reliability there are assessments to consider. The test-retest reliability concerns
repetition of the research. The greater the difference between the tests, the lower the reliability. Our research has not considered this assessment, due to time limitations. If the same respondents received the same questionnaire again, there is a risk that they would interpret the statements differently the second time around.

Another assessment to consider, to ensure reliability, is the inter-item reliability. This concerns cases where multiple variables are used to measure a specific concept. The answers to questions, developed to measure some specific concept, should be associated with each other. This is what has been carried out of the two concepts, consumer-based brand equity and consumer involvement. In chapter 5.1, Index establishment, the correlation of the dimensions are discussed and proved to have a somewhat significant relationship. This indicates, when considering the inter-item reliability assessment, that our research is reliable to a certain degree.

4.7 Validity

Validity is the extent to which the findings of a measurement are accurate. High validity is expected with proper operationalisation and correct and accurate measuring instruments (Saunders et al., 2009).

The face- and criterion-related validities of our research are hard to determine; it depends on the respondents' ability to properly understand the statements given in the questionnaire, as well as our ability to create statements that measure the intended dimension of our two concepts. However, we based the questionnaire's statements on other researchers' statement-type questionnaires; primarily Quester and Lim (2003), Kapferer and Laurent (1985a; 1985b) and Jensen and Hansen (2006), which have been peer-reviewed and should be considered accurate enough to use in empirical research.

The content- and construct validities of our research are in some aspects a bit questionable, as dimensions of each concept (consumer-based brand equity and
consumer involvement) is measured rather accurately, but then these variables are also used to create indexes which are used for different analyses. The creation of these indexes possibly reduces the validity of our research, as individual aspects of dimensions can be lost in the process. However, we believe that there is enough correlation between the dimensions of each concept to use the indexes created as, at the very least, predictive indicators.

The validity of the data might also have been influenced by use of certain words, perhaps of strong meaning to some respondents, in some statements. For example, the statements regarding hedonic value and perceived loyalty might be misinterpreted; and respondents may have wanted to choose the most corresponding answer in terms of "product vs. product" and not seen the chosen product categories as separate from each other.

4.8 Generalisability

Generalisability, which is referred to as external validity by Webb (1992), is how well the results of the research can be applied, in a general manner, to a larger population. Two areas that need to be discussed, when determining if the research is generalisable, are the reactive bias and sample bias. Reactive bias is when the respondents act abnormally due to the fact that they know that they are involved in an experiment. This area is hard to define, since there are no indications whether the respondents are biased in this way. Regarding our research, the respondents know that they are part of an experiment, which means that there is a possibility of our population being reactive biased. Sample bias occurs when the respondents are not representative of the general population. Since this dissertation applies the convenience sampling method, the respondents are, in our case, not likely to represent a general population of anything but students.

We believe that our research is generalisable to the extent that, when performing similar research on respondents with similar background (students) as our respondents, the results will not differ a great deal.
4.9 Response rate
The response rate of our research shows to be very high, almost entirely complete. All of our respondents agreed to complete the questionnaire, although some participants did not answer all the questions. These respondents are included in the analysis, but the questions that were not answered count as missing values. One respondent was excluded of the result, since that questionnaire was obviously answered in an irrelevant manner. The response rate for this research is 98.98% (98 out of 99), however the three respondents that failed to answer all the questions are included. Two of the respondents failed to answer one of the variables and one of them failed to answer two of the variables.

4.10 Questionnaires
Our questionnaire consists of closed questions, apart from no.2, age, which is an open question. This is made due to convenience, since the age groups can be formed after the data input. The questionnaire consists of two control questions, gender (no. 1) and age (no. 2). The remaining 11 are all questions regarding the research and are all presented as attitudinal likert scale questions, with the scale 1-7. 1 equals strongly disagree, 7 equals strongly agree and 4 equals neither agree nor disagree.

4.10.1 Gender

1. Gender □, Male □, Female

This independent variable is of formality and specifies the respondents' gender. Even though this might not be of importance for the research, evidence for generalization of the research can be contributed from this. It is of significance to be aware of the evenness of gender distribution.
4.10.2 Age

2. Age: ___ years

Also this question is of formality and is an independent variable. This type of control question can add implications of differences in results within different age groups, which can be of interest.

4.10.3 Hedonic value (involvement)

3. I find that the following product appeals to me:
   3.1 Cellphone  1  2  3  4  5  6  7
   3.2 Toothpaste 1  2  3  4  5  6  7

This question aims to show the consumers' perceived pleasure of the given product. By measuring this, the consumer’s interest in the product can be observed, which consequently measures one of the dimensions of involvement. A low value indicates low involvement and a high value indicates high involvement.

4.10.4 Perceived importance (involvement)

4. When I purchase a product in the following category, I make careful considerations between the different products that are available in that category:
   4.1 Cellphone  1  2  3  4  5  6  7
   4.2 Toothpaste 1  2  3  4  5  6  7

Question number four aims to measure whether the consumer finds the product important and thereby makes careful and longer considerations. A low value indicates low involvement and a high value indicates high involvement.

4.10.5 Perceived risk (involvement)

5. When I buy a product in the following category, it matters a lot if I make a mistake:
   5.1 Cellphone  1  2  3  4  5  6  7
   5.2 Toothpaste 1  2  3  4  5  6  7
The consumers' perceived risk is measured by asking whether the respondents’ feel like it does not matter if, when purchasing the given product, a mistake is made. A low value indicates low involvement and a high value indicates high involvement.

4.10.6 Symbolic Value (involvement)

6. When I buy a product in the following category, it expresses who I am:
   6.1 Cellphone  1  2  3  4  5  6  7
   6.2 Toothpaste 1  2  3  4  5  6  7

The fourth and last dimension of involvement is measured by asking if a certain product can have a symbolic value for a consumer. The respondents are asked whether a certain product in the following categories can express who they are. A low value indicates low involvement and a high value indicates high involvement.

4.10.7 Brand awareness (consumer-based brand equity)

7. I know a lot about brands within the following product category:
   7.1 Cellphone  1  2  3  4  5  6  7
   7.2 Toothpaste 1  2  3  4  5  6  7

This question aims to show whether the consumer has a high or low brand awareness in the given product category. High brand awareness gives indications that there is interest and that brands have a great meaning for the respondent.

4.10.8 Brand associations (consumer-based brand equity)

8. When I buy a product in the following product category, it is important for me that I have positive associations with the chosen brand:
   8.1 Cellphone  1  2  3  4  5  6  7
   8.2 Toothpaste 1  2  3  4  5  6  7

This question measures the importance of having positive associations with a chosen brand. If the respondent perceives this to be important, it shows that positive associations to a brand can be essential in a purchase.
4.10.9 Perceived quality (consumer-based brand equity)

9. When I buy the following product it is very important for me to buy a certain brand, since I feel that it is of higher quality:

9.1 Cellphone 1 2 3 4 5 6 7
9.2 Toothpaste 1 2 3 4 5 6 7

The above question measures the respondents' perceived quality associated with a certain brand. Consequently, it also tells us that, if the respondent agrees with the statement, they consider other brands to be of lesser quality.

4.10.10 Brand loyalty 1 (consumer-based brand equity)

10. I consider myself to be loyal to a certain brand when it comes to:

10.1 Cellphone 1 2 3 4 5 6 7
10.2 Toothpaste 1 2 3 4 5 6 7

This question measures the respondent's perceived loyalty to a certain brand. This is a very accurate measurement, since it focuses on the attitude towards brand loyalty and not actual brand loyalty.

4.10.11 Brand loyalty 2 (consumer-based brand equity)

11. During the last purchases, I have always bought the same brand of the following products:

11.1 Cellphone 1 2 3 4 5 6 7
11.2 Toothpaste 1 2 3 4 5 6 7

The above question focuses on brand loyalty; however, it does not solely focus on perceived brand loyalty. Instead, it takes into account the last purchases that have been made, to see if the respondent acts according to his/her loyalties, or, combined with the previous question, if the respondent is "loyal" because there is no better alternative.
5. Research results and analysis

This chapter presents the analysis of our results. The analysis is divided into three segments, index establishment, index comparison and comparison of involvement index and consumer-based brand equity dimension, which are analyzed by presenting statistics processed through SPSS. The results of the analysis are then evaluated and compared to our previously stated hypotheses.

5.1 Introduction

The result of our research is now to be presented and analyzed, to investigate the relationship between consumer-based brand equity and level of involvement. This relationship is tested by regression analysis and other correlation tests, to determine the accuracy and significance of the relationship.

5.2 Index establishment

As explained in the previous chapter, empirical method, we calculate an index of each of the two concepts (Consumer-based brand equity and consumer involvement), based on their different dimensions. These indexes are used to make different comparisons, as we need to create a single dependent variable (Consumer Involvement) for many of our statistical tests. This is not optimal, but should be able to provide a functioning indicator as to where consumers rank on the complete consumer involvement profile scale (Kapferer and Laurent, 1985b).
5.2.1 Consumer involvement dimension correlations

This correlation analysis (table 1) within the involvement dimensions of cellphone explains the correlations between the dimensions. Noticeably, there are significant correlations between all of the dimensions, apart from one. Between hedonic value and perceived risk, there is no evidence of a significant correlation. This shows that a big majority of these dimensions correlate, which strengthens the validity of creating an index for these variables.

<table>
<thead>
<tr>
<th>Table 1. Correlations between Cellphone Consumer Involvement Dimensions</th>
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<tbody>
<tr>
<td><strong>Hedonic Value</strong></td>
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<tr>
<td><strong>Cellphone</strong></td>
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<tr>
<td>Hedonic Value Cellphone</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
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<tr>
<td>Perceived Importance Cellphone</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<tr>
<td>Perceived Risk Cellphone</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<tr>
<td>Symbolic Value Cellphone</td>
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<tr>
<td>Sig. (2-tailed)</td>
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</table>

<table>
<thead>
<tr>
<th>Table 2. Correlations between Toothpaste Consumer Involvement Dimensions</th>
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<tbody>
<tr>
<td><strong>Hedonic Value</strong></td>
</tr>
<tr>
<td><strong>Toothpaste</strong></td>
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<tr>
<td>Hedonic Value Toothpaste</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<tr>
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<tr>
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<tr>
<td>Perceived Risk Toothpaste</td>
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<tr>
<td>Sig. (2-tailed)</td>
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<tr>
<td>Symbolic Value Toothpaste</td>
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<td>Sig. (2-tailed)</td>
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</table>
Toothpaste’s involvement dimensions (table 2) also have several significant correlations, although in this case there are two variables that do not correlate. Hedonic value in comparison with perceived risk and symbolic value shows no significant correlation. However, the correlations are close to being significant at the 0.05 level.

5.2.2 Consumer-based brand equity dimension correlations

<table>
<thead>
<tr>
<th></th>
<th>Brand Awareness Cellphone</th>
<th>Brand Associations Cellphone</th>
<th>Perceived Quality Cellphone</th>
<th>Perceived Loyalty Cellphone</th>
<th>Recent Purchase Loyalty Cellphone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brand Awareness Cellphone</strong></td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
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</tr>
<tr>
<td></td>
<td>1.00</td>
<td>.236*</td>
<td>.405**</td>
<td>.212*</td>
<td>.151</td>
</tr>
<tr>
<td><strong>Brand Associations Cellphone</strong></td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
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<tr>
<td></td>
<td>.236*</td>
<td>1.00</td>
<td>.424**</td>
<td>.339**</td>
<td>.137</td>
</tr>
<tr>
<td><strong>Perceived Quality Cellphone</strong></td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
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<tr>
<td></td>
<td>.405**</td>
<td>.424**</td>
<td>1.00</td>
<td>.430**</td>
<td>.342**</td>
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<tr>
<td><strong>Perceived Loyalty Cellphone</strong></td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
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<tr>
<td></td>
<td>.212*</td>
<td>.339**</td>
<td>.430**</td>
<td>1.00</td>
<td>.647**</td>
</tr>
<tr>
<td><strong>Recent Purchase Loyalty Cellphone</strong></td>
<td>Pearson Correlation</td>
<td>Sig. (2-tailed)</td>
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<td></td>
<td>.151</td>
<td>.137</td>
<td>.342**</td>
<td>.647**</td>
<td>1.00</td>
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</tbody>
</table>

The correlations within the dimensions of consumer-based brand equity, when it comes to cellphones (table 3), are several. Two of the ten comparisons are proven insignificant, the relationship between recent purchase loyalty and brand awareness and brand associations. This could be due to various reasons, since knowing a lot about brands not necessarily has to result in the consumer being purchase loyal to a specific brand, although it is possible. The same assumptions can be drawn regarding brand associations. Perceiving that it is of importance to
have positive associations to a specific brand does agedly not lead to purchase loyalty. Something that is interesting to note is that there is a very strong correlation between perceived brand loyalty and recent purchase loyalty. This gives valid evidence for accurate and legitimate answers by the respondents. If there was no correlation that would indicate that the respondents do either not feel loyal even though they buy the same brand repeatedly, or that they do not buy the brands they consider themselves loyal to. It also proves that perceived loyalty and actual loyalty, according to our results, harmonize.

### Table 4. Correlations between Toothpaste Consumer-Based Brand Equity Dimensions

<table>
<thead>
<tr>
<th></th>
<th>Brand Awareness Toothpaste</th>
<th>Brand Associations Toothpaste</th>
<th>Perceived Quality Toothpaste</th>
<th>Perceived Loyalty Toothpaste</th>
<th>Recent Purchase Loyalty Toothpaste</th>
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<tbody>
<tr>
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<tr>
<td><strong>Toothpaste</strong></td>
<td>1.000</td>
<td>.332**</td>
<td>.405**</td>
<td>.179</td>
<td>.237*</td>
</tr>
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<td>Pearson Correlation</td>
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<tr>
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<td>.641**</td>
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</tr>
<tr>
<td><strong>Perceived Quality</strong></td>
<td>Pearson Correlation</td>
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</tr>
<tr>
<td><strong>Toothpaste</strong></td>
<td>.405**</td>
<td>.641**</td>
<td>1.000</td>
<td>.514**</td>
<td>.446**</td>
</tr>
<tr>
<td><strong>Perceived Loyalty</strong></td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Toothpaste</strong></td>
<td>.179</td>
<td>.328**</td>
<td>.514**</td>
<td>1.000</td>
<td>.673**</td>
</tr>
<tr>
<td><strong>Recent Purchase</strong></td>
<td>Pearson Correlation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Loyalty Toothpaste</strong></td>
<td>.237*</td>
<td>.345**</td>
<td>.446**</td>
<td>.673**</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Toothpaste</strong></td>
<td>.019</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>

**Note:**
- Pearson correlation coefficients are used for calculating the correlations.
- Sig. (2-tailed) indicates the significance level of the correlation coefficient.
- 
- **"** indicates significance at the 0.01 level.
- **"** indicates significance at the 0.05 level.
When observing toothpaste, the results (table 4) show that only one out of the ten possible correlations is insignificant. In this case, the relationship between perceived loyalty and brand awareness proves to be insignificant.

Since most of the correlations between our dimensions, within our established indexes, are proven significant we can somewhat determine the validity of creating the indexes. To examine this further, t-tests of the indexes are analyzed in the next section.

5.2.3 T-tests

Table 5. One-Sample T-Test of Cellphone Indexes

<table>
<thead>
<tr>
<th></th>
<th>Test Value = 0</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>Cellphone Consumer Involvement Index</td>
<td>64.562</td>
<td>96</td>
</tr>
<tr>
<td>Cellphone Consumer-based Brand Equity Index</td>
<td>46.275</td>
<td>97</td>
</tr>
</tbody>
</table>

Out of this test (table 5) it is noticeable that, within a 95% confidence interval of the difference, the lower and upper value has an approximate difference of 0.5. This indicates that results are somewhat corresponding between the respondents.
Table 6. One-Sample T-Test of Toothpaste Indexes

<table>
<thead>
<tr>
<th></th>
<th>Test Value = 0</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
<td>df</td>
</tr>
<tr>
<td>Toothpaste Consumer Involvement Index</td>
<td>29.824</td>
<td>94</td>
</tr>
<tr>
<td>Toothpaste Consumer-based Brand Equity Index</td>
<td>30.732</td>
<td>97</td>
</tr>
</tbody>
</table>

The results in difference, regarding toothpaste, between lower and upper values in a 95% confidence interval are similar to the ones in cellphone. Both indexes have an approximate difference of 0.5.

This t-test of our indexes adds to the credibility, however, when viewing the dimensions separately in a t-test, some variables have larger standard deviations than others. Both for cellphone and toothpaste there are large variances in level of perceived loyalty and purchase loyalty. This is something that signifies as evidence in opposition to our initiative of establishing indexes. However, since these dimensions derive from our two intended research variables, we feel that establishing these indexes provides a righteous view of the research.

5.3 Index comparison

Table 7. Correlations between Cellphone Consumer-based Brand Equity Index and Cellphone Consumer Involvement Index

<table>
<thead>
<tr>
<th></th>
<th>Cellphone Consumer Involvement Index</th>
<th>Cellphone Consumer-based Brand Equity Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellphone Consumer Involvement Index</td>
<td>Pearson Correlation</td>
<td>1.000</td>
</tr>
<tr>
<td>Cellphone Consumer-based Brand Equity Index</td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
</tbody>
</table>

Pearson Correlation

Sig. (2-tailed)
Before beginning to compare the indexes, we intend to verify the correlation of the two indexes. Between the indexes of consumer-based brand equity and involvement for cellphones (table 7), the Pearson correlation (0.440) is relatively high and the significance level (0.000) of the correlation coefficient indicates a positive strong linear relationship.

Table 8. Correlations between Toothpaste Consumer-based Brand Equity Index and Toothpaste Consumer Involvement Index

<table>
<thead>
<tr>
<th>Toothpaste Consumer Involvement Index</th>
<th>Toothpaste Consumer Involvement Index</th>
<th>Toothpaste Consumer-based Brand Equity Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1.000</td>
<td>.598**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Toothpaste Consumer-based Brand Equity Index</td>
<td>Pearson Correlation</td>
<td>.598**</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

Regarding toothpaste (table 8), the Pearson correlation (0.598) appears to show a strong positive relationship, slightly stronger than for cellphone. In addition, the significance level (0.000) shows that the correlation is linearly related.

This correlation analysis provides evidence for the relationship’s existence. Consequently, results regarding how our respondents have answered are presented and discussed.

Table 9. Cellphone Consumer Involvement Level and Cellphone Consumer-based Brand Equity Level Cross Tabulation

<table>
<thead>
<tr>
<th>Cellphone Consumer-based Brand Equity Level</th>
<th>Low</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cellphone Consumer Involvement Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>1.0%</td>
<td>2.1%</td>
<td>3.1%</td>
</tr>
<tr>
<td>High</td>
<td>10.3%</td>
<td>86.6%</td>
<td>96.9%</td>
</tr>
<tr>
<td>Total</td>
<td>11.3%</td>
<td>88.7%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
The cross table above (table 9) presents information about how the population has answered regarding cellphone. To begin with, we have created groups for whether the respondent has a low or high value of the respective variables. When comparing these to each other, it appears as though a vast majority of the population (86.6%) is both highly involved and has a high level of consumer-based brand equity regarding cellphone. Only 1% of our population regards these values as low. The high involvement, the result showed (96.9%), of cellphones was somewhat expected, since purchases of cellphones are commonly purchases that consumers put more time into, and have greater interest in. However, the large percentage of high consumer-based brand equity (88.7%) is an interesting result. Our population seems to perceive brands as an important aspect when it comes to cellphones.

Table 10. Toothpaste Consumer Involvement Level and Toothpaste Consumer-based Brand Equity Level Cross Tabulation

<table>
<thead>
<tr>
<th>Toothpaste Consumer Involvement Level</th>
<th>Low</th>
<th>High</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>31.6%</td>
<td>25.3%</td>
<td>56.8%</td>
</tr>
<tr>
<td>High</td>
<td>5.3%</td>
<td>37.9%</td>
<td>43.2%</td>
</tr>
<tr>
<td>Total</td>
<td>36.8%</td>
<td>63.2%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The answers are more spread out regarding toothpaste in this comparison. The majority of the population has a low involvement concerning toothpaste, although it is not a large majority (56.6 %). Something that is interesting is that 63.2% of the respondents perceive brands to be important in the choice of toothpaste. This high level of consumer-based brand equity could possibly be due to a large extent of brand marketing in this product category. The cross table further shows that the most common relationships are low/low and high/high combinations (31.6% and 37.9%). Another interesting aspect to note is that even though the involvement level is low, the brands of the toothpaste products have influence on 25.3% of the population. This can be interpreted as even if the consumer has low interest and puts little time into the purchase, the brand can play an important role.
To check the relationship between two categorical variables a chi-square test is used, as presented in the cross table below. The chi-square test requires there to be at least five cases in each cell of the cross table, but since two of the categories regarding cellphone do not have enough cases the chi-square test is not possible to perform. However, there are enough cases to perform this test on toothpaste.

Table 11. Toothpaste Consumer Involvement Level and Toothpaste Consumer-based Brand Equity Level Cross Tabulation Chi-Square Tests

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig. (2-sided)</th>
<th>Exact Sig. (2-sided)</th>
<th>Exact Sig. (1-sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>18.831</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuity Correction b</td>
<td>17.013</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>20.444</td>
<td>1</td>
<td>.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fisher's Exact Test</td>
<td></td>
<td></td>
<td></td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N of Valid Cases</td>
<td>95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 15.11.

b. Computed only for a 2x2 table

The Pearson chi-square value (18.831) under “Asymp. Sig.” is 0.000, which is under the 0.05 value. This means that there is a significant relationship between the rows and columns of low and high values in involvement and consumer-based brand equity regarding toothpaste.
Table 12. Cellphone Consumer Involvement Level and Cellphone Consumer-based Brand Equity Level ANOVA

<table>
<thead>
<tr>
<th>Involvement Cellphone Index</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>24.998</td>
<td>22</td>
<td>1.136</td>
<td>1.740</td>
<td>.041</td>
</tr>
<tr>
<td>Within Groups</td>
<td>48.336</td>
<td>74</td>
<td>.653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>73.334</td>
<td>96</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 13. Toothpaste Consumer Involvement Level and Toothpaste Consumer-based Brand Equity Level ANOVA

<table>
<thead>
<tr>
<th>Involvement Toothpaste Index</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>61.463</td>
<td>26</td>
<td>2.364</td>
<td>2.559</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>62.818</td>
<td>68</td>
<td>.924</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>124.280</td>
<td>94</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The ANOVA results above (tables 12 and 13) show that there is a significant difference between consumer-based brand equity level and level of consumer involvement for both cellphone and toothpaste, since the significance values are lower than 0.05 (0.041 and 0.001).

5.4 Comparison

This is where we compare consumer-based brand equity (where each dimension remains separate) and consumer involvement (the calculated index) with each other, and attempt to identify correlations and their significance. This analysis is provided to attempt to find indications of how the different dimensions of consumer-based brand equity affect the general level of involvement.
5.4.1 Cellphone consumer-based brand equity effect on consumer involvement

Table 14. Cellphone Consumer-based Brand Equity effect on Cellphone Consumer Involvement Index: Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>.661a</td>
<td>.437</td>
<td>.406</td>
<td>.673757</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Recent Purchase Loyalty Cellphone, Brand Associations Cellphone, Brand Awareness Cellphone, Perceived Quality Cellphone, Perceived Loyalty Cellphone

The above table (table 14) shows the R square value of a linear regression analysis on the cellphone consumer involvement Index variable. The R square value tells us that 43.7% of the variation in the inclination of the dependent variable (consumer involvement) is explained by the variation in the five independent (consumer-based brand equity) variables.

Table 15. Cellphone Consumer-based Brand Equity effect on Cellphone Consumer Involvement Index ANOVA

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>32.024</td>
<td>5</td>
<td>6.405</td>
<td>14.109</td>
</tr>
<tr>
<td>Residual</td>
<td>41.309</td>
<td>91 .454</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>73.334</td>
<td>96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Recent Purchase Loyalty Cellphone, Brand Associations Cellphone, Brand Awareness Cellphone, Perceived Quality Cellphone, Perceived Loyalty Cellphone

The general regression results are shown in the above ANOVA table (table 15), which tells us that the regression model is statistically significant, as the F ratio is 14.109 and the significance value is 0.000.
In order to examine the relationship between consumer-based brand equity and consumer involvement, we look into the information provided above (table 16). It determines which of the independent variables that are significant predictors of consumer involvement; in this case, the significance column shows that the only significant beta coefficients are Brand Awareness and Brand Associations. The values of the beta coefficients show that Brand Associations is the most notable predictor of consumer involvement, with a beta coefficient of 0.422. This means that if respondent A values Brand Associations 1 point higher in our Likert scale than respondent B, respondent A is expected to have a consumer involvement index that is 0.422 points higher than respondent B’s. The same goes for Brand Awareness, with a beta coefficient of 0.312.
5.4.2 Toothpaste consumer-based brand equity effect on consumer involvement

Table 17. Toothpaste Consumer-based Brand Equity effect on Toothpaste Consumer Involvement Index: Model Summary

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>.691a</td>
<td>.478</td>
<td>.449</td>
<td>.853862</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Recent Purchase Loyalty Toothpaste, Brand Awareness Toothpaste, Brand Associations Toothpaste, Perceived Loyalty Toothpaste, Perceived Quality Toothpaste

b. Dependent Variable: Toothpaste Consumer Involvement Index

The above table (table 17) shows the R square value of a linear regression analysis on the toothpaste consumer involvement index variable. The R square value tells us that 47.8% of the variation in the inclination of the dependent variable (consumer involvement) is explained by the variation in the five independent (consumer-based brand equity) variables.

Table 18. Toothpaste Consumer-based Brand Equity effect on Toothpaste Consumer Involvement Index ANOVA

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>59.392</td>
<td>5</td>
<td>11.878</td>
<td>16.292</td>
</tr>
<tr>
<td>Residual</td>
<td>64.888</td>
<td>89</td>
<td>.729</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>124.280</td>
<td>94</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Recent Purchase Loyalty Toothpaste, Brand Awareness Toothpaste, Brand Associations Toothpaste, Perceived Loyalty Toothpaste, Perceived Quality Toothpaste

b. Dependent Variable: Toothpaste Consumer Involvement Index

In the above ANOVA table (table 18), we can see the general regression results, which tells us that the regression model is statistically significant, as the F ratio is 16.292 and the significance value is 0.000.
Table 19. Toothpaste Consumer-based Brand Equity effect on Toothpaste Consumer Involvement Index Coefficients

<table>
<thead>
<tr>
<th></th>
<th>Standardized Coefficients</th>
<th>95% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>t</td>
</tr>
<tr>
<td>(Constant)</td>
<td>3.201</td>
<td>.002</td>
</tr>
<tr>
<td>Brand Awareness Toothpaste</td>
<td>.205</td>
<td>2.421</td>
</tr>
<tr>
<td>Brand Associations Toothpaste</td>
<td>.288</td>
<td>2.874</td>
</tr>
<tr>
<td>Perceived Quality Toothpaste</td>
<td>.351</td>
<td>3.110</td>
</tr>
<tr>
<td>Perceived Loyalty Toothpaste</td>
<td>-.088</td>
<td>-.802</td>
</tr>
<tr>
<td>Recent Purchase Loyalty Toothpaste</td>
<td>.086</td>
<td>.810</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Toothpaste Consumer Involvement Index

The above table provides information that we use in order to examine the relationship between consumer-based brand equity and consumer involvement. The table shows which of the independent variables are significant predictors of consumer involvement; in this case the significance column shows that the significant beta coefficients are Brand Awareness, Brand Associations and Perceived Quality. As the other two beta coefficients have a significance value greater than 0.05, they are not statistically significant. The values of the beta coefficients show that Perceived Quality is the most notable predictor of consumer involvement, with a beta coefficient of 0.351. This means that if respondent A values Perceived Quality 1 point higher in our Likert scale than respondent B does, respondent A is expected to have a consumer involvement index that is 0.351 points higher than respondent B's. The same goes for Brand Associations and Brand Awareness, with beta coefficients of 0.288 and 0.205 respectively.
5.5 Hypothesis

5.5.1 Hypothesis 1
The first hypothesis concerns cellphones and is as follows:

\[ H_1: \text{Regarding cellphones, consumer-based brand equity and its dimensions has a positive influence on the level of consumer involvement.} \]

This hypothesis aims to show that the index, as well as the separate dimensions, of consumer-based brand equity has a positive influence on the consumer involvement index.

According to the measured variables, and indexes that we created from them, consumer-based brand equity does have a positive influence on consumer involvement regarding cellphones. The results from the indexes show that 86.6% (see table 9) of the respondents that perceive to have a high consumer-based brand equity also perceive to be highly involved. We did not expect the results to show such a high percentage in this matter. Respondents that perceived to have low consumer involvement are almost non-existent, 3.1%. We intended to do this as we attempted to choose one product that was perceived as a high involvement product. By doing this, we could be sure to observe whether or not consumer-based brand equity would have an influence on consumer involvement.

Regarding the four separate dimensions of consumer-based brand equity, only two are found to have a significant effect on consumer involvement for cellphones. These dimensions are brand awareness and brand associations. Since the hypothesis only is supported by two of the dimensions, it cannot be completely accepted.

5.5.2 Hypothesis 2
The second hypothesis concerns toothpaste and is as follows:

\[ H_2: \text{Regarding toothpaste, consumer-based brand equity and its dimensions has a positive (although lower than the corresponding measure in the cellphone category) influence on the level of consumer involvement.} \]
This hypothesis aims to show the same as the previous hypothesis, but for a
different product category. It also relates to the other product category, in terms of
how a presumed low-involvement product is less affected by consumer-based
brand equity than a presumed high-involvement product.

According to the measured variables, and indexes that we created from them, it is
difficult to say that the hypothesis can be accepted. This is because the different
combinations of low and high values are somewhat spread. Something that does
not support our hypothesis is that even though the involvement level is low, the
brands of the toothpaste products have influence on 25.3% of the population.

Regarding the separate dimensions of consumer-based brand equity, three of them
are found to have a significant effect on consumer involvement for toothpaste.
These three dimensions are brand awareness, brand associations and perceived
quality.

The analysis of comparing the consumer involvement index and the dimensions of
consumer-based brand equity shows that the hypothesis can be partly accepted.
Although, when including the analysis of only comparing the indexes we do not
consider that the hypothesis can be accepted.
6. Conclusions

This chapter begins by presenting our conclusions, followed by critical reflections, suggestions for future research and practical implications.

6.1 Conclusions

Our intentions with this dissertation were to gain a deeper understanding on the effects that consumer-based brand equity has on consumer involvement. In our research we attempted to use theories and models from previous research to study the relationship between two constructs.

- How does consumer-based brand equity affect different levels of consumer involvement?

This question provided a line of argument throughout this dissertation.

To gain an answer to our research question we developed two hypotheses, which were investigated with the results of our questionnaire.

\[ H_1: \text{Regarding cellphones, consumer-based brand equity and its dimensions has a positive influence on the level of consumer involvement.} \]

\[ H_2: \text{Regarding toothpaste, consumer-based brand equity and its dimensions has a positive (although lower than the corresponding measure in the cellphone category) influence on the level of consumer involvement.} \]

None of these hypotheses were significant enough to be completely accepted. However, there were significant results showing that brand awareness and brand associations had a positive influence on consumer involvement, regarding cellphones. The same result was found regarding toothpaste, although perceived quality was additionally included as a significant positive factor. Another reason for why the hypotheses could not be completely accepted was that the indexes conducted could not be completely validated.
Our results provide some support to previous findings that a relationship does exist between different dimensions of consumer involvement and consumer-based brand equity, for example Quester and Lim (2003).

Clearly, our results are limited by, for example, the choice of product categories, our convenience sampling and our oversimplifying of different concepts. The latter can be very treacherous and should of course be avoided if possible, in order to receive results of greater validity. In addition, what we perceive to be inconsistencies in the responses may very well be a lack of proper formulation of statements, or maybe even inconsistencies in the models used to define the concepts of our research.

When viewing the difference in results between cellphones and toothpaste, it is notable that cellphones had a much higher percentage of respondents that were highly involved than toothpaste had. The difference was, however, not as prominent regarding consumer-based brand equity, as both cellphones and toothpaste showed high percentages of this. Our explanation for this is that both of these product categories heavily invest in brand marketing, which creates higher brand awareness and positive brand associations. In other words, the heavy brand marketing increases the consumer-based brand equity.

In addition, a regression analysis of all of the consumer-based brand equity variables for a product category, compared to the consumer involvement index for the same category, showed that the variation in the inclination of consumer involvement is explained to a higher degree by the variations in consumer-based brand equity when it comes to toothpaste. In other words, consumer-based brand equity has a greater influence on toothpaste consumer involvement than it has on cellphone consumer involvement.
6.2 Critical reflections

In this part of the conclusion chapter the areas that are questionable are discussed and reflected upon, areas that we believe are insufficient, missing or inaccurate.

Something that we believe would have added more validity to our research is a Partial Least Squares analysis which could have performed an analysis with several dependent variables. This could also have eliminated the need to create an index for consumer involvement in order to see to what extent it was affected by the different consumer-based brand equity variables.

Our next questionable area is the creation of indexes. This was not optimal, but should be able to provide a functioning indicator as to where consumers rank on the complete consumer involvement profile scale (Kapferer and Laurent, 1985b).

Another part that can be perceived as inaccurate is the statement of hedonic value, in our questionnaire, which was very hard to define without making it sound quite strange. Another questionable detail in our questionnaire is that it had to be translated to Swedish, which might have led to differences in meanings.

Regarding our collection of primary data, there are also some critical reflections to discuss. The questionnaire was handed out in accordance with a convenience sampling, which is not an optimal method concerning validity and generalisability. Furthermore, since we approached students, the ages of the respondents were similar, which is not ideal.

It might be possible that the dimensions of consumer-based brand equity which are found to affect consumer involvement are actually the result of a certain degree of consumer involvement, rather than actually affecting the consumer involvement itself. To exclude this problem, further research and analysis would be necessary.
The questionnaire might have been perceived as a comparison between the two products, which might have resulted in inaccurate answers. Unintentionally, the respondents may have answered so that the difference is more observable.

### 6.3 Future research

Along the process of conducting our dissertation, some ideas for further research, in this area emerged. To begin with, it would be interesting to conduct our research in larger scale and with proper sampling. Since this dissertation studies consumer behavior, it could have been an interesting approach to examine it by conducting some sort of practical experiment, rather than performing an attitudinal study.

Furthermore, something that we initially intended to do, would be to include a partial least squares regression analysis. This allows for regression analysis with several dependent variables, which would eliminate the need to create indexes and instead allow researchers to analyze the different dimensions' affects on each other separately.

### 6.4 Practical implications

We have found results that suggest that brand associations are the greatest significant predictor of high consumer involvement regarding cellphones. This implies that cellphone manufacturers may have to focus on finding a niche and associating certain positive aspects with their brand.

In addition, perceived quality was found to be the greatest significant predictor of high consumer involvement regarding toothpaste, suggesting that people care about their teeth and want to have high quality toothpaste. This is already being exploited by toothpaste manufacturers to some extent, as they have professionals (often dentists) who recommend their product in advertisements.
The perhaps most important implication we can find is that there is no simple relationship between consumer-based brand equity and consumer involvement. This means that there is no simple way to exploit certain aspects of consumer-based brand equity in order to increase consumer involvement.
References


Jovens, Colin, "Names, brands, branding: beyond the sings, symbols, products and services", *Journal of product and brand marketing*, 2005-02-14, pp. 117-118


Pappu, Ravi and Quester, Pascale and Cooksey, Ray W., "Consumer-based brand equity: improving the measurement - empirical evidence", Journal of product and brand management, 2005-03-14, pp. 143-154
Appendix A - Questionnaire

Enkätundersökning - Konsumenters involvering och varumärkessyn

1. Kön

☐ 1 Man  ☐ 2 Kvinna

2. Ålder: __________ år

Detta avsnitt kommer att innehålla frågor som rör vårt undersökningsområde; nämligen att mäta konsumenters engagemang, intresse och hur noggranna överväganden som görs vid köp ur två olika produktkategorier. Dessutom kommer frågor angående varumärkens signifikans, samt varumärkeslojalitet, vid val av produkt att ställas.

För samtliga nedanstående påståenden gäller följande svarsskala:

1 = Håller inte alls med  |  4 = Varken eller  |  7 = Håller med fullständigt

Vänligen ringa in ditt svar på varje produktnkategori.

3. Jag finner att följande produkt tilltalar mig:
   3.1 Mobiltelefon  1  2  3  4  5  6  7
   3.2 Tandkräm     1  2  3  4  5  6  7

4. När jag köper en produkt i följande kategori gör jag noggranna överväganden mellan de olika produkter som finns tillgängliga i den kategorin:
   4.1 Mobiltelefon  1  2  3  4  5  6  7
   4.2 Tandkräm     1  2  3  4  5  6  7

5. När jag köper en produkt i följande kategori har det stor betydelse om jag köper fel:
   5.1 Mobiltelefon  1  2  3  4  5  6  7
   5.2 Tandkräm     1  2  3  4  5  6  7

6. När jag köper en produkt i följande kategori ger det uttryck för vem jag är:
   6.1 Mobiltelefon  1  2  3  4  5  6  7
   6.2 Tandkräm     1  2  3  4  5  6  7

7. Jag har god kunskap om olika varumärken i denna produktkategori:
   7.1 Mobiltelefon  1  2  3  4  5  6  7
   7.2 Tandkräm     1  2  3  4  5  6  7

8. När jag köper en produkt i följande produktkategori är det viktigt att jag har positiva associationer till varumärket:
   8.1 Mobiltelefon  1  2  3  4  5  6  7
   8.2 Tandkräm     1  2  3  4  5  6  7
9. När jag köper följande produkt är det väldigt viktigt för mig att köpa ett särskilt varumärke, som jag tycker håller högre kvalitet:
9.1 Mobiltelefon 1 2 3 4 5 6 7
9.2 Tandkräm 1 2 3 4 5 6 7

10. Jag anser mig vara lojal mot ett särskilt varumärke vad gäller:
10.1 Mobiltelefon 1 2 3 4 5 6 7
10.2 Tandkräm 1 2 3 4 5 6 7

11. Under de senaste inköpen har jag alltid köpt samma varumärke av följande produkt:
11.1 Mobiltelefon 1 2 3 4 5 6 7
11.2 Tandkräm 1 2 3 4 5 6 7

Tack för din medverkan!