BRANDING OF OTC AND SKINCARE PRODUCTS: A BEHAVIOURAL PSYCHOLOGY APPROACH

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Thesis submitted in fulfilment of the degree of Doctor in Business Administration

DURHAM BUSINESS SCHOOL

DURHAM UNIVERSITY

JUNE 2012

Abstract

One of the main reasons for the failure of branding activities, is that marketers and brand managers consider branding as an input activity or as "something done to the consumer." It is argued in this thesis that consumers actively participate in this practice by evaluating branding efforts and in many cases they do not associate branding endeavours with product category. This thesis is attempting to explore consumer behaviour toward branding and discover variables that could be used to explain the role and contribution of consumers in branding activities.

Two main reasons have been introduced in this thesis to explain the characteristics of consumer contribution in branding endeavours. First, the consumer side of brands and second, the situational variables in a purchase and consumption environment. The consumer side of the brand consists of three main factors: firstly, what customers expect from the brand *per se*, independent from the product; secondly, the extent to which the brand is considered by customers and finally, their consideration of the relationship between product and brand.

The Behavioural Perspective Model (BPM), introduced by Foxall (1997), is applied in this research to explore both situational variables and the consumer's side of the brand. This behaviouristic approach to consumer research considers setting and learning history as twodeterminants of consumer behaviour. Involvement has been used for quantifying learning history and it is argued that to a very high extent involvement could be considered as the same as learning history in BPM.

Three different methodologies have been used in this research to investigate the aforementioned variables using a case study of skincare and OTC products in Iran. Interviews, focus groups and questionnaires have been applied to explore the aforementioned variables and any potential relationships among them.

The results show that brand image is the main situational variable in these two groups of products. For OTC products the dominant expected brand image is functional; in skincare products, although some level of symbolic brand image is expected, the brand image is mainly functional.

The variables introduced in this thesis could be used as a framework for brand managers when deciding how to prioritise their efforts. More importantly, they could use this information for choosing the right brand image based on the type of consumer involvement.

Key words: Branding, Behaviourism, Behavioural Perspective Model, the BPM, OTC, Skincare, Involvement, Brand image management, Situational variables

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ACKNOWLEDGEMENTS

First and foremost, I wish to thank my supervisor, Dr. Mike Nicholson. This thesis would not have been possible without his help, patience and continuous support; I consider it an honor to work with him. His sage advice, insightful criticisms, and patient encouragement aided the writing of this thesis in innumerable ways, as well as his unsurpassed knowledge of behaviourism. I am also extremely indebted to my second supervisor, Dr. Victoria Wells, for her advice and insight, which has been genuinely invaluable. Thanks are also due to the staff at the Doctoral Office, especially Mrs. Anne Bailey, for their help at all stages during the writing of this thesis.

Above all, I would like to thank my wife Nooshin for her personal support and great patience at all times, and to express my greatest gratitude to her for her patience during my time at Durham.

To my family

Chapter 1.0: Introduction

1.1 The broad problem area

Introducing a new brand to the market or managing an existing brand is extremely expensive and It is believed that 80-90% of new brands do not succeed (Leuthesser, L., Kohli, C., & Suri, R, 2003; Völkner and Sattler, 2006) and just 5% of brands achieve ultimate success (Greenway, 2012), introducing new brands could cost $80 to $100 million in some industries (Ourusuoff 1992). This issue makes brand management a tricky task for all organisations and one that requires a high level of consideration in order to prevent costly failure.

Generally, branding has been considered by marketers as "something done to consumers"; in other words, marketers interpret branding as an input process. They assume that branding is entirely under the control of organisations. De Chernatony (2006) argues that it is wrong to place a considerable emphasis on brand as input, while branding in reality is more of an output process. Branding has to be considered as "something consumers do things with."

De Chernatony (2006) argues that although organisations dedicate considerable energy towards supporting their brand, it is ultimately the consumer who makes the decision. In other words, customers analyze marketing activities and extract their own perceptions from the branding process. These perceptions are not necessarily what marketers intended.

It could be concluded that "consumers are not passive recipients of marketing activities" and, accordingly, brand is not entirely a producer-constructed perception. It is rather a consumer-constructed perception (De Chernatony and McDonald 2006).

It is argued in the thesis that, to a high extent, the main reason that organisations could fail in their branding activities is their negligence in considering the active contribution of customers in their branding activities. Two different variables have been introduced in this thesis that could explain the involvement of consumer toward

branding and provide explanation about customers' brand choice. Firstly, they do not take into account the consumer side of branding or they are not familiar with the consumers' understanding of brand (Boyle, 2006; Brown et al, 2003; De Chernatony and McDonald, 2006). Secondly, they have been negligent in considering situational variables in a purchase and consumption environment (Foxall, 1997, 2007; Kotler, 1973; Stanton and Bonner, 1980; Srivastava et al. 1978). Lack of understanding about these two important factors could prevent organisations from benefiting effectively from their branding activities.

1.2 Research aims and objectives

Based on the mentioned argument, the main objective of this work is to explore consumer behaviour toward branding. The research questions of this thesis are: **what variables could be used for understanding and explaining consumer behaviour toward brand and branding activities? How these variables could be evaluated quantitatively and qualitatively? Finally how they could be utilized for developing successful brand strategies in different product categories?**

It is argued in this thesis that two factors could capture all aspects of consumers' participation in branding endeavours and consumers' brand choice.

The first one is called "consumer side of brand" and consists of three different variables that define thoroughly consumer understanding from brand: the first variable is about how customers consider the relation between product and brand, whether brand and product are one entity inseparable or two different factors with distinct benefits. The second variable of consumer side of brand is the level of brandability of a product category or how much a brand is important to consumer choice and the third variable is about consumers' expected brand benefits, which could be categorised in two main types of benefit; functional or informational.

The second one consists of the situational variables in purchase and consumption environment that could have an impact on consumer behaviour. In this thesis brand is considered as a situational variable because brand *per se,* independent from a product, has the capability to signal benefits to customers and accordingly causes some consequences. Discovering which one of these situational variables is the most influential and could be transferred to discriminative stimuli and consequently

determine behaviour generating valuable information for understanding consumer behaviour.

One of the situational variables is brand, or more precisely brand image. It is argued in the literature review that brand image performs as a stimulus in the purchase and consumption environment according to Foxall's (2006) definition of setting as "the social and physical environment in which the consumer is exposed to stimuli signalling a choice situation". It is argued in this study that a suitable brand image, which is in unity with the type of consumer involvement with the brand, could potentially be the strongest stimuli of the setting. Also determining the other situational variables with a high level of influence on consumer brand choice, other than brand itself, is very important in order to control the setting as much as possible.

The first variable of the consumer side of brand is how consumers consider the relation between product and brand. In some groups of products brand and product are considered inseparable by customers in other words customers could not distinguish brand from product and sometimes even, they refer to the whole product category by a brand name. In this situation, customers evaluate brand and product holistically and could not separate brand and product attributes (Aaker, 1991; Del Rio, 2001;Gardner and Levy, 1955).

If customers could explain different brand names in OTC and skin care products and associate some characteristic to the brands such as reliable, classy, effective and so on, that is customers could differentiate brand and product perfectly. Each one of the mentioned situations requires different approaches in branding (Batey 2006).

The second variable of the consumer side of branding is about brandability, that is to what extent consumers consider brand as a reliable stimuli for their choice. There are different situational variables in a purchase and consumption setting that could perform as stimuli, high brandability in OTC and skin care products means brand is mainly the only stimuli that would be considered by customers. Low brandability means other situational variables like the recommendation of seller or promotions have been considered more important than brand per se by customers. In a high brandability situation, investing in branding is the best strategy for sale while in a low brandability

situation other situational variables have to be considered to manage in favour of increasing sales.

The third variable of the consumer side of brand is about brand image, it is argued in this thesis that brand could deliver two different types of benefits to customers, functional and informational. Functional brand image is the rational assessment of a brand by customers. A brand that associates itself mainly with functional claims like, effectiveness, value for money and reliability is a functional brand (Bhat and Reddy ,1998; De Chernatony and Mac William, 1990 ; Spahenberg et al. 1997). For instance, a functional brand in a skin care industry could dominantly emphasise on being natural or showing fast results. An OTC functional brand could focus on functional claims like lack of any side effects.

Informational brand image is about symbolic benefits of the brand. Consumers expect that an informational brand image will make a statement about them, signal their type and status to others.

1.3 Research framework

There are different methods of research in consumer behaviour, which are based on cognitive principles. The model chosen for this study, unlike cognitive models, is a behaviouristic approach, which does not rely on attitudes as the basic determinant of behaviour; instead, it considers the environment and consumer-learning history as the two main determinants of behaviour. This method, which is introduced by Foxall (1997) as the Behavioural Perspective Model (BPM), has two main components: setting and learning history.

Different reasons were involved in adopting BPM for this research; first, BPM as a behaviouristic approach overcomes the low correlation between attitude and behaviour of cognitive models. BPM by considering situational variables and learning history for explaining consumer behaviour has introduced two new variables to consumer behaviour research, which could thoroughly explain consumer behaviour and provide a new understanding about consumer behaviour based on behaviourism principles.

Secondly, BPM by adopting neo-Skinnerian approach to consumer behaviour consider contingencies of reinforcement as determinant of consumer behaviours.

Patterns of reinforcements fall into three categories in BPM: first utilitarian reinforcement (functional reinforcements), second informational reinforcement (symbolic reinforcement) and finally costs or aversive outcomes (Foxall 2006). The reinforcements explained in BPM model as consequences of behaviours are a very good equivalent to the benefits that two different brand images could convey to customers. It is argued in this thesis that brand per se, independent of a product, could convey two distinct benefits to customers, functional and informational. These two benefits could be conveyed to customers by brand image.

Thirdly variables that have been introduced in this thesis for explaining and understanding consumer behaviour toward branding could be considered situational variables according to BPM based on BPM definition: “the social and physical environment in which the consumer is exposed to stimuli signalling a choice situation” (Foxall 2006).

Fourthly, to a very high extent, learning history could be considered identical to involvement. It is argued in this thesis that customers' involvement with product and brand has been developed based on past experiences such as learning history which is customers previous experience of the same situation. To quantify consumer learning history, the concept of "involvement" is utilised. Involvement is an idea that has been used in consumer research for a long time and the approach to involvement chosen in this thesis is very close to learning history in many aspects. The concept of involvement has been thoroughly discussed in the literature review, and it has been shown that learning history could be alternated with involvement.

The existence of all of these variables in BPM and the basic emphasis of behaviourism for explaining consumer behaviour based on the setting and scope in which purchase and consumption takes place makes this model a perfect framework for this research.

Providing a new understanding for brand managers in terms of how to prioritise and customise their marketing efforts based on their product's characteristics and the purchase and consumption environment characteristics, is the main focus of this research. A product's characteristics have to be used to generate an appropriate brand image, and purchase and consumption environment characteristics have to be utilised

to know other potential situational variables that compete in setting with brand image. What differentiates this research from other research in this area is a behaviouristic approach to branding, specifically brand image selection.

This information could be used by brand managers in planning how to invest their resources based on the importance of different situational variables. For instance, there are different strategies for products with a high level of brand consideration (brandability) and products where consumers pay little attention to the brand in their purchase decision. In products where a high investment in brand is worthwhile, it is very important to generate the right brand image based on involvement types. In products where brand is not taken into account significantly by customers it is very important to know of other situational variables in the purchase and consumption environment that could have an impact on consumer brand choice.

1.4 Selection of product category

Skincare and Over The Counter (OTC) products have been chosen for this research. OTC products consists of pharmaceutical products that could be purchased by consumers without any prescription, these products have no or limited side effects. OTC products are made of an ingredient or a combination of ingredients that are safe for increasing general health and well-being for a broad spectrum of customers. Products like vitamins, painkillers and proteins are common OTC products. In this thesis, skincare products are products that enhance the look and physical condition of skin by protecting it from unwanted elements of the environment or restore skin elasticity. A broad range of ointments, lotions and creams with different benefits from sun protection to anti wrinkle products are in this group of products.

One of the main reasons that these two groups of products were chosen for this research is the huge market for these products in Iran. It is estimated that the market value for Skin care products in Iran is between $1.2 to $2 billion per year and the market grows by 8% rate every year (Samadi 2010). For OTC products, the market value is 0.5 billion per year (Market Research.com 2014). The very young population of Iran and the high rate of influence of different media on new generations have been provided as explanations for this big market.

The second reason that these products are chosen is that these products could play a very important role in the economy of smaller pharmaceutical companies by generating extra profits without requiring heavy investment.

These products are principally produced by pharmaceutical companies. Often, only a very small regulatory procedure differentiates an actual pharmaceutical product from an OTC or special skincare product. The quality of pharmaceutical products is highly regulated internationally, and in some cases, even the packaging of these products has to follow similar regulation everywhere in the world. In addition, the main buyers of these products are health insurance companies and governments. These two issues diminish the bargaining power of pharmaceutical companies and are the reasons that brand name in these companies do not play an important role in sales. The most important sales factor in this industry is predominantly price, especially in generic products. These factors, largely, decrease the profit margins of pharmaceutical companies. This issue is much more apparent in medium and small sized companies because, firstly, they cannot decrease their price by mass production, and secondly, they do not have the financial resources to invest in the research and development of new products, a process, which involves significant time and cost and from which the results are not always predictable.

Many of these companies compensate for these problems by producing OTC and skincare products. These products can be sold directly to the end customers and there is much scope for innovation in their quality and packaging. Moreover, because of the increase in life expectancy and other variables, a huge market has emerged for these products, the mentioned advantages have generated fierce competition among producers and brand names.

Although skincare and OTC products could be produced in pharmaceutical companies, branding of these products is very different from pharmaceutical products. Unlike pharmaceutical products, these products are purchased directly by consumers. Secondly, the main distribution channel of these products in Iran is private owned pharmacies. These two issues make the branding of these products different and complicated by existing many situational variables beside brand with potential impact on consumer brand choice.

There are some issues specific to distribution channels in Iran, which generate new challenges in branding of these products. In Iran, there are no huge chains of pharmacies like Boots or Superdrug. The distribution of medicines, pharmaceuticals, OTC and skincare and cosmetics products is mainly by private pharmacies in different parts of cities which, based on regulations, requires a pharmacist to be present during all opening hours. Traditionally customers seeking advice approach these pharmacists who are highly trusted. This position gives them a unique advantage for recommending and supporting special brands. There are also other practices that pharmacies deploy to indirectly influence consumer brand choice such as the assortment of the products available and temporary promotions. In countries with chain pharmacies the customers mainly use brand as the most important situational variable and generally there are not many other situational variables especially in purchase environment. Whilst in Iran, there are many other factors other than brand that could have an impact on consumer brand choice which has to be considered by brand mangers and marketers.

1.5 Thesis structure

The thesis begins with a literature review, which consists of four main topics. In the first part of the literature review, different aspects of brand are discussed. In particular, the arguments surrounding the benefits that could be obtained from a brand are thoroughly explained and analysed. The second part of the literature review explains why a behaviouristic approach has been chosen for this research, and is followed by an introduction to BPM and its components. In the third part of the literature review, setting, one of the main components of BPM, is explored. Finally, in the fourth part of the literature review, involvement has been studied and investigated and it is argued that a particular approach to understanding involvement could be used for quantifying learning history.

The literature review is followed by a conceptual framework, research programme and methodology section. Three different methodologies have been applied in this research. In project one, interviews have been used to explore the three components of the consumer side of branding. In the second project, focus groups have been utilised to provide an inventory of situational variables. In the third project, questionnaires have been used for finding the level of involvement and its type, and also

the relation between involvement level and type and situational variables in these two group of products.

Chapter 2: Literature review

This literature review consists of four main parts. The first part of the literature review is about brand and its importance, and the potential benefits that a strong brand generates for an or

ganisation. This is followed by a discussion about why many branding efforts do not achieve their full potential (that is, generating loyal customers with a willingness to pay a premium price). Based on the argument provided for this failure, the concept of the consumer side of branding is introduced. The second part of the literature review explains why a behaviouristic approach has been selected for this research, and BPM has been introduced as a behaviouristic pattern for analysing consumer behaviour. In the third part of the literature review, setting, as one of the two main components of BPM, is explained. Finally, in the fourth part of the literature review, the concept of involvement is scrutinised and evaluated; this will be used for quantifying consumer learning history, the other main component of BPM.

2.1 Brand

2.11 Introduction

Creating strong brands is an organisation's first priority. Brands are the most precious, intangible asset of any organisation. In a highly competitive environment, brand is one of the most important sustainable advantages that organisations can rely on, since they are specific to organisations, highly protected by law and, more importantly, inimitable and unique. Strong brands enable organisations to expand their brands more effectively, decrease the effect of competitors' promotional activities, generate a powerful barrier to entry and increase the willingness of customers to pay a higher price (Farquhar 1989).

Nowadays, the complication of brand management has been increased and has put extra pressure on brands' managers because of the following reasons: increasing the number of relatively high quality and affordable retailer brands, and the emergence of new media that generates a complicated situation for organizations to reach their

potential customers and thirdly, the internet, which in many cases provides information about lower price alternatives (De Chernatony and McDonald 2006).

It is argued by Brown et al. (2003) that building and managing a brand is a course of action associated with not only branding activities but also consumers. They consider branding as a setting in which marketing managers and consumers co-exist; in this environment, consumer and brand relation is “complex, heterogeneous and experiential”. Boyle and McCabe (2006) have explained this concept: “In particular, the process may be hampered by the existence of potentially devastatingly different views of brand value held by the strategic marketers and brand managers, on the one hand; and consumers, on the other”.

Generating positive brand association in public is the focal responsibility of a brand manager; his/her central problem is how this positive association can be provided. Brand association has been defined as “the beliefs and meaning created in the minds of consumers by the brand managers through a mix of media and non-media elements” (de Chernatony and Riley, 1998). Boyle (2006) defines brand association as “anything that reminds someone of the brand”.

Brand association creation is not completely in the hands of marketers and brand managers working through marketing interventions. Marketers have no control of brand reputation and actual brand expectations (Brown et al., 2003). It is believed that customers expect to receive unique and sustainable benefit from a brand (Peter Doyle 2001); accordingly, marketers' ignoring the consumer side of branding is one of the reasons for the high rate of brand failure and low level of brand performance in many cases. Marketers generally consider customers as passive recipients of advertising campaigns, while in fact customers actively participate in brand image creation (De Chernatony and McDonald 2006).

Customers’ active role in branding depends on different variables that generate expectation from brands. These expectations come from relatively distinct factors that together shape what consumers actually expect to receive from a brand, apart from what they expect to receive from the product itself. In this thesis, these factors collectively are referred to as the "consumer side of branding". It is argued that all of these factors have to be considered for any branding activity and brand image selection.

In the following sections, the three main variables that constitute the consumer side of branding have been introduced and defined.

The consumer side of a brand is a complicated concept, which includes several aspects, from brand image selection to the level of brandability (or the importance of brand in consumer choice of a product in a given country) and from the origin of brand equity to the relationship between product and brand (Batra and Homer, 2004; Foxall, 2008; Keller, 1993 Orth; 2005; Park et al 1986; Meenaghan, 1995;).

Brand is the variable that has a high impact on consumer behaviour, but it is not the only one. In any purchase environment other than brand there are other potential factors that have the capability to influence consumer choice, which will be discussed later. However, brand is a variable that could be managed and controlled by organizations by generating a proper brand image.

Proper brand image is based on the category of product increases the willingness of the customers to pay a higher cost for what they perceived as credibility. In some other categories customers choose regularly a special brand and are willing to pay a premium price because they would like to show their social status or to show their type to others. In some cases strong brands decrease the ambiguity and uncertainty which is embedded in purchasing process of some category of products like technological products.

In the first part, brand has been defined, its advantages have been explained and following that, the consumer side of a brand has been introduced. Brand benefit dimensions and concepts like brand equity and brand image have been introduced and defined, and it is argued that strong brand equity comes from a proper brand image. In other words, an appropriate branding involves generating the right brand image, which ultimately increases the influence of the brand in consumer behaviour and protects consumer choice from other situational variables with potential impact on consumer choice that exists in a consumption and purchase environment.

2.12 The consumer side of branding

One of the contributions of this thesis is determining and defining variables that together are elements of consumer side of branding. Consideration of these three

variables is essential for brand managers, because customer ideas about these variables have huge implications for the design of potential branding campaigns. The first of these variables is how customers consider the relation between product and brand. Although some have argued that customers always consider brand and products as one entity and others have argued the reverse, this thesis takes the position that there can be no generalisation in this matter and for each product category this matter has to be found out. The second variable, which plays an important part in the consumer side of branding, is brandability, or how much customers pay attention to brand in their choices; in other words, how strong is the role of brand as one of the stimuli in the purchase environment in comparison to other potential situational variables? Finally, the third and the most important element of the consumer side of branding is what customers expect from brand *per se*, independent of the product. These three variables are not totally independent from each other; for instance, a high expectation from a brand naturally increases a product's brandability.

2.121 Brand and product

The first variable of consumer side of branding concerns whether customers are able to distinguish between product and brand as two different entities, in other words whether customers can differentiate between products' attributes and brands' attributes.

In the classic school of thought, it is believed that the consumer can differentiate a product from a brand. Consequently, it is argued that the brand is considered by customers as a separate body that adds its own additional benefits to the product. There are three possible conclusions from this point of view. Firstly, viewing brand and product as different entities allows organisations to consider whether they should sell products with or without a brand. Secondly, based on this assumption, it would be reasonable to consider some features exclusive to brands to be utterly separate from products as, obviously, these attributes contribute only to branded products. And, thirdly, this separation between product and brand attributes allows researchers to differentiate products' attributes and brands' inherent attributes (Gardner and Levy 1955, Aaker 1991).

In another approach to this subject, it is argued that brand and products are inseparable in the minds of consumers. That is customers evaluate products in a holistic way from an overall perspective, including brands and products' attributes simultaneously. It is believed that there is a strong inter-relation between product and brand, which precludes any separation or makes it very difficult for the customer to distinguish between them. These authors also suggest that because the creation of brand association in the mind of customers is not only based on the branding process, but also on expressing the actual product, it is very difficult, for customers to distinguish which part of this association is related to brand attributes and which part is related to product (Murphy 1990, Ambler 1996 in Del Rio 2001 article).

What is important here is that the two schools of thought agree that the brand adds its own benefits to the product, whether customers can differentiate between these benefits or not. It is also important to mention here that empirical research upholds the classic school of thought and supports the idea that customers have the ability to distinguish between brand and product attributes (Murphy 1990).

In another approach toward brands and products, Batey introduces four differences between a product and a brand. First, a product is bought by customers "for what it does" while a brand is chosen "for what it means". Second, "a product sits on retailer shelves; a brand exists in consumer's mind". Third, while a brand is timeless, products are subject to becoming outdated eventually. Finally, competitors could easily imitate a product, but a brand is a unique asset to an organisation, which cannot be copied (Batey 2006).

2.122 Brandability

The second variable of the consumer side of brand is brandability. In branding, it is essential to find out in the first place whether or not brand has any influence on consumer behaviour as a stimuli; in other words, to understand the level of brandability of these products. Brandability has been defined by Foxall (2008) as "how much branding influences consumer behaviour and, consequently, brand performance in each product category". A high level of brandability in a product category indicates that the brand image is a strong stimulus in a particular setting, while a low level of brandability

means that the brand does not particularly influence consumer choice and consumer behaviour is under the influence of other variables apart from the brand.

We can consider a brand's financial value as an indicator of brand importance. In luxury industries, brands are worth up to 70% of the intangible assets of these organisations, whilst in pharmaceutical industries brand value could reach to a maximum of 10% of their intangible assets (Emily Boyle 2006). The lack of precise knowledge as to how branding affects consumer brand choice in each industry could be seen as a poor use of financial resources invested by companies in the branding process (Interbrand (Emily Boyle 2006)).

TABLE I. Relative importance of brands and other assets

	Tangibles (%)	Brands (%)	Other intangibles (%)
Utilities	70	0	30
Industrial	70	5	25
Pharmaceutical	40	10	50
Retail	70	15	15
Information technology	30	20	50
Automotive	50	30	20
Financial services	20	30	50
Food and drink	40	55	5
Luxury goods	25	70	5

Table 1 Relative importance of brands and other assets

Based on what has been discussed, it could be concluded that brands have different level of impact on consumer brand choice in different product categories. Knowing the level of brand impact on consumer brand choice, in comparison to the other potential factors, is crucial for any branding activities. Lack of insight about the level of brand contribution on sales, or brandability, may cause marketers to exaggerate the importance of a brand. This false perception causes organisations to over-invest in branding without any significant outcome.

2.123Brand image

The third variable of consumer side of brand is brand image. The associations customers have with brands are collectively described as "brand image" which Aaker has defined as "a set of associations, usually organised in some meaningful way" (Aaker, 1992), and which Kotler defined as "the set of beliefs held about a particular brand"

(Kotler 1988). It is argued by Hsieh et al that: "a successful brand image enables consumers to identify the needs that the brand satisfies and to differentiate the brand from its competitors, and consequently increases the likelihood that consumers will purchase the brand"(Hsieh, Pan, and Setiono 2004)

To create strong brands it is essential to generate proper customer brand associations or brand image. Brand association or brand image comes from customers' needs; hence, to create an appropriate brand image, it is necessary to know the essence of customers' needs or what they expect as value or benefits from brand in a particular category of products (Park et al 1994, 2005). It is important to consider that customers expect some benefits that could be delivered exclusively by brand or more precisely brand image. Keller (1993) argues that brand image has to be determined by considering the consumer's needs and wants, and that brand image has to be consistent with fundamental consumer needs. As with Keller, in his definition of brand image/concept, Park and srinivasan (1994) also highlights customer benefit as the main constituent of brand image: "a firm selected brand meaning derived from basic consumer needs". In another approach to this subject Salciuviene (2007) argues that, "The power of a brand's image lies in how consumers perceive it and what they expect from the brand over time, thus consumer knowledge is really the core of brand image formation".

Orth (2004) believes that consumers seek certain special features from brands rather than products. He argues that tailoring the brand according to customer-expected preferences differentiates the brand from other competitors. Srinivasan (1979), in an influential article, introduced the concept of "brand specific effect" and argued that brand adds its own values independently of, and utterly different from, the product values. Accordingly, different kinds of attributes were considered that were contributed solely by brand (Keller 1993, Park and Srinivasan 1994).

It is important to mention that brand image is a consumer-constructed belief or, as Park (1986) explains, "the understanding consumers derive from the total set of brand–related activities engaged in by the firm". Park also mentions another important notion, brand concept, which he defines as, "…a firm selected brand meaning derived from basic consumer needs". What Park tries to explain by separating these two notions

from each other is that brand image does not come from an organisation's communication activities alone. It is formed by what customers perceive from all of the organisation's brand-related activities and can be different from what the organisation is trying to convey to the customer.

2.1231 Brand identity

Nandan (2004) introduces a new notion to this argument and terms it "brand identity. It is a concept which originates from an organisation, and differentiates it from brand image as follows: "brand image refers to consumer perceptions and encompasses a set of beliefs that consumers have about brand". In other words "brand message is packaged or wrapped in terms of brand identity, and it is unpackaged or unwrapped by the consumer in the form of brand image". Nandan argues that brand image originates from "particular product features" plus "firms' effort to create meanings from these arrangements". Nandan argues that by strengthening identity-image linkage, brand loyalty could be improved. Minimisation of the gap between brand image and brand identity could be accomplished by knowing the consumer's perception about the product and, based on this, an attempt could be made to put brand identity and brand image in harmony.

2.1232 Brand equity

Brand equity has been defined as "the set of associations and behaviours on the part of brand's customers, channel members, and parent corporation that permits the brand to earn greater volume or greater margins than it could without the brand name and that gives the brand a strong sustainable, and differential advantage over competitors" (Marketing Science Institute, 1998, quoted in Chay, 1991; p.30 quoted in A. Belen Del Rio et al. 2001). Brand equity could be approached from many different angles, but most related to our topic is the consumer-based approach, which has been defined by Vasquez (2002) as "the overall utility that the consumer associates to the use and consumption of the brand; including associations expressing both functional and symbolic utilities". This aspect of brand equity is responsible for generating long-term and durable differentiation advantages for the firm.

Farquhar (1989) has defined brand equity as "the added value of brand to the product". Brand equity has been considered as an intangible value. In other words:

"brand equity is manifested in the difference in choice between products that are identical in terms of their features, but differ only in brand name" (Morrison and Eastburn, 2006).

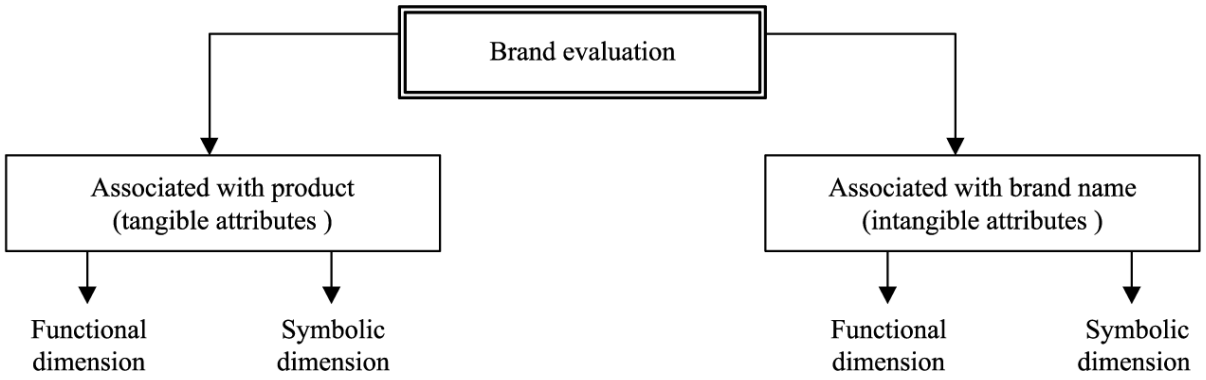
In a more comprehensive definition, Srinivasan (1979) has defined brand equity, or what he called “brand-specific effect”, as “the component of overall preference not explained by objectively measured attributes." Many scholars believe that brand equity underpins customers’ brand associations or brand image.

Hoefler and Keller (2003) believe that the common core of different definitions of brand and brand equity “implicitly or explicitly rely on brand knowledge structures in the mind of consumers-individuals or consumer associates to the use and consumption of the brand; including associations expressing both functional and symbolic utilities”. They conclude that the main research priority in branding is “understanding how brand knowledge structures are created and how they influence consumer behaviour”.

Park and Srinivasan (1994) argue that brand association or brand image is related to brand equity from two main sources: attribute-based, and non-attribute-based. Attribute based brand equity refers to brand building activity, which is based on products’ attributes. According to these authors, “[t]he attribute-based brand equity incorporates the differences between subjectively perceived and objectively measured attributes levels”, while non-attribute-based brand equity consists of associations unrelated to products’ attributes, like usage imagery or brand personality.

Based on the above argument it is vital for a brand manager to know the source of brand equity in his product sector. The brand manager needs to know whether non-attribute-based components create customers’ associations with the brand, or whether attribute-based components are responsible. This knowledge enables marketers to increase the influence of their advertising campaign by spending their resources in an efficient way.

Figure 1 Brand evaluation



(Park and Srinivasan 1994)

2.1233 Brand benefits' dimensions

The fact that brand adds its own value to the product, independently of any value added by the product's attributes, has been discussed (Keller, 1993; Orth et al, 2004; Park and Srinivasan, 1994). In other words, brand and product contribute different sorts of services to the customers (Belen Del Rio et al, 2001; Srinivasan 1979). Belen Del Rio argues that there is a fundamental difference between these two types of benefits. That is, that "product is something that offers functional benefit" while a brand is "a name, symbol, design or mark that enhances the value of product beyond its functional value" (Farquhar 1990).

Two main dimensions have been considered for brand's added values: functional and symbolic. This classification has been supported by empirical research (De Chernatony and Mac William, 1990; Bhat and Reddy, 1998; Spahenberg et al, 1997; Vazquez, 2002).

Vazquez (2002) argues that products and brands have symbolic and functional values. In other words products satisfy both functional and symbolic needs of customers, and the same applies to brands. They justify this idea by using the work of Ambler (Ambler, 1997), which examined the demystifying role of brands as a functional effect of brands not related to their symbolic aspects. Products *per se*, as well as brands, have some symbolic attributes but clearly the functional characteristics of products are more obvious. Their empirical research shows that consumers perceive different roles for brand names and products. This assumption that they should allocate symbolic and

functional characteristics to products and brands separately is valid and reliable (Vazquez, 2002).

2.12331 Functional dimensions

The functional dimension of a brand concerns the rational evaluation of the brand by customers. It is used by customers to assess the practicality of products, including issues like usage effectiveness, value for money, reliability or, in the words of del Rio (2001), "the more intrinsic advantages of the product", which "usually correspond to the product related-attributes" . Garwin (1987) has shown that customers expect, from a functional brand, a guarantee or information about the following characteristics of products: performance, features, reliability, confirmation to specification, serviceability, aesthetics and reputation. The functional dimension of a brand is considered more by customers before and during the purchase process. However, after these two phases, the product itself is the source of benefit for customers. Although the symbolic dimension of a brand is important for the customer before and during the purchase process, its main benefit is felt during the consumption of the product or, in reality, the consumption of the *brand* in many categories of products.

Some scholars (for instance, Erdem et al, 1998) place more emphasis on the functional dimension of the brand. They believe that brands are used to convey product credibility to assure customers of the reliability of a particular organisation's claims. This issue enhances consumer perception of a product's features and decreases uncertainty. For this reason, they conclude that "the reduced uncertainty lowers information costs and the risk perceived by consumers, thus increasing consumers' expected utility" (Erdm et al, 1998).

It is argued by Erdem, Swait and Louviere (2001), that the cause of uncertainty originates from asymmetric information that is inherent in the market, since organisations have more information about their products than their potential consumers. In this situation, the role of the brand is to assist consumers in evaluating product reliability and, consequently, the decreasing the risk perceived by the customer.

Empirical research shows that brand credibility reduces price sensitivity, and this decrease in price sensitivity varies in different product categories.

Accordingly, they conclude that the most important role of brands is “their effect on consumer brand choice and consideration” and explain that this impact comes via brand credibility (Erdem and Swait 2004). Brand credibility has been defined by Erdem and Swait (1998) as “the believability of the product position information contained in a brand, which entails “consistently delivering what is promised”".

Erdem et al (2004) explain that credibility can be conveyed to the consumer merely by brands, and argue that although the marketing mix could signal product quality by different techniques, such as charging a higher price or choosing high-end channels, these activities may or may not create credibility for the product because of a special market situation. For example, competitive and consumer behaviour deeply affect the activities of the marketing mix. While brands express a different signal because they bring together organisations’ past and present marketing activities and brand investments. This enables brands to convey credibility signals to customers.

Erdem et al (2004) define two different dimensions for credibility: *trustworthiness* and *expertise*. Trustworthiness is the willingness to fulfil what has been promised, and expertise is the ability to deliver what has been promised. To build the credibility perception in the mind of consumers a brand has to demonstrate these two aspects.

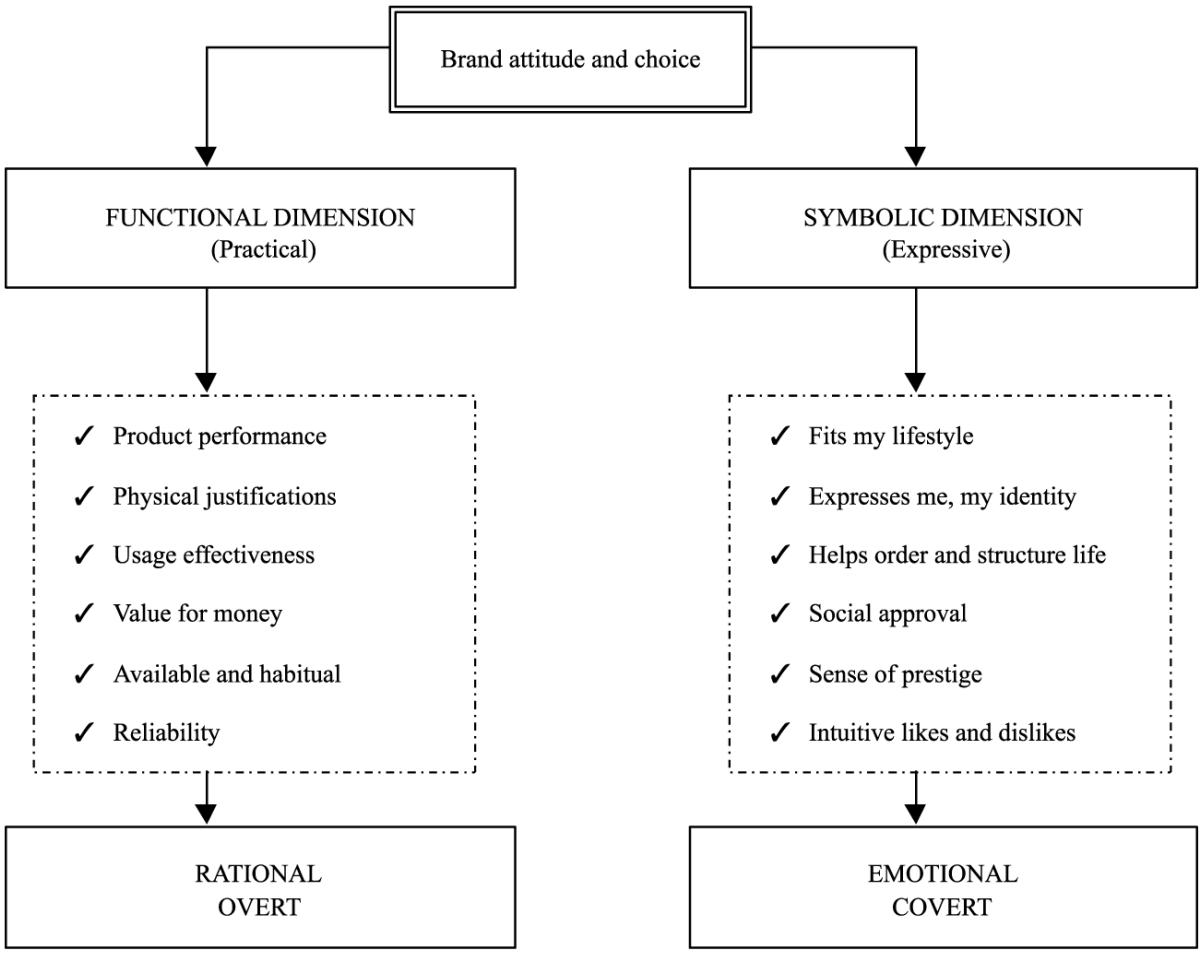
2.12332 Symbolic dimensions

The symbolic dimensions of a brand concern the emotional evaluation of that brand. De Chernatony and McDonald (2001) defines the symbolic dimension of a brand as: “When people choose brands,... consumers are concerned with the brand's ability to help make a statement about themselves, to help them interpret the people they meet, to reinforce membership of a particular social group, to communicate how they feel and to say something privately to themselves”. Symbolic aspect of the brand "goes beyond the rational side and that generates the emotional one" in other words in symbolic association there is a shift of attention from physical and functional attributes of products to its more emotional and symbolic attributes of it (Cian et al 2011).

The rationale behind this irrational behaviour (irrational, that is, according to the economic consumer behaviour models) has been explained by Woods as: "thinking about the meaning of a product purchase rather than the function of the purchase." He continues: "Thus, the perceived prestige of ownership comes to be more important in bringing about a purchase than is the function which the product would service" (Woods 1960). In this group of products customer satisfaction comes from viewers' feedback, not from the actual utility value of the product.

These dimensions have been explained as follows (Del Rio et al. 2001):

Figure 2 Symbolic and funcitional dimensions of brand



When considering brand as output, or what consumers do with things, it is very important for marketers to know which one of the aforementioned dimensions of a

brand is the one expected by customers in a particular product category. In this thesis, it is argued that customer expectation from brands is related to product category.

Strong brands guarantee what organisations can expect from branding activities. They allow them to command larger profit margins, increase their market share, generate loyal customers and extend their brand. Creating strong brands requires proper customer brand association. In order to create the right brand association, it is necessary to know what customers need from a brand in a particular category of products.

2.13 Brand image selection

Woods (1960) argues that products have a capacity to be symbolic, or what he calls "ego-involved", to a greater or lesser degree. He argues that products by which consumers identify themselves have a higher potential to be symbolic, and products which have little social or cultural meaning are functional products with less capacity to be symbolic. Woods suggests that a product's ability to be functional or symbolic is a very important variable in choosing a proper brand image.

Woods argues that marketers or brand managers are not the sole source of brand image creation. Rather, customers' former perception of a product highly influences the brand image creation in their minds. Woods claims that, contrary to Park's (1986) argument, it is impossible to generate any brand image for any product. What Woods defines as the capacity of having symbolism value could be defined as a product's level of visibility. The more the product can be seen by others, the greater its potential capacity to be symbolic.

Bearden et al. (1982) show that the benefits which consumers anticipate from products in many cases mainly come from brand. They used Bourne's (1957) framework, introduced two attributes, which divided product consumption into two categories: public consumption and private consumption. The framework also included two attributes, which also divided products into two categories: luxury products and necessities. They argue that in the case of publicly-consumed luxury, the influence of product and brand is strong, while in the case of publicly-consumed necessity, the influence of products is low, but because it is seen by others the influence of brand is

high. That is, like Woods, Bearden found that the visibility of consumption of a product has some level of influence on consumer expectations of the brand.

Another product attribute which is important in brand image selection has been introduced by Erdem (1998), who suggests that "observability" or "quality recognition" of a product plays an important role in consumer brand choice. In products where quality recognition is low, brand credibility has a high impact on consumer decision-making. In this situation, in order to decrease the risk involved, consumers rely heavily on brand credibility, or expect a functional role from the brand when making this kind of purchase.

In another approach to the previous argument, Park et al (1986), divide all products into two groups based on their attributes. "Utilitarian products" are products that customers' expectations have "physical terms or how brand works objectively". The other group of products is called "value-expressive", and Park argues that this category is purchased for "emotional outcomes and/or the personality image that their use enables the user to express". These two values, to some extent, exist in every category of product, but in many cases one of these values is dominant.

In highly visible products, or in products which customers use to express or identify themselves, the symbolic value of brand is very important. It could even be argued that in this group of products what is consumed is not the product but the brand; as Levy (1953) puts it, these products have not been purchased by customers because of what they do, but for what they mean. In this situation, in accordance with the holistic school of thought mentioned previously, customers consider product and brand as one entity. In this situation what customers expect from a brand is a high-status image.

It could be argued that for products with a low level of visibility, customers expect a more functional role from a brand; that is, they expect guaranteed brand quality. In this situation, as in the classic school of thought, product and brand are considered by customers to be two separate entities.

2.131 Brand image management

Park et al (1986) introduced Brand Concept Management (BCM) in order to create a framework to guide managers through the brand management process. In this framework, they consider three distinctive functions for brands. It is argued that brands create a symbolic, functional or experiential perception in the minds of customers, based on the advertising activities of the brands' creators and consumer needs. These three images have been discussed earlier in this thesis. Park, like del Rio (2001), accepts the two dimensions of brand - symbolic and functional - and adds the experiential dimension, which could be considered as a symbolic function of the brand but which has more internal or personal benefits.

Park et al (1986) argues that "any product theoretically can be positioned with a functional, symbolic, or experiential image". He believes that there is no need to consider product attributes and characteristics in brand image selection. This issue is discussed thoroughly in the next chapter. The next important argument of Park is that every brand could present one of its dimensions well, and that if they offer a mix of images this will generate confusion and problems.

Park believes that every brand has to position itself through just one of these images. He argues that positioning brand strategy is a long-term procedure and needs a high level of consistency; trying to create multiple brand concepts and images increases inconsistency during brand management. Furthermore, because a brand encounters new competitors with every concept, a brand with multiple concepts will have to compete with more brands. Consequently, it is more difficult to manage a multiple concept brand. Finally, he argues that the most important flaw of a multiple concepts brand is the difficulty of establishing an effective image and position. Brands employing multiple concepts confuse the consumer about the exact meaning and position of the brand. He argues that customers prefer, or are only able to associate, a single attribute to each brand.

In another approach to this concept, other scholars like Bhat and Reddy (1998), Chernatony and Harris (2000) and Mowle and merrilees (2005) et al carried out empirical research to test Park's hypothesis, and they found that "brand functionality

and symbolism are distinct concepts in consumers' minds". Their results revealed that although consumers see the functionality and symbolism concept as separate phenomena, it is possible to have brands that have both functional and symbolic meanings for the consumer. According to these findings, they conclude that, contrary to Park's argument, companies can position their brand with several concepts successfully, and "it is possible for consumers to view a brand in both symbolic and functional terms.

2.132 Functional or symbolic brands?

In order to clarify this conflict, it is arguable that a practical definition of functional image and symbolic image could help us to find a new insight into this issue. Functional brand image is an image which generates the perception of a particular level of quality (for instance, the level of quality associated with low-price airlines), and ensures a consistency of quality and reliability, while symbolic brand image generates status distinction, conformity to a group and so on.

Depending on the product category, there could be a broad overlap between these two images. In symbolic brand image, this overlap is more obvious: generally, a highly symbolic brand image will indirectly convey a perception of high quality. A highly functional brand image generates some symbolic value for the product, even if the highest priority which the customer places on brand in a group of products is as a sign of quality. It is argued in this thesis that any brand has a dominant image, generally followed by another image which has been generated unintentionally. Depending on what customers expect from a brand, or in other words, what kind of brand associations fit (attribute-based or non-attribute-based), brand managers have to create the proper image, functional or symbolic, as the dominant brand image.

2.14 Conclusion of the first part of the literature review

The central point of the literature examined so far is that customers are not passive recipients of branding activities. They expect some benefits from products and brands which, in many cases, are separate from each other, and some of these expected benefits could be conveyed solely by brand.

This argument is outlined clearly in the following quotes:

> ...researchers generally did not distinguish between the effect caused by brand name and the effect originated in the products…the product as well as brand name is capable of contributing several types of benefits to the consumer (Orth 2005).

> Brand managers should evaluate the consistency and the cohesiveness of the brand image in terms of the fundamental consumer needs and wants that the brand is supposed to satisfy (Keller 1993).

> Ad-evoked symbolic and functional brand beliefs shape brand purchase intentions but only if the beliefs fit the product schema (Batra and Homer 2004).

> Product features which deliver meaningful product benefits are generally central to the brand image creation process in that it is the ability of the product offering to satisfy buyer needs that is at the core of image formation (Meenaghan 1995).

Like other previously mentioned researchers, Orth (2005) argues that brand delivers its own benefits to the consumer separately from product. Keller (1993) believes that these benefits are not random benefits chosen by marketers, but have to be related to fundamental consumer needs. Batra and Homer (2004) suggest that brand beliefs must be compatible with products' schema to be able to influence brand purchase intention. In other words, according to Meenaghan (1995), product attributes determine what kind of brand image must be generated. A proper brand image must be compatible with customers' expectations, and decreases the gap between brand image and brand identity.

2.2 Consumer research

Despite the growth in attention paid to consumer research over recent years, there is no common agreement among researchers and scholars regarding the exact definition of consumer research and its objectives, and how it can be distinguished from other disciplines. Studies in this field have proceeded using various unrelated principles (Simonson et al. 2001). Before proceeding, we need to define the construct and clarify the boundaries of what we mean by consumer research.

Holbrook's (1987) definition could be used as a starting point for overcoming the consumer research identity crisis. Holbrook has defined consumer research and explained its boundaries with other disciplines based on seven key points. In his first

and most important point, Holbrook states that “consumer research studies consumer behaviour” Studying consumer behaviour has to be the main objective of any consumer research and this criterion could distinguish consumer research from other disciplines in this field. This understanding of consumer research is a relatively accepted approach in the field.

Consumer research has been defined by Calder and Tybout (1987). The field, which, “…seeks to produce knowledge about consumer behaviour”. Similarly, Belk (1986) argues that consumer research’s main concern is consumer behaviour. He recommends that consumer behaviour should be classified as a discipline in and of itself: “That is, consumer behaviour should not be a sub-discipline of marketing, advertising, psychology, sociology, or anthropology, nor the handmaiden of business, government, or consumers. It should instead be a viable field of study, just as these other disciplines are, with some potential relevance to each of these constituent groups”. Like Belk Deighton (2007) considers consumer research as a discipline by itself which:"sits in a slightly uncomfortable middle ground, an applied discipline relative to psychology, economics, statistics, sociology, or anthropology but a fundamental discipline relative to marketing or management".

The definition of Foxall, Goldsmith and Brown (1994) is at variance with Holbrook (1987) and Belk (1986). They write:

> Consumer behaviour includes the activities of buyers, former buyers, and potential buyers from pre-purchase to post-purchase, consumption to discontinuance. As conventionally conceived, it embraces the awareness of a want, search for and evaluation of possible means of satisfying it, the act of purchase itself, and the evaluation of purchased item in use, which directly affects the probability of repurchase. Consumer behaviour is a dynamic, complex and multidimensional process. It comprises not only the act of buying itself but also the pre-purchase and post-purchase activities.

Solomon's (1996) definition of consumer behaviour is less complicated than Foxall’s (1994)definition, but covers much of the same ground: “the study of the processes involved when individuals or groups select, purchase, use or dispose of products; services, ideas, or experiences to satisfy needs and wants”. Synthesising these two definitions of consumer behaviour, consumer behaviour could be explained as an independent field of study, mainly dealing with aspects of consumer choice, purchase

and consumption of tangible and intangible products and services. In this article, the issue of consumer choice is researched and examined as the most important component of consumer behaviour. It could be argued that other activities introduced by Foxall and Solomon as parts of consumer behaviour are highly affiliated with consumer choice.

The next part will discuss and evaluate the different, but largely accepted methods for studying this concept, including how it might be understood, measured and explained.

2.21 Consumer research study

Consumer research has grown over time from the foundations of several different disciplines. In the beginning, the main approach toward consumer research was based on economic ideas, and attempted to explain and justify consumer behaviour in line with demand theory in microeconomics. The domination of economic understanding in the explanation of consumer behaviour began to be questioned in the early 1950s.

As an alternative approach to consumer research, behavioural psychology was introduced and became mainstream in consumer research studies. The consumer decision-making models which were introduced from the 1960s were the result of this understanding of consumer research, and of cognitive psychology. In the 1970s, the main obsession of consumer researchers was generating comprehensive multi-attribute in order to provide a framework for a thorough explanation of consumer behaviour (Foxall 1999).

However, cognitive and economic approaches to consumer behaviour research have continued to dominate the field, backed up by the disciplines of economics and cognitive psychology. Consequently, in the majority of research exercises, decision-making and information-processing patterns based on cognitive theories are used to study consumer behaviour (Foxall et al. 2006).

“Consumer cognitivism”, which is the main foundation of current consumer behaviour research, has been explained by Foxall. He notes that “the essence of consumer cognitivism is its depiction of the consumer as a boundedly rational information processor that uses evaluative criteria in determining the viability of her personal goals, achieves a comparative evaluation of the brand alternatives available to

reach those goals through the exercise of decision rules, and mentally selects, on the basis of information perceived into the processed by long-term memory, the course of action (brand choice) that is superior to the other options" (Foxall 1999).

2.211 Attitudes and behaviour

Cognitive approaches assume that there is a strong causal link between attitudes and behaviour, or in other words, "that behaviour can be efficiently understood in terms of the beliefs and desires that precede it" (Foxall 1999). The cognitive models associate cognitive activities to behaviour by considering a consequent chain among the following variables: "belief, attitude, and intention formation". The last part of this change (intention formation) determines actual consumer behaviour (Foxall 1998).

Accordingly, the study of attitudes has become a basic part of marketing research for predicting consumer behaviour. As an example, Loudon argues that changes in attitudes are directly related to changes in behaviour (Loudon et al. 1993). Similarly, Hawkins (1991 p.433) claims that "Because of their importance, attitudes are the focal point for a substantial amount of marketing strategy". Empirical research shows no, or very weak, support for this causal relation.

As has been mentioned, it is argued by cognitive scholars that there is a high correlation between pre-purchase attitudes and actual consumer choice. "Prepurchase mental processes" are the actual and only determinant of brand choice. Dennett's "intentional stance", a derivative of cognitivism, is relevant here: "An intentional system is a system whose behaviour can be (at least sometimes) explained and predicted by relying on ascriptions to the system of beliefs and desires (and other intentionally characterised features) - what I will call intentions here, meaning to include hopes, fears, intentions, perceptions, expectations, etc" (Dennett 1978, 271 in Foxall 1999).

This type of argument inspired marketers to concentrate their efforts into strengthening consumer attitudes in terms of behavioural preferences. If we assume that any behaviour (in this case purchase or brand choice) originates from some attitude, then it is possible to change an individual's behaviour by modifying her/his attitudes towards that given behaviour.

This attitude-based argument is mainly constructed according to stimulus-organism-response theory, and has three main characteristics argued by Moore: "(a) the

bifurcation of human experience into a behavioural and a pre-behavioural dimension, (b) the use of psychological terms to refer to organo-centric entities from the pre-behavioural dimension, and (c) the use of organo-centric entities as causally effective antecedents in explaining behaviour" (Moore 1981: 62). This interpretation has an important consequence: by considering attitudes as the initial antecedent of consumer behaviour, it generates comprehensive consumer behaviour models (Foxall 1983).

From the early 1930s, empirical researchers such as La Pierre highlighted the relation between behaviour and attitudes. La Pierre's (1934) research looked at racial attitudes, and he found that while just one in 250 restaurants and hotels actually refused to serve a Chinese couple, in the survey that he distributed six months later, 90% of them stated that they would not accept Chinese customers.

Wicker (1969 p.65), after reviewing the evidence of 46 empirical studies related to attitudinal-behavioural consistency in which the units of observation were individuals, reached the conclusion that "it is considerably more likely that attitudes will be unrelated , or only slightly related to overt behaviours than attitudes will be closely related to actions. Product-moment correlation coefficients relating the two kinds of responses are rarely above 0.30 and are often nearer zero". In the Wicker study, just 10% of "the variance in overt behavioural measures" was related or connected to attitudinal data.

Researches about consumers' positive attitude towards green consumption and their behaviour show that the correlation between attitude and the consumption behaviour is very low. This concept has been called "attitude-behaviour gap" by Carrigan (2012). The attitude-behaviour gap has been identified in different types of consumers from mainstream consumers (Chatzidakis et al 2007) to ethical consumers (Harrison et al 2005).

According to this evidence, supporters of attitude-behaviour relation took into account new variables as other determinants of behaviour and generated multi-attribute frameworks. One of the most influential models was the Theory of Reasoned Action (TRA) developed by Ajzen and Fishbein. They argued that the consumer decision process is under the control of two cognitive variables where the sum of these two

components determines the individual intention of doing, or not doing, a given behaviour (Hini, Gendall, Kearns 1995).

The first component is attitude toward the behaviour, or individuals' thought about the consequences of undertaking a particular behaviour. The second is subjective norms. These refer to the consideration of how the behaviour will be judged by other people, including friends and family or, more generally, about our understanding of the desires and expectations of people around us. Subjective norms could also be explained as the level of desire of individuals to conform to others' expectations regarding their behaviour.

This model originates from Dulany's theory of propositional control (1968), which was largely developed to study the relation between attitude and behaviour. This theory has been highly regarded by researchers for two key reasons. Firstly, the theory generates a framework for studying the relation between attitudes and social influence on behaviour; secondly, the model could potentially be used for predicting behaviour by using behavioural intention as a mediator (Ryan and Bonfield 1975). However, empirical research based on this multi-attribute model also failed to show any meaningful relation between behaviour and the consumer's attitude (Hini, Gendall, Kearns 1995).

Nevertheless, this structure was used by Fishbein and Ajzen (1980) to generate a more developed framework. In the new framework, which is called the behavioural-intention model, behaviour is considered the same as behaviour-intention under certain special conditions. Ajzen and Fishbein(1980) introduce four parameters which must be considered when measuring attitudes. They claim that the more precisely these variables are measured and understood the stronger the behavioural-intention-behaviour link will be. These four requirements of attitudes measurement are time, action, context and target.

Foxall (1983), after examining 11 studies which tested the link between behaviour and behaviour intention, described the results as unexciting. The average correlation between the variables was 0.46 from a range of 0.4 to 0.9. Foxall argued that the four limited parameters, which are introduced by Ajzen and Fishbein for increasing the accuracy of their model, could not be reproduced in the practical world and

therefore could not be used by marketers. Besides that, new consumer product development based on intentional models had shown very little success in predicting actual consumer choice (Foxall 1984) and these failure rates had not improved in the previous 25 years (Rockwell and Particelli 1982). Consequently, it is suggested by Foxall (1984) that "the practice of making behavioural intention or attitude rather than behaviour the dependent variable must be overcome".

2.212 Situational variables:

To overcome this problem, and in order to increase the accuracy of the predicting of consumer behaviour, other variables besides attitude were considered by academics. For instance, it was believed that taking into account the level of involvement or level of correspondence between measures of behaviour and measures of attitude would increase the attitude-behaviour consistency, but empirical research shows that even these adjusting factors did not increase substantially the behaviour-attitudes correlation (Foxall et al. 2006).

Empirical research has shown that by considering situational variables, or extra-personal events, instead of intra-personal issues, the predictability of consumer behaviour significantly increases (Foxall 1997). Accordingly, it was suggested that by taking into account situational variables as one of the main, or, indeed, *the* main determinants of consumer behaviour, it is possible to generate an alternative model for predicting consumer behaviour distinct from cognitive models.

The claim about the potential influence of situational variables on consumer behaviour is not new. In 1935, Lewin argued that an interaction between the individual and its environment was the reason for intention, and consequently any behaviour. Lewin (1953) considers situation as phenomena with two different facets, the first being an objective world outside of the person which encompasses social and physical aspects (the *psychological environment*), the second being a subjective world entailing an individual's understanding and perception of the physical environment (*the psychological variable*) (O'Mahony et al. 2006).

Foxall (1992) argues that cognitive consumer research, by over emphasising the problem-solving and decision making sequence as the main factor in consumer behaviour, totally ignores the influence of the setting and environment in which a

purchase takes place. In other words, the question "where does consumer behaviour take place?" remains unanswered by the cognitive approach.

In consumer cognitivism, the consumer has been assumed to be a "rational informational processor that uses evaluative criteria in determining the viability of her personal goals, achieves comparative evaluation of the brand alternatives available to reach those goals through the exercise of decision rules, and mentally selects, on the basis of information perceived into and processed by long-term memory, the course of action (brand choice) that is superior to the other options" (Foxall 1999). In this point of view no role has been considered for the physical and social environment as parameters, which could influence consumer behaviour.

When we consider that cognitivism has been the dominant theory of consumer behaviour for a long time, it could be argued that it is time for new theories to be examined in this field. The development of consumer behaviour analysis was a reaction to the dominant position of cognitive approach to consumer behaviour research and a need for an alternative approach for a better understanding of consumer behaviour (Foxall 2010a).

It is argued by Foxall (1992) that what creates progress in social science is the existence of alternative models. An active interplay between diverse models, attempting to explain different issues, generates intellectual progress in three ways:

> by generating data that promote the testing of current theories but, which would otherwise not be gathered, by generating counter-inductive hypotheses to account for existing data and by stimulating comparative evaluations of taken-for-granted explanations. While recognising the merits of the prevailing paradigm, consumer research can benefit from an accurate appreciation of ontological and methodological concerns of its alternative.

The weaknesses in the consumer cognition model have been summarised by Foxall as follows (1999):

> consumer cognition has been shown seriously lacking in view of untestability of its propositions, the correlational consistency between the assumed prebehavioural determinants of choice (beliefs, attitudes, intentions) and the observed choices of consumer holding them, and the lack of evidence for prepurchase information

processing and decision making whose assumption is an inherent component of the approach.

Accordingly, Foxall (1992) argues that behavioural analysis could be an appropriate basis for a substitute model for two reasons. Firstly, this approach is grounded in experimental research with human subjects. Secondly, this model's stance is antithetical to the cognitive approach. That is, in this approach, *only* the influence of the setting on purchase is considered, while in the cognitive approach environmental influences have been entirely de-emphasised.

2.22 Alternative approach

To overcome the problems cited above, the "Behavioural Perspective Model" (BPM) has been proposed by Foxall (1992a, 2010a) for predicting and explaining consumer behaviour by considering not only intra-personal events and processes but also extra-personal events and processes. He has described it as a model which "explains consumer behaviour in terms of the scope of the setting in which it occurs and the learning history of individuals" (Foxall 1997). It is argued by Foxall (1999) that a combination of these two types of variables could comprehensively cover the majority of factors that influence consumer behaviour, and that consequently this model could be used to predict consumer choice more accurately than the previous cognitive models. Four components have been proposed for BPM as a research programme: "(i) a conceptual critique of the cognitive interpretation of consumer choice; (ii) the development of a model of consumer behaviour based on a behavioural perspective; (iii) empirical research to test and explore the model; and (iv) further theoretical development".

Behavioural analysis has generated a set of theoretical concepts based on experiments and applied research. The main assumption in behavioural analysis is that the main determinants of any behaviour are situational variables. It is claimed that by considering the events that precede and follow any particular behaviour, the rate of recurrence could be predicted. It has also been pointed out that the recurrence of any behaviour is associated with its consequences and also with its antecedents.

Explaining this argument, Foxall has noted that "[…] observed patterns are neither autonomous nor mentally determined but shaped by contingent consequences

of single or distributed choices". He has introduced three different stages for his approach, which is called the "contextual stance": "the contextual stance inherent in this approach had three stages; (i) treat the behaviour to be predicted as environmentally contingent; (ii) figure out the past contingencies that have shaped that behaviour; and (iii) predict how present and future contingencies will influence the continuity of that behaviour" (Foxall 1998).

The central point of this argument comes from radical behaviourism, based on the research of B.F. Skinner. In Skinner's theory every response, behaviour or choice is reinforced or punished by its consequences in the presence of stimuli. Developing this idea, Skinner wrote that, "…behaviour is shaped or maintained by its consequences". This is the main assumption of the theory. The consequences of every response are known as "reinforcement" if they strengthen the rate of the behaviour, and "punishers" if they weaken the rate of reoccurrence. Neutral consequences are those have no influence on response or behaviour (Skinner 1953, 1957, 1974).

2.221 Behaviourism

In behaviourism, a behavioural confirmation is expected for any psychological claim or theory. The following principles are the basics of behaviourism: firstly, that psychology is all about behaviour and is not at all about mind; secondly, behaviour has to be considered without any association to internal affairs like mind, thought or feelings, and the only source that initiates any behaviour is the subject's external environment; and, thirdly, in psychological articles mental terms must not be used, or must be explained and clarified by behavioural concepts (Foxall 1998).

Radical behaviourism, developed by Skinner (1950, 1974), differentiates itself from mainstream behaviourism by arguing that firstly, everything that any organism does is "a behaviour", and, secondly, although physiology or "private events" that happen in a mental "black box" (based on behaviouristic assumption) are potentially valid and useful, there is no need to take them into account in predicting and explaining behaviour. In other words, Skinner argues that physiological explanation of behaviour could be as reliable as the behavioural explanation, but considered as behaviour, feeling and thinking have to be explained by environmental factors.

In general, this theory assumes that any given behaviour could be explained and predicted in the "environmental-behavioural contingencies" (Foxall 2007). The three-term contingency is the basis of this approach, which comprises "stimulus" or discriminative stimulus (SD), "response" or operant class (R), and finally "consequences" or reinforcing stimulus (SR/A). SD is a stimulus that indicates a special consequence for a specific behaviour. SR/A is the reinforcing consequence, which is responsible for increasing or decreasing the possibility of occurrence of the given behaviour. R is the operant class that generates positive or negative reinforcement. The relation among these variables could be illustrated as follows:

SD: R → SR/A

This argument has been explained by Foxall (1995) as follows: "The contingencies of reinforcement which provides the basis of explanation comprise the behaviour in question, the setting conditions in which it occurs (composed of discriminatory stimuli that signal an opportunity for reinforcement), those of its consequences, which influence the rate at which it is repeated, and the relationships among all of these. The discriminative stimulus, response, and reinforcing/punishing consequence, each of which is a class rather than a single event, make up the fundamental explanatory device, the three-term contingency".

The elements of the three-term contingency have been described as follows by Smith (1994): "Its operation is not dependent upon wants or beliefs, desires or intentions. Hence, an operant response 'is not simply a response that the organism thinks will have a certain effect, it does have that effect'. Further, a reinforce 'is not simply a stimulus that the organism desires to occur. It is a stimulus that will alter the rate of behaviour upon which its occurrence is contingent'. A discriminate stimulus 'is not simply a stimulus that has been correlated with a certain contingency in the organism's experience. It is one that successfully alters the organism's operant behaviour with respect to that contingency'" (Foxall 2007, p 30)

Radical behaviourism separates itself from cognitivism by its rejection of mental terms, and from behaviourism by its inclusion of internal affairs (such as thinking and feeling) as behaviour to be considered on the level of other behaviour. These characteristics give radical behaviourism the potential to provide a new and distinctive

interpretation of complex human behaviour, but it is argued by Foxall that, for two main reasons, this capability has not been fully employed.

Firstly, the radical behaviourists have limited their research to the consumption activity of non-humans; or, in rare cases of human research, the experiments have been conducted in a very limited setting. This approach prevents them from providing an operant explanation for complex consumer behaviour. Secondly, radical behaviourists are generally reluctant to deploy an operant interpretation. This may be because it allows them the freedom of speculation without the restrictions of a theory (Foxall and Keele 1998).

Besides that, it is assumed by radical behaviourists that interpretation of behaviour is attainable by deploying the main principles of radical behaviourism which have been observed in simple settings. However, in more complicated behaviour and settings, there is a need to infer when observation and measurement are impossible; in science, for example, it is common to have a situation in which direct observation and control are not feasible. This argument is highly satisfactory in this case, especially because in radical behaviourism "experimental warrant exists" (Foxall and Keele 1998).

To overcome such difficulties, it is argued by Foxall and Keele (1998) that for explaining a behaviour, deploying a "bottom-up" approach instead of a "top-down" approach enable practitioners to avoid any superficial analysis of complex behaviours. In this "top-down" approach, attempts are made to explain behaviours by finding reinforcing stimuli that are adjacent to behaviour: "top-down interpretations begin with behaviour analysis and seek plausible instances of behaviour-environment coincidence that may be construed as examples of the three-term contingency. Useful as general interpretations of this kind are as a starting point, they do not penetrate the surface of the complex phenomena they address, and they are scarcely subject to scientific scrutiny" (Foxall and Keele 1998).

Behaviourists have been criticised for their operant justification of behaviour, because it is argued that the subjects' previous experiences have been excluded from the operant argument. Skinner (1974, p91) has argued that the meaning of any behaviour in response to any stimuli has to be found in what has happened previously:

> The meaning of an act is not found in the current setting: neither in the discriminative stimuli that compose the setting, nor in the responses that take place there, nor in their outcomes. Rather, it is located solely in the history of exposure to similar contingencies that have brought behaviour under the control of the current situation.

Skinner's definition of the meaning of behaviour, which pre-empts critiques about the absence of "the actor's subjective experience of situations" by taking into account the actor's previous experience or "past contingency'" as the main determinant of behaviour, has helped to tackle this criticism (Foxall and Keele 1998).

Radical behaviourism has been shown to be highly plausible in experiments with rats and pigeons, but in a more complex environment, and with humans as the subject, it is impossible to provide a reliable account of consumer-learning history. Of course, one can assume some facts about a subject's learning history, but there is no way to measure how much this assumption is reliable.

In attempting to overcome this problem in situations where it is impossible to find the meaning of a given behaviour by observing it, Foxall and Keele (1998) has suggested that, following his "bottom-up" approach, behaviour should be classified according to consequences. In Foxall and Keele's (1998) words, "Instead of considering isolated acts of consumer behaviour, it makes sense to analyse purchase and consumption in terms of classes of actions grouped by the outcomes they produce" (Foxall and Keele 1998). If this argument is accepted, disparate behaviours which produce the same outcomes will be classified in the same class. Accordingly, it is argued by Foxall that for an "operant interpretation", it is necessary to include the type of consequences of behaviour and environmental factors, on top of what has been understood of the subject's learning history.

Before we address the BPM in detail, it is important to mention two basic preoccupations that have been stated by Foxall (1999) concerning his BPM research programme: firstly, "the consequences of human consumers' verbal behaviour", and secondly, "the quest for a valid method for interpretation of consumer behaviour".

It is argued that, although non-human operant behaviour is totally ruled by "direct contact with the contingencies", humans' operant behaviour is influenced by an additional type of control. This new source of control is verbal, and causes a

considerable deviation from matching law which states that "subjects emit alternative responses with frequencies in direct proportion to the frequency of reinforcement available for each response" (Foxall 1999).

This deviation from matching in human behaviour, in comparison with non-human behaviour, could be explained by considering a unique human quality: "verbalising the contingencies of reinforcement that they believe to be in operation" (Foxall 1999). In other words, transfer of a previous experience by verbal behaviour or the existence of some sort of verbal instruction is the reason for this deviation.

The second issue regarding the BPM research programme mentioned by Foxall (1999) is its requirement for "a method of interpretation". In complex behaviour, when behaviour cannot be justified or explained by experimental manipulation, "interpretation" is used by behaviour analysts to explicate the behaviour. It is argued by Foxall that behaviour analysts have not attempted to explain and clarify the nature of this interpretation. Plausibility is the only criterion that has been introduced for evaluating interpretation.

"Interpretation", for a radical behaviourist, entails generating the same contingencies that produce a particular behaviour in the first place when experimental methods cannot be employed. This practice has been criticised: some have argued that the subjective influence of the individual has been removed, by putting individuals in an external order during observation. Behaviourists have responded to this criticism by arguing that the following factors have to be taken into account for any interpretation of any behaviour in a given situation: "individual's verbal behaviour, the rule-governance of his or her earlier activities, and the continuity of behaviour over time" (Foxall 1999).

Antecedent variables play an important role in the probability of response occurrence. The role of antecedent variables is to signal expected consequences according to the response or behaviour. In other words "they are stimuli, in the presence of which the individual discriminates, usually by performing only those behaviours that have previously been positively reinforced or which have led to the avoidance of or escape from aversive consequences" (Foxall 1992). For this reason, the antecedents are called "discriminative stimuli". Hence, in each particular situation, an

event inhibits a unique function by indicating the probability and scale of a reinforcement or punisher, contingent upon the considered behaviour.

2.222 The Behavioural Perspective Model

Foxall (1999) has presented four reasons why the BPM could promote consumer behaviour research. Firstly, this model introduces a new way of interpreting consumer behaviour and accordingly of building new hypotheses for empirical research. Secondly, plausible reinterpretation of consumer behaviour through this model could demonstrate the non-exclusivity of intentional models. Thirdly, by using this model new research could be undertaken, especially research which is consistent with the BPM model predictions. Finally, the BPM could promote intellectual activity by encouraging and stimulating the debate between intentional and contextual stances in this field.

2.223 Behaviour setting scope

The starting point of the BPM is behaviour setting scope. Behaviour setting has been defined as "the social and physical environment in which the consumer is exposed to stimuli signalling a choice situation" (Foxall 2006) or, more comprehensively, "the antecedent events that set the scene for consumer behaviour form the behaviour setting. This consists of all the physical, social, and temporal elements that signal the likely consequences of behaving in particular way" (Foxall 2007). The stimuli which create the consumer behaviour setting could be "physical (e.g. point of sale advertising, the product array, a store logo), social (principally the physical presence of co-shoppers, other diners in a restaurant, the waiter, the salesperson), temporal (the hours of opening of a store, the duration of a special offer, Christmas-time) or regulatory (self- and other-generated rules that specify contingencies)" (Foxall 1999).

The consumer's experience (particularly consumption history), by reflecting the probable outcome of the behaviour based on previous events, transforms a neutral stimuli to a discriminative stimuli which will determine the possibility of a particular response or behaviour. Hence, in the BPM, the scope of behaviour setting is constructed by a combination of neutral stimuli, which could be social or physical, and also a consumer's consumption experience in a similar situation, based on the consequences which the consumer has previously experienced (Foxall 1999).

In theory, the behaviour setting is a much more comprehensive concept. In reality, there are many occasions on which the immediate setting variables have no

direct or indirect influence on consumer behaviour, and the behaviour setting therefore has to be considered more broadly. To illustrate this issue, Foxall uses the example of a subject who receives a threatening legal letter about his debt situation; no immediate setting variables have any impact on the subject's behaviour relating to the letter, but in a retail environment, immediate setting variables of any type (social, physical and temporal) have an enormous and observable discriminative control on subject's behaviour. Accordingly, it is argued by Foxall that "the term 'behaviour setting' as used in the BPM refers not directly and simply to the immediate environment, but to the source and nature of control it exerts, including the possibility of self-control, in which the consumer is in a position to arrange the contingencies to which he or she is subject" (Foxall 1998).

2.224 The continuum of consumer behaviour setting

Behaviour analysts have criticised the generalised outcomes that arose from lab-based experiments of behaviourists by arguing that these results could not be generalised to the real world, as they had been achieved in very confined settings. The idea of a continuum of consumer behaviour setting is a response to these critiques. In reality, human behaviours take place in a complex environment in which, although operant controls may be functioning, it is not feasible to accurately recognise them. Accordingly, the basic variables that have been provided by behaviourists in a lab setting could not offer a basis for providing a thorough explanation of behaviour in complex situations.

The idea of a continuum of behaviour setting, proposed by Foxall (2006), regards setting as a continuum. At one end are extremely close settings, such as situations in animal experience; at the other, very open settings in which many alternative choices exist for individuals. This proposition comprehensively covers and classifies the entire potential environment and setting in which behaviour can occur.

Every behavioural setting could be placed in this continuum from a comparatively open to a comparatively closed setting. The openness and closeness of settings are based on the degree of control which a customer has on her or his behaviour in that particular setting. A closed setting has been defined by Schwartz and Lacey (1998):

> Only a few reinforcers are available, and usually one has special salience; the experiment (behaviour modifier) has control over conditions of deprivation and access to reinforcers; there is only one, or at most a few available means to the reinforcers; the performance of clearly defined, specific tasks is reinforced; […] the contingencies of reinforcement are imposed and varied by agents not themselves being subjected to the contingencies; and there are no effective alternatives to being in the setting."

In contrast, an open consumer setting has been defined by Foxall as "one form which such physical, social and verbal pressures are largely absent or in which their influence is less obviously traceable" (Foxall 1992). A setting with a relatively high level of freedom and without any particular social or physical pressure imposing on a subject's choice of behaviour could be considered as an open setting. For instance, in a typical open setting, "the relationship between reinforcement and behaviour change is less clear-cut, less orderly, and is less likely to apply to all of the participants" (Foxall 1998).

The difference between openness and closeness of the setting is a good indicator of the distinction between personal and social locus of control. The more social pressures exist in a particular setting the more that setting is closed, while when there is a high personal locus of control, the setting is more open. Another important difference between the two ends of this continuum is that the more closed the setting, the more predictable consumers' behaviour will be; in an open setting, where consumers have plenty of choices, the accuracy of prediction decreases according to the increase in the openness of the setting (Foxall 1999). In summary, "the more open the setting, the less specific will be the environmental control of behaviour" (Foxall 1998).

It is possible to define two main variables as indicators of the openness and closeness of a setting. Firstly, availability of an access to reinforcement, which according to Foxall (1992) "encompasses three considerations: (1) the number of reinforcers available, (2) the number of means of obtaining the reinforcers and (3) the necessity of performing specific tasks on which the reinforcers are contingent. Secondly, the external control of the consumer setting rests on three further considerations: (1) whether the consumer or someone else controls access to or deprivation of the reinforcers, (2) whether the contingencies are imposed by agents not themselves

subject to them and (3) whether there are readily accessible alternatives to being in the setting ".

2.225 Learning history

The learning history is the second component of the consumer setting. Learning history concerns a customer's previous experiences of the same situation. Foxall has explained learning history as follows: "Learning history is the cumulative effect of rewarding and punishing outcomes of past behaviour; it represents the personal factors influencing consumer choice and primes the consumer's approach/avoidance responses; and state variables, moods, ability to pay, deprivation, influence momentary purchase and consumption, etc" (Foxall 2007 pp 9). Previous experiences (for instance, of consumption) in the same setting help the customer to predict the consequences, and accordingly execute a particular behaviour or action. In other words, the transformation of neutral stimuli to discriminative stimuli is based on customer learning history, or more precisely consumption history.

Learning history is formed by a change from initial rule-governed behaviour, in a situation where no learning history exists, to contingency control behaviour. In the first place, where there is a lack of learning history, consumers deploy some level of evaluation and interpretation by comparing the information received for making a choice. The consequence of this change has been explained by Foxall: "the consumer action involved in the trial and repeat purchase/consumption of the product develops a learning history. Moreover, reasoning with respect to personal experience of the item, and the evaluation of this experience, will lead to the formation of self-rules which henceforth, guide action without constant deliberation" (Foxall 2007 pp 16).

Any consumer behaviour results from the existence of a proper consumer behaviour setting and a related consumer learning history. In this interaction, learning history's function has been explained by Foxall (1998) as follows: "the consumer's learning history determines what can act as a discriminative stimulus of current behaviour; that learning history thereby also determines what is a potential reinforcer or punisher. But that learning history, which shapes the individuality of the consumer, his or her unique response potential, is activated by the consumer behaviour setting".

Learning history *per se* is meaningless and has no capability to initiate any behaviour, unless it is contiguous with the right occasion offered by the existence of setting. In this situation, learning history can shape and determine a consumer's choices. The development of the theory of learning history has been discussed thoroughly by Nicholson and Xiao (2010): "Foxall's initial conceptualisation of the learning history was very close to that of Skinner himself, the logic being that each individual is endowed with past experiences of previous consumption experiences and their reinforcing/punishing outcomes. Later, he came to accommodate the more intrinsic outcomes of those experiences, such as the attitudinal and emotional response tendencies the individual acquires towards aspects of the consumption setting. The socio-cultural norms are exposed to across the lifespan, the rules-of thumb which come into operation in particular situations that function as heuristics, and so on. The learning history is more than merely a 'storehouse' of past experiences, however, as it readily accommodates a range of related attitudes, beliefs, norm, etc., that are hypothesised as developing iteratively as a result of those experiences".

2.226 Behaviour consequences

Based on BPM, customers could experience three kinds of consequence or reward for a given behaviour (for instance, purchase or consumption of a specific product). These are summarised below.

Utilitarian reinforcement. Utilitarian reinforcement comes from product characteristics, and is connected to the benefits as a whole acquired directly from owning or using a particular product. Foxall explains utilitarian reinforcement as follows: "utilitarian reinforcement consists in the practical outcomes of purchase and consumption - the functional benefit, value in use. Economic/pragmatic/material satisfactions received by consumers as a result of acquiring, owning and/or using an economic product or service. It is purely instrumental consisting in itself and for itself; it is concrete and likely to be constant across social systems" (Foxall 1999).

Utilitarian reinforcement, in essence, is about the functional benefits of having and consuming a product, or "the direct satisfaction that goods and services yield to the possessors" (Gould & Kolb, 1964, in Foxall 1998). However, it is argued by Foxall (1998) that there is a difference between the conceptualisation of functional benefits in utility theory offered by economics and psychology. In psychology, besides the "direct

satisfaction" that owning a product generates, the feeling related to having a product is considered as utilitarian reinforcement too. In other words, "in addition to the functions performed by a product or service, utilitarian consequences of consumption include the positive affect generated in the process. Utilitarian reinforcement refers, therefore, to all of the benefits derived directly from possession and application of a product or service; it is reinforcement mediated by the product or service; it inheres in the use value of the commodity" (Foxall 1998).

Informational reinforcement. The second type of reward which could accrue to customers, according to the BPM, is informational reinforcement: the indirect or symbolic benefits of using or possessing a product. These consequences are more social and mediated by the reactive action of the subject as a member of society. In other words, the source of these consequences comes from the feedback of other people. Foxall (1999) explains these consequences as follows: "informational reinforcement results from the level of social status, prestige and acceptance achieved by a consumer by his or her efforts. It is usually publicly determined, judged by others according to the rules and thus primarily social significance".

Symbolic or informational reinforcements solely exist for human kind, language provides a unique ability for human to refer to "some naturally occurring stimuli" which in return generates a kind of symbolic or informational rewards totally different from functional rewards. Language allows that a given individual be reinforced by rewards like prestige and honour, which solely could be expressed and communicated by a comprehensive language (Foxall 2010).

Informational reinforcement has been considered from two different points of view by Foxall (1990: the point of view of the consumer, or of society.) From the viewpoint of the consumer, informational reinforcement is more about how the consumer compares the use of her or his time and energy for a particular task, relative to other people. From the social viewpoint, informational reinforcement concerns how public consumption of a prestigious product or service has brought about attention, admiration, distinction, or other positive responses from other members of society. Social informational reinforcement can be public or private. Public informational reinforcement consists of social honour, esteem or status validated by others, which

could originate from possession or consumption of a conspicuous product or service. Private informational reinforcement occurs on a more individual level of appreciation and admiration.

In BPM, it is assumed that these two variables are independent and distinct from each other, and that both have a unique impact on behavioural action. The difference between these two reinforcements has been explained by Foxall (1998): "informational reinforcement attests to the level of correctness or appropriateness of a person's performance as a consumer; whereas utilitarian reinforcement stems from economic and functional payoffs of buying and using goods, informational reinforcement results from the level of social status, prestige, and acceptance achieved by his or her efforts".

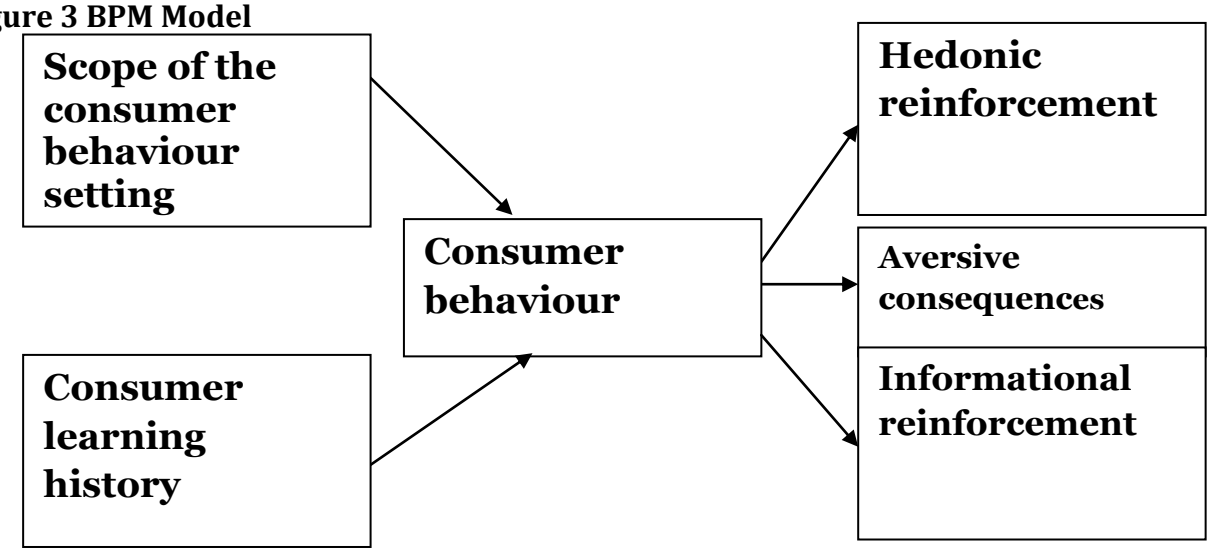
Foxall (1998) has presented four different strands of evidence in support of his argument about the bifurcation of reinforcements into informational and utilitarian. The first argument derives from the inability of neoclassical economic rationality to predict consumer behaviour based purely on the laws of demand and utility theory. The assumption that consumers always seek for more as value in their choice is not the case in many consumer choices. This empirical evidence could not be explained by appealing to mere economic factors. It is argued by Foxall that this deviation from economic prediction of consumer choice shows that consumer choice is under dual control of utilitarian and economic factors, including variables such as social status and feelings such as self-esteem on the other hand.

The second argument Foxall (1998) uses to support his dichotomy of reinforcements originates from the research of Wearden (1988). Empirical findings in behavioural analyses show that in human cases, utilitarian reinforcements such as money and food are less influential on participants' behaviour than informational reinforcements such as graphing and listing of achievements, especially in competitive situations. These results have been explained by Foxall (1998) as follows: "the reinforcement in these cases appears not to stem from any utilitarian benefits but from the feedback on the appropriateness and correctness of the performance that earned the food or money". According to these results, it could be argued that human behaviours are more complex than animal behaviours and there is a need to take into account new potential variables to justify the results.

Foxall's (1998) third argument employs the results that come from "applied behaviour analysis". Applied behaviour analysts research the influence level of environmental factors on individual behaviours. Different kinds of incentive have been proposed to participants in order to enhance and improve their behaviour: for instance, towards protecting the environment from pollution. The incentives offered in these studies are different in nature and could be classified accordingly; some of them, such as financial incentives, could clearly be classified as utilitarian.

Another type of incentives that have no direct utilitarian benefits for participants, but show a relatively high level of influence on participants' behaviour, are benefits that come from the feedback that they received from their performance during the experiment. These incentives are symbolic, appreciated verbally by the organisers and, especially in the presence of others, enhance the participants' social status (Foxall 1998). These incentives, that arise mainly from the feedback that the participants receive and do not convey any functional benefits, demonstrate that there are two distinctive and independent types of reinforcement with the ability to have some level of impact on the subjects' behaviour, which supports Foxall's argument about the dichotomy of reinforcements.

Figure 3 BPM Model



The deviation of human behaviour from the predictions of matching law is the fourth piece of evidence that has been provided by Foxall. Matching law has been explained by Foxall (1998) as follows: "that subjects emit alternative responses with frequencies in direct proportion to the frequency of reinforcement available for each response". The conformity of non-human behaviour to matching law has been proven in many experiments; in human cases, the results are unclear. Some researchers have reported substantial deviation from matching law while others have indicated conformity to matching law.

It is argued by Foxall (1998) that the existence of two origins for reinforcements is the reason of deviation from matching law. Based on this explanation reinforcements could be either contingency-derived reinforcers or rule-derived reinforcers. Contingency-derived reinforcers have pleasant outcomes, like eating and sleeping, which have direct feedback to a person and could clearly be classified as utilitarian outcomes In contrast, rule-derived reinforcers could only have a potential impact if they are considered as a kind of virtue by social rules.

The incentives originated by rules are not associated with basic needs related to the nature of human kind or organism's birth, but are related to symbols and are indicators of, for instance, level of performance or success of individuals. Foxall (1998) has considered rule-derived reinforcers as symbolic and argues that "they derive power from the social status or self-esteem conferred as a result of the behaviours they maintain. Rule-derived reinforcers are, therefore, informational reinforcers". He concludes that the deviation from matching law in human experience is because of the existence of this kind of incentive. Matching law is merely based on utilitarian needs, and in non-human subjects utilitarian needs as the only source of incentive totally controls behaviour; in human experience, however, the existence of informational incentives causes a substantial deviation from matching law, the fourth and final confirmation for Foxall's argument about the dichotomy of incentives.

Aversive consequences. The third potential consequence of the model is the cost related to each behaviour or response to discriminative stimuli, which could be monetary or non-monetary. Cost is the aversive result of any particular behaviour. For

instance, the aversive cost of each purchase is the money and time that have been spent by the customer for the purchase. Foxall argues that possessing and consuming each product and service comprise some level of informational and utilitarian reinforcement and at the same time some level of aversive outcome or punishment. The probability of occurrence of a particular behaviour depends on the relative weight of these reinforcers and punishers (Foxall 2006).

2.227 Operant classes of consumer behaviour

In BPM, an alternative model for classifying consumer behaviour has been introduced. In this model, a pattern of reinforcement has been used to categorise consumer behaviour. That is, consumer behaviours could be differentiated from each other based on the degree of the two different reinforcers they are associated with. Accordingly, by considering the two main kinds of reinforcements, utilitarian and informational, every consumer's behaviour could be put into one of the following four operant classes.

Maintenance has the lowest level of utilitarian and informational reinforcement in comparison with other operant classes and includes all routine and necessary behaviours for being alive and well. Much behaviour which is the minimum requirement of being a member of a society is in this class too, such as paying taxes. In this group, neither informational nor utilitarian consequences are very important. The customer is obliged to perform them in order to have the minimum level of physical and social life.

In mandatory behaviours like paying tax, the setting is relatively closed because of aversive consequences. While in purchase and consumption of food, the setting is more open because of the availability of different brands. However, in comparison with other operant classes, the level of openness across this operant class is generally not very high. Foxall(2007 pp 9) has summarised maintenance as follows: "Maintenance consists of activities necessary for the consumer's physical survival and welfare (e.g. food) and the fulfilment of the minimal obligations entailed in membership of a social system (e.g. paying taxes)".

The second operant class in the BPM model is *Accumulation*. In this class of behaviour, the level of utilitarian reinforcement is low but the level of informational

reinforcement is high. According to Foxall (2007), "the important reward, in every case, is informational, feedback on how much one has accumulated, how close one is to the ultimate reinforcer". The main character of behaviours in this group is saving and collecting; that is, an incremental and systematic accumulation of points, tokens or money, and the expectation of positive consequences for this. For instance, promotional deals generate generous reinforcement, such as prizes, depending on continuous purchase.

Accumulation could occur in relatively open or closed settings. Open settings include the regular promotion deals which are generally offered by different brands competing with each other and give consumers a relatively large number of options to choose between. Accumulation could also take place in a more closed setting, for instance a "token-based buying" or purchase scheme in which payment for one item offers tokens for another. These settings are considered closed because the purchase of the first item happens anyway, but the back-up reinforcer has already been chosen by the company and the customer has no control over it.

Hedonism is about increasing pleasure and decreasing pain. The main source of reward in this class is more utilitarian, and the level of informational reinforcement is relatively low. In an open setting, watching TV, listening to music, and reading popular fiction are examples of this class of operant behaviour. Hedonism can also take place in closed settings; behaviour such as watching movies on long-distance flights, which could potentially be pleasurable but where customers have no other options to choose between, is an example.

Accomplishment entails behaviours with a high level of utilitarian and informational reinforcements. Generally, every personal achievement with a high level of informational and utilitarian consequences could be classified in this group. For instance, in an open setting, using and having high-status products or conspicuous products are examples of Accomplishment behaviour. In a more closed setting, personal achievements like finishing a training course or completion of a university degree are also examples of Accomplishment activities.

2.228 The BPM contingency matrix

This is an eight-fold classified consumer behaviour matrix proposed by the BPM, encompassing a combination of operant classification variables and the level of openness and closeness in the consumer behaviour-setting scope. Each contingency category has been divided into two parts according to the openness and closeness of the setting available for consumer behaviour. It is argued that all consumer behaviour belongs to at least one of these classes and this matrix could allocate one of these operant classes to any particular behaviour. The following figure shows the BPM contingency matrix (Foxall 2002):

Figure 4 Behaviour setting scope:

	Closed	Open
Accomplishment	Fulfilment	Status consumption
Pleasure	Inescapable entertainment	Personal entertainment
Accumulation	Token buying	Saving and collecting
Maintenance	Mandatory consumption	Routine purchasing

It is important to mention that the allocation of any behaviour to one of these categories is made on a practical basis, and should be investigated by empirical researchers. It should also be noted that one behaviour could potentially be placed in more than one contingency category.

2.23 BPM in practice

The problem in explaining consumer behaviour based on BPM is that learning history, the most important variable in understanding behaviour, is a variable that cannot be empirically accessed by the researchers. For an observer, it is difficult if not impossible to have access to the history of individuals' previous exposure to similar situations. For this reason, an operant interpretation is mainly dependent on visible environmental variables, or environmental variables that have the capacity to be interpreted as influential on behaviour. This practice has been justified because in

previous similar situations, an environmental factor has generated a specific behaviour, it will have the same effect on behaviour in the next similar occasion.

As an alternative approach to finding a method of exploring a subject's learning history, it is argued by Foxall (1998) that it is feasible to use "the individual's own recollection of that history", or an individual's self-described account of her or his own learning history. The problem lies in the discrepancy of this approach with the radical behaviourist idea that every influential variable has to be scientifically explained, and also observable. In non-human laboratory experiments, learning history is available because the subjects have been trained during the beginning of their operant research. In the case of human subjects however, a subject's learning history could not be available at all.

Accordingly, since there is no systematic way of observing an individual's learning history, it is stated by Foxall (1998) that "there may be no alternative here than to turn to verbal surrogates of a learning history, to ask respondents to report on the antecedents and consequences of this prior behaviour (although this, of course assumes a good deal of self-knowledge)".

The basis of relying on the verbal account of an individual about their own learning history arises from the concept of "verbal operant conditioning", introduced by Dulany, and has been explained by Foxall (1998) as follows: "

> In Dulany's theory of propositional control, the individual is assumed to form a rule or "verbal hypothesis" summarising his or her learning history that describes the reinforcing and punishing consequences of performing a given act. The influence of such "contingency awareness" on current or future behaviour depends also upon the individual's positive or negative evaluation of the consequences of similar behaviour in the past, something that can be just a function only of his or her learning history.

The difficulty here is determining if a psychometric scale for determining learning history could be reliable. The best way of answering this question is to examine empirical studies on this matter. A pattern is needed that could predict consumer behaviour based on the level of functional or informational reinforcement and the behaviour setting scope. Foxall's suggestion for this matter is a psychological model developed by Mehrabian and Russell (1974).

In this model, three different variables (pleasure, arousal and dominance) are used to explain the emotional reactions of individuals to an environment. It is argued that the emotional reaction of an individual to an environment acts as a mediator between that environment and human behaviour. A particular physical environment has the capability to generate a state of emotion that could lead to an individual's approach or avoidance behaviour. Approach behaviour is characterised by a willingness to stay, explore and socialise with others in the environment. In contrast, avoidance is an emotional state that increases the tendency of individuals to leave the environment and avoid communication.

These variables are measured by a verbal assessment of individuals' answers to bipolar adjectives. In the case of pleasure, questions like happy vs. unhappy or pleased vs. annoyed are determinants of a respondent's level of pleasure in a given environment. Arousal, the second emotional state of this model, is measured by adjectival pairs including stimulated as opposed to relaxed or excited as opposed to calm. Dominance is quantified by adjectival pairs such as controlling as opposed to controlled, influential as opposed to influenced, and dominant as opposed to submissive.

Using Mehrabian and Russell's (1974) methodology to generate a psychometric scale for BPM flouts the basic behavioural rule about direct observation. This technique is more like cognitivism's approach toward behaviour by using attitude and intention for predictive purposes. The difference lies in the distinct nature of unobservable behaviour in these two approaches.

It is argued by Foxall (1998) that there is a difference in the nature of interpretation of data in these different theories:"by their nature (reasoned action or planned behaviour), their unobservable phenomena cannot be observed and the verbal statements of attitude or intention that serve as their proxies have to be interpreted as inferring the existence, usefulness, and strength of the hypothetical constructs in terms of which the explanation takes place". In contrast to the cognitivism approach, it is stated by Foxall (1998) that "the unobservable phenomena inherent in the radical behaviourist interpretation are by contrast, simply difficult to observe; their existence

and influence are not doubted. They are based directly upon behavioural regularities observed in experimental studies" (Foxall 1998).

Accordingly, empirical investigations were performed by Foxall to examine whether "pleasure, arousal and dominance" could be feasible verbal responses to the three structural components of consumer situation proposed by BPM. Foxall (1998) has summarised his findings:

> A pilot study of students and four studies of consumer respondents indicate support for the view that verbal behaviour differs predictably depending upon the discriminative stimulus or learning history (consumer situation) that precedes it. That approach employs the verbal measures of individuals' responses developed by Mehrabian and Russell which are expected to describe their affective responses to environment.

The main interest of this research comes from the verbal responding *per se*, and the extent to which "arousal, pleasure and dominance" could resemble informational/utilitarian reinforcement and behaviour setting as proxy variables. In the case of pleasure, considering the verbal responses that Mehrabian and Russell allocated to this variable, it is entirely reasonable to consider this as a proper proxy for utilitarian reinforcement. Labels like pleasure and pleased bear a heavy resemblance to the essence of utilitarian reinforcement. Arousal, similarly, could be considered as a proxy for informational reinforcement. And, finally, the dominance variable could be considered as an indicator of openness and closedness of the consumer behaviour setting.

The empirical findings support the above-mentioned argument; a high level of reported pleasure is associated with a high level of utilitarian reinforcement and vice versa. The same result exists for arousal; a high level of informational reinforcement is associated with a high level of reported arousal. The dominance variable also confirms the BPM prediction: in closed situations, in which individuals have no control or a very limited level of control, the reported dominance level is higher than in open settings (Foxall 1998).

2.3 Setting

2.31 Physical environment

Kotler (1973) is the first researcher to point out the importance of the physical environment in marketing research (Wells and Foxall 2010). Kotler (1973) argues that buyers consider "total product" and not just "the tangible product." "Total product", for Kotler, consists of "the services, warranties, packaging, advertising, financing, pleasantries, images, and other features that accompany the product". However, according to Kotler, the most important component of total product is place, or more precisely "the atmosphere of the place." He argued that in many cases "the atmosphere of the place" could potentially be much more influential on consumer behaviour than the actual product. He even goes as far as arguing that "in some cases, the atmosphere is the primary product".

Kotler (1973) suggests two reasons why academics and practitioners ignored such an important variable. Firstly, he argues that focusing on practicality in marketing has caused this ignorance; "the atmosphere of the place" is an aesthetic factor which has no importance in practical thinking. The second reason he offers for this neglect is because atmospheres are communicating in a "silent language". This was not recognised as influential for a long time.

To define the atmosphere, Kotler's main concern is the physical attributes of a place, and he has utilised "sensory terms" for explaining an atmosphere. Sight, sound, scent, and touch are introduced as the "main sensory channels" for describing an atmosphere. Everything that could be seen, heard or smelt is part of the atmosphere, and has to be considered in its definition.

According to Kotler (1973), the physical surroundings of an atmosphere, either intrinsic to an atmosphere or designed by a seller, could influence consumer behaviour in three different ways. An atmosphere could be managed by sellers to serve as an "attention-creating medium", or the physical environment could be designed to work as a "message-creating medium". Finally, an atmosphere has the potential to act as an "effect-creating medium." To further clarify how manipulation of the physical environment could influence consumer behaviour, the following example has been

provided by Kotler; in an attention-creating medium, "a vendor may use colours, noises, and motion to make his establishment stand out among others" (Kotler 1973).

2.311 Physical environment classification

This approach, which defines the immediate physical characteristics of the environment as the "situation", has been widely accepted. However, the notion has been interpreted differently by scholars and practitioners. One of the most established approaches in this area considers as a situation only the immediate physical variables of any purchase situation that are "controllable by organisations". There are indefinite environmental factors in any situation that could have some levels of impact on consumer behaviour, but the only ones considered in this approach are those that could be managed by companies to some extent.

According to Baker (2002), the design factor of an environment can be described as “store design perception”, the social factor can be described as “store employee perceptions” and ambient conditions can be described as “store music perception” . Similarly, Bitner (1992) introduced three composites of the situation, perhaps more thorough than the taxonomy provided by Baker: firstly, “ambient conditions”, which include temperature, air quality, noise, music and odour. The ambient condition of Bitner is close to the ambient dimension of Baker. The second category of a situation introduced by Bitner is “space or function”. This is about the layout and furnishings of the purchase environment and finally, “sign, symbols and artefacts” that consider factors like signage, personal artefacts and style of decor.

There is another classification of situation that arises from this type of approach, which classifies "design" and "ambient" in one category of "store atmospherics". Environmental psychologists provide two reasons why they should be in different categories. Firstly, ambient factors are non-visual factors while design factors are visual. Secondly, ambient factors influence consumer behaviour subconsciously in comparison with the design elements of a purchase situation (Baker 2002).

2.32 Situation, setting and environment

Complications in discussions about the purchase environment mainly occur over the definition of what the environment of purchase is. There are different ideas about how the purchase environment is defined. Belk (1975) argues that the main barrier in

the inclusion of situational variables in the study of consumer behaviour is "the absence of an adequate conception of the variables which comprise a situation". Belk introduced three different concepts as a starting point for his definition of "consumer situation" as a position that consists of situational variables. The first concept introduced by Belk is "situation" as an environmental unit that could be defined "by a locus in time and space".

Hansen (1972) has explained this concept more thoroughly: “the situation of greatest concern in consumer behaviour occurs at times and places of communication, purchase and consumption”. Because time and space are general boundaries for defining a situation, this makes great flexibility possible regarding understanding this idea. However, there is also some confusion in the field.

Belk (1975) has also mentioned a larger unit for analysing an environment. “Behavioural setting” is a unit of a situation that has three boundaries. As well as time and space, “behavioural setting” is also limited by: “a complete sequence of behaviour or an ‘action pattern”. In other words, a behavioural dimension has been added to the two previous boundaries. In a behavioural setting, particular behaviours are expected to happen periodically. In comparison with a situation, this behavioural setting needs a more extended frame of time and place.

The third unit which has been introduced for analysing a situation has been called "environment" and is more thorough than "behavioural setting." All three boundaries introduced so far have been stretched to a higher extent. Lewin has defined environment as follows: “An environment may be thought of as the chief characteristic of a more or less permanent “situation”” (Lewin 1933, in Belk 1975). Therefore “environment” has to be much broader geographically, in comparison with “situation” and “behaviour setting”.

Belk (1975) has concluded that “behaviour setting” and “situation” are sub-units of “environment”, and accordingly he argues that “in this sense, situations represent momentary encounters with those elements of the total environment which are available to the individual at a particular time”.

2.33 Situational and non-situational factors

However, while Belk to some extent clarifies the boundaries of this concept, he does not make clear what situational factors actually are. According to Belk's (1975) approach to a situation, a wide range of variables have been considered as situational factors and studied by different researchers. In order to try to overcome this confusion (essentially, the questions of what situational factors are, and how they can be differentiated from non-situational factors), Belk comes up with a new understanding of stimulus-organism-response paradigm.

Belk (1975) considers the stimulus as a concept that could be divided into two distinct notions: situation and object. He argues that "because behaviour with respect to a product or service object is of primary significance in consumer behaviour, the object to which the consumer is directly responding will be regarded as unique source of behavioural influence". Belk (1975) justifies his exclusion of an object from a situation by arguing that: "The rationale for this more limited view of situation is the greater possibility of operationalising a construct which has an existence apart from the individual's total consciousness. For there to be a hope of really adding to the ability to explain consumer behaviour, this separate existence is essential".

For differentiating these three variables (person, object and situation), Belk (1974) has utilised R.L. Thorndike's theory. According to Thorndike's theory, features of individuals like personality, intellect, and sex, as they are stable over time, are considered as personal variables. While, temporary features like headaches and tiredness and could be considered as situational variables. Furthermore, the same assumption could be applied for differentiation between object and situation. For instance, a contemporary discount of a special brand is a situation variable, but a lasting feature of a brand is an object feature (equivalent to Thorndike's idea of a personal feature) totally distinct from a situation.

Following the above-mentioned argument, Belk (1974) comes up with this definition for the consumer situation: "all those factors particular to a time and place of observation which do not follow from a knowledge of personal (intra individual) and stimulus (choice alternative) attributes, and which have a demonstrable and systematic effect on current behaviour" (Belk 1974).

There are several important features of Belk's (1975) argument. Firstly, he categorises all potential contributors to consumer behaviour into three main categories: person, object and situation. The second feature of Belk's argument which differentiates his understanding of situation from Kotler (1973) is his very broad consideration of situation. Belk excludes person and object from situation but includes "all those factors particular to time and place", while Kotler solely considers physical factors that could be understood by "sensory terms", limiting situation to the immediate physical cues existing in the immediate environment.

In explaining "all those factors", Belk introduces a new kind of variable besides the immediate physical variables of Kotler. Belk (1975) describes this variable as follows: "the antecedents of conditions for the momentary individual states which a person brings to a given time and place".

It is argued by Belk that for understanding what comprises a given situation, the person and object-related determinants of behaviour have to be excluded. After that, what remains could be classified as a potential situational variable which could influence consumer behaviour. However, what makes Belk's (1975) approach to understanding situation different is its argument about situational variables, which he describes as "residing within the individual and having no external correlates to present." These internal situational variables have been defined by Belk as follows: "These unobservable features involve such momentary or episodic states of the individual as moods, plans, and purposes."

What is interesting in Belk's conclusion, which also serves to differentiate his argument from Kotler's, is his interpretation of the interaction of the individual (person) and physical variables of the situation. The momentary state of an individual is part of the situation if that state has been originated from an occasion not in the current situation. If not, and that momentary state is a result of an interaction of a subject and their current situation, according to Belk it will be categorised as an individual variable not a situation variable: "In as much as such momentary internal states may potentially affect behaviour, they fall within the scope of the minimum criteria for a situation as long as they may be constructed as the result of an interaction between the characteristics of the individual and those of the stimulus object or the physical features

of the situation. Thus a mood created by the background music in the store would be a response rather than a situational stimulus, while a mood created be events outside of the present physical situation may be regarded as a part of the current situational stimuli" (Belk 1975).

It is argued by Belk (1975) that adding the internal state of individuals that are specific to a given time and space ("that reside within the individual and have no external correlates present"), such as moods, plans and purposes which are produced from stimuli other than from the current situation, to the physical situation, could enhance the understanding of situation and generate a more accurate method for predicting and interpreting consumer behaviour. In his own words: "The discussion to this point has been concerned with a more precise specification of what is meant by the term "situation". It has been argued that a rich and meaningful use of this concept includes both the antecedent conditions for the momentary individual states which a person brings to a given time and place, and the physical features which he finds there" (Belk 1975).

For classifying situational variables based on his definition of situational factors, Belk has proposed five categories. The first one is "physical surroundings", and consists of the immediately apparent features of every situation. This class of situational variables largely involves physical variables and is very close to Kotler's (1973) approach. The second is "social surrounding" and covers the influence of other persons present. The third class of situational factor is "temporal perspective"; this category of situational variables is defined by time units, for instance, time of day or season of the year. The fourth is "task definition" and covers the general customer intention and requirement to shop. The fifth category is "antecedent states", which covers the momentary moods and conditions such as acute anxiety, pleasantness, fatigue and illness carried over from a previous situation.

2.34Subjective approach to situation:

Lutz and Kakkar (1975), by advocating the Belk approach toward situation, argue that Belk's definition of situation is objective. Its main focus is on situational variables that are known and meaningful to the customers in the purchase

environment, while their approach is more subjective and its main argument is about subjective understanding of the situation.

Lutz and Kakkar's (1975) definition of situations is as follows: "situation relevant for understanding of consumer behaviour is the psychological situation, which may be defined as an individual's internal response to or interpretations of, all factors particular to a time and place of observation which are not stable intra-individual characteristics or stable environmental characteristics, and which have a demonstrable and systematic effect on the individual's psychological processes and/or his overt behaviour" .

They argue that their definition of situation is broadly very close to Belk's definition from many aspects but has two important differences. First, their main concern is "subjective interpretation of the situation" and, second, "psychology processes preceding behaviour are posited as a locus of situational effects, rather than over behavioural outcomes only" (Lutz and Kakkar 1975).

For providing a taxonomy for their subjective approach toward situation, Mehrabian and Russell's 91974) theory has been utilised by them. It is argued by Mehrabian and Russell that the situation impact on behaviour is mediated by the emotional reaction of individuals to the different aspects of an environment. In this theory, that any situation based on its characteristics generates an emotional response, any generated response could be categorised by using three main states of emotion: pleasure, arousal and dominance. An individual's reaction to a situation could be explained with one or more of these emotions.

Mehrabian and Russell (1974) explain pleasure as "preference, liking, positive reinforcement..." In essence, pleasure is a combination of liking, happiness, delight and ease while arousal is about "a measure of how wide awake the organism is, of how ready it is to act" and finally, dominance shows the individual's perception of his level of control on his environment: "The higher the level of dominance perceived in the situation, the more submissive is the state of the individual" (Lutz and Kakkar 1975).

Using these three states of emotion not only could be used for symbolizing a given situation, but also they could be used as a way of categorising different situations

based on the generated level of these three states of emotion, that is, situations could be compared and differentiated from each other by these three emotional variables.

Accordingly, two main reasons have been provided by Lutz and Kakkar for implementation of Mehrabian and Russell's theory in the study of situation: "on the one hand, the Mehrabian-Russell framework can be viewed as at least a partial explanation of the influence of situations on behaviour, whereas the most past research has utilized a "black-box'" approach, focusing only on inputs and outputs, with no consideration of mediating psychological variables. Secondly, the Mehrabian-Russell framework may satisfy the need for a taxonomical scheme for situations" (Lutz and Kakkar 1975).

2.341Subjective and objective:

It is argued by Srivastava (1978) that each of these two approaches (objective approach by Belk and psychological approach by Lutz and Kakkar) have their own advantages and disadvantages. Belk's objective explanation of situation is meaningful: "they provide some usable explanation for situational effects on behaviour" but this is considered by Srivastava as a major disadvantage: "the potentially large number of dimensions may lead to a correspondingly large number of distinct situational types" (Lutz and Kakkar 1975).

Srivastava (1978) also mentioned that while the psychological approach could be utilised partly for explaining consumer behaviour, "However, for most managerial marketing purposes, one might expect that the psychological situation would prove less usable".

2.35 Usage situation

A different approach to situation has been initiated by Stanton and Bonner (1980). They argue that two different kinds of situation exist, distinct from each other and with the same capability of influencing consumer behaviour. The first is situation during purchase and the second is consumption situation or "the objective circumstances for which the product or service is purchased" (Srivastava et al. 1978). They believe that it is important to delineate between "consumption situation" and "purchase situation" as two different types of situation.

They refer to these two situations as two "moments of truth", and explain them as follows:

> The first moment is the activity and/or situation in which an object is acquired or purchased for future use. This future use may be distant in the case of inventory purchase of food or additional clothes, etc. or may be almost immediate in the case of fast food, prescription drugs, etc. The second moment of truth involves the consumption of a previously acquired or purchased good. Although the time period may be quite short between the moments, they are normally not simultaneous. (Stanton and Bonner 1980)

The situational factors of the purchase situation have their own impact on consumer behaviour, and during her or his purchase a consumer is also is under the influence of the variables that exist in her or his consumption situation.

2.36 Summary and conclusion

So far, this section has introduced the major academic theories about situation and its influence on consumer behaviour. Two different ideas are at the centre of research into situation. Firstly, how a situation is to be defined and how its boundaries are to be clarified; secondly, what are the situational variables that have a potential impact on consumer behaviour inside the situation and how can these variables be categorised and prioritised?

In answer to the first question, Belk comes up with three different concepts. Firstly, “situation” as the immediate physical environment limited by time and place; secondly, “behavioural setting” which is wider in scope situation and encompasses the “complete sequence of behaviour” or “action pattern”. Finally, “environment”, which could be called a “permanent situation” and is broader in all aspects than situation and behavioural setting.

Complementing Belk's approach to situation or purchase environment, researchers argue that, for a better understanding of situational variables on consumer behaviour, it is important to bring into the account those situational variables that exist in a usage or consumption situation. It is argued that situational variables in an intended consumption situation have their own independent impact on consumer behaviour.

The second major concern in this field of study, after the discussions about what situation actually consists of, is taxonomising situational factors and determining which

have the potential to impact consumer behaviour. Belk, by proposing that every setting consists of three different components, situation, object and person, argues that "all those factors" that are independent from object or person are situational factors.

Ideas on how to study "all those factors" generally fall into a dichotomy: subjective or objective. Each of these approaches has its own advantages and disadvantages, which have been explained previously. In summary, a subjective approach or psychological taxonomy, although providing general ideas about how a customer has perceived the situation as a whole, may be able to explain and predict some broad consumer behaviour but does not have a significant ability to explain consumer choice or consumer preference. The psychological approach could provide an explanation for some of the consumer's behaviour, but could not be used to find out the potential situational factors that directly or indirectly influence consumer choice as a specific behaviour.

The objective approach, by considering the physical situation *per se*, and without taking into account the internal state of individuals, could provide more practical clues about understanding and explaining consumer behaviour. The main problem with this approach is the massive number of situational factors that could be included in the definition of situational variables. Some taxonomy of situational variables has been introduced in the later parts of this section which, to some extent, could help to overcome this problem.

It is argued in this thesis that there has been a longstanding confusion between situation and situational variables. These are distinct from each other and must be defined separately. Situation entails the environment in which behaviour takes place: in the case of this research, the point of interest is purchase behaviour and consumption behaviour. While situational variables are those variables (of any kind) that exist in a situation and that could potentially have an impact on consumer behaviour.

Accordingly, it is important to clarify what exactly situation means in this thesis, as has been pointed out by Wicker (1975): "I believe, however, that the first and most important step is to state more positively and more explicitly what are the defining or boundary characteristics of the consumer situation. It should eventually be possible for

researchers to identify in natural environments what is, and what is not, a consumer situation, and to determine when and where one of them ends and another one begins".

A psychology taxonomy or subjective approach has not been taken into account in this research because the subject situation and mood originated from the situation would be the same in meeting the other situation variables of the setting. That means, for instance, if the individual in a given situation is in pleasure mood, he/she is in the same mood when he/she encounters the situational variable and, subsequently, that mood becomes a fix variable for all situational factors.

The approach of this article toward setting is objective. Foxall's (2006) definition of setting comprehensively captures all aspects of a potential consumption and purchase environment: "the social and physical environment in which the consumer is exposed to stimuli signalling a choice situation". This definition is comprehensive; to some extent, it broadly encompasses the majority of the main streams of setting definition arguments and, is not just limited to purchase environment. Any environment that a consumer could be exposed to a stimuli, either purchase or consumption, is a situation.

Besides that, there is a need for a definition of situational variables based on BPM as the theoretical foundation of this thesis. In this thesis situational variable are referred to as all extra-personal or environmental factors that exist in the immediate environment of purchase or consumption. The BPM approach towards setting and situational variables is behaviouristic. Situational variables in BPM refers to every physical, social and temporary element that has the capability of providing the opportunity of producing different choices for the consumer (Foxall 2006). Setting is a scene that "signal[s] the likely consequences of behaving in particular way" (Foxall 2007).

The BPM approach is more general than Kotler's (1973) consideration of the specifically physical surrounding of the purchase environment, and different from Belk insistence on differentiating the object from the situation. In the BPM, anything that has the potential to signal a choice and consequently particular consequences is a situational factor and is part of the situation, no matter whether it is physical surroundings, an object or even part of an object, like a brand name.

This definition to some extent is close to Belk's definition, but more general. Belk limited situational variables by considering a special feature for them: that they must "…have a demonstrable and systematic effect on current behaviour". It is argued by Wicker that this part must be excluded from the definition because: "it forces researchers to accept a circular, blindly empirical approach" (Wicker 1975).

Belk, in his definition of situation, considers situation to include all factors that are distinct from "object" or "choice alternative" and "person" or "intra-individual". For differentiating these factors, as was mentioned previously, he argues that the lasting and general characteristic of the object and individual are not part of the situation, while other temporary factors *are* part of the situation.

The difference here is that based on Foxall's definition, a product's brand image could be considered as part of a situation because it is a stimuli that could signal a choice. Whilst, based on Belk's definition, a product's brand image is not part of a situation because it belongs to an object of the situation and is a permanent feature in a situation. In this thesis, it is argued that brand image as a variable that could be taken into account by a customer as a "usage situation" variable is actually part of the situation, and has its own impact as a situational variable on consumer behaviour. It seems that what Belk actually means by object is mainly product attributes per se (choice alternative), and brand image is completely independent of product.

As was mentioned previously, an informational brand image in a social usage situation might serve as a reminder of an owner's social or financial status. In another social situation, a brand image could show conformity to peer pressure. In the case of products with a high level of sensitivity about their quality, a functional brand image could be used as an assurance of quality, or serve to demonstrate that the product possesses a special characteristic.

It has been argued previously in this thesis, and is also been supported by the results of the first research project, that brand, at least in skincare and OTC products, is considered by customers as an entity completely distinct from product, with its own independent benefits alongside the product benefits. This perception about brand makes brand image an entity separate from product (object), as a neutral stimuli that could be transferred to discriminative stimuli.

2.361 Situational taxonomy

In this thesis, Srivastava's (1981) argument has been considered as a pattern for taxonomy of situational variables that exist in a situation: "The key point is that in the creation of situational taxonomies, we are interested in those aspects of the environment that affect consumer behaviour. Although the total number of situations that persons encounter is enormous, and each situation is unique and the likelihood of exact replication is exceedingly small, it is undoubtedly also true that people do not behave differently under all such changed circumstances" (Srivastava 1981).

Accordingly, for having the contribution of every potential situational variable, or in other words, **every physical, social and temporary element that has the capability of providing the opportunity of producing different choices for the consumer (Foxall 2006),** it was decided to use Belk's research method. Although as was mentioned Belk's definition of setting and situational variable is different from this thesis definition which is based on BPM but Belk's methodology by providing an inventory of potential situational variables is not in contradiction with this thesis accepted definition of setting.

Therefore, an attempt was made to provide an inventory of situational variables relating to purchasing situation and consumption situationSituational variables were selected based on empirical research using interviews and focus groups. Subsequently, that inventory of situational variables were treated as "those aspects of environment that affect consumer behaviour" either in purchase or consumption, in a questionnaire to find out which were most influential and could actually determine consumer behaviour by transforming neutral stimuli into discriminative stimuli.

This methodology has been criticised by researchers such as Wicker, who argue that this way of generating an inventory could not cover all the potential aspects of a situation. In this thesis, situational variables have been determined by using focus groups. In analysing the focus group results all the above-mentioned situational factors involving participants, without considering their recurrences, were taken into account as potential situational factors and used in the final questionnaire. As a result, it can be assumed here that as far as possible all aspects of a situation, whether consumption or purchase, have been covered.

The purpose of this research is to find out which particular brand image, on the one hand, and which other situational variables, on the other, could be the most important factor in determining actual consumer behaviour, in this case purchase choice. The above-mentioned inventory, even though not fully complete in many cases, could be used to help answer the stated question. After analysing the results of this research, it could be possible to ascertain the importance of a proper brand image to consumer behaviour, in comparison with other situational factors, in terms of those customers involved and also in the case of customers who were not involved. As mentioned by Belk, it is impossible to "investigate a complete list of situational characteristics, because no such list exists. Only by continuing to conceptualise and research situational characteristics under a guiding understanding of the scope and criteria for situations can such a summary ever be achieved" (Belk 1975). Throughout this thesis, efforts have been made to come up with a criterion for situation and a suitable taxonomy of situational variables.

2.4 Involvement the story

Involvement is of interest to scholars and marketers because of its importance in understanding consumer choice. Laurent and Kapferer (1986) argue that the level of involvement has a considerable influence on consumer behaviour and, accordingly, has several and very important strategic functions in marketing. To a large extent buyers' behaviour could be understood by knowing their involvement level and involvement type in every category of products.

In this thesis it is argued that one of the understandings of involvement introduced by Zaichkowsky (1989) is synonymous with the concept of learning history in the BPM. Involvement, under Zaichkowsky's definition, is a well-conceptualised tool with a highly tested methodology for its quantification. Another approach to involvement by Mittal (1988), employing the same broad principles as the Zaichkowsky definition, has also been chosen to understand the type of involvement.

Involvement as an important variable in consumer behaviour research began to be seen as significant after the consumer decision models, based on the cognitive approach, came under criticism from researchers and academics. In 1960 and 1970, developing a consumer decision-making model was seen as a central task by

researchers into consumer behaviour. The main assumption of all these models is that customers display a rational problem-solving approach in their purchasing behaviour.

What is meant by "a rational problem-solving approach"? It could be thought of as considering and evaluating accurately all physical attributes of a given product and comparing it with other alternatives in order to arrive at a reasonable choice. The main assumption of this approach was criticised by researchers after empirical research showed it to be untrue. Kassarjian (1981) argued that like other prevailing theories that were questioned during this time and altered by new ideas, it is necessary to reconsider cognitive views in consumers' behavioural patterns.

Two different categories of purchase have been introduced by Kassarjian, one of which has no cognitive basis. The first one follows mainstream cognitivism: "There is certainly no argument that under some conditions, at least for the purchase of some categories of goods and services, consumers do behave as information processing, problem solving, cognitive individuals reaching for a reasoned decision" (Kassarjian 1981). The second type of purchase introduced by Kassarjian does not involve much (or even any) decision making: "the consumer unconcernedly purchases and consumes the products, switches brands, obliviously ignores promotional activities" (Kassarjian 1981).

Kassarjian (1981) argues that in some cases no decision process occurs, in contrast to other models that view every purchase as brought on by a decision process. His idea was a turning point in research into consumer behaviour. He bravely raised this issue at a time when all research into consumer behaviour operated on theories which treated the consumer decision-making process as based on pure cognitivism.

His argument was backed up by empirical and conceptual work done by Olshavsky and Granbois (1979). Olshavsky and Granbois, according to Kassarjian's argument, cast doubt on the dominant theory of consumer behaviour of the time. It was believed that every single buy has to be preceded by a rational decision process because in general, customers have different choices among some alternatives. Choice, therefore, is inevitable, and customers, by assessing the criteria of different options, could predict the consequences of their purchase and utilise them in their decision making. These

assumptions were the foundation of researchers' arguments for explaining and predicting consumer behaviour.

Olshavsky and Granbois (1979), after considering and reviewing articles in pre-purchase behaviour, concluded that "Kassarjian is right. A significant proportion of purchases may not be preceded by a decision process. This conclusion does not simply restate the familiar observation that purchase behaviour rapidly becomes habitual, with little or no pre-purchase processes occurring after the first few purchases. We conclude that for many purchases a decision process never occurs, not even on the first purchase."

If Kassarjian's argument was accepted, every purchase was either preceded by a decision process, or happened without any pre-purchase decision process. Kassarjian called these two types of purchase *low-involvement* and *high-involvement* purchases. He mentions that high-involvement purchases are preceded by some level of decision process depending upon the importance of the product for the customer, and low-involvement purchases are not preceded by decision processes, as such products are considered to be relatively unimportant.

Kassarjian argues, "Cognitive activity for low-involvement and high-involvement are simply different and one cannot simply generalize research results from one situation to the other. Thus, research must measure the concept of involvement first, then turn to the hypotheses at hand. At this point it is unfortunate that a simple instrument or tool has not yet been developed to measure the concept of involvement, "necessity is the mother of invention," that will come in time - for the measure of involvement is unquestionably a necessity - one can no longer be ignored" (Kassarjian 1981).

In the following section, the conceptualisation of involvement has been discussed, a different approach to defining involvement has been introduced and compared, and efforts have been made to find out which definition is the closest one to the approach of this thesis, considering that the main aim of using involvement in this thesis is for measuring and quantifying "learning history". The development of measures for involvement has also been reviewed and discussed, and finally, the reasons for the chosen involvement scale selection have been explained.

2.41 The concept of involvement

Rothschild argues that, although the concept of involvement is vital for explaining consumer behaviour, there is no agreement among academics about the definition of involvement (1980a). Early researchers in the subject offer several different definitions of the concept. Similarly, Mitchell (1979) states that "there seems to be a general agreement that 'involvement' is a potentially important mediator of consumer behaviour, however, 'involvement' remains an elusive concept. Precisely what is involvement? How do we manipulate involvement in the laboratory? Until we can answer these questions, the quantity and quality of empirical research on the subject will remain limited" (Mitchell 1979).

Involvement in nature possesses different aspects, and because of this has been defined in various ways. These definitions often appear to be related, despite many broad differences. This concept has been studied from a range of different viewpoints; sometimes involvement has been considered as an independent variable, sometimes as a dependent variable. Some academics' views about this notion are "stimulus centred" and some "subject centred". It is argued by some researchers that involvement is "situational specific", and by others that in order to understand involvement we need to have a "behaviouristic approach".

Muehling (1993) argues that lack of clarity about the concept of involvement is the reason that involvement research has decreased. In his review of advertising and marketing articles related to involvement, he finds out that involvement has been used in conjunction with "ego, product, product class, messages, advertising execution, advertising content, content processing, decision-making, construction motivated, cognitive, affective, situational, enduring, response, audience, personal, issue, and felt involvement" (Muehling et al. 1993). What makes this concept more complicated is that some of these fields have been studied by academics in relatively broad domains, while similar fields have been implemented as very specific concepts by other academics.

Ignoring some of these understandings of involvement would be a mistake. In the next section, some of the most prominent approaches towards a definition of involvement will be introduced, their similarity and differences will be assessed, and an attempt will be made to choose the one which is most in harmony with this research.

2.42 First approach

Categorising involvement

Many researchers have attempted to find different components of involvement in order to come across a highly acceptable and also a comprehensive understanding of involvement. The main attempt of this group of academics is to find sub-categories for involvement, and to put all understandings of involvement in one of these categories. They believe that by accurately defining every category it is possible to create some clear avenues for research and also a common perception about involvement among academics. In the next section one of the most inclusive of these ideas, by Muncy and Shelby (1984), has been introduced and discussed.

Muncy and Shelby (1984) offer one the most comprehensive categorisations of involvement. Five distinct types of involvement have been put forward and explained by them in a prominent article in 1984. They argue that these five categories of involvement, in general, could be considered as, although not independent of each other and sometimes highly-related, but are, in nature, totally distinct and could be measured independently from each other.

They believe that the reason for the degree of confusion over the definition of involvement is that "the term involvement had been used by researchers to denote at least five distinct (yet perhaps related) concepts. Though some acknowledge the existence of different types of involvement (see Houston and Rothschild undated; Lastovicka and Gardner 1979; Mitchell 1980; Rothschild 1979), most researchers fail to make a clear statement as to which concept they are investigating" (Muncy and Shelby 1984).

Accordingly, five different types of involvement were introduced. It was argued that this classification would decrease the confusion around this concept and help researchers to choose a proper category of involvement based on their areas of research.

The first of their five types of involvement is *ego involvement*, which has been defined as "the degree to which an object or idea is centrally related to the value system of an individual". They argue that this kind of involvement "can provide insights when

researching areas which involve consumer values or value systems" (Muncy and Shelby 1984).

The second type is *commitment involvement*. Muncy and Shelby (1984) state that there is still debate about how to distinguish this from ego involvement. Initially, they argue that ego involvement precedes commitment involvement, and also that ego involvement is more general than commitment involvement. In other words, ego involvement could exist without commitment involvement. Commitment involvement is more like loyalty; in Muncy and Shelby's words, "Consumers can become committed to a brand or store when that brand or store becomes ego involving to them. Many organisations have tried to produce such commitment by attempting to tie their product to the central value systems of individuals" (Muncy and Shelby 1984).

The third type is *communication involvement*; this entails "the number of connections a person makes between a communication and something existing in their life" (Muncy and Shelby 1984). Two main variables have been introduced for distinguishing this involvement from ego involvement; first, ego involvement is involvement with a product or an object and, therefore, is more enduring, while "in communication involvement, the involvement is with something which is occurring at a specific time (i.e. the communication), making it situationally specific and transitory" (Muncy and Shelby 1984). Second, a person's communication involvement could involve "any aspect of the person's life, not just those which are related to the person's central value system, thus a person can become involved with a communication involvement only minimally related to his or her central value system" (Muncy and Shelby 1984).

The fourth type of involvement is called *purchase importance* by Muncy and Shelby, and they define it following Howard and Sheth (1969):"A variable in the buyer's frame of reference that corresponds to intensity of motives. It is product-class specific only and does not distinguish among brands. It is the saliency of one product class with respect to another… it is variously labelled degree of involvement importance of task, and seriousness of consequences" (Howard and Sheth 1969 in Muncy and Shelby 1984). Again, Muncy and Shelby, in an effort to distinguish this type of involvement from ego involvement, argue that this confusion between purchase importance and ego involvement occurs because, potentially, purchase importance could generate ego

involvement. They argue, however, that factors like high perceived risk could be a reason for purchase involvement without any contribution of ego involvement: an example might be a customer‘s choice of tyres for his car. In this case, purchase importance exists without the existence of any level of ego involvement.

The fifth type of involvement introduced by Muncy and Shelby is *response involvement* and is defined by Houston and Rothschild as “the complexity of cognitive and behavioural processes characterizing the overall consumer decision process” (Houston and Rothschild in Muncy and Shelby 1984). Considering this definition, response involvement has been explained by Muncy and Shelby in this way:

> High response involvement would represent situations where individuals are highly active, information-processing beings, trying to gain as much information as possible, then using this information in attempting to arrive at the optimum choice. Low response involvement would reflect a fairly passive choice situations, where individuals are interested in minimizing the physical and psychological effort required to obtain a product. (Muncy and Shelby 1984)

These types can easily be understood as abstract categories, but their generalisations can generate confusion. These categories have some degree of overlap and consequently, in some groups of products, distinction among them is totally impossible. For any given product category, these types of involvement have to be customised based on that product’s attributes.

It is clear from this classification that all five types have something in common: all concern the relation of a product to customers’ value systems. This kind of relation, most prominent in ego involvement, generates a base for other types of involvement introduced by Muncy and Shelby. For instance, if this relation of product values and an individual’s values is strong, it also generates strong importance involvement. As an illustration, consider the case of buying a tyre. A high consideration for safety by an individual is a value that creates a strong importance involvement and, subsequently, this individual will pay more attention to any information about this product in order to fulfil his desire for safety. This, again, forms a powerful communication involvement, and this argument is also valid for the generation of commitment involvement.

It will be explained in detail later in this thesis that two main sources have been proposed for involvement: informational and utilitarian involvement. These two types of involvement comprise all five types of involvement and have the capability to be generalised. The main assumption of this categorisation is that involvement is about the relevance and importance of a product category to an individual which could also be described as the relation of a product's attributes to the individual's values.

2.43 Second approach

Definition based on primary components

Another interesting approach toward defining and understanding involvement comes from Antil (1984). He argues that, although there is some level of agreement among scholars that involvement is about "importance" and "interest", "there is by no means any agreement exactly what involvement is, its bounds, and in general a thorough conceptualization of the concept" (Antil 1984).

Antil classifies the most influential definitions of involvement based on their "primary components" and concludes that they "either directly or indirectly imply 'involvement' is somehow related to the individual, usually in terms of some measure of interest or importance to the person" (Antil 1984). Accordingly, he argues that while personal importance is a "common thread" in all of these considerations of involvement, what causes so much divergence about the precise definition of involvement is "what is included in the definition that is joined with or 'causes' personal importance" (Antil 1984).

Three variables are introduced by Antil that have an impact on involvement or, in other words, "… is joined with or causes personal importance". It is argued by Antil that different academics, by weighing these variables differently in their definitions of involvement, have generated dissimilar definitions. Some academics have considered "product" as the main priority in understanding involvement, some others have argued that "situation" causes involvement, and the third variable often mentioned by researchers is "message".

The above-mentioned factors have also been recognised by other academics. Zaichkowsky, for instance, argues that "the literature suggests that a person can be involved with advertisements (Krugman 1962, 1965, 1967, 1977), with products

(Howard and Sheth 1969, Hupfer and Gardner 1971) or with purchase decisions (Clarke and Belk 1978). Involvement in these different objects leads to different responses" (Zaichkowsky 1985). It is argued by Antil that a combination of these three factors has to be taken into account when explaining involvement.

Accordingly, Antil argues that:

> …thus it is the characteristics of the stimulus that are interpreted by the person and determine the extent of involvement. This, I believe, is a critical point. It is not the product *per se* that is involving, but the personal meaning or significance the individual attributes to the characteristics of the product that result in involvement… Since it is the individual's interpretation of the stimulus and not the stimulus itself that determines the level of involvement. (Antil 1984)

The perceptions of each individual of a product's characteristics determine the level of involvement to that given product. In other words, product *per se* could not be involving for a customer; rather, what a customer interprets as essential is the main cause of involvement. Subsequently, Antil concludes that, because of inherent differences among individuals, the level of involvement with the same product will be different among them.

Situation is another factor introduced by Antil (1984) that must be considered by researchers for defining involvement. Antil believes that involvement is situation specific, and involvement varies in different situations. After considering all the potential parameters that could have any level of impact on understanding and defining involvement, Antil defines involvement as "the level of perceived personal importance and/or interest evoked by a stimulus (or stimuli) within a specific situation" (Antil 1984).

In terms of measuring involvement, Antil argues that because involvement with a product is a function of two different variables, "perceived personal importance" and "situation", for every measurement of involvement these two variables have to be taken into account. He argues that it was previously impossible to generate a valid procedure for evaluating involvement by considering involvement as a function of situation, communication and product. Accordingly, he introduces a new approach for measuring involvement to overcome this problem.

The “benefit approach” is introduced by Antil for measuring involvement as a situation-specific variable. This approach is based on an assumption that, in order to know how much a consumer is involved, it is necessary to know the motives of this involvement in any possible situation. Antil concludes: “Thus, the degree of involvement within a specific situation is equal to the level of perceived personal importance, which is determined by the total of expected benefits to be gained through interacting with the stimulus” (Antil 1984). According to this argument, Antil argues that the expected benefits by a consumer in different situations have the capacity to be generalised. By considering a consumer’s expected benefit (what Antil calls “what is in it for me?”), it is possible, to a great extent, to assess the contribution of a particular situation to involvement.

Antil, introducing three variables, has tried to define and conceptualise involvement in a new way. He argues that by considering these variables it is possible to understand and explain why researchers have had so much difficulty in defining this very important notion. In his argument, “perceived personal importance” is the backbone of understanding involvement, and “situation” and “communication” are two variables that have been added by authors and researchers of consumer behaviour to this theory.

In this thesis, as will be explained later, involvement has been considered as a situation-specific variable. In other words, it is believed that situation has a potential impact that must be considered when measuring involvement, and that the best way for measuring the contribution of situation, as Antil has suggested, is by seeking to understand consumers’ expected benefit across product categories in different situations.

The difference between the position this thesis takes on involvement, and Antil’s ideas, concerns the influence of communication on involvement. In this thesis, it is proposed that “communication involvement” is a kind of involvement that can be measured independently from “product involvement”. Communication involvement and product involvement have some level of impact on each other, but as in the classifications from Muncy and Shelby, and also Zaichkowsky, the two are separate variables and can be measured independently from one another.

2.44 Third approach

Behavioural definition

Stone notes that "it seems strange that a term such as involvement, one used with such ease in everyday instances, has become an acknowledged research enigma" (Stone 1984). He argues that the main reason for this situation is borrowing the notion of "involvement" from psychology and putting it in a new context: "marketing".

Zaltman's(1982) comment has been used by Stone to explain his point: "confusion also arises because we don't recognise the difference in meaning when using old words in a new context, that is, if we "borrow" the concept of entropy from physics, does it have the same meaning in a marketing context? Since many people get an initial theory by borrowing from another discipline, it is important to recognise that the terms that are used may not have the same meaning in the marketing area. Are the phenomena they refer to the same?" (Zaltman et al. 1982, in Stone 1984). Stone, considering Zaltman's point, argues that a "behavioural definition" for involvement could generate a definition compatible with marketing, in contrast to the existing understanding of behaviour, which is more psychologically oriented.

Two main understandings of involvement are preferred among psychologists. One is suggested by Sherif and Cantril (1947): "involvement was associated with ego, a concept understood to be comprised of a constellation of attitudes that was concerned with the very being of each individual" (Stone 1984). "Taking a stand" is what Sherif and Cantril believe people who are highly involved in an issue do. The other psychological approach to involvement involves value compatibility of individuals to stimuli. In other words, the more an individual's values are engaged by a special stimulus, the more he/she feels involved.

By considering a range of involvement definitions from a variety of researchers, Stone argues that while these definitions have significant differences from each other, they all demonstrate a cognitive approach towards understanding and explaining involvement. Stone has summarised the common thread of these definitions, using Cohen's comment: "At this point then it might be reasonable to define involvement in terms of (1) a pre-existing state or predisposition to respond to a specific stimulus, (2) the activation level at a particular moment of time (possibly directed to a purpose), or

(3) a sequence of cognitive activities carried out subsequent to message reception" (Cohen 1983 in Stone 1984).

Stone believes that any understanding of involvement with a cognitive approach could not be applicable in marketing. Cognitive approaches necessarily entail a psychological basis in ego and customer values. However, in marketing, involvement is about customer's behaviour. "What about involvement in a marketing context? If psychological (ego) involvements calls for one to take a stand on an issue, is there some equivalent to this for marketing involvement? The very posing of these questions seems long overdue and badly in need of resolution" (Stone 1984).

As a resolution, Stone argues that, based on a marketing point of view as distinct from a psychological approach, it is necessary to shift our research emphasis from cognitive understanding of involvement to a behavioural approach and accordingly study involvement in the marketplace: "That is really the place to study involvement, involvement in the sense of noting what consumers are doing because of the marketing efforts aimed at them" (Stone 1984).

Considering his behaviouristic approach to understanding involvement, Stone defines involvement as "time and/or intensity of effort expended in the undertaking of behaviours" (Stone 1984). This behaviouristic definition, which is highly distinct from other definitions of involvement, has emphasised the consequences of involvement instead of explaining involvement. "Time and/or intensity of effort" are outcomes of high-involvement behaviour and knowing these behaviours and measuring them does not explain or improve our understanding of involvement. This goes against Stone's claim that a behaviouristic approach toward involvement, instead of a cognitive approach, could clarify the confusion over what involvement actually is.

2.45 Fourth approach

Information acquisition styles

Finn (1983) believes that the best way for refining this concept is by rejecting some approaches toward involvement. Consequently, he has investigated three independent variables, people, situation and products, which are at the heart of involvement research, working under the assumption that low or high involvement in these variables has different levels of impact on "information acquisition styles". That is,

for Finn, different "information acquisition styles" is the main factor that should be considered for understanding involvement. In his own words: "The thoughts expressed in this paper have targeted on the influence of involvement on the acquisition of new information - specifically on the awareness (or cognition) stage of behaviour hierarchy" (Finn 1983).

The main assumption behind this argument is that "high involvement generates 'active' (information) processing, and low involvement generates 'passive' (information) processing". Accordingly, he introduces a framework for evaluating the usefulness of the variables for studying involvement, and ultimately in consumer behaviour research:

> If the concept of 'involvement' is to be useful in consumer behaviour research, two things are required. First, there must actually be consistent and definable differences in involvement as a phenomenon of interest. That is, there must be such things as high- and low-involvement in person, situation and product, cognitive processing styles, and/or behavioural outcomes. Second, we should expect to find consistently different outcomes of high- and low-involvement levels of person, situation and product and cognitive processing styles. (Finn 1983)

Finn has made a close study of the assumed relationship between these three variables and involvement. Firstly, he examines a "stimulus-centred view" or the contention that "involvement is a characteristic of a product" (Finn 1983). In this approach, it has been presumed that the majority of people perceive some level of importance in some groups of products. That is, "here, we presume that there are products that are either trivial and unimportant or more serious and important" (Finn 1983).

After applying the two criteria, it is argued by Finn that the first criterion has been met by "stimulus-centred view" but could not pass the second criteria. Krugman's (1966) research has been used by Finn, who notes that

> Krugman measured the number of connections people made between the content of an advertisement and the content of their own life. He found that the extent of this processing (involvement) varied only slightly between messages for airlines and messages for margarine. The stimulus-centred approach would require us to define

> ‘airlines’ as a high-involvement product and ‘margarine’ as low-involvement, and our second criterion would not be met. (Finn 1983)

The “subject-centred view” suggests that high-involved people “actively process new information” while low-involved people “exhibit a passive processing strategy” (Finn 1983). It is argued by Finn that this consumer involvement has been partitioned into three different conceptualisations, and in order to assess this approach it is necessary to consider each part independently.

The first category of the subject-centred view that has been recognised by Finn is “interest/importance”. Involvement has been explained as the level of consumer interest in a product category, or how significant a product is for an individual. This understanding and approach to involvement is the common thread in a majority of research into involvement, and is explained comprehensively later in this thesis.

In this category, it is argued by Finn that, although there is not enough empirical data to examine, this approach to involvement could meet the requirements of his two criteria. Again, in evaluating this category, seeking information based on involvement is the main norm for Finn to apply his framework. Finn argues that:

> a person who has a desire to keep abreast of the latest information in a product class can be described, almost by definition, as interested. Likewise a person engaged in active search for information about a product class is naturally interested, and people are expected to differ in the amount of interest they have. Both of these definitions of interest seem to satisfy our first criterion of usefulness—that definable differences exist. (Finn 1983)

“Goals and consequences” are the second category of the “subject-centred view”, according to Finn's classification. In this category, it is assumed that a consumer’s involvement with a product’s category is due to the fact that she or he expects some potential benefits from that product category. This consideration of involvement is relatively highly regarded among consumer behaviour researchers. Later on in this thesis this approach to involvement will be explained comprehensively.

It is argued by Finn (1983) that the two criteria of his pattern have been met by this definition of involvement. Expanding on this, Finn adds situation to the involvement concept and argues that “it is clear that at a given point in time some consumers will

have strong needs for information or for solutions to existing problems, and that others will have weak or no needs" (Finn 1983). This consideration of situation in involvement is very interesting in this category.

The third category of the "subject-centred view" is "commitment". Finn has noted that "the position that involvement is defined in terms of the level of commitment that a consumer exhibits with respect to his position on an issue is an old one" (Finn 1983). Finn states that the first criterion is easily met by this understanding of commitment because it is definitely true that individuals differ in their level of commitment to different brand and products.

The second criterion is slightly problematic to analyse. By considering different aspects of this approach, Finn rejects this category as being useful for the concept of involvement, arguing that, although "it is true that there is an extensive literature on brand loyalty that is also concerned with the commitment issue and in the interest of reducing redundancy and reducing the confusion in the involvement literature, I recommend rejection of the label "involvement" for this subject-centred view in favour of the label 'brand loyalty'" (Finn 1983).

A "response-centred view" is the third view examined by Finn(1983). This type of involvement has some level of overlap with the "stimulus-centred view", and it has been defined by Finn using Krugman and Leavitt's illustration: "Krugman's(1965) characterization as the extent of personal involvement with the medium and the message (1965). Another example is Leavitt et al.'s separation of involvement levels according to the extent of cognitive processing and encoding elaboration (1981)" (Finn 1983). A "response-centred view" easily meets the two criteria of Finn's analysis and is considered as useful in involvement research.

The main assumption of Finn's argument is that for understanding involvement, the most relevant variable is the amount and kind of information sought. He believes different levels and kinds of involvement can be best understood by determining what kinds of information, and how much information, has been sought.

Although Finn's approach to the concept of involvement is perhaps a little vague, it generates a new way of understanding the concept. In general, it could be argued that the categories of involvement which have met his criteria are in line with the common

thread of what so far has been previously proposed as a definition of involvement by other academics from different points of view; Finn's work has somehow backed up many of the previous ideas about this concept.

In the "subject-centred view", in which people are the main part of this approach, two categories have met Finn's standards of involvement's usefulness: "interest" and "goals and consequences". These two are essential for the general understanding of involvement, which will be further discussed illustrated in the next section. Even though "information acquisition styles" are the main benchmark for understanding the usefulness of a variable for involvement, the results obtained through Finn's method are quite similar to mainstream understanding of this concept.

2.46 A general understanding of involvement

As we have seen, involvement has been examined by academics from different directions. These different understandings of involvement have generated a degree of confusion about this concept. What does involvement exactly mean? In this research, an attempt has been made to explain and scrutinise some specific approaches toward this concept and, to some extent, compare them with each other and with the position taken in this thesis. In this part, a more general approach will be offered, in an attempt to establish the common thread of these understandings and to finalise a comprehensive definition of this tricky concept.

One of the earliest studies about involvement, by Sherif and Cantril in 1947, considers involvement as a "cluster of ego attitudes" (Sherif and Cantril 1947). Involvement has been defined by Day (1970) as "the general level of interest in the object or the centrality of the object to the person's ego-structure". These kinds of definitions that relate involvement with consumers' important values, needs and self-concept have been backed up and accepted by many researchers and academics. The same understanding has also been initiated by Muncy and Shelby: they define involvement as "the degree to which an object or idea is centrally related to the value system of an individual" (Muncy and Shelby 1984).

A majority of researchers agree that involvement with a product is the power of a product in initiating a propensity to that special product. Mittal and Lee (1989) have

gathered some prominent definitions of involvement, and argue that the concept of involvement over time has advanced toward quite similar definitions:

> Involvement is said to reflect the extent of personal relevance of the decision to the individual in terms of her basic values, goals, and self-concept (Engel and Blackwell 1982, p.273; also adopted by Zaichkowsky 1985; and Celsi and Olson 1988). Similarly, Greenwald and Leavitt (1984) conclude their literature review by stating that 'there is a consensus that high involvement means (approximately) personal relevance or importance'. Involvement is 'an internal state variable that indicates the amount of arousal, interest, or drive evoked by a particular stimulus or situation' (Mitchell 1979, 1981; also adopted by Bloch 1982). Involvement is a 'motivational state of mind of a person with regard to an object or activity. It reveals itself as the level of interest in that object or activity' (Mittal 1983). And, involvement may be defined as a goal-directed arousal capacity. (Park and Mittal 1985)

Mittal and Lee (1989) argue that, regardless of the differences in diverse definitions of involvement, they all convey a relatively similar idea: "involvement is the perceived value of a goal object that manifests as interest in that goal object. This goal object can be a product itself (as in product involvement) or a purchase decision (as in brand-decision involvement)."

What appears to be the main factor in all these definitions is that the greater the importance of a product to a consumer (for any reason and in any situation), the more the consumer is involved in that product category. The reason, or the basis of why a particular product is important for a customer, is the main source of debate in articles about involvement and will be discussed later in this thesis. In this thesis, involvement is about the importance and relevance of the product to the consumer.

2.47 Defining the concept

After considering the main approaches toward involvement it is important to finalise the position taken in this thesis, employing Zaichkowsky's (1985) definition of this concept. Zaichkowsky's definition of involvement is comprehensive enough to include all previously-examined approaches: "A person's perceived relevance of the object based on inherent needs, values, and interests" (Zaichkowsky 1985).

It is argued here that this definition covers all the five types of involvement introduced by Muncy and Shelby. "Ego involvement", their first and most important

category, has some level of overlap with the other types. Their definition is a rephrasing of Zaichkowsky's definition, and could be considered as essentially the same. "Ego involvement" is the main contribution of Muncy and Shelby toward the concept of involvement, and it could be argued that the other types are the reactions of individuals because of their different levels of their "ego involvement"; consequently, in many cases are basically these categories may be indistinguishable from "ego involvement".

Considering Antil's(1984) definition of involvement, "the level of perceived personal importance and/or interest evoked by a stimulus (or stimuli) within a specific situation", the only difference is that Zaichkowsky (1985) applies a new variable to Antil's concept of involvement: that is, "situation". Antil's explanation of situation shows that he perceives situation as a variable of needs or expected benefits: "Thus, the degree of involvement within a specific situation is equal to the level of perceived personal importance which is determined by the total of expected benefits to be gained through interacting with the stimulus" (Antil 1984). This has been taken into account in Zaichkowsky's definition of involvement.

Finn, after applying his refinement standards on different variables surrounding the concept of involvement, eventually comes up with two main factors: "interest" and "goals and consequences". He argues that these two factors could be useful in establishing an understanding of the concept of involvement and, consequently, in explaining consumer behaviour. These two factors are evident in Zaichkowsky's (1985) definition.

The main constituent of the differing definitions of involvement is "personal relevance" or, in other words, "perceived importance". Accordingly, this part could be finalised by considering Zaichkowsky's comprehensive definition as the accepted definition of involvement in this thesis. It could be argued here that her definition, in general terms, encompasses all the key points of the other approaches to involvement. More importantly, Zaichkowsky's (1985) definition allows us to quantify this concept in a way that could be used practically in consumer behaviour research.

2.48 Causes of involvement

2.481 Product and brand benefit typology

As discussed in the first part of this literature review, both brand and product independently have the capability of conveying some benefits to customers. As was explained in the case of benefit typology, brand and product have distinct functional, symbolic and hedonic values for customers in different groups of products.

To review, these items are briefly summarised again here:

Product symbolic benefits, or (in the terminology of Mittal and Lee) product sign value: "the more extrinsic advantages of product consumption and generally related to non-product-related attributes but associated with needs like social approval, personal expression and outer-directed self-esteem" (Orth and De Marchi 2007).

Brand symbolic benefits, or brand sign value: "The ability of brand to make statement about themselves, to help them interpret the people they meet, to reinforce the membership of a particular social group, to communicate how they feel and to say something privately to themselves" (De Chernatony and McDonald 2001).

Product functional value, or product utility: "Functional benefits are the more intrinsic advantages of product consumption and usually correspond to products' attributes" (Orth and De Marchi 2007).

Brand functional value, or (following Mittal and Lee) brand risk: The functional dimension of brand is about the rational evaluation of brand by customers. It is used by customers to assess the practicality of products, issues like usage effectiveness, value for money, or reliability. In the words of Del Rio, "this dimension represents the more intrinsic advantages of the product and usually corresponds to product related-attributes" (Del Rio et al. 2001).

2.482 Sources of involvement

Consumers' brand and product involvement occurs when any of the above-mentioned values and benefits become consumer priorities for any category of product. This assertion is based on Engel and Blackwell's definition: "Involvement is said to reflect the extent of personal relevance of the decision to the individual in terms of her basic values, goals and self-concept" (Engel and Blackwell, 1982). According to this

definition, like many other definitions previously mentioned, personal relevance to a product category causes involvement, and the reason for this relevance is rooted in consumers' basic values and goals. These goals and values determine the type of involvement, and the extent of personal relevance determines the level of involvement.

As explained in the previous section, when considering involvement as, essentially, the relevance of the product to the customer, it is noted that this relationship could have two characteristics: functional or utilitarian, on the one hand, and symbolic or informational on the other. Furthermore, it has been noted that brand and product independently have the ability to generate these two types of relationship with customers. Accordingly, some researchers (e.g. Mittal 1988)) argue that product and brand involvement are two different concepts distinct from each other.

Product and brand involvement has been defined by Mittal (1988) in the following terms: "product involvement is the degree of interest of a consumer in a product category on an ongoing basis. Brand choice involvement is the motivation of a consumer to make the right choice". In the terminology that will be employed by this thesis, product involvement occurs when products' informational and functional benefits are the main source of relevance. In other words, when the main source of benefits for a particular consumer comes from product *per se*, the involvement is called product involvement regardless of the benefit type (functional or informational). The same applies in respect to brand involvement, when consumers' expected benefit comes from the brand itself despite its benefit type (informational or functional). Here, this relation is called brand involvement. Brand and product involvement can be informational or functional, as we have seen. Park and Young (1983) have examined these two concepts by considering them as motives of involvement, and classified them as cognitive and affective motives respectively. Cognitive motives are about the costs and functional benefits of the product, whereas affective or value expressive motives are more about the interest of the individual in "enhancing self-esteem or self-concept".

2.483 Measuring the involvement concept

Kassarjian (1981) has argued that there is a definite need for "a tool" to measure the concept of involvement: "Cognitive activity for low involvement and high involvement are simply different and that one cannot simply generalise research results from one situation to the other. Thus, research must measure the concept of

involvement first, then turn to the hypotheses at hand. At this point, it is unfortunate that a simple instrument or tool has not yet been developed to measure the concept of involvement, “necessity is the mother of invention,” that will come in time - for the measure of involvement is unquestionably a necessity - one can no longer be ignored” (Kassarjian 1981). For a long time, measuring involvement has been a major concern of many of those who undertake research into consumer behaviour.

Quantifying involvement is one of the most complicated topics in marketing research. The importance of involvement in understanding and predicting consumer behaviour has given a high priority to providing a standard measurement for involvement, and this task, like the definition of involvement, has become a very controversial subject in involvement research.

Andrews stated that many different approaches have been employed for measuring involvement during time, from “ingenious methods to tap product interest (Buchanan 1964), to the use of "proxy" measures to infer product involvement (Bowen and Chaffee 1974; Tyebjee 1979), to scales employing rigorous procedures suggested by Churchill (1979) in developing, purifying, and validating scales (cf., Bloch 1981; Zaichkowsky 1985)” (Andrews, Durvasula and Akhter 1990). From this quote, we can see that many different scales for measuring involvement have indeed been introduced.

In this part, attempts have been made to scrutinise these scales and to find out which is compatible with this thesis’s definition of involvement, and is also capable of gathering and measuring the kind of data that is needed here. As previously explained, a scale must have the ability to measure involvement with product and brand separately, and in addition discover and quantify the particular type of involvement.

Before proceeding, it is necessary to again clarify the position taken in this work regarding involvement. As previously explained, Zaichkowsky’s definition of involvement is the basis of our own approach: “A person’s perceived relevance of the object based on inherent needs, values, and interests” (Zaichkowsky 1985). Besides that, in this paper, involvement is considered as a two-dimensional variable, with informational and functional aspects.

It is absolutely necessary to first specify what has to be measured, and second how it could be measured. It is argued by Zaichkowsky (1985) that an individual could

potentially be involved with message (advertisements), or with products, or with a purchase decision. These three categories of involvement's sources have been explained in the definition of involvement given earlier.

The main objective of this article, according to the agreed definition of involvement, is measuring "a person's perceived relevance of the object"**.**

2.4831 Quantifying involvement

Using "resulting behaviour" or consequences of involvement, as an indicator of involvement is one of the main approaches to quantifying involvement. It is believed that by quantifying these "resulting behaviours", involvement could be measured. In other words, once we understand how involvement in a person's mind is reflected in their behaviour, we could measure their behaviour and thus gauge their level of involvement.

Some researchers have used involvement antecedents as the indicator of the level of involvement, such as Laurent and Kapferer (1985). It is argued by Zaichkowsky that considering involvement as a stable trait which is formed by particular antecedents could be problematic, because any change in the antecedents of involvement could change what has been measured as "involvement".

In general, Zaichkowsky argues that any quantification of involvement by employing "resulting behaviour" could potentially include three major flaws: firstly,

> …if conflicting results are obtained, we do not know if the discrepancy is due to different measures or to different behaviours. Second, many scales are single-item measures and may not capture the total involvement concept. Finally, single-item measures have low reliability, and current multiple-item measures have not tested for internal reliability, stability, or validity. (Zaichkowsky 1985)

She concludes that there is a need for a standardised, general, valid and multiple-item scale for quantifying involvement.

Accordingly, she suggests that for an involvement scale capable of being employed in various research studies, a measure of involvement "independent of the behaviour that results from involvement" is absolutely necessary. Other criteria suggested by Zaichkowsky for a thorough involvement scale include the sensitivity of

the scale to "the proposed areas that affect a person's involvement level". These areas are introduced as follows. Firstly, *Personal*, the "inherent interests, values, or needs that motivate one toward the object". Secondly, *Physical*, the "characteristics of the object that cause differentiation and increase interest". Finally, *Situational*, "something that temporarily increases relevance or interest toward the object" (Zaichkowsky 1985).

Many academics do not consider "physical" and "situational" as two distinct variables (Houston and Rothschild 1978). It is true that for many groups of products they could not be differentiated, but it is quite handy to have the possibility of doing this differentiation wherever possible, in order to provide additional detail for the research. In this thesis, however, these two variables have been considered as the same, with a high focus on situational variables.

2.4832 Zaichkowsky's scale PII

Zaichkowsky (1985) differentiates her involvement scale, the Personal Involvement Inventory (PII), from others by noting that it is a context-free scale which measures "the motivational state of involvement" and that her scale is not based on the antecedents and consequences of involvement: in her words, it is "independent of the behaviour that results from involvement" (Zaichkowsky 1994). Zaichkowsky (1985) argues that measuring "the motivational state of involvement" instead of the consequences or antecedents of involvement enables researchers to "use the same measure across various research studies".

For generating a measure of involvement, different scales were tested by Zaichkowsky in order to find out how much they could be used in a general and widespread sense. It is argued by her that "Likert scale" measurements could not be used for different categories of products, and, accordingly, she suggests that a general scale using "semantic differential type" (see Osgood, Suci and Tannenbaum 1957) could be the best way of quantifying involvement.

She defines "semantic differential" as a "series of bipolar items, each measured on a seven-point rating scale", which has the following advantages: firstly, the scale is easy to manage, administer and score; secondly, it does not take long to be completed (a maximum of a few minutes); thirdly and most importantly, the scale is highly capable of being used across various product categories. Zaichkowsky (1985) also claims that this

kind of scale could be used in other domains, such as purchase decisions and advertisements.

Zaichkowsky has gone through several steps to complete her measure of involvement. After accurately defining the concept, she provides a list of 168 word pairs pertaining to the concept. Consequently, these word pairs were judged by professionals in consumer behaviour to evaluate the content validity of the word pairs. The internal reliability of remaining items were judged, and finally, pair words were reduced based on "the stability of internally reliable items over time (item reduction)" (Zaichkowsky 1985).

Only 20 word pairs then remained in the inventory of word pairs related to involvement and were tested by measuring their content validity and criterion validity in order to assess the ability "of the scale to discriminate among different products for the same people and different situations for the same people" (Zaichkowsky 1985). The final step was testing the concept validity of the scale which has been defined by her as the "theoretical value of the scale", which she tested "by gathering data and testing whether the scale discriminates on self-reported behaviour" (Zaichkowsky 1985).

It is claimed by Zaichkowsky that her 20 item scale or PII is a valid scale for measuring involvement, with a capacity to be quickly administered and employed across different product categories.

After PII was introduced by Zaichkowsky (1985), her scale was employed and subsequently criticised by many academics and practitioners. For instance, McQuarrie and Munson (1987), in their first revision of PII in 1987, claim that:"The PII seems to include two distinct groups of adjectives; one group contains items that would possess high face validity as indicators of involvement, prior to any empirical validation work (e.g., "interesting-boring") but the other group contains terms with quite different connotations". They argue that some of these adjectives measure attitudes, and some of them measure involvement. McQuarrie and Munson (1987) also mention that PII is unidimensional and could not capture all facets of involvement, unlike Laurent and Kapferer's scale (1985), which considers involvement as a multi-faceted construct and has ability of measuring all these dimensions.

In their second revision in 1992, they note that"One finding of this study is the strong performance of Zaichkowsky's PII across a number of validation tests. It is exceedingly reliable; it is highly predictive of a broad range of behavioural outcomes associated with involvement; and it is able to discriminate successfully felt involvement across several products and a variety of situations. The last two validation tests go beyond the evidence provided by Zaichkowsky (1985) in her original article. However, the PII also appears to suffer several limitations. It is unnecessarily long and elaborate; needlessly difficult to comprehend; insufficiently predictive of information search and processing outcomes; and unduly narrow in its conceptualisation" (McQuarrie and Munson 1992).

Later, after a thorough reconsideration of the critiques and recommendations, Zaichkowsky revised PII and reduced the original scale from 20 word pairs to 10, and also adds a measure of affective and cognitive involvement to the PII. In the revised PII, five items have been allocated for measuring the effective dimension of involvement and five items for the cognitive dimension of involvement. The result of these new amendments show a good internal scale reliability and an acceptable level of initial validity of measurement of both dimensions.

RPII, or the Revised Personal Involvement Inventory, has been employed for measuring an individual's involvement in a variety of subjects: for instance, measuring purchase decision involvement in financial services (Foxall and Pallister 1998), involvement with healthcare services (Celuch & Taylor, 1999), brand loyalty (Park, 1996), news consumption (Wojdynski, 2009) and consumer behaviour (Smith & Carsky, 1996). RPII shows an acceptable level of reliability and validity in different area of research in measuring general level of involvement (McQuarrie and Munson 1992).

2.4833 PII in practice

However, questions remain about the capability of this scale to quantify the two dimensions or sources of involvement: functional and emotional. Dimensionality of PII is tested by Stafford and Day, and their results do not show a satisfactory performance of this scale in measuring these two dimensions: Celuch and Taylor (1999) came up with similar results. Empirical research shows that, although PII is a highly reliable scale for measuring involvement, it is not suitable for exploring and quantifying the dimensions of involvement.

Lacking the capacity of distinguishing between "brand involvement" and "product involvement" is another flaw of PII mentioned by some academics (Peter and Olson 1987, McQuarrie and Munson 1992). Peter and Olson argue that involvement in product and involvement in brand are two distinctive involvement types that could occur at the same time or independently. A customer could be just involved in brands of a category of products without paying attention to the product's category itself or vice versa, or they could be involved with a product and a brand at the same time.

This point has been thoroughly explained in the section on brand and product benefit typology. To summarise it here once more, it could be argued that Zaichkowsky's definition of involvement, "a person's perceived relevance of the object", could apply to a product *per se,* a brand *per se*, or both simultaneously, and accordingly it is very important for an involvement scale to be able to distinguish between these types of involvement.

One of the most important qualities of Zaichkowsky's (1985) scale for this research is the capability of her scale to be used across different product categories, especially since one of the main aims of this thesis is to compare the level of consumer involvement in two different categories of products. The weakness of this scale is in realising robustly the type or source of involvement, and it also lacks the ability to distinguish between brand involvement and product involvement, which is a potential problem for this research. Accordingly it has been decided to use another scale at the same time as PII, to ascertain the type of involvement (informational or functional), the level of involvement, and the involvement category (involvement with brand or product).

In this research PII is employed for measuring the general level of involvement with the product. In the methodology section it has been explained that, in the pilot study, questionnaire results show that what the subjects discovered from PII was mainly concerning product involvement.

2.484 Involvement type and involvement category

For measuring involvement type (functional and informational) and involvement category (brand or product), it was decided to use Mittal's scale (1989), which basically measures four different items in involvement. Mittal argues that there are two main

categories of involvement that have been neglected or confused by researchers. Based on his definition of involvement as "a goal-directed arousal capacity" (Park and Mittal 1985), he claims that goal could be satisfied by the product itself or by the purchase decision (brand-decision involvement).

This point has been stated previously in this research, but as a brief reminder, it is explained here again. The difference between these categories of involvement has been explained by Mittal: "Product involvement is the interest taken in possessing and using a product, and purchase involvement is the interest taken in the brand selection task" (Mittal and Lee 1989).

Mittal also considers three different sources for involvement as causes of involvement and classified them in three groups. First, *utilitarian*: in this group, goal-objects are mainly related to physical performance. Second, *sign value*, which concerns "impression management goals". Finally, *hedonic*, which concerns sensory pleasure or experiential goals. By considering the two categories of involvement, he concludes that six sources of involvement have to be measured by a proper involvement scale.

For measuring all the above-mentioned variables Mittal has built his involvement scale according to three prior scales: Laurent and Kapferer (1985), Bloch and Richins (1983) and Hostoun and Rotshchild (1977). He has taken into account their weaknesses and strengths. He has used the fundamentals of these previous frameworks and adapts and customises them based on his personal understanding of involvement.

Although the multi-dimensionality of the Laurent and Kapferer (1985) scale is appreciated by Mittal, three main flaws are mentioned. Firstly, their involvement measure does not have the capability to differentiate between brand and product involvement. Secondly, it is impossible to allocate the three facets introduced by Laurent and Kapferer to brand involvement or product involvement separately. Finally, Laurent and Kapferer's scale antecedents, and involvement, are not divided properly, whilst in Mittal's (1989) scale, antecedents or sources have been appropriately separated from involvement. In the Mittal scale, Laurent and Kapferer's scale has been extended to have the ability to measure all the expected variables.

In addition, two fundamental problems have been noted by McQuarrie and Munson(1987) that make employment of Laurent and Kapferer's (1985) scale very

difficult and potentially inaccurate. First of all, they never published their full scale in their articles. Secondly, and very importantly, the original scale is in French and there is no guarantee that the translation conveys exactly what it conveys in French, especially as in this research the scale has to be translated from English to Farsi. This again increases the complication of the scale.

The second and third frameworks considered by Mittal for developing his scale are Bloch and Richins (1983) and Houston and Rothschild (1977). They use involvement measurement which, in basic terms, is quite similar to Mittal's (1989)framework of involvement and its sources, and its effects, but three differences have been mentioned by Mittal that separate his framework from that of Bloch and Richins. Bloch and Richins also build up their framework, in essence, according to Houston and Rothschild (1977).

Measuring enduring and situational involvement as two types of involvement is the first distinction of these two scales. Enduring and situational involvement are two qualifiers of the forms of involvement (involvement to brand and product) in the Mittal scale (1989), while in the Bloch and Richins scale there are two types of involvement. The second difference between these two scales concerns their understanding of the concept of brand-decision involvement. Bloch and Richins consider this variable as "temporary", and about the importance of "product", while Mittal views it as not temporary and concerning the "perceived importance of making a brand-decision carefully" (Mittal and Lee 1989). Finally, Bloch and Richins consider the that the interaction of "product", "people" and "situations" produces involvement while, in Mittal's argument, these variables are a causal link that produce the three antecedents of involvement: utility/risk, sign value and hedonic value.

2.4841 Comprehensive involvement scale

For measuring involvement to brand and product separately and also for understanding the sources of involvement in these two types of involvement, Mittal and Lee's scale is a perfect choice for this research in that it covers and measures all variables that are needed.

Mittal and Lee's scale, alongside PII, can quantify and distinguish the sources of involvement and its type. Mittal's scale and PII have been built based on a very close

understanding of involvement. Mittal, in his approach, considers involvement as a "goal-directed arousal capacity" (Park and Mittal 1985). The goal-directed part of Mittal's definition is very close to what Zaichkowsky has argued as sources of involvement: "inherent needs, values and interests". It could be argued here that their conceptualisations of involvement are quite close to each other; in other words, that they are measuring the same phenomena.

Having two different scales generates a capacity to be flexible in generating a customised questionnaire based on product categories and situations. In this research, questions in these two scales often could not be translated to Farsi, or the translated questions conveyed a very different point to the originals. Furthermore, in some cases, questions were not very appropriate culturally, accordingly, a mixture of the two scales has been used for generating a thoroughly detailed questionnaire with the capability to capture and quantify all necessary variables. This process has been explained in detail in the methodology section.

2.4842 Data gathering methods

Another approach to classifying different involvement scales has been initiated by Traylor et al (1984). Measures of consumer involvement have been categorised into three different classes, based on their data-gathering methods. In the first category, the connections between a consumer and a "communications message"is measured by analysing the content "of open-ended responses to the messages". Krugman is one of the pioneers in this type of measurement. His main concern is measuring the involvement of consumers with messages; in other words, the stimuli of involvement in this approach is communication or advertisement.

This technique could be appropriate for Krugman's (1967) approach to involvement. Involvement has been defined by Krugman as "the number of "connections", conscious bridging experiences, or personal references per minute, that the subject makes between the content of persuasive stimulus and the content of his own life. This definition necessitates a report of immediate experience or conscious reaction to a stimulus. Krugman states that, unlike general definitions of involvement which concern the importance of products or the opinion of customers about products, his approach is about "stimulus material".

Consequently, he argues that the interview situation must be different from data-gathering attempts about opinions and attitudes. In this method, interviewees are asked "to recall and report what they were thinking at the earlier time they viewed an advertisement, i.e. they are asked to report mental incidents" (Krugman 1966-67). These responses are subsequently coded and analysed by researchers.

This method may best be suitable for "communication focus" research about involvement, but is far from being reliably quantified, which is the main concern of this thesis. Besides that coding of interviews is always problematic, especially when the coding is reporting "mental incidents".

The second category of scales to measure involvement, according to Traylor, M. B., & Joseph, W. B. (1984). is physiological measures, such as "brain waves". This method also is better used for measuring media involvement and, could not be properly quantified.

The third category introduced by Traylor et al (1984), has been called "paper-and-pencil tests". They argue that this scale could be applied for measuring involvement in "specific product categories", and is potentially suitable for utilising in consumer behaviour research.

2.49 Involvement and learning history

Bloch (2001), after considering the relevant literature, comes up with two ideas about the domain of product involvement: "First, involvement has been treated as a temporary concern with high-risk products which occurs during the purchase process" (Bowen and Chaffee, 1974; Houston and Rothschild, 1978). Product involvement has also been viewed as a long-term interest in a product which is based on the centrality of the product to important values, needs, or consumer self-concept (Day, 1970; DeBruicker, 1979; Houston and Rothschild, 1978; Tyebjee 1979a).

These illustrations of the involvement domain are very close to what has previously been defined as learning history in the BPM model. Learning history is about a customer's previous experiences of similar situations. It is important to mention that learning history is a comprehensive notion, consisting of attitudes and beliefs shaped by these experiences: "The learning history is more than merely a "storehouse" of past

experiences, however, as it readily accommodates a range of related attitudes, beliefs, norms, etc, that are hypothesized as developing iteratively as a result of those experiences" (Nicholson and Xiao 2011).

It is argued by Foxall (1990) that previous consumer experience guides consumers to expect certain purchase outcomes according to previous similar experiences. Every purchase outcome could be categorised into two main groups, utilitarian and informational. These two ideas have already been explored thoroughly in this literature review. Therefore the likelihood of every purchase, or, more comprehensively, every behaviour, depends on what a consumer expects to receive based on his previous consumption history: "The learning history of consumers will determine how they act within a current environment. Part of what are understood as personal values, attitudes, intentions, and personality, in the cognitive literature, is considered by analyzing consumer learning history, and, in most cases, researchers can only probe into the consumer history aided by questionnaires, interviews or by looking at previous buying behaviour" (Nicholson and Xiao 2010).

Foxall argues that every product has some level of utilitarian and informational reinforcements, which differs from product to product and also in different situations. In other words, "the probability of purchase and consumption depends on the relative weight of the reinforcing and aversive consequences that are signalled by the elements in consumer behaviour setting" (Alhadeff 1982).

Bloch (1981) notes that "Product involvement has also been viewed as a long-term interest in a product which is based on the centrality of the product to important values, needs, or the self-concept". Considering involvement as defined by Bloch involved customer assessments of product relevance and importance, it is sensible to consider involvement as a concept which is clearly synonymous with learning history.

2.491 Summary

In considering this thesis's definition of involvement, as well as the requirements of this research, it has been decided to use two complementary scales of involvement to measure involvement types and sources. These are PII and Mittal's (1988) scale, two involvement measurements with the ability to gather all the data needed to complete this research.

Zaichkowsky's (1994) scale, or PII, has been chosen as the primary measure of the general level of involvement for this research. The reasons for choosing PII are as follows: firstly, involvement, as defined by Zaichkowsky, is identical to what this thesis has defined as "learning history". It has been explained previously that involvement is measured in this theory instead of "learning history", and given that Zaichkowsky's definition matches to a large extent with the consequences of learning history, it could be argued that this characterisation of involvement could be considered as a manifestation of learning history.

Secondly, PII has been used in a variety of different research projects covering several different categories of products, and has demonstrated a high level of reliability and validity. This quality of PII is very important for this research, in which there is a need to measure the scale and type of involvement in two different classes of products. Thirdly, PII is easy to use and also simple to interpret for researchers, and offers easy answer options for participants. The simplicity of interpreting PII, in comparison with Laurent and Kapferer's(1985) scale, prevents different explanations arising from the same results. Fourthly, unlike Laurent and Kapferer's scale, all the items of PII have been published and are available and, in addition, the diversity of the items in PII allows researchers to customise these items based on the requirements of different situations and different product categories.

To compensate for the weakness of PII in measuring and distinguishing the two sources of involvement, it was decided to also use Mittal's (1988) scale, to measure types of involvement (brand and product) and sources of involvement (functional or informational). These two scales were modified after the results of the pilot questionnaire were analysed, and they were highly customised on the product categories being examined and the necessary limitations involved in conveying the exact meaning and sense of material translated from English into Farsi.

2.5Conceptual framework:

2.51Introduction

The conceptual framework for this thesis has been generated based on the argument that marketers and brand managers are not the sole players in a branding activity. Consumers are not passive recipients of branding campaigns but actively

participate in branding by having their own understanding from brand and branding in different product categories. The consumer perception of brand in different categories of products is the main concern of this research because of the enormous implication of this information in developing branding strategy in different groups of products. Accordingly, this thesis is trying to answer the following questions: **what variables could be used for understanding and explaining consumer behaviour toward brand and branding activities? How these variables could be evaluated quantitatively and qualitatively? And finally how they could be utilized for developing successful brand strategies in different product categories?**

Two important factors were introduced in literature review for explaining and predicting consumer behaviour toward branding. The first factor is called consumer side of brand and consists of three different variables that explain different aspects of the relation involving customers and brands. The second factor is about any potential stimuli that exist in purchase and consumption settings with a potential impact on consumer brand choice. It is argued here that a thorough understanding about consumer side of brand and purchase and consumption settings in every category of products has to be considered in any branding strategy planning.

Consumer side of brand and setting are different in different categories of products and in different locations. For a successful branding, it is necessary to thoroughly explore these two variables and choose a proper branding strategy accordingly. In the empirical part, the objective is to discover how these variables are different for the two groups of products chosen in this thesis, and how these differences affect the planning efforts of these two groups of products.

2.52BPM in this research:

Foxall (1999) argues that the stimuli that make up consumer behaviour setting could be physical: for instance, a store logo. In other words, a brand *per se* could be assumed to be "point of sale advertising"; accordingly, a brand could also be considered as a physical stimulus. On the other hand, if a consumer already has any previous experience of the brand, which could constitute a learning history, together with neutral stimuli, this could generate a particular behaviour, which in this situation, is choosing a brand.

In order to apply the BPM to interpret the research presented in this work, it is necessary to explain how the three-term contingency can be adapted to the different variables used within this argument. It has been assumed that customers' learning history generates an expectation from a brand *per se*, which creates some benefits above those normally seen as the specific benefits of the product. These expectations vary based on product categories and are manifested in consumer involvement. The types and levels of consumer involvement are suggested as an indication of consumer learning history.

Marketers have to be aware of these expectations in order to build a proper brand image which, based on the BPM model, could act as a powerful signal for customers as a neutral stimulus which will be transformed by consumer experience or consumer learning history into a discriminative stimulus that will generate a particular behaviour. This issue is discussed in detail in the literature review.

In the following, these two concepts (consumer side of brand and situational variables) have been explained and it has been clarified how knowing information about these variables could heavily influence branding planning. Following that involvement as a manifestation of learning history has been discussed and then the relations among these variables have been explained and methodologies and concepts that have been employed for determining these variables quantitatively and qualitatively have been justified.

2.521 Setting

Brand as a situational variable is more complicated than other situational variables of purchase and consumption environment. In order to fully understand all aspects of brand, which is very important for grasping brand performance, it is required to explore three different variables about brand. The combination of these three variables, which has been called "consumer side of brand" in this thesis, explains how brand performs as a situational variable, in this part, first "consumer side of brand" has been explained and the application of each of these variables on a branding endeavour has been explained, then other situational variables have been discussed.

2.5211Consumer side of brand:

Consumer side of brand is about what consumers actually consider and understand brand per se, and has three main variables:

2.5212The relation between brand and product:

The initial step for generating a branding strategy is exploring consumer side of brand and the first step is finding out how customers consider the relation between product and brand and to what extent they could distinguish product and brand benefits from each other. That is, whether customers could distinguish brand characteristic from product characteristic or if they consider brand and product as one entity. Knowing this information in different product categories has its own unique implication for developing brand strategy. The more the customers distinguish brand and product benefits from each other, the more investing on branding activities becomes reasonable and justifiable. The higher the distinction, the easier it is for a brand manager to plan branding activities especially when brandability is high.

In some categories of products, consumers actually refer to a product by the name of a famous brand in that category. This kind of perception could be the results of many years of branding by the company or being first in that market. In many cases, this perception is because of low brandability. That is consumers are not very concerned about a wrong choice or they are highly satisfied with what they already get. It is argued by Gardner and Levy (1955) in a situation that customers actually differentiate product and brand. Firstly it will be reasonable to consider investing on brand, secondly this perception allows brand managers to generate a proper brand image which conveys some benefits to customers independent from product, in general this separation of brand and product makes branding necessary.

Considering that in this thesis two different groups of products are under research, it is important to know if customers consider the relation between product and brand the same in these two group of products or not.

Hypothesis one: The relation between product and brand has been considered differently in different product categories by consumers, either as one entity or as two separate elements.

This hypothesis leads to the following question:

How customers in these two groups of products have considered the relation between product and brand?

Empirical results of this research show that customers could recall different brands of the same product category and explain different advantages and disadvantages of each brand in these two groups of products. Brands and products are two different concepts for them, and as a result it is sensible to consider brand as a source of information and benefits which if brandability also is high it makes investing on brand highly sensible.

2.5213Brandability

The second variable of the consumer side of brand is brandability; Low level of brandability means that a brand is not the main contributor in consumer brand choice and consumers consider other stimuli for their product selection other than brand, like price or packaging. Brandability or the extent to which customers consider brand in their brand choice has been defined by Foxall as "how much branding influences consumer behaviour and, consequently, brand performance in each product category" (Foxall 2008). This variable has the highest implication in planning a branding strategy.

High brandability makes investing on branding highly justifiable considering that a successful branding would have a huge impact on consumer brand choice. In a situation in which brandability is low, marketers have to focus on other factors. The special distribution channels of OTC and skincare products in Iran comprise other stimuli with a potential capability to compete with brand in affecting consumer brand choice. Therefore, the first priority of this research was to find out the level of brandability in these products and compare their levels of brandability.

Hypothesis two: In different groups of products, brand as a potential situational variable has a different level of strength as stimuli in purchase and consumption environment.

For testing Hypothesis two the following question has to be answered:

What is the level of brandability of these two groups of products? How different is the level of brandability in these two groups of products?

In empirical research of this thesis, it was found that these two categories of products are highly brandable and customers pay a high level of attention to brand in their choice. In addition, it was found that there are other stimuli especially in the purchase environment with relatively high impact on consumer brand choice but to a very high extent brand was the main contributor in consumer choice.

Hypothesis three: In any purchase and consumption environment, there are other situational variables with the capability to compete with brand to become the discriminative stimuli.

These hypotheses could be tested by answering the following questions:

What are the other potential situational factors that could compete with brand image? Which one of these situational factors has the highest influence on consumer brand choice in these two groups of products?

High brandablity in these two groups of products decreases the importance of other stimuli and makes brand the most important variable in consumer choice and consequently makes concentration on branding the most important job of a marketer.

2.5214Brand image

The third variable of the consumer side of brand is brand image; in brandable product category, the selection of proper brand image in harmony with product schema and fundamental to consumers' needs is the most important job of a brand manager. In a product category with a high brandability the more important factor in adopting a brand strategy is choosing a right brand image. Two main brand images could be developed for a product category: informational and functional. Brand image defines how brand managers would like to associate customers with a product category. Depending on the product category customers, expect different function from a brand and this expected function determines which type of brand image has to be chosen for the product category.

Park (1986) provides three main reasons why a brand has to adopt just one brand image; firstly, generating multiple brand images causes confusion during branding management by generating inconsistency in branding benefits. Secondly, a brand with multiple brand images faces more competition in market and finally

multiple concept brands confuse customers about the particular meaning of the brand and prevent marketers from establishing an effective image about the brand.

As it is argued the benefits that are delivered by brand per se are independent from product and must be related to fundamental consumer needs based on product category, or must be compatible with product schema to have the ability to have an impact on consumer purchase choice (Batra and Homer, 2004; Keller, 1993). Therefore, brand image selection is one of the most important parts of a branding campaign.

Hypothesis four: One of the two brand images (functional or symbolic) is expected to be the dominant brand image by customers in different groups of products.

The hypothesis could be verified by finding an answer for the following question:

What is the expected brand image by customers in these two groups of products? Do customers expect the same brand benefits and consequently brand image for these two groups of products?

That is, based on products' category and their characteristic one of these two is more expected by consumer. In other words one of these brand images delivers the benefits that customers want from brand in a special product category. Functional brand image is attribute-based and is about the functional aspects of the product category. Attribute based brand image differentiates a product category based on its attributes and functions while symbolic or non attribute brand image is concentrating on conveying symbolic benefits to customers such as demonstrating customers social or financial status.

The point is that these two-brand images are not completely distinct from each other and they have some level of overlap. Depending on the product category they could not be differentiated from each other by customers. It is important to find out which one is the more expected one in any product category in order to generate the same brand image for strengthening brandability. As was mentioned, considering that informational brand image and functional brand image are not fully distinct, a brand image could not be completely informational or functional but one of them has to be the dominant brand image.

Considering the mentioned argument, it could be argued here that if functional brand image is more desirable by customers, then branding activities have to be based on attribute based campaigns to satisfy functional expectations from brand. Empirical results of this thesis reveal that attribute based brand image is more expected by customers especially in OTC products. Although non-attribute based brand image, or functional brand image is the main concern of customers in skincare products but some level of informational image also is expected. This issue could be used for customer segmentation by developing two different brands with different images for two different segments of the market.

2.5215Other situational variables:

Setting is any place that could contain situational variables, and situational variables refer to any personal or environmental factors that exist in an immediate environment of purchase or consumption with a potential capability to have an impact on consumer brand choice. The importance of situational variables has been explained by Ferreira and Castro (2010) as follows: "To understand consumer behaviour, it is necessary to define how each attribute of the consumer setting will interact with the consumer learning history, based on his past experience in similar settings. Situations that have high probability of each type of consequence will influence the consumer to behave accordingly".

For a successful branding campaign, it is necessary to know all the situational variables with an impact on consumer choice other than brand, especially if brandability is low. Low brandability means customers consider other stimuli of the purchase and consumption environment more reliable than brand, the lower the brandability the more important other situational variables become. For instance, if the main contributor in consumer choice is sellers' recommendations, then consumers consider seller recommendation the most reliable source for their choice.

There are many reasons that decrease the consideration of brand in consumer choice. Mainly because customers do not associate any significant differences among different brands of a product category, or customers are not very concerned about potential functional and informational reinforcement that they could get, therefore they do not care about which brand they choose and at this situation, they consider other situational variables for their choice. Another important reason for low level of

brandability is that customers do not believe claims provided by brands and they try to find other more reliable sources for their choice.

Accordingly, an attempt was made to determine all of the situational factors besides brand with the potential impact on consumer brand choice in Project 2. For this part of the research, a focus group was used for investigating setting and finding out all potential situational variables in the purchase and consumption environment, the main objective of this project was generating a very inclusive inventory of all potential situational factors. Considering that a very thorough and comprehensive inventory of situational variables were needed for an ideal result, it was decided to choose a focus group because a focus group has the ability to provide much more information in comparison with other methodology by engaging more participants in discussions.

In Project 3, these situational factors were quantified to establish which ones are the strongest in the purchase and consumption environment by using a questionnaire and finally they are compared by brand as another situational factor to establish which situational factors in addition to brand are necessary to consider in marketing campaigns.

As was mentioned previously, knowing all of the potential situational factors in a setting could also be used for consumer segmentation. Consumers could be divided in different groups based on the situational factors that they consider in their brand purchase. Low brandability situations or in a situation that companies do not have enough financial resources to invest on expensive branding activities they could consider and invest on situational variables that have some impact on consumer brand choice and are less expensive to obtain.

2.522Learning history:

Learning history is about previous experiences in similar situations. These previous experiences allow consumers to expect potential outcomes of a situation based on past experiences. In long term the accumulation of these experiences shapes learning history for expecting particular outcomes (Foxall 2010). Involvement, similar to learning history, is the result of long-term interest and concern about the outcomes of a purchase, concerns about to what extent a purchase could fulfil what was expected from that purchase. In the long term, these experiences develop involvement.

Consumers could be involved with brand in two different ways; informational and functional. Functional brand involvement is more about brand functional benefits or is attitude-based while informational brand involvement is non-attitude based and is more about the symbolic benefits that a brand could provide. Consumers expect two outcomes from brand comparable to consequences that shapes learning history. In this theses involvement and learning history have been considered equivalent and an involvement questionnaire has been used for quantifying learning history.

Three different types of involvement are chosen to thoroughly cover different aspects of consumer involvement. The combination of consumers' functional/informational involvement and product involvement are considered as learning history. These variables have been quantified by involvement questionnaires and the results have been used for finding proper brand image in each of the two product categories and determining potential relations between involvement variables and situational variables.

For instance, product involvement or functional/informational involvement to brand could be related positively or negatively to one of the situational variables, for instance informational involvement to brand could lead to high brandability or functional brand involvement could increase the importance of point of sale advertisement. Different types and level of involvement as a display of learning history could have an impact on which one of the situational variables could become the discriminative stimuli.

Involvement could be used for consumer segmentation and marketers and brand managers could focus more on segments that are more reachable for them based on their resources. Companies that do not have enough financial resources for thorough branding activities could concentrate more on segments of the consumers that consider other situational variables that are easier to reach, such as seller recommendation or periodical promotions.

In other words, brand informational/functional involvement and product involvement are independent variables, and the dependent variables are brand and other situational variables. What is important to know about the relation between

dependent and independent variables is how independent variables (involvement) could indicate which situational variable is the most considered by customers.

Hypothesis five: The impact of brand and situational variables on consumer behaviour varies based on their different levels and types of involvement to product and brand.

And the question would be:

What is the impact of involvement in considering different situational variables by consumer in their brand choice?

2.523 Determining and quantifying variables:

For exploring variables, that construct consumer side of brand different qualitative and quantitative methodologies were used. For the first project, it was decided to employ interview as methodology considering that interview is the best way to gain insight about a topic in the early phase of research. The interviews were semi-structured to allow interviewees to participate fully. One of the important objectives of employing interview as methodology, besides gathering data about the main variables of consumer side of brand, was becoming familiar with terminologies that are used by interviewees to express their ideas.

Following interviews, in project two focus group was used to explore and find out all of the potential situational variables and also to evaluate the results of interviews as triangulation strategy. Although the main objective of project two was not investigating variables of consumer side of brand but because questions concerning setting were to some extent in harmony with questions about consumer side of brand, it was possible to evaluate the results of interview in this part of the research at the same time without facing the limitations of interviews.

For a reliable comparison of situational variables' strength including brand and for quantifying them in order to put a figure on their strength, questionnaire as methodology was used. For quantifying brandability and the level of functional or informational expected reinforcement from brand, it was decided to use involvement. Involvement definition is approximately indistinguishable from learning history and has well-established questionnaires, which could measure involvement to brand and

product. Involvement to brand could be considered as the same as brandability considering its definition. Another feature of involvement is the capacity of involvement to differentiate and quantify two types of involvement that are identical with two expected brand image from brand by customers that is informational and functional brand image.

Chapter 3: Methodology and data analysis

3.1 Project One

This section is about finding and exploring the consumer side of brand in skincare and Over the Counter (OTC) products in Iran.

The annual market value of skincare in Iran is around $1.2 to $2 billion per year based on different sources with 8% growth per year. Iran has the highest level of consumption of skincare in the Middle East, it is seventh in the world, and an average of 10% to 15% of family income is spent on skincare products (Samadi 2010). Many reasons have been provided for such a high increase of consumption of these products. Iran is a very young country, more than 50% of the population is below 30 years old and the influence of media through different channels such as the internet and satellite on young generations is the most important reason provided for the boom in high consumption. Beside the mentioned causes, the rise in disposable income also has contributed to the increase of consumption in recent years.

Awareness of OTC products has risen constantly as the result of the competition among domestic and international producers, especially in new categories such as vitamins and dietary products. Other categories like cough and cold remedies, digestive remedies, wound treatments and sleeping products also experienced a rise in consumption to this awareness too.

Because of the rules and regulations by the ministry of Health, the distribution of OTC products is mainly limited to pharmacies. There are no chain pharmacies in Iran like western countries. More than 8,000 private pharmacies provide skincare and OTC products and they are highly regulated by the ministry of health.

3.11 Research objectives

The main objective of this part of the research is exploring the three following variables of consumer side of brand according to the following hypotheses:

The first variable of consumer side of brand that has to be determined and explored is how customers view the relationship between product and brand in the two groups of products under consideration. As has been explained in the literature review,

knowing the nature of this relationship has serious implications for branding and brand management.

Hypothesis one: The relation between product and brand has been considered differently in different product categories by consumers, either as one entity or as two separate very separate elements.

Secondly; it is important to know how much customers consider brand in their brand choice; in other words, to understand the level of brandability of these products

Hypothesis two: In different groups of products, brand as a potential situational variable has a different levels of strength as stimuli in purchase and consumption environment.

Thirdly, as has already been mentioned, brand could generate two main benefits or reinforcements, informational and utilitarian. These two reinforcements have been thoroughly discussed in the literature review. The question is, which one is expected by customers? This expectation comes from some product attributes. It is anticipated that in publicly visible products the consumer's expectation from brand is more informational and symbolic. In BPM terms, the customer expects to receive informational reinforcements for his or her brand choice. On the other hand, it is anticipated that in products where the customer is very sensitive to quality, utilitarian benefits are anticipated to be expected benefits from brand. This information is significant for marketing a particular product, because it will help marketers to generate the proper brand image compatible with customers' expectations and product attributes.

These two reinforcements have been accurately defined in the literature review, but practical ways of precisely distinguishing between these two variables is needed. In the following paragraphs some methods have been introduced to differentiate between these two categories, which will be used in analysing and interpreting data.

Attribute-based brand image, or functional brand image, based on a products' characteristics as differentiators from other brands, is utilitarian. According to our definition, customers who expect this kind of function from a brand actually expect

functional reinforcement. Non-attribute-based differentiation, on the other hand, is considered to be symbolic reinforcement.

Another indicator for distinguishing between these two reinforcements is the particular time that a brand is used during the purchase and consumption process. Functional brand image is usually utilised before and during purchase, as an indicator of quality and assurance of a promised level of quality, while symbolic brand image is not only used before and during purchase, but also after purchase and during the consumption of the product to display publicly the status of the owner and other symbolic effects. The main benefits of symbolic brand image are gained after purchase.

Hypothesis four: One of the two brand images (functional or symbolic) is expected to be the dominant brand image by customers in different groups of products.

3.12 Research methodology: Interviews

In early phases of a research, interviews are the most appropriate technique for gaining a deep understanding about the different aspects of the research (Rugg and Petre 2007). The freedom of choosing different types of questions and formats enables the interviewer to explore a diverse topic area more thoroughly and in greater detail. The advantages and disadvantages of the interview process have been summarised by Rugg and Petre (2007): “This can give you some useful insights into what is out there, and also into what it appears not to be out there. It can also help with identifying important bits of terminology or etiquette. What it can't do is give you either numbers you can trust, or cross validation on the qualitative features that crop up - for these, you will need to use some other techniques”.

At this stage of the research three different concepts need to be explored in depth in order to adequately cover the consumer side of brand. These three concepts, brandability, brand's expectation and the relationship between brand and product, have clear definitions in academic articles, but what is important is to determine in the first place how interviewees communicate their understanding of these concepts, In other words, what kind of terminologies and expressions are used by them when explaining and talking about these concepts. This is particularly important for this research because the data comes from a different language and, more importantly, a different culture, altogether separate from the English-language academic literature that has

discussed these variables. These factors mean that utilising interviews not only generates insight about the topics in question but also, at the same time, helps to determine how these ideas are expressed and explained.

An interview creates a unique opportunity for a thorough investigation of interviewees' perspectives by allowing them to communicate their ideas using their own style and mode of expression, in their everyday conversational vocabulary. This not only uncovers some new ideas and understanding about the subject matter but also shows how people convey their ideas, which can make the interviewer more familiar with terminologies that have been employed for explaining their points of view. This is absolutely necessary for a clear and mutual communication and understanding.

The semi-structured interview gives important insight into the interviewee's point of view by using open questions to allow the interviewee to participate fully, honestly and actively in the interview. In the semi-structured interview, much other information is captured indirectly too. This can help the interviewer identify reasons behind his opinions. Asking questions will always help with this process, the answers to such questions giving an indication as to how and why the interviewee considers something to be a reinforcement in the relationship between brand and product (Sekaran 2003).

The semi-structured interview is fully adaptable and can follow and trace the interviewee's point of view. Every individual can add new aspects to a piece of research; the interview process has the capability to capture this information, and to probe into any new factors which have been introduced by interviewees. The main advantage of the semi-structured interview for the purposes of this research is the flexibility of this method which allows the interviewer to adapt to the flow of the conversation by adjusting questions during the interview. This characteristic allows the interviewer to explore previously unknown areas and reveals new and potentially unidentified factors (Sekaran 2003).

To gather as much data as possible, it is necessary to allow the interviewee to express his thoughts and ideas freely in order to extract views and opinions. Other methodologies, such as structured interviews and questionnaires, may constrain the choice of the interviewee and in some cases give direction to the interviewee. However,

the semi-structured interview, although involving fairly close observation, is mainly under the control of the interviewee. The main disadvantage of focus groups is the impact of the participants upon each other. If one of the participants uses a strong argument for his or her ideas, for instance, then others may have a tendency to go along with this and prove more reluctant to explain their own ideas.

3.121 Conducting the interviews

For gathering the necessary data, a series of questions have been developed (Appendix 1), based on relevant literature and preliminary research. In addition, some extra questions have been included to ensure, as far as possible, that the entire topic has been adequately covered (Rugg and Petre 2007, Ritchie Lewis 2004). Many of these questions were used to keep the interviews moving in the right direction. It was important to refrain from interrupting the interviewee by asking questions if the flow of the interview seemed to be going well. This strategy, on the one hand, is very useful for finding new ideas; on the other hand, it makes the analysis and coding of the results very complicated (Ritchie Lewis 2004, Sekaran 2003). The interviews were structured to achieve some balance between asking questions and letting the interview go by itself, especially after pilot interviews had been conducted and analysed.

In general, questions were divided into two main groupings: general questions directly related to the topics, and more probing questions, seeking clarification in an effort to obtain data supplementary to the answers given to the more general questions. Interviewees were asked to answer questions for OTC and skincare products separately to prevent confusion in analysing the data.

In several cases, there was no need for many of the questions. The following criteria were used in developing the questions: the questions must be easily understandable in order to increase the contribution of the interviewee and to extract more in-depth detail concerning ideas and opinions. The questions must be distinct from each other and must not lead the interviewee to a particular answer (Rugg and Petre 2007).

The first question was: could you please mention some brand names in different categories of products? This question could be used as a ‘warm-up’ question and the

answers could assist in finding some information about the interviewee in order to use in the rest of the interview.

The second set of questions was: how do you define them and why do you remember them? The interpretation of these questions could show which aspect of each particular brand is more important for the interviewee. The interviewee's perception about different brands could show what kind of image (symbolism or functionality) has been communicated by these brands to their customers, and, by analysis, the relationship between the brand image and products' category could be established. Another important outcome of these questions is that the interviewer becomes familiar with the terminologies that are used by interviewees, which is crucial for interpreting the answers of the following questions and also for interpreting the results of focus groups in project two.

This information could be verified again by asking these questions: which brand name do you trust more in terms of quality, and which one would you choose just because of your feeling about the brand's image, without comparing its price and quality with competitors?

The next questions were: do you think that your mentioned brand name guarantees something about the products? If so, what does it guarantee? These questions will reveal the interviewee's expectations about different brands and will show whether their expectations in different groups of products are the same, or if they vary according to the products' category.

The next questions were: would you please tell us some of the products that you buy by paying attention to the brand name? Are you prepared to pay more money and spend more time to find special brands, and which products do you buy without paying attention to the brands at all? How do you justify the compromises of time, money and quality? After these warm-up questions, which familiarise the interviewee with the research topic, questions were asked specifically about OTC and skincare products. The interviewee was asked to clarify how important brand name was for her or him in this category of products, and why. This would be followed by other questions, based on the flow of the interview.

These questions were provided to give guidelines to the whole process of the interview but, on many occasions, these questions were answered by the interviewee without the interviewer's interruption. In a semi-structured interview it is better to keep the comments of the interviewer to a minimum, allowing the interviewee to speak freely in order to extract more information and perhaps even some pertinent observations regarding the topic under consideration (Ritchie Lewis 2004, Rugg and Petre 2007, Sekaran 2003). It is felt that the interruptions by the interviewer could potentially give some kind of direction to the interviewee, and therefore mislead him or her. Therefore, the interviewer has to minimise his influence and seek to adjust the questions based on the flow of the interview.

Analysis of the first interviews illustrated that, for clear results that could unambiguously coded, it was necessary to ask more probing questions after the general questions, such as "what do you exactly mean by that?" and "would you please elaborate on that?" Perhaps the most appropriate means of generating the best response and conclusion would be to say something along the lines of "May I summarise your idea as this...?" Sometimes this seemed an imposition, but when put to the interviewees in this manner it generally led to excellent results that are relatively easy to identify and code. In general, the questions gradually moved towards more probing questions based on the analysis of the previous interviews.

After the pilot interviews it was discovered that there was a need for a more complete introduction about what exactly OTC products are. Many of the interviewees seemed to be a bit confused about the exact nature of OTC products and kept asking during the interview for more clarification. Accordingly, it was decided to make the introduction very comprehensive and to explain as clearly as possible what OTC products are in subsequent interviews.

Sample size in qualitative research is always a source of debate among scholars and there are many different guidelines about this matter. The concept of "saturation" is most referred to for determining proper samples size. In other words, researchers limit their sample when they reach to a point that they could not observe new data. However, "saturation" is not a very clear notion to be used for determining sample size. Creswell (2002) recommends that at least to 15-20 interviews are required to reach reliably to

saturation for a grounded theory study. Guest, Bunce, Johnson (2006) by considering sixty interviews, find out that saturation occurred in the first 12 interviews. In this thesis saturation occurred after 23 interviews (18 complete and 5 incomplete) which was definitely in the range of acceptable number of samples before reaching saturation. Although the study is mainly, exploratory which convenience sample size is acceptable (Sekaran 2003) was decided to have a probability sample and have interviewees from different age, education and income level.

After 18 complete interviews and five incomplete interviews (for different reasons explained in limitation section), it seemed that the results of the data had reached some level of saturation, and analysis showed that the previous results were repeated with very little change to the findings. Therefore, it was decided to stop the interviews here. The sampling strategy for finding suitable candidates for interview required selecting women of different ages, levels of income and education who were actively responsible for the purchase of these products.

Table 2 Participant information

Age	20-30	30-40	40-50	Unknown
	7	**5**	**3**	**3**
Education	High school	Undergrad	PhD Student	Unknown
	7	**4**	**5**	**2**
Income level	Below average	Average	Higher than average	Unknown
	2	**9**	**4**	**3**

3.122 Analysis strategy

For analysing the data, it was decided to follow the main pattern of analysing qualitative data: that is, identifying, coding and categorising data in pre-set categories and also new categories that could potentially emerge during the analysis of the interviews (Ritchie Lewis 2004, Sekaran 2003). Importantly, the sequence of these three steps was changed during the process of analysing of the interviews. In analysing the later interviews these three steps just happened at the same time.

In the beginning of the analysis some clear criteria were defined for classification of the data in the four mentioned categories. These criteria were based on literature and an appropriate definition of each variable.

Any comments or quotes in the interviewees' brand choice argument that reflected the importance of brand *per se*, in comparison to other variables (especially price), was categorised in the brandability category. Comments that could be considered as being related to brandability could be indentified in the answers of all questions. This variable was very easy to identify, code and categorise.

To identify data about the source of brand equity or brand expectations in these two groups of products, different criteria were used. It was particularly important to understand how these ideas would be conveyed by interviewees. For this specific reason, the answers to the following questions were largely used: how they define a brand, or why they remember a particular brand. The expressions with which these questions were answered were used as clues in understanding how interviewees express their opinions regarding functional or informational.

l brand expectations. It is absolutely crucial for the interviewer to be familiar with these expressions to obtain an accurate understanding of what the interviewees were trying to convey.

The first and more general criteria used for differentiating the sources of consumer brand equity was that, if an attitude-based matter was mentioned by the interviewee, then the quote was definitely categorised as a functional brand expectation. For example, quotes like "this brand of product is very famous for its complete range of colours", "this brand has maintained its quality over all of its products" or "this brand has never compromised its quality" would all be categorised as functional brand expectations. If brands were remembered or defined by non-attributive ideas they have been categorised as emotional brand expectations. This might include, for example, "this brand is used by high class people" or "this is a brand that as far as I know is consumed by posh people."

Other indications used to classify comments related to consumer brand expectation, and expressions differentiating the two kinds of brand expectation from each other were noticed during the interview analysis stage. Quotes such as "I do not

think that I will be judged by others for my brand choice in these two groups of products", or "I do not care and it is not important for me to know who buys which brand" are considered as clear signs of functional brand associations. Quotes like "I know what kind of people buys this brand", or "buying and consuming some brands is very embarrassing and even if I receive them as a gift I do not want others to know about that", are clear indications of the customer's emotional association to brand, in other words the non-attribute-based brand equity.

As a general rule for distinguishing these two brand associations, it could be argued that if a brand is used by consumers solely for brand choice, and they do not expect any benefits from the brand during consumption. They mainly expect the brand to serve a functional role; however, if they still anticipate using the brand as an item to communicate something to others, it could be argued that there is some symbolic expectation from the brand also.

Understanding how interviewees consider the relationship between product and brand, either as one entity or as two separate entities that have their own characteristics, was complicated. Special criteria to determine this had to be developed. For instance, if the interviewee knows many brands in these two categories of products, this shows that product and brand are separate phenomena in her or his mind. Other clues that gradually became apparent during the interviews, including diverse aspects of quality of different products of the same brand.

After the transcription of each interview was finished, the analysis began, based on the criteria described above. In the analysis of the first interviews, the three stages of identifying, coding and categorising were done separately, with great confusion over the actual meaning of quotes and statements. However, by gradually becoming more familiar with the terminologies and expressions used by interviewees, the actual meaning of many phrases and sentences became easier to comprehend and subsequently to code and categorise. Considering that the interviews were semi-structured and that in some cases the flow of the interviews was not entirely under the control of the interviewer, the identifying part became very complicated because data about a given topic could be found in different parts of the interview, sometimes in answers to apparently irrelevant questions.

The first plan was to categorise all the data into the four pre-set groups consists of firstly quotes related to brandability level of these products, secondly ideas about functional brand expectations, thirdly quotes about informational brand expectations and fourth quotes related to the interviewees' perception about the relation between product and brand. However, it was discovered that the brandability category and the brand equity source categories have a substantial overlap, as many quotes about the importance of brand in consumer brand choice included reasons that were related to brand equity sources. In addition, two distinct subcategories emerged in the brandability category; firstly, statements about the risk involved in choosing the wrong brand and, secondly, statements in which interviewees maintained that brand is so important for them that they do not care about price at all. These two variables were the most common indicators of the importance of brand or brandability. The reasons provided by the interviewees as to why the wrong brand is high risk, or why they pay a premium price for a special brand, fell into the brand equity categories. As described above, in some cases it was very difficult to differentiate the statements from each other completely. However, the meaning behind the statements could often be understood from the whole context. It was, therefore, possible to classify it accordingly.

Finally, based on the results of all the interviews, the data was categorised into two groups with some separate subcategories for each group of products (OTC and skincare). The interviewees were asked to answer each question for the groups of products separately in order to simplify the categorisation of data in the two main groups of products**.** The first category is brandability, consisting of all the ideas that reflect the importance of brand. This category has been divided into three subcategories: the first subcategory contains quotes that directly concern the importance of brand in these two types of products, the second subcategory contains statements that argue that brand is important for its functional benefits, and the third subcategory contains quotes that take brand to be important because of its symbolic role.

The second group contained the data that showed consumer perception concerning the relationship of product and brand, which includes some interpretation of the thinking of the interviewees about this concept but does not include direct quotes. Every interviewee’s quotes about brandability and brand equity sources were

categorised separately for each product, in both categories and subcategories respectively, and the interviews were evaluated and analysed accordingly. It was also apparent that an idea on a topic was mentioned indirectly, in which case it was necessary to look at the context to understand the specific meaning behind a particular explanation.

After finishing the analysis of all the interviews, in order to measure the inter-observer reliability of the analysis (whether or not different observers or interviewers reach the same results of the same transcript), it was decided to ask a third party to verify the results. Unfortunately, there were no experts available in the field that were familiar with Farsi. For this reason, it was decided to train another person.

The results of the third-party analysis showed that the two opinions about the three steps of analysis were the same. There were, however, disagreements over the interpretation of certain sections of the interviews. A number of the differences in interpretation (coding and categorising) of the data were solved by discussion, and the parts on which agreement was not reached were omitted from the analysis. These concerned conclusions arising from the whole context of some parts of the interviews. This was particularly significant because several of the interviewees did not allow their interviews to be recorded and, instead, shorthand had to be used; in the process of analysis, it seems that what could be understood from the shorthand and the recordings could be interpreted differently.

Considering that the majority of interviews were recorded and a very few were short handed, the quotes that were not clear, or if there was disagreement on how to code and classify them they were deleted, to a prevent the results from bias.

During analysis of the interviews it was established that, in both groups of products. but especially in OTC products, brands are remembered and explained mainly by their functional features. It could be interpreted from this that consumers expect a functional role or attribute base from a brand, but in the case of skincare products some level of symbolism was also mentioned. The results are discussed in the next section.

3.123 Results of the Project One

Qualitative analysis of the results of interviews undertaken concerning the target products of this research exercise, namely OTC and skincare products, are as follows:

Generally OTC products are categorised totally differently from skincare products, and accordingly interviewees perceive relatively different functions for brands in these two groups. It was mentioned by participants that the OTC brand could not be seen by others and generally nobody asks or is interested to know the brand names of OTC products used by others, while skincare brand names could be seen and were always a matter of discussion: “everyone can see what I bought“, in the words of one participant. This issue is one of the main differences between these two categories of products mentioned by participants. Another major difference between these two products mentioned by participants involved the risk of choosing the wrong brand in these groups of products. A perception exists that OTC products are highly regulated and even brands with low reputation could not harm customers, although maybe they are not as useful. This issue was stated in quotes such as: "No risks involved in OTC products, they are mainly under control"; " I am sure about the average of the quality, I think there is some level of control on these products". On the other hand, participants believe that in skincare products, there is a high risk of damage from choosing a wrong brand. Many quotes could be directly categorised in these two symbolic and functional approaches to consumer brand expectation.

The results indicate that although there is a perception of a particular level of guaranteed quality in OTC products, participants still prefers to choose their brand carefully. In answering the question “How do you justify the time and money that you spent in your brand choice?” typical answers included:

“There are many low quality brands out there, you have to be careful, do not trust shopkeepers and sellers, I choose my brand by myself with great attention.”

“I am doing a lot of research online and by asking family and friends before choosing a brand.”

“I just buy expensive brands, to some extent you could be sure that they have a good quality.”

These responses indicate a high level of brandability in these two groups of products.

In the case of skincare products, the main priority of the majority of interviewees was quality, and they do believe that famous brands possess the quality they desire and will not damage their skin. However, the symbolic features of a brand were also a matter of concern for them in this group of products. The importance of the symbolic aspects of brand in skincare products was illustrated in statements like:

“Some brands are used by more prominent people.”

“Some brands are showing the status of you, there is no doubt about that.”

“Everyone can see it, therefore you have to be careful in your brand choice.”

“There are brands that when I possess them I feel better about myself because the way that others consider me.”

“Sometimes I really want to inform others about my skincare brand.”

“Possessing unique brands in some categories of products including skincare shows other who you are”

“Your skincare brand tells others how much you care about yourself."

“By buying a famous brand others will know that you are not cheap.”

“For some ladies their skincare brand name is a matter of prestige for them, but not for me, but I care about my skincare brand name, I do not want to look cheap.”

Several participants also evinced concerns about the product quality:

“In skincare products quality could not be compromised because of its devastating consequences.”

“I am very worried about the quality of my skincare, the only clue that I trust is brand with good reputation, and they have to be expensive.”

“One of the products that I do not care at all about the price and just go for a good brand is skincare, because I really want to be sure about the quality of the products.”

With OTC products, the main concern was the quality of these products and accordingly the functional aspect of brand was very important for participants. The

participants mainly claimed that they do not compromise on the quality of these products and they rely highly on brand as a guarantee of quality. On the other hand, they do not expect any symbolic benefit to feature in this category:

"Not compromising my health, I just go for good brands."

"I am not considering money as an issue during my OTC brand choice."

In summary, it could be claimed that these two groups of products are highly brandable and that brand name does convey some benefits to customers. In skincare products the functionality of brand, or guarantee of quality, is the main concern and that after that, the symbolism of the brand is also important for consumers. It could be argued that this brand choice should be placed in the accomplishment category. In contrast, for OTC products the main expected reinforcement from the brand is a reliable guarantee of quality, or a functional role for the brand; accordingly, this brand choice could be categorised in the hedonism category of consumer behaviour. The results also indicate that brandability is of higher importance for skincare products than for OTC products. This leads to the conclusion that, similarly, the functional and symbolic aspects of brand expectations are also higher for skincare products than for OTC products.

3.13 Discussion

In the following, the hypotheses and questions that were proposed in the conceptual framework have been discussed and their implications have been explained:

Hypothesis two: In different groups of products, brand as a potential situational variable has a different levels of strength as stimuli in purchase and consumption environment.

What is the level of brandability of these two groups of products? How different is the level of brandability in these two groups of product?

The results clearly demonstrate that the two groups of products are highly brandable and it is reasonable to invest financial resources on branding of these products that is brand is highly powerful and is the most important stimuli in purchase and consumption environment. Level of brandability is the most important variable of

consumer side of brand. Low level of brandability means the marketer has to focus on other stimuli and not waste their financial resources on branding activities.

Although brandability is high in these products still, there are other potential stimuli in purchase and consumption with different levels of impact on consumer choice. The higher level of brandability in skincare products shows that these stimuli are less important in skincare products than OTC products, that is, for OTC products, marketers have to be more aware of them and their potential strength in comparison with brand, this issue is less important in skincare products.

Hypothesis four: One of the two brand images (functional or symbolic) is expected to be the dominant brand image by customers in different groups of products.

What is the expected brand image by customers in these two groups of products? Do customers expect the same brand's benefits and consequently brand image for these two groups of products?

The results of this part of the research show that brand image for OTC products has to be definitely functional or attitude based. While in skincare, although the brand image has to be dominantly functional, customers expect to receive some informational benefits from brand to which this issue differentiates these two groups of products from each other.

Hypothesis one: The relation between product and brand has been considered differently in different product categories by consumers, either as one entity or as two separate very separate elements.

How the relation between product and brand has been understood in these two groups of products?

The results indicate that participants clearly distinguish product and brand from each other as two separate entities in their mind and associate different benefits to brand separate from products.

Based on the results so far by considering that the brandability level is different in these groups of products and also the expected brand image is not completely the same, is reasonable to generate two different brand images for these groups of products based

on expected brand image and level of brandability. In OTC products, other situational variables beside brand image also have to be considered with high importance

3.14 Limitations of interview as methodology

1 - Limitations in the quality of data

The complexity of correctly interpreting the dialogue with the interviewees is the main weakness of the interview methodology. In this exercise, a third, non-biased individual was used for verifying the results, but there is still a chance that the outcome of the analysis could be biased or (to some extent) subjective.

A further problem encountered in this research was the sometimes inconsistent answers given by interviewees. In some cases, different attitudes have been expressed by an interviewee about a group of products, and asking for clarification somehow generated more confusion. This issue made analysis of the interviews very complicated.

2 - The practical limitations of interviews:

(i) *Very time consuming*

One of the issues that must be discussed is the number of interviews that could realistically be conducted and analysed. Roughly 35-55 minutes was needed for each interview, more than two hours was required for transcription, and at least two to four hours were needed to analyse it, i.e. approximately five to seven hours for every interview. Time is therefore a significant limiting factor.

(ii) *Cultural barriers*

In some cases, it seemed that interviewees did not actually express what they genuinely felt and believed, especially the ones who were known to the interviewer. There appeared to be some elements of "showing off" in their answers. They tried to look sophisticated and sometimes pretended to be very careless about money. Another reason that seemed to prevent the interviewees from expressing their ideas fully was their willingness to please the interviewer by all possible means, and consequently answering the questions based on what they perceived the interviewer's expectations to be.

The concept of interviews is not very common in Iran and, to some extent, the interviewees were confused and suspicious about what was happening. In many cases

their main concern was anonymity, even amongst friends and family. Although they were thoroughly informed about the purpose of the interview, many of them seemed suspicious and in some cases, in the middle of the interview asked the interviewer to stop the interview for different reasons. This issue had some effect on the interviewees and made them conservative and cautious in their answers. Interestingly, when they were informed in advance that the identity of the interviewees would remain anonymous, it caused some kind of panic, and interviewees became more concerned about what was happening. These issues were more noticeable with older people.

Another problem that was experienced during the interviews was that some of the interviewees, for various reasons, did not want to be recorded. In these circumstances, the only option was to simply note down the main points and significant quotes. This made analysis of the interviews extremely limited and subjective, as the transcript was dependent on what the interviewer considered relevant and important, thus risking the possibility of losing significant points.

3.2 Project two

3.21 Research objectives

The main aim of this part of the research is twofold. Firstly, the relation between environment and consumer brand choice will be investigated, in order to find out what elements of environment and situations could influence consumer brand choice. The objective of this part of the research is finding “those aspects of the environment that affect consumer behaviour” based on Srivasta's argument (1981): “The key point is that in the creation of situational taxonomies, we are interested in those aspects of the environment that affect consumer behaviour. Although the total number of situations that persons encounter is enormous, and each situation is unique and the likelihood of exact replication is exceedingly small, it is undoubtedly also true that people do not behave differently under all such changed circumstances”.

“All those factors” mentioned by Srivasta (1981) could exist either in a purchase or consumption environment. These factors are also competing with brand image as another situational factor for influencing consumer brand choice or, in other words, acting as a

situational stimulus. Therefore, the most important objective of this project is to thoroughly investigate potential situational variables related to consumer brand choice.

Hypothesis three: In any purchase and consumption environment, there are other situational variables with the capability to compete with brand to become the discriminative stimuli.

Secondly, a new methodology for evaluating the findings of interviews in the first part of data collection will be used as a triangulation strategy, hopefully overcoming some limitations inherent in the interview methodology and, moreover, specific limitations of the interviews conducted for this research.

Hypothesis two: In different groups of products, brand as a potential situational variable has a different levels of strength as stimuli in purchase and consumption environment.

Hypothesis four: One of the two brand images (functional or symbolic) is expected to be the dominant brand image by customers in different groups of products.

3.22 Methodology

Accordingly, it was decided to generate an inventory of potential situational factors, following Belk's approach to situational research. The main weakness of this method, as noted by Wicker, is that this inventory could not comprehensively cover all potential situational factors. To compensate for this flaw as much as possible, a methodology is needed that can collect as many situational factors as possible. Therefore it was decided to use focus groups, which have the ability to generate many more ideas, by engaging more participants in a discussion about a topic.

Besides this, the focus groups were used for improving the validity and reliability of the interviews and verification of their outcomes. It was decided to re-examine the results, using focus groups as a triangulation method (that is to say, using a combination of methods to generate data on the same topic). Although the main objective of this part of the research concerns setting and situational variables, as the questions about setting were in harmony with the questions about the consumer side of brands which were investigated in the interviews, it was possible to use the same groups for validation of the interview results. Focus groups have been chosen for this part of data-gathering

mainly because this methodology has the capacity to generate more data than interviews. This method cannot be as detailed and deep as interviews; however, considering that the main objective of this part of the research is to find, as many situational variables as possible, focus groups, because they have more participants than interviews and generate interaction among participants, could be more practical in obtaining the appropriate information.

In this exercise, it is not only important to find the maximum number of situational factors but also to evaluate their significance in influencing consumer brand choice. The focus group approach generates interaction among participants such that the importance of each idea mentioned could be better understood by considering the participants' discussions about the situational factors highlighted in the exercise.

In order to overcome some of the limitations of interviews, especially the cultural limitations, it was decided to use online focus groups. Besides the practical advantages (there was no need for transcription, and no difficulty of managing time and place for all of the participants), as participants did not know and see each other they were much more honest and felt under less pressure of being judged. Therefore, their answers could be considered more reliable. It could be also argued that even though the participants did not see each other, they reflected each other's ideas without hesitation. Of the five focus groups conducted in this research, just one of them involved the physical presence of participants and four others were online.

There are different opinions about how many participants should be in each focus group. Numbers vary among researches from four people per group (Kitzinger 1995), five per group (Sampson 1972) up to fifteen (Goss & Leinbach 1996). There is not a ground rule about the number of participants in each focus group and it is mainly dependant on the researchers and the type of data that is intended to be gathered. In this research considering that the focus group was online, it was difficult to manage the flow of the discussion with more than five participants.

Scholars have different ideas about how many focus groups have to be conducted to reach a reliable saturation. Morgan (1997) argues that in general it is possible to reach saturation with 3 to 5 focus group, while Kuzel (1992) recommends six to eight. In this thesis after five focus groups author was convinced that more focus groups would not produce

new data and the study had reached a good level of saturation, especially as no new situational variables were introduced by participants.

The convenience sampling was applied first because as explanatory research convenience sampling is acceptable (Sekaran 2003). Secondly it was very difficult to find older people knowledgeable enough to use computers and chat online and keep up with others during discussion, the participants were in general more educated and younger from the participants of interviews. Stewart (2007) argues that although convenience sampling is the most common method for focus groups and considering that generally, focus group results are not considered to be generalized, still some characteristics of the target group have to be considered. Although it was very difficult to have participants from different age, education level and income, participants were women who were responsible for the purchase of these products.

Five focus groups with five participants were conducted to find as many situational variables as possible which were related to brand choice. The analysis strategy was to consider any situational factor in the inventory, no matter how many times it had been mentioned, to make the inventory of potential situational factors as comprehensive as possible. For each focus group, more than five participants were invited, and also two close friends or family members of the author were ready to join the discussion if some of the participant did not show up. In comparison with the interviews, the average age of participants was lower, because the older candidates were not computer-savvy enough. Another important difference between focus group participants and interviewees was the education level of participants; on average, the participants of focus groups were at least undergrad or higher.

The first focus group, conducted with participants who were physically present, was the longest at about two hours. The other four online focus groups were shorter from 57 to 75 minutes. In general, the content of the first focus group had many deviations from the topic and the online focus groups stayed closer to the subject. Among online focus groups, after the discussion had been formally concluded, conversation often continued among two or more participants: this also generated good ideas and points in a relatively less formal situation.

3.221 Conducting focus groups

The questions provided for focus groups (Appendix II) were based largely on the interview questions, with the addition of basic questions about setting: “Do you have a particular brand in mind before purchase?” was followed by, if the answer was yes, ”What factors could change your mind?”, and if no “what factors do you consider for your brand choice in the purchase environment and outside the purchase environment?”. These questions tended to steer the discussion toward situational factors.

These questions could be classified into two main groups: basic questions for warming up and starting the conversation, and probing questions for encouraging different points of view and greater engagement in the discussion. As with the interviews, the main principle was to minimise any intervention in the flow of the discussion until it was strictly necessary or until a topic was saturated.

Before the start of the focus groups, OTC products were explained thoroughly in a written document (Appendix III) and the participants were encouraged to ask for further explanation if this was still not clear to them. After they were made familiar with the topic, the anonymity of the participants was emphasised, and any other queries the participants had been answered, the questions of the focus groups were asked.

1 - *Expected reinforcements from brand*

In this category, it was attempted to ascertain information about expected reinforcements from a brand, and also those reinforcements which had already been experienced. The questions were mainly the same as those in the interviews, but with many ending questions such as “May I summarise your ideas by saying ...?” or “By this do you mean ....?”, which, on the one hand, helped to clarify the ideas of some participants, and, on the other hand, helped to generate more discussion. Not all eight questions were used in every focus group; in general, the flow of conversations produced the required information without asking all the questions, helped by appropriate interventions.

2 - *Brandability*

In this category it was anticipated that participants would discuss how much they consider brand *per se* in their brand choice for these products.

3 - *Setting*

In this category, it was attempted to determine the influence of setting on customers' brand choice; what are the potential situational factors, and (as far as it can be ascertained) what is their relative importance to one another. In this study, many of the results of previous focus groups were also introduced, and the participants were asked to comment on them and evaluate them. The main question in this part ("What other clues do you use for your brand choice?") served mainly for brainstorming among participants and the other questions were used to direct the conversations and ask for evaluation by pushing different points of view into the mainstream of the conversation.

4 - *The relation between product and brand*

As in the interviews, the entire context of focus groups was used to determine the answer to this question.

The first focus group results showed that some of the questions were vague or that the understanding of the questions by the participants was very different from how they had been designed. This resulted in a major change to these questions. The experience of the next focus group (online) indicated that good interventions were even more important than good questions, serving to increase the interaction in the group discussion and to guide the discussion toward the proper area in relevant information can be obtained without asking direct questions. After conducting the first focus group it was understood that all five categories could be covered with approximately eleven questions.

It was decided to conduct online focus groups after completing the first one. This was in order to receive more accurate data from participants, as online focus groups, especially when the participants do not know each other, create an environment in which participants could express their ideas without being worried about other people's perception of their views.

3.222 Analysis strategy

Five focus groups were conducted with five participants each. In order to analyse the data, a continuum from a merely qualitative approach to a merely quantitative approach was used (Silverman 2004, Sekaran 2003).

In the first approach, each quote or idea of the participants was considered, without paying attention to the number of times these arose (Rugg and Petre 2007). These ideas were categorised using the same criteria that were employed in the interviews. Data related to the question, "What are the variables that they consider in their brand choice other than brand?", were placed in a new category for further consideration. Apart from this, the categories and criteria were the same as in the interviews.

Initially, quotes were categorised based on questions. These results were not satisfactory because, in every category based on a particular question, there was plenty of unrelated information or information relating to another question. Accordingly, it was decided to code each individual quote without considering the question that generated it. Some criteria were considered as indicators of a different category as a guide to prevent a biased interpretation, similar to the approach used in the interviews. For instance, each quote that mentioned the importance of brand was considered to relate positively to the brandability category, and statements discussing the reason why brand is important were considered as an expected reinforcement, using the same criteria as in the interviews. The identifying, coding and categorising for the online focus groups was very straightforward and much easier than for the interviews, largely because the context of discussions was clear, and participants, by following the topic, were aware of what was going on and their comments could be understood and categorised directly.

The interview experience was helpful for analysing and making sense of focus groups, as it allowed the author to become familiar with many of the expressions, which were a key factor for identifying, coding and categorising the data. The only new category was situational variables and the evaluation of their importance. By having a clear definition of what is considered a situational variable in this research, as discussed in the literature review, it was relatively uncomplicated to recognise this category; the problem was evaluating the importance of these variables and comparing them with others. However, the main task of this part of the research, to find out as much as possible about potential situational variables, was fulfilled.

3.23 Results of project two

The objectives of this part of the research are two fold, first evaluating the results of the first methodology and comparing the results as triangulation technique and secondly to determine more as situational variables with a potential impact on consumer brand choice and finding the potential relation between these variables and brand. In the following, the consumer side of brand and situational variables will be explained and then the results of this part of the research will be discussed.

Based on conceptual framework the first step in a branding activity is to find out the level of brandability. That is marketers have to know -to what extent consumers consider brand for their choice or to what extend brand influences customers' purchase behaviour.

Brand, beyond products' attributes, could deliver some benefits to customers. Consumer expected benefits from brand determine what type of brand image is more suitable for a product category. A brand could be categorised in two main categories based on its brand image. Brand with functional brand image and brand with informational brand image. Functional brand image is dominantly attitude based and links some functional characteristics to product. For generating a functional brand image, the concentration of branding activities has to be on communicating functional attributes to a product, general attributes or specific claims that differentiate a product based on the functionality of the product.

A functional brand image in a skincare product could be used to associate some functional claims to the products. For instance, functional claim such as the product is natural, the product does not cause allergy or the products is approved by dermatologists.

An informational brand image is mainly about generating a distinctive prestige for the product instead of concentrating on functionality of the products for instance by using celebrities as endorsement or generating a glamorous advertising that communicates special social or financial status for the consumer of the brand and concentrating less on functionality of the products.

Generating one dominant brand image based consumer brand expectation from brand increases the level of brandability. Generating a dominant brand image

(functional or informational) beside strengthening brandability has other advantages, for example avoiding competition with products employing other types of brand image and also creating a stable mindset about consumer understanding from brand.

Based on the mentioned arguments all of the quotes related to the importance of brand and consideration of brand more than other situational variables are considered as brandability of the products. Customers are familiar with some brands more than others for different reasons. Some brands have been in the market for a long time and generate a solid reputation for themselves and some brands have been established to the market by heavy branding activities and there are also some less famous brands in the market. When customers prefer famous brands to not famous brands it could be argued that brandability exists for that group of products, therefore any quotes that address the importance of brand for customers or in other words ideas that show the influence of brand on consumer purchase behaviour were considered as indicators of brandability in the product category.

Ideas and quotes related to the importance of functional claims of a brand, was categorised in functional brand image expectations, and ideas about the importance of brand to show their social status, financial status or in general generates any symbolic associations to the owner was categorised as informational brand expectation.

3.231 Brandability

Hypothesis two: In different groups of products, brand as a potential situational variable has a different levels of strength as stimuli in purchase and consumption environment.

The results clearly indicate that there is a high level of brandability in these two groups of products. High level of brandability justifies investment on branding endeavours considering that brand highly influences consumer behaviour. The result could not be used to discover if there is any difference between the levels of brandability in these products.

Qualitative and quantitative analysis shows that these two groups of products are highly brandable. In other words, participants' brand choice is highly influenced by brand. Participants repeatedly gave statements about brandability, and many reasons were provided as to why brand is so important in their brand choice:

“For me, brand is always an indicator of quality.”

“I would not trust a product with an unknown name.”

“Unknown brands are never in my list.”

“If the product has to do something with my skin, I would not gamble on it”

In skincare and OTC products, participants were very brand oriented. They knew different brands in these groups of products, and had a very thorough knowledge of the relative quality and characteristics of different brands. High brandability in this group of products generates a high level of loyalty, with relatively low price sensitivity:

“With skincare I tend to stay with the brand that has worked for me over time.”

“I stick to famous brands because they guarantee quality, I do not like to take risks.”

3.232Expected reinforcements

Hypothesis four: One of the two brand images (functional or symbolic) is expected to be the dominant brand image by customers in different groups of products.

For OTC products, participants indicated that they mainly expected a functional role from brand; in other words a guarantee of quality.

In skincare products, the participants mainly expected functional benefits from brand, such as a guarantee of quality, or an assurance that the product was organic or chemical/preservative-free. However, that is, the symbolic function of brand also was important for them. In general, examined through quantitative analysis, the dominant expected benefits for brand in this group of products are functional benefits or attitude-based brand image:

“Sometimes your brand can say something about you, but it is not as important as quality.”

“In skincare products, because you carry it with you and people see it, good brands mean something, but in medicine hmm…nobody cares?”

“In makeup maybe brand has some show-off capability, but nobody can see what brand of vitamins you use so brand does not matter in that respect.”

“Nobody cares if I take Neurofen or Panadol.”

“I will buy only medicine from reliable brands.”

”With skincare, both the quality and image is important for me, with medicine it is just quality and price.”

“For myself, in skincare products level of quality and overall brand image are both important. In OTC I prefer to stick to the brands that I have known for a long time, I do not care about others’ opinion about that.”

“In skincare products social acceptance and prestige definitely comes with brand name, not the quality of the brand.”

“When people ask me what is your skincare brand name, I am proud to say .....”

“Sometimes brand can give a special meaning, but it is not true with all brands.”

“Brand .... gives a French feeling about its owner, but brand .... generates a classic feeling, which I think is suitable for older ladies, and i do not buy it.”

“I prefer people to know my brand name.”

No indication of hedonic value (as defined in the literature review) was found during the analysis of focus groups’ results, therefore it was decided to consider only informational and functional values for this research. It is possible that this benefit does not concern consumers in these two groups of products, or that it is not recognisable from informational involvement.

3.233Setting

Hypothesis three: In any purchase and consumption environment, there are other situational variables with the capability to compete with brand to become the discriminative stimuli.

In general, what could be concluded is that the higher the brandability, the lower the impact of setting on participants’ brand choice. On the other hand, the perception of

a highly regulated environment for pharmaceutical products greatly increased the influence of setting (for instance, temporal promotion or store opening hours), and consequently decreased the impact of brand on consumer brand choice. However, even the perception of a highly regulated environment for OTC products was not enough of a guarantee to apply to brand; there is a competition among famous brands, but with the potential influence of other situational variables.

In the case of skincare products, high brandability has significantly decreased the influence of setting. Participants mentioned that temporal promotions, opening hours and other environmental issues had no or little influence on their brand choice.

In general, it was found that in these two groups of products, situational variables that exist during and after purchase, have a potential influence on consumer brand choice. By the qualitative approach, eighteen different situational variables were introduced by participants of which eleven had a relatively high level of recurrence. However, it would be inaccurate to evaluate them and find out, which one is the most influential, based on the results of the focus groups alone.

The results mentioned showed that the focus groups were relatively successful and, to a large extent, gathered the anticipated information necessary to complete this part of the research. This information was be used to generate a questionnaire to quantitatively measure the aforementioned variables, and also to assess the relation of different elements of setting and consumer brand expectations.

3.3 Project three

3.31Research objectives

For a better understanding of the strength of situational variables, involvement levels and types and to discover any potential relation among them, it was decided to quantify the variables by using a questionnaire. A two-step procedure was applied to develop a reliable questionnaire; firstly, different techniques were used to translate the questionnaire, and secondly, the quality of the translation was tested in a pilot questionnaire with a limited distribution. In order to increase the accuracy of the final questionnaire in communicating the exact meaning of the first language (English), the results of the pilot questionnaire were analysed by interviewing the participants, in

order to customise and enhance both the quality of the translation and the types of questions used, in an effort to ensure suitability. This process is explained more thoroughly in the following section.

Eight questions were designed to quantify situational variables including brandability for testing the following hypothesis:

Hypothesis two: In different groups of products, brand as a potential situational variable has a different levels of strength as stimuli in purchase and consumption environment.

Hypothesis three: In any purchase and consumption environment, there are other situational variables with the capability to compete with brand to become the discriminative stimuli.

By quantifying the situational variables strength it would be possible to accurately compare the brandability in these two groups of products, compare the strength of brand with other situational variables and also find out if there is there any positive or negative correlation between brandability and consideration of other situational variables.

Six questions based on Mitall (1988) brand involvement scale have been used to measure brand informational and functional involvement (three questions each) to find out quantitatively what is the expected dominant brand benefits in these two group of products:

Hypothesis four: One of the two brand images (functional or symbolic) is expected to be the dominant brand image by customers in different groups of products.

For finding the potential impact of different types and levels of involvement on consideration of different situational variables, personal involvement inventory (PII) of Zaichkowsky (1986) has been deployed to quantify product involvement in these two groups of products. The following hypotheses could be examined by having the mentioned information:

Hypothesis five: The impact of brand and other situational variables on consumer behaviour varies based on their different levels and types of involvement to product and brand.

3.32 Generating the questionnaire

In the pilot questionnaire, five independent variables (involvement level and its types) and ten dependent variables (different situational factors) were quantified. To measure involvement, as defined in the literature review, standard questionnaires have been translated into Farsi. To measure the general level of involvement, or product involvement, Zaichkowsky's (1994) PII scale, or Personal Involvement Inventory, was chosen. For quantifying involvement to brand and product and also finding its types (functional or informational), the Mitall and Lee (1989) scale has been chosen.

3.33 Translation

In this research, the most complicated part of generating the questionnaire was the translation procedure. The back translation is the only highly accepted method for translating a standard questionnaire into other languages; however, this technique has some disadvantages and flaws, and there is always a high risk that a translated questionnaire actually measures something different from the original.

All translation methods can be categorised into four main techniques, and many sub-techniques. The first method, and the most straightforward, is one-way translation. In this method, a translator is asked to translate the original transcript into the target language and no evaluation or back-translation will be carried out. One of the main advantages of this technique is its speed; however, there is a high chance of meaning loss (McGorry 2000).

The second method of translation is back-translation or double translation. This technique is used for translating questionnaires in the area of social science. Douglas & Craig (2006) have defined back-translation as follows: "In this procedure, a bilingual native of the target country translates a questionnaire into the target language. A bilingual native speaker of the source language then translates it back into the source language. The original and back-translated versions are then compared for differences and comparability".

Several reasons have been offered by academics to suggest that back-translation *per se* could not adequately convey the exact, or near-exact, sense of the questions. In many cases, the fluency of bilingual translators prevents them from using and applying the language of monolingual people. For instance, Brislin (1970) argues that a bilingual translator could understand a "poorly written target translation" completely, but that a monolingual person might find it extremely difficult, to make adequate sense out of it.

Another weakness of back-translation comes from the literal or direct translation, that makes it possible for bilinguals to translate and back-translate the same thought without actually conveying the genuine meaning of the idea. This could occur particularly in the translation of idioms or some expressions that bilinguals are familiar with, but monolinguals are not (Douglas & Craig 2006).

To help overcome these problems, several methods have been suggested by academics in different disciplines. There is one important general principle that has to be considered in translation, which is explained by Sekaran (1983): "The equivalence of source and target version of the instrument can be ensured with good back translations by persons who are not only facile with the different languages in question but are also familiar with the cultures involved, and with the usage of the concepts and their meanings in the relevant cultures".

Accordingly, it could be argued that the main source of the problem in the translation of a questionnaire into a different language is the lack of "persons who are not only facile with the different languages in question but are also familiar with the cultures involved". It is necessary to compensate for this by using different techniques in order to reach a maximum accuracy. Berry (1992) also argues that for a successful back-translation, there is a need for translators "who are fluent in both the original language and the target language. The forward translation and back translation procedure sometimes has to be repeated by an independent team before the original version is reproduced with sufficient precision".

The third method of translation is "Translation by committee". In this technique, two or more experts in two languages will translate the text into the target language, then experts will be asked to reach a final format; it is also possible to ask a third person to perform the final comparison (McGorry 2000).

The fourth type of translation is called “decentering”, and is explained by McGorry (2000) as follows: “Werner and Campbell (1970) proposed decentering as a way to develop instruments that would be culturally appropriate when cross-cultural research is conducted. In this process, the original language instrument is not considered finalised until the entire translation process is completed. Therefore, if a translator believes that a grammatical structure must be changed to appropriately fit the cultural group under study, the original instrument should also be changed to reflect these linguistic and cultural characteristics”.

The main difference between back-translation and decentering is that in back-translation the concern is the first language, and the main feature is to come up with a text as close as possible to the first language whilst, in decentering, the focus is on seeking to generate two texts in two different languages at the same time and with exactly the same meaning. This technique is suitable for a situation where a questionnaire is produced from scratch for two new languages. In the case of this exercise, where an already established questionnaire is used, the decentering technique could not be applied.

These four forms of translation have been given different names by academics and practitioners and have been applied in different ways (perhaps it would be more accurate to say that they have been customised based on the different requirements of particular research). In this thesis, different procedures have been deployed, based on the results of each part of the translation and also based on available resources, especially individuals with the required expertise. The procedure has been explained in detail in the next section.

Harkness (2003) has suggested five steps for a trustworthy translation: “translation, review, adjudication, pretesting and documentation”. In this thesis, these steps have been largely followed, based on the outcomes of each stage. Berry (1980) argues that the principal objective of a translation is to achieve a result that could convey the same meanings to individuals with different languages and, because that was also the main objective in the process of translation for this research, relatively high levels of flexibility in wording and sentence structure were required.

3.331 Translation procedure

For as accurate result as possible, and based on available resources (time and people), it was decided to use different techniques in conjunction and pre-test the results in a pilot questionnaire. One of the techniques that has been used by academics, with a very high level of accuracy, is "parallel translation" which is a kind of back translation employing different translators at the same time. In this technique, independent translators produce more than one translation. It is recommended by Douglas & Craig (2006) that this technique should be used in conjunction with a "committee approach" to assess the translations, in order to choose the one, which is most appropriate to the main questionnaire.

According to Berry's (1980) recommendation, it was decided to use more than one translator for both translation and back-translation. Eight Iranian PhD students were available for this procedure, but the problem was that some of them were very fluent in English because they had grown up in English-speaking countries, but were not very familiar with the very exact meaning of the adjectives or sentences in the daily life of those who had grown up in Iran. On the other hand, some of them were completely familiar with Iranian words and expressions, but were not as fluent as the first group in English. Our results show that the latter group were more useful in the translation of the questionnaire.

Finally, it was decided to divide them into two groups with a mix of both of the abilities mentioned above and ask group one, independently from group two, to translate the text from English to Farsi and the second group to back-translate the first group translations, independently of the first group. The result was four different sets of questions. At this point, the author decided to choose the best portion of each translation, based on his own knowledge, and to ask the translators to judge the level of accuracy of the chosen questions.

One of the most difficult parts was the selection of meaning among the twenty adjectives of the Zaichkowsky (1994) scale (PII). In Farsi, many of these adjectives are actually synonyms and, for that reason in translation, some of them were translated to a one-Farsi adjective. The back-translation increased the confusion by doing the same. As the adjectives have very clear meanings in English, it was decided to choose the work produced by the two translators who actually were more fluent in Farsi, who knew

more about the actual meaning of these adjectives in the daily life of Iranians. As previously mentioned, the back-translation was not used in this part of translation at all.

The task of selecting the best translation for the questions was therefore made much easier. By comparing the translation and back-translation for each question, two sets of translated questions were chosen by the author from the four available translations. After that, the two groups of translators were asked to rate individually the two suggested translated sets of questions and to give an indication of how close they were to the main English questions. Four of the translators were willing to do that, three from the group more fluent in Farsi and one from the group more fluent in English.

3.3311 Committee approach

At this step, it was accepted that there is an enormous difference in what a fluent Iranian understands from the questions compared with an English fluent translator. It was therefore decided to manage a committee approach with the existence of the two groups for more discussion about the actual meaning of the sentences. Reaching any level of consensus among the two groups was a major challenge, particularly when considering the use of adjectives in Pll and also the questions that measured involvement in brand and product.

As has been discussed previously, the PII adjectives could be interpreted in different ways, and even when it was decided to consider solely the adjectives that could make sense in relation to the two groups of product related to this research, the matter was still difficult to resolve. Finally, a committee of four PhD students who were more available and committed to participate in all meeting were created with two students fluent in Farsi and two fluent in English to cover all aspects of translation. The committee reached some level of agreement by reducing the PII adjectives from 20 items to 12, although there was still a relatively high level of overlap between the meaning of the adjectives, and it was often difficult to understand the association of some of the chosen adjectives to the two product categories. The decision to reduce the 20 PII adjectives to 12 is based on two main criteria: first, the prevention of repetitions of adjectives with the same meaning; second, the exclusion adjectives that have no association with the two product categories studied in this research.

Further confusion ensued during the translation of questions about involvement in brand and products. The more Iranian-fluent group of translators produced translations of these questions which were very close to each other, with almost no visible distinction between the two concepts in question, e.g. involvement to product or to brand. However, those who were more fluent in English were more accurate in translating these questions, and, to some extent, it was possible to distinguish which questions were about brand and which ones were about product. The problem is that the meaning of these questions are very close to each other, even in English. In translation, this leads to a high level of uncertainty about the exact meaning of the questions. Participants in the pilot questionnaire also mentioned this issue later.

After finalising the questionnaire, it was decided to distribute the questionnaire by "SurveyGizmo" software among close friends, and ask them not only to answer the questions but also to evaluate the clarity and comprehensibility of the questions. After receiving 22 results, it was obvious that almost all the participants believed that the questions were not easy to understand, that they could be interpreted in different ways, and that there was a high level of repetition among them.

3.332 Pilot questionnaire structure

The questionnaire has three parts. The first part measures the involvement to product by 12 adjectives from PII. The second part comes from Mitall's (1998) questionnaire for measuring involvement to product and brand and distinguishing the type of this involvement (functional or informational). Finally, 10 questions in the final part of the questionnaire measure the influence of 10 situational variables on consumer brand choice. It was also decided to add 13 questions about involvement to product and brand developed by Traylor and Joseph (1984), in order to have more options for the final questionnaire and also to evaluate Mitall's questions. All questions were rated on a seven-point scale, from strongly disagree (1) to strongly disagree (7).

For the general level of involvement (one dimension) or involvement to product, as previously discussed, the 20 adjective questionnaire of PII (Zaichkowfsky 1986) was reduced to 12 adjectives. In a revision of PII Zaichkowfsky herself reduced PII from 20 items to 10 with 0.9 internal reliability (Zaichkowfsky 1994), which could be seen as somehow justifying our reduction of items. The next part of the questionnaire consists of the five questions proposed by Zaichkowfsky (1989), to evaluate the construct

validity of the main 20 items. These questions were added to check again the chosen PII items in order to ensure that they had conveyed what was originally intended.

In the next part of the questionnaire, Mittal's questionnaires (1989) have been applied to differentiate between product and brand involvement and also effective and cognitive (functional/informational) involvement. As previously discussed, the Mitall questions for measuring involvement to brand and product become very close to each other in terms of meaning after translation, and it could be argued that it was very difficult or impossible to distinguish between them. However, it was decided to add them to the questionnaire and make a decision about their inclusion after the analysis of the pilot questionnaire. At the end of the questionnaire, some questions about setting were also added (Appendix III).

3.333 Launching the pilot questionnaire

The pilot questionnaire was distributed online using "SurveyGizmo" software. Participants were asked to not only answer the questions, but also to evaluate the clarity of questions and provide an evaluation of the entire questionnaire.

22 complete evaluations were produced. The questionnaire was highly criticised for the following reasons:

Many of the participants mentioned that the questions were not clear and that they were not easy to comprehend. The structure of the sentence was weird and difficult to deal with. The compositions of sentences were not fluent. One of the participants mentioned that the structure of the questions was like an old manuscript: very hard to understand and relate to. Although the questions could convey the actual sense of the sentence, it was generally felt that this was done in a very difficult and overcomplicated way.

The second major criticism concerned the lack of any straightforward meaning. It was felt that the sentences could be interpreted in different ways, which meant that they could also be answered in different ways. This issue has been thoroughly discussed in the previous parts. For instance, "valuable-worthless" could produce several different interpretations after translation into Farsi. It could be interpreted in financial terms, or as discussing the importance of the products in everyday life. In another example, a respondent argues that the sentence "Seeing somebody else use this product tells me a

lot about that person" is very vague, and it is not made clear how a chosen brand could provide information regarding an individual's personality.

The third criticism concerned the ways in which the same questions were repeated in different formats. This made the questionnaire appear rather boring. One of the reasons for this problem is the closeness in meaning of the respective questions to each other in the first place, an issue that has been exacerbated by the process of translation. For instance, questions that measure brand and product involvement are already very close to each other, and did not become less so after translation.

The fourth problem with the questionnaire, as raised by respondents, is that it is very difficult for a participant to relate some of the questions to these two groups of products. This issue also caused some confusion among respondents seeking to answer the questions properly, because they could not understand how to quantify their experience when it was impossible to find any connection between some questions and the products under discussion. For instance, the following sentences, sentences such as "this product is me", "my favourite brand represents who I am", or "I listen closely to people's comments about this product" or word pairs such as "boring-interesting" or "unexciting-exciting", were considered completely unrelated to these products.

There were also other issues mentioned by participants that were not related directly to the translation and clarity of the questions. The most important one was the length of the questionnaire, a factor that was resolved in the final questionnaire. The second was about the definition of OTC products. Some of the participants were not sure about the exact classification of these products. In the final questionnaire, this problem was handled by explaining the product classification more thoroughly and giving some examples. The last problem concerned the reluctance of some participants in answering questions about skincare products, although they knew that the results would be analysed anonymously.

After the poor feedback regarding the translation quality, it was decided to conduct some in-depth interviews with some respondents in order to re-evaluate the quality of translations. Prior to this, in order to achieve a better understanding of the structure of the questionnaire, some qualitative analysis was conducted and, following that, the chosen questions were retranslated with the help of the in-depth interviews.

3.334 In-depth interviews:

The in-depth interview, or unstructured interview, is a qualitative method for obtaining as much detailed information as possible from a relatively small sample size. In this technique, questions are mainly open-ended, in order to allow an interviewer to freely explore the interviewee's ideas. In this technique, an interviewee could express her or his ideas without interference from others, which could be very useful for understanding how a given individual actually interprets and perceives a problem, and also for finding out about their evaluation criteria.

The in-depth interview has been used by Douglas and Nijssen (2003) for this same reason. By using in-depth interviews and employing their findings, they modified an existing questionnaire and obtained a much better and more justifiable result. In their interviews, they found out that there were some cultural and practical issues that had been neglected in the translation of their questionnaire, such as the non-existence of domestic brands in some product categories, which made the following statement very irrelevant: "It is not right to buy foreign products".

The most important part of the interview was the introduction, in which the research objectives were explained thoroughly, but in a very simple way, by using the expressions and words that were obtained during focus groups and interviews. This introduction was very necessary for the interview in order to generate a mutual understanding and make sure that all parties knew exactly what they were talking about. This part was relatively time-consuming, and often resulted in some questions before the interviewee reached some level of clarity and understanding about the research. This process was repeated for each section of the questionnaire. Although it was very time-consuming, it significantly enhanced the interviewee's understanding of the rationale behind the questionnaire.

The main objective of the in-depth interview was to establish a common, straightforward, and easy to understand questionnaire, which could be easily comprehended and be connected to the products which are the subject of this research. The structure of the interview was based on direct questions to participants about each question or sentence contained within the questionnaire, and asking for the participants' suggestions and feedbacks after a thorough introduction describing the questionnaire's objectives. The procedure was quite simple because it was based on

writing, and there was no need to record the interview as there was no data to be coded or analysed.

The feedbacks from interviews showed that the questionnaire had three main problems. First, the translation had not provided a simple and easy-to-understand text. Second, some of the sentences and questions could be interpreted in different ways, and, finally, some of the questions and sentences had no association and relation to these groups of products. Following this, it was decided to use an in-depth interview with individuals with little or no knowledge of the English language. It was also considered necessary to amend the text to some extent to decrease the cultural sensitivity of the respondents, especially in relation to skincare products.

Two schools of thought contradict each other in multicultural research. The first approach to multicultural research is "Etic" a universal approach to multicultural research mainly adopted by psychologists in order to discover theories which could be applied worldwide. The second approach, "Emic", is more culturally based and is supported by anthropologists who argue that each culture and sub-culture is unique and, accordingly, need to be studied in their own context (Reardon and Miller 2012).

The process of translation that has been used seems to be more Etic based, according to the above-mentioned definition and potentially, for that reason, to some extent, the results seems to be strange for Iranians. It is suggested by Berry that these two approaches do not inherently contradict each other, and even if they are used in conjunction with each other could generate results with both Etic and Emic qualities (Berry 1989). In accordance with Berry, Kumar (2000) argues that accurate research requires not only commonalities but also uniqueness in the quality of its translation. It was decided to use an in-depth interview in order to find out more about the neglected cultural and common linguistic parts and apply it in the translation.

In the PII part, the process was much easier; interviewees were asked to note the adjective pairs that had the same meaning and were likely to cause repetition, and those that could not be meaningfully related to these two groups of products. Generally speaking, all the interviewees had the same idea about the repetition of the meanings and the unrelated adjectives. Finally, after six interviews, six pairs of adjectives were chosen for the PII part of the questionnaire.

In the next part, about questions and sentences, the questionnaire was divided into different sections based on its objectives, and the interviewees were asked to give feedback about the clarity of the text in Farsi. Based on their feedback, they were invited to simplify it or suggest an alternative sentence with the same meaning. The whole process was carried out with the full cooperation of the interviewer by explaining the main reason behind the question and sometimes suggesting expressions that had previously arisen in focus groups and interviews.

After finalising this section, the interviewees were then asked to give their opinions about the potential of the text to be interpreted in different ways, followed by their opinion on whether the question was related to the two products under research and, finally, about whether they felt the question was potentially culturally sensitive. If some degree of sensitivity was anticipated, they were asked how the text might be adapted or modified to make it less so. Finally, they were asked how they would define OTC products in the simplest way possible.

The first two interviews were long and exhausting for both participants, but generated great results that could be used in the next four interviews. This made these interviews much more straightforward to conduct. To an extent the interviewees had the same ideas about cultural sensitivity, the relationship between the questions and the products under research, and the questions which could be interpreted ambiguously.

There were differences in their respective responses, however. Some suggested a smoother translation of sentences and texts things, flagging especially style, length and level of formality of sentences and questions. However, there was a great deal of consistency in the various responses.

3.3341 In-depth interview results

In the PII part, six pairs of adjectives were chosen, mainly based on their relevance to the two groups of products being researched. It could be argued that these six pairs of adjectives, cover more than half of the twenty adjectives of Zaichkofwsky's (1994) involvement scale, or PII, because these six pairs could potentially be translated or interpreted in more than one way, compared with their counterparts in the main PII scale. It could be argued that all pairs of adjectives that could potentially generate

valuable results have been included. The ones that have been excluded are either not related at all (e.g., they do not make sense in the context of the product categories being researched), or have been considered in other synonym pairs.

In the second part, about measuring the type of involvement (product/brand), the situation was more complicated. The first question, which was about the clarity of each sentence, was often followed by some further questions from the interviewee, demanding to know the reason for asking that particular question, even though everything had been explained previously in the introduction. After receiving some suggestions for each text in the first two interviews, these ideas were presented to the later interviewees to ask for their evaluation of the level of clarity, whether or not they could be interpreted differently, to what extent they could potentially generate cultural sensitivity. As a result of the interviews, it was decided to exclude the sentences related to measuring product involvement and its type because firstly, product involvement could be measured by PII, Secondly, in translation, this could not be distinguished from brand involvement and consequently generated confusion, as it looked as if questions were repeated without any justification.

3.3342 Final questionnaire structure

After this process was completed, the questionnaire was finalised. Largely, it was the texts which arose from interviews which were adopted, and not those from translations and back-translations. The back-translation was a crucial part of the whole translation procedure, generating an initial idea about the potential meaning of each sentence; but as previously mentioned, it was not good enough to create a precise questionnaire which conveyed the exact meaning or near exact meaning of the English original.

The final questionnaire comprised twenty entries; six pairs of adjectives for measuring the general level of involvement or product involvement, based on Personal Involvement Inventory (PII) (Zaichkowsky 1986). Three questions about functional brand involvement and three questions about informational brand involvement from the Mittal (1988) brand involvement scale; and one question measuring the brandability of the two groups of products, and seven situational factors came from interviews and focus groups.

The questionnaire could be described as having eight dependent variables (situational factors and brandability), and three independent variables (involvement to product, functional brand involvement and informational brand involvement). These will be used to explain consumer behaviour in brand choice.

3.335 Launching final questionnaire

SurveyGizmo software and printed questionnaires were used for launching the final questionnaire, and 179 complete and 111 incomplete results were gathered from females. In many cases, incomplete results were just one or two questions short of completion, in which case they were classed as complete and added to 179 complete results.

Two different approaches were used in finding the acceptable sample size for this research, firstly the four rules of thumb introduced by Roscoe (1975) were implemented: the sample size between 30 and 500 is acceptable for the majority of research. Considering that the data would be used for multi regression, Roscoe argues that the sample size has to be 10 times more than the variables. There are four main variables in this study, (brand functional/informational involvement, product involvement and situational variables) in total there is a need of a sample size of at least 40.

The second approach to evaluating the sample size was measuring the sample size based on population, a confidence level and confidence interval. Considering that the female population in Iran is 35,000,000, with 95% confidence level and 7% confidence interval the sample size should be 196, and with 6% confidence interval should be 267. Roscoe (1975) considers 10% confidence interval as acceptable as a rule of thumb. Considering that, 179 complete questioners have been received and in total with the non-complete the number reached 290, it could be argued here that to a very high extent the sample size of this research is acceptable.

In order to prevent a convenient sample size and considering that, the majority of applicants who complete an online questionnaire appear to be younger and more educated, it was decided to use printed questionnaires too. These questionnaires were distributed among older, less educated individuals. Following that, 28 complete printed

questionnaires were received which to a high extent decrease the probability of convenience distribution.

3.3351 Quantitative analysis

The quantitative analysis has two parts. The first part consists of preliminary analysis of the variables. Variables are quantified by calculating their mean and standard deviations to compare the strength of dependent and independent variables (Pallant 2005), first within the product category and second, with the other product category. The second part comprises basic analysis, examining for any relationship among independent and dependent variables.

In the preliminary analysis, it has been attempted firstly to discover the level of product involvement by using PII; secondly, to ascertain the dominant type of brand involvement by applying Mitall's (1988) questionnaire; thirdly, to determine the level of brandability; and finally, to verify the strength of the influence level of the other different situational variables.

In the basic analysis, the potential relationship between involvement type and level as independent variables, and the situational variables' impact on consumer brand choice as dependent variable is examined. Before beginning these two analyses, it was necessary to verify the questionnaire for its internal reliability and to check the structure of the questionnaire by factor analysis (Pallant 2005).

3.3352 Reliability of the scale

Three different independent variables have been measured by multi-item questions: general level of involvement, brand informational involvement and brand functional involvement. It is necessary to check the internal reliability of the questionnaire to be sure that multi-item questions in each section are actually quantifying the same underlying concept (Pallant 2005).

As was mentioned previously, these three concepts have been measured in two separate parts of the questionnaire, firstly for OTC products and secondly for skincare products. Therefore it was decided to measure the internal scale of reliability first for each part of the questionnaire and, secondly, for the questionnaire as a whole.

3.3353 Personal involvement inventory (PII)

Zaichkowsky (1986) has used Cronbach's alpha and item-to-total score correlation for evaluating the internal consistency of her scale. Consequently, the same items are checked in this article for evaluating the PII section of the questionnaire. Pallant(2005) argues that Cronbach's alpha higher than .7 indicates that the scale could be considered as reliable, and item-to-total score correlation values lower than .3 indicate that the entry quantifies something different to the scale as a whole. The results show a high level of Cronbach's alpha for the three analyses:

Table 3 Cronbach's alpha for PII

PII Cronbach's alpha for OTC:	**.873**
PII Cronbach's alpha for skincare products**:**	**.919**
PII Cronbach's alpha for the whole questionnaire:	**.902**

Accordingly, it could be argued here that Cronbach's alpha values for this part of the questionnaire show the reliability of the scale. Zaichkowsky (1994), in developing her revised scale of PII, has used Cronbach's alpha of .9 as an acceptable reliability result and, in developing the main 20 items scale of PII, her results for item-to-total score correlation are above .5.

Considering that one of the Cronbach's alpha values is even slightly lower than .9, and one of the twelve item correlation is even slightly smaller than .5 (.474), it is argued here that the PII part of the questionnaire has internal reliability of scale.

3.3354 Brand involvement reliability

The same procedure is applied for brand functional involvement and informational involvement separately.

Brand informational involvement:

Cronbach's alpha for brand informational involvement in OTC is .882 and for skincare is .908. Finally, the whole brand informational section of the questionnaire's Cronbach's alpha is: .918. There is no corrected item-total correlation below .7 in the results.

Table 4 Cronbach's alpha for informational involvement

Cronbach's alpha for brand informational involvement in OTC i	.882
Cronbach's alpha for brand informational involvement for skincare	.908
Cronbach's alpha for brand informational involvement the whole questionnaire	.918

Based on Pallant's (2005) argument, the brand informational section of the questionnaire could be considered reliable with our sample.

Brand functional involvement:

In the brand functional involvement scale, the Cronbach's alpha is slightly lower than for brand informational involvement, but all values are above .7 which is necessary for reliability of scale. The results are as follows:

Table 5 Cronbach's alpha for brand functional involvement

Cronbach's alpha for brand functional involvement in OTC	.711
Cronbach's alpha for brand functional involvement for skincare	.798
Cronbach's alpha for brand functional involvement the whole questionnaire	.918

Cronbach's alpha for OTC products is .711, for skincare products is .798, and for the whole questionnaire is .838. Corrected item-total correlations are lower than the brand informational section, but in the questionnaire there are no values less than .3, which is the lower bound for accepting internal reliability. Consequently it is claimed here that the questionnaire shows internal reliability and consistency in the three different sections in which several questions have been used for measuring one concept.

3.3355 Factor analysis

There are two main reasons for applying factor analysis. Firstly, reducing a large set of variables to a smaller set of variables makes the whole analysis much more manageable and meaningful. Secondly, factor analysis is used for detecting the structure that underlies a set of variables or, in other words, to classify the variables (Pallant 2005). The reason for doing factor analysis in this thesis is to find out whether or not the questionnaire actually consists of the four underlying factors that it is intended to measure. The results of factor analysis will determine how many factors underlie the

questionnaire. According to the result, it could then be argued that the questionnaire has a valid structure for measuring four different variables with different sets of questions for each variable. In the following, the factor analysis process has been explained in detail.

In the first step, the suitability of data for factor analysis is evaluated. The results were satisfactory: there were many correlation coefficients above .3, the KMO was .799 (it must be above .6) and the significance was .000, which is less than .05 significance recommended.

For determining how many components potentially exist in the data, generally the following factors are considered: eigenvalues, screenplots and component matrices. Five items have an eigenvalue higher than one, which is considered as significant. However, by considering the component matrix, it was decided to choose four main components because in the fifth column of the component matrix only five items exist, whilst these items are also present in another column with a much stronger correlation, four of them greater than .5. Another reason for choosing four main components is because these four items, *per se*, explain 65% of the variance.

The decision to choose four main components could also be justified by looking at the rotated component matrix, which shows a very clear classification of the three independent variables of the questionnaire in four main clusters. In the first column, the six brand informational questions exist with a relatively high correlation, in the second and third columns, the six adjectival pairs of PII are classified into two groups, and finally, in the fourth column, the six questions regarding brand functional are placed. The appearance of two columns for PII shows that in these two groups of products, the PII adjectival pairs are measuring two relatively different concepts, which is consistent with the translation interview results. Many interviewees stated that these adjectives could be interpreted differently, and it seems that based on the product category they have been interpreted differently but consistently in each category.

Table 6 Rotated Component Matrix of the questionnaire:

	Component			
	1	2	3	4
2BI	.858			
BIA2	.847			

BIA3	.842				
1BI	.812				
BIA1	.807				
3BI	.802				
ZA1		.839			
ZA5		.814			
ZA2		.813			
ZA6		.792			
ZA6		.769			
ZA4		.724			
BFA3			.821		
BFA2			.814		
3BF			.802		
2BF			.720		
BFA1			.646		
1BF	.305		.409		
z3				.849	
z6				.780	
z2				.776	
z4				.759	
z1				.742	
z5				.691	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalisation.
a. Rotation converged in 5 iterations.
BI=brand information/ BF=brand functional/ Z=PII

The same procedure is applied for each product category. Firstly the data were assessed for their suitability for factor analysis, and then factor analysis was applied. The results show that three distinct classes of variables with eigenvalues of more than one have the ability to explain more than 66% of the variance for OTC products:

Table 7 Total Variance Explained:

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**4.341**	**33.392**	**33.392**	4.341	33.392	33.392	3.775	29.040	29.040
2	**2.358**	**18.137**	**51.529**	2.358	18.137	51.529	2.589	19.917	48.957
3	**2.007**	**15.438**	**66.967**	2.007	15.438	66.967	2.341	18.010	66.967
4	.905	6.964	73.931						
5	.665	5.116	79.048						
6	.549	4.223	83.271						
7	.439	3.377	86.648						
8	.421	3.237	89.884						
9	.347	2.671	92.556						

10	.325	2.498	95.054						
11	.295	2.271	97.324						
12	.209	1.611	98.936						
13	.138	1.064	100.000						

Extraction Method: Principal Component Analysis.

The rotated component matrix shows three different components: in the first column, six items related to PII, in the second column, three items that measure brand informational involvement, and in the third column, three items that concern brand functional involvement.

The same analysis is applied for the skincare part of the questionnaire and the results were the same: three variables with an eigenvalue of more than one, responsible for 75% of the total variance, are discovered.

Table 8 Total Variance explained:

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**5.707**	**43.897**	**43.897**	5.707	43.897	43.897	4.243	32.635	32.635
2	**2.159**	**16.611**	**60.507**	2.159	16.611	60.507	2.802	21.555	54.190
3	**1.951**	**15.011**	**75.518**	1.951	15.011	75.518	2.773	21.329	75.518
4	.622	4.785	80.304						
5	.534	4.104	84.408						
6	.504	3.875	88.283						
7	.345	2.654	90.937						
8	.262	2.013	92.949						
9	.235	1.806	94.755						
10	.205	1.579	96.334						
11	.185	1.423	97.757						
12	.164	1.263	99.020						
13	.127	.980	100.000						

Extraction Method: Principal Component Analysis.

Table 9 Rotated component Matrix:

	Component		
	1	2	3
ZA1	.851		
ZA2	.849		
ZA5	.840		
ZA6	.812		
ZA6	.802		
ZA4	.763		
BIA3		.896	
BIA1		.896	
BIA2		.895	
BFA2			.925
BFA3			.866
BFA4			.734
BFA1		.398	.651

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalisation.
a. Rotation converged in 5 iterations.

3.3356 Discussion

The factor analysis results clearly show that the questionnaire has four underlying bases. The classification of these bases through factor analysis indicates that items related to each independent variable have been categorised in the same component, which shows that the translation procedure has been relatively accurate and the questionnaire has consistency in what it measures across different variables.

The separation of PII items into two groups in factor analysis is very interesting. It seems that, unlike brand informational or brand functional involvement, the PII items have noticeably been sorted into two components which show the different understanding of items in these two product categories. To some extent, this issue was predicted during the translation procedure.

3.3357 Managing multi-item variables

For a more accurate evaluation of the concepts, three of the independent variables have been measured by multi-item questions. It is necessary to generate new variables as the representatives of each of these independent variables. These new

variables will be used in quantitative analysis, rather than the items that have been used for measuring the independent variables.

It was decided to use the average of items related to each variable as an indicator of that item in quantitative analysis. This argument would be valid if the average of items showed a high correlation to the items, and also if in factor analysis this new variable showed a high correlation in different potential components.

3.3358 Brand informational involvement in OTC products

Three items have been used for measuring this variable in the questionnaire. The average variable of these three items shows a very high correlation with these items; average correlation is .900 from a range of .869 to .925, which is very close to a perfect correlation. (A perfect correlation of 1 indicates that one variable can be determined exactly by the value of the other variable.) It could be argued here that average variable *per se* could be used in quantitative analysis, instead of the three items.

Table 10 Correlations among brand informational involvement variables:

		@BIaverage	1BI	2BI	3BI
@BIaverage	Pearson's correlation	1	**.907****	**.925****	**.869****
	Sig. (2-tailed)		.000	.000	.000
	N	225	225	225	225
1BI	Pearson's correlation	.907**	1	.783**	.648**
	Sig. (2-tailed)	.000		.000	.000
	N	225	225	225	225
2BI	Pearson's correlation	.925**	.783**	1	.715**
	Sig. (2-tailed)	.000	.000		.000
	N	225	225	226	226
3BI	Pearson's correlation	.869**	.648**	.715**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	225	225	226	226

For greater assurance, factor analysis is also applied, and the results indicate one component with an eigenvalue over 1 (about 3.4) with the ability to explain more than

85% of the variance. The communality matrix shows that communality for the average variable is 1 before and after the extraction. Considering that communality is an indication of the proportion of the variance that could be explained by the underlying factor, it is clear that the communality of 1 for the average factor means that 100% of the variance could be explained by the mentioned item (Pallant 2006).

Table 11 Communalities (brand informational involvement):

	Initial	Extraction
1BI	1.000	.816
2BI	1.000	.859
3BI	1.000	.758
@BIaverage	1.000	**1.000**

Extraction Method: Principal Component Analysis.

Table 11 Total Variance Explained (brand informationa involvement):

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**3.433**	**85.813**	85.813	3.433	85.813	85.813
2	.362	9.040	94.853			
3	.206	5.141	99.994			
4	.000	.006	100.000			

Extraction Method: Principal Component Analysis.

The results shown illustrate that an average of the items in this independent variable, to a very great extent, could be used as a proxy for the whole items.

The same procedure is used for other variables too, and the results are approximately the same. This is briefly explained in the following parts.

3.3359 Brand functional involvement in OTC products

For measuring brand functional involvement, three items are used. The average variable generated from these three items has an average correlation of .764, indicating a large correlation among these variables:

Table 12 Correlations among brand functional involvement variables:

		@BFaverage	1BF	2BF	3BF
@BFaverage	Pearson's correlation	1	**.662****	**.831****	**.833****
	Sig. (2-tailed)		.000	.000	.000
	N	218	218	218	218
1BF	Pearson's correlation	.662**	1	.334**	.292**
	Sig. (2-tailed)	.000		.000	.000
	N	218	224	222	220
2BF	Pearson's correlation	.831**	.334**	1	.753**
	Sig. (2-tailed)	.000	.000		.000
	N	218	222	224	220
3BF	Pearson's correlation	.833**	.292**	.753**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	218	220	220	222

The factor analysis also shows just one component with an eigenvalue higher than 1 (3.368), demonstrating that one main component underlies these four items that could explain more than 67% of the variance. In the communalities matrix, the average variable has the value of .995 after extraction which means that almost the entire variance could completely be explained by the average variable:

Table 13 Total Variance Explained (brand functional involvement):

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.368	67.356	67.356	3.368	67.356	67.356
2	.801	16.024	83.380			
3	.589	11.772	95.152			
4	.242	4.848	100.000			
5	-1.150E-16	-2.299E-15	100.000			

Extraction Method: Principal Component Analysis.

Table 14 Communalities (brand functional involvement):

	Initial	Extraction
@BFaverage	1.000	.995
1BF	1.000	.368
2BF	1.000	.725
3BF	1.000	.734
4BF	1.000	.547

Table 14 Communalities (brand functional involvement):

	Initial	Extraction
@BFaverage	1.000	.995
1BF	1.000	.368
2BF	1.000	.725
3BF	1.000	.734
4BF	1.000	.547

Extraction Method: Principal Component Analysis.

3.336 PII in OTC products

The same procedure is applied for the six PII items and the results are also satisfactory. The average correlation is .783, from a range of .719 to .835. In factor analysis one component with an eigenvalue of more than 1 has emerged. The communality matrix indicates .987 ability to explain the matrix for the average variable.

Table 15 Communalities (OTC products):

	Initial	Extraction
z1	1.000	.586
z2	1.000	.670
z3	1.000	.716
z4	1.000	.658
z5	1.000	.484
z6	1.000	.645
@Zaverage	1.000	.987

Extraction Method: Principal Component Analysis.

Table 16 Total Variance Explained (OTC products):

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	**4.746**	**67.804**	**67.804**	4.746	67.804	67.804
2	.736	10.517	78.322			
3	.483	6.900	85.222			
4	.414	5.911	91.133			
5	.314	4.480	95.613			
6	.293	4.187	99.801			
7	.014	.199	100.000			

Extraction Method: Principal Component Analysis.

3.3361 Skincare products

The results of the analysis for this group of products have been summarised in the following table:

Table 17 Summarised result (Skin care products):

	Average correlation	Eigenvalue and variance explanation	Communality after extraction
Brand informational average	.919	3.536 and 88.4%	1
Brand functional average	.535	3.243 and 64.8%	.6
PII average	.846	5.314 and 75.9%	.998

It could be argued that, as with OTC products an average of multi-items *per se* could be utilised as an alternative to the individual items in qualitative analysis.

In the next section some preliminary analysis is applied to independent and dependent variables. Firstly, the variables will be compared with other variables in the same product category, and then the variables will be weighed against the other category of products.

3.3362 Preliminary analysis

In this section, the main concern is to quantify all the variables and compare their level of strength in their own product category compared with other variables, and also in comparison with the same variable in the other product category. For comparing different variables with each other, it is mainly their mean and the percentage that are used.

Independent variables:

Three main independent variables are quantified to determine brand functional and informational level, product involvement, and the level of brandability. The main factor which will be referred to in this section is the mean; the higher the mean, the stronger the variable. As was mentioned previously, all the variables in the questionnaire are

measured on a Likert scale from 1 to 7, 1 meaning not at all and 7 meaning completely. The higher the number, the more the involvement level. In PII, to harmonise with other items, the positive adjectives have been arranged in 7 sides of the Likert scale. The same standard is also applied for the seven other dependent variables, that is, the higher the number the greater the influence of the special situational variables.

Accordingly, it could be argued that values greater than 4 could be considered as showing high involvement or the high level of influence of a situational variable, while numbers equal to or less than 4 could be interpreted as low involvement.

3.3363 OTC products

In this section, the mean of all the mentioned variables has been calculated, to establish firstly the strength of these variables (for instance, the strength of functional involvement of customers to brand). Secondly to compare the variables with each other (for instance, to understand whether the functional involvement to brand in this product is higher than the informational involvement), which could be useful for choosing the proper brand image. For instance, if the functional brand image has a higher mean than informational, this means that consumers expect a more attitude-based or functional brand image for this type of product.

The mean for the independent variables in this group of products is calculated by using SPSS 22, and the results are as follows:

Table 18 Mean and Std deviation for OTC products:

	N	Mean	Std. Deviation	Variance
Brand informational involvement	225	**2.9319**	1.66497	2.772
Brand functional involvement	218	**5.2110**	1.39648	1.950
Brandability	227	**5.17**	1.583	2.506
Product involvement	150	**4.8844**	1.19889	1.437
Valid N (listwise)	142			

The results show that there is a relatively high level of brand functional involvement in OTC products, with a mean of 5.21 (Std=1.39). On the other hand, the mean of 2.93(Std=1.66) indicates that participants have little brand informational involvement in this group of products.

Product involvement's mean is above average, which shows some level of involvement in products and brandability. This has been measured by a one item question, "Generally before purchase of these products do you have a special brand in mind?", and shows that many customers, to a large extent, have a favourite brand in mind before purchase or are otherwise loyal to a brand.

The most important outcome of the results is the difference established between functional and informational brand involvement. It is clear that customers, in the case of OTC products, are mainly concerned about the functional attributes of the brands and, care highly for what the brand will do for them and view the brand as a guarantee of quality, not a sign of social or financial status. As mentioned previously, this is a very good indication for choosing brand image.

3.3364 Skincare products

The same calculation is performed for skincare products and results achieved, in general terms, are close to those for OTC products:

Table 19 Mean and Std deviation for SKC products:

	N	Mean	Std. Deviation	Variance
Brand informational involvement	162	3.4342	1.85502	3.441
Brand functional involvement	161	5.5797	1.29718	1.683
Brandability	166	5.34	1.605	2.576
Product involvement	130	4.7885	1.28444	1.650
Valid N (listwise)	123			

The results show that, like OTC products, involvement in brand is again mainly functional, brandability is high and customers are relatively involved in the product category.

3.3365 Comparison of the two product categories

It could be argued that customers are more functionally involved in brand in these products. The level of involvement is higher in skincare products, especially in brand informational involvement, which was prredictable based on the focus group and interview results.

Table 20 Independent Variables Means (comparison of the two groups):

	Brandability	Product Inv	BII	BFI
SKC	**5.337**	**4.78846**	**3.43416**	**5.5797**
OTC	**5.172**	**4.88444**	**2.93185**	**5.21216**

BFI: brand functional involvement
BII: brand informational involvement

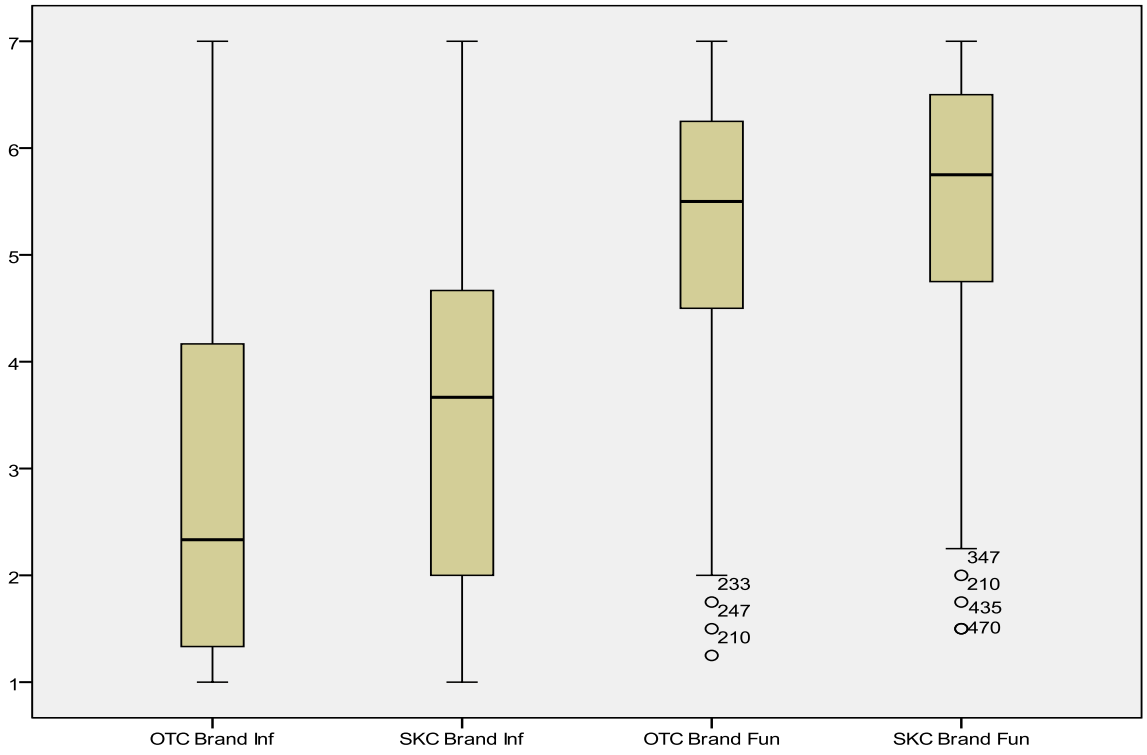
As explained previously, the Likert scale could not be considered as an interval scale because equal intervals on the scale do not correspond to equal differences in the actual measurement. For instance, the difference between 2 and 3 may not be quite the same as the difference between 6 to 7, and the interpretation of this is subjective; furthermore, if an individual chooses 6 it does not mean that she or he is 3 times more involved than one who has chosen 2.

There is still a grey area in statistics as to whether Likert scale should be considered as ordinal, and eventually a categorical variable, or to consider it as an interval scale and classify them as continuous variables. Discussions about this issue are still a hot topic in statistics. Therefore, comparison of variables based on their means could be considered as a way of explaining the differences by using numbers. However, it is important to note that these numbers are not functioning exactly as interval numbers; to some extent they are something between ordinal and interval scale. This understanding of numbers is very important in the analysis of Likert scale outputs.

Accordingly, we must conclude that brand informational involvement is higher in skincare products, in comparison with OTC products, but quantifying the magnitude of this difference is extremely difficult. In general, it could be argued that brandability and

brand functional and informational involvement is higher in skincare products than OTC products; brand informational involvement in skincare products is much higher. Product involvement in these two groups of products is approximately the same. The results referred to earlier have been illustrated by boxplot for a better understanding of the variables' differences:

Table 21 Brand functional and informational involvement:



Inf: Informational/Fun: Functional/SKC: Skincare products

The boxplot clearly shows that the distribution of scores in brand functional involvement is mainly in the high involvement area while brand informational involvement is mainly in the low involvement area. Furthermore, given that the line inside the box represents the median, it could be argued that brand informational involvement is much higher in skincare products.

3.3366 Dependent variables

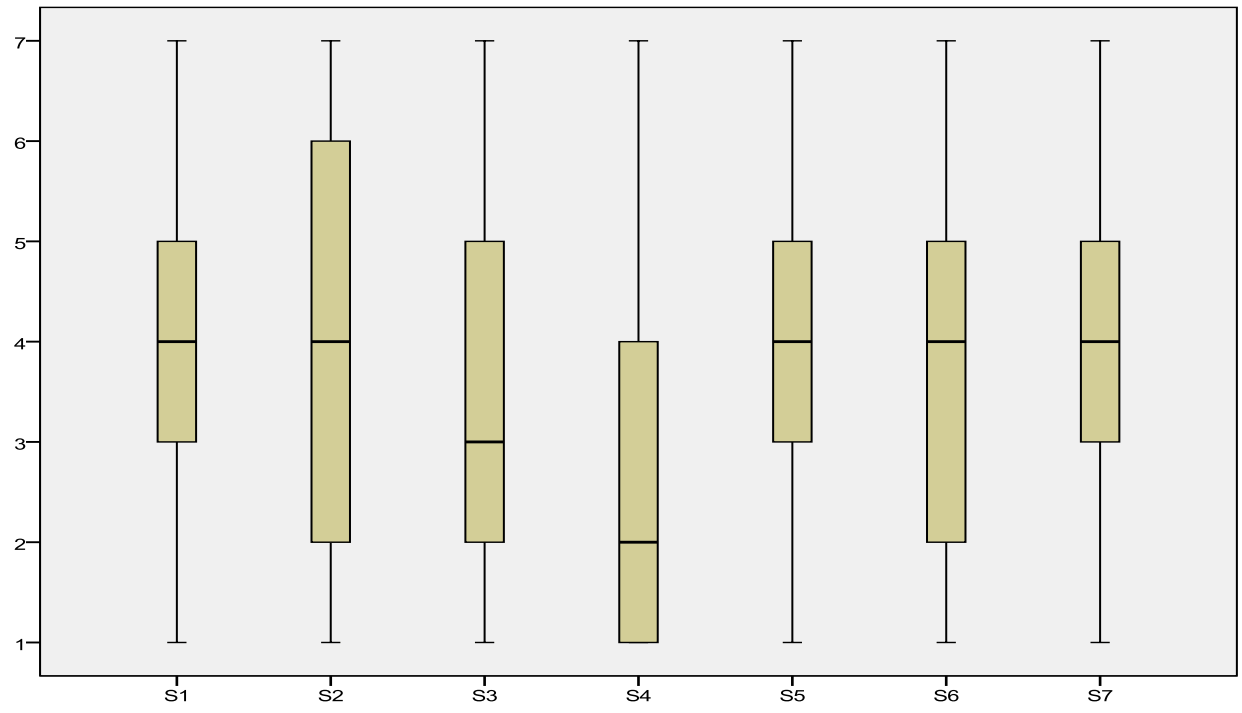
In this section the seven dependent variables are measured and compared with other variables, firstly within the product category and then with the other product category (see Appendix IV). As mentioned previously, the higher the number, the greater the influence of these variables on consumer brand choice. The means of the mentioned variables are as follows:

Table 22 Mean and Std deviation for situational variables in OTC products:

	N	Mean	Std. Deviation	Variance
S1	236	**3.97**	1.686	2.841
S2	233	**4.08**	1.999	3.998
S3	233	**3.22**	1.822	3.318
S4	230	**2.91**	1.797	3.227
S5	234	**3.92**	1.793	3.217
S6	234	**3.75**	1.996	3.983
S7	235	**4.01**	1.707	2.914
Valid N (listwise)	225			

According to the chart, by excluding variables S4 and S3 it could be argued that the strength of the situational variables is somehow the same and there are not any statistically meaningful differences among them. S4, or store opening time, has the lowest impact on consumer brand choice and, interestingly, S3, or the existence of promotion and temporary price reductions and coupons, also has the lowest score after shop opening hours. This result is unexpected. The above-mentioned results also have been illustrated as a boxplot:

Table 23 Situational influence on brand choice:



Situational impact on consumer brand choice in skincare products:

In skincare products, as with OTC products, there is no particularly strong situational variable with a very high influence on consumer brand choice:

Table 24 Mean and Std deviation for situational variables in SKC products:

	N	Mean	Std. Deviation	Variance
1SA	175	**4.41**	1.706	2.909
2SA	173	**4.05**	1.901	3.614
3SA	171	**3.84**	1.918	3.679
4SA	172	**3.27**	1.914	3.662
5SA	173	**4.12**	1.821	3.317
6SA	174	**3.94**	2.008	4.031
7SA	174	**4.30**	1.913	3.658
Valid N (listwise)	162			

Although the average is higher than OTC products, by excluding S4 the strength is approximately the same. As with OTC products, shop opening hours had the lowest impact on consumer brand choice.

3.3367 Comparison of the two product categories

According to the results, it could be argued that in most cases the situational factors for skincare products have a higher mean than for OTC products. S4, or shop opening hours, has the lowest mean in the two groups of products and S1, S2, S5 and S7 or the support of the seller, the level of crowding in the shop, price differences and the advertising materials at the point of sale, have the highest means in the two groups of products.

Table 25 Dependent variables mean (Comparison of OTC and SKC products):

	S1	S2	S3	S4	S5	S6	S7
SKC	4.41	4.05	3.84	3.27	4.12	3.94	4.3
OTC	3.97	4.08	3.22	2.91	3.92	3.75	4.01

3.3368 Exploring relationships among variables

The main aim of this part of quantitative analysis is to explore any potential association among dependent and independent variables. Different techniques are applied in order to quantify these relationships, and finally the application of the results is discussed.

The objective of this section is to find out how the independent variables are associated with the dependent variables. For instance, is there any relation between product involvement and the influence of promotion and temporary price reduction on consumer brand choice? To what extent is it possible to predict consumer brand choice in a purchase situation in which only some of the situational variables are present if the customer's level of involvement in the product is already known?

As another approach, which of the independent variables contributes most in explaining the dependent variables could be investigated. For instance, does an increase in brand functional involvement cause customers to pay greater attention to the advice of sales staff, or cause an increase in brand informational involvement?

Initially, for a better understanding of any relationship among variables, Pearson's correlation is applied to find out the strength and direction of the association between independent and dependent variables.

3.3369 Pearson's correlation among OTC variables

Interestingly, the three independent variables show a negative correlation with S1 (the influence of the seller's support from a brand), which means the more involved in product or brand the customer is, the less she or he takes into account the seller's recommendations for this group of products. In brand functional involvement, this negative association is stronger (r_{Fun}=-.239, r_{Inf}=-.174, r_{Pro}=-.172).

The second situational variable where the three involvement variables are similar is in S7 (the influence of the existence of advertising materials at point of sale). This means that, to some extent, when the level of involvement increases, customers positively consider advertisement items at point of sale in their brand choice. This influence is relatively higher in brand informational involvement (r_{Fun}=.170, r_{Inf}=.267, r_{Pro}=.162).

Table 26 Correlation among OTC products variables:

		S1	S2	S3	S4	S5	S6	S7	Brandability
Brand informational involvement	Pearson's correlation	**-.174****	-.101	.152*	.258**	.092	.237**	.267**	.236**
	Sig. (2-tailed)	.009	.132	.024	.000	.169	.000	.000	.000
	N	224	222	222	219	223	223	223	225
Brand functional involvement	Pearson's correlation	**-.239****	-.025	-.057	-.025	-.010	.171*	.170*	.535**
	Sig. (2-tailed)	.000	.714	.402	.721	.881	.012	.013	.000
	N	217	215	215	213	216	216	216	218
Product involvement	Pearson's correlation	**-.172***	.001	-.044	.002	**-.164***	-.001	**.162***	.106
	Sig. (2-tailed)	.036	.989	.597	.980	.046	.988	.049	.199
	N	149	147	147	146	148	148	148	149

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The results show that informational involvement to brand is positively associated with S7, S4 and S6 (r=.267, r=.258, r=.237). In other words, the higher the informational involvement to brand, the greater the influence of advertising materials at point of sale, store opening hours and the assortment of the products in the store. Interestingly, informational brand involvement, unlike functional brand involvement, has a relatively low positive association to brandability (r=.236) in comparison with S7,S4 and S6; that is, customers consider other situational factors in their brand choice more than brand *per se*.

Brand functional involvement, has a large and positive correlation with brandability: that is, customers who are functionally involved to brand have a favourite brand in mind for a purchase. This strong association justifies the negative association to seller's recommendations and weak correlation to S6 and S7. Advertising in the point of sale and the assortment of the products has a very weak positive influence on the brand choice of functional brand involved customers and they mainly use their brand knowledge for brand choice.

3.337 Pearson's correlation among skincare variables

The three variables have a positive association with S1, or the support of sellers from a particular brand. This association is stronger in brand informational

involvement (r_{Inf}=.343, r_{Fun}=.271, r_{Pro}=.299). The other item that shows correlation with the independent variables is brandability, which is relatively very strongly correlated with product involvement and brand functional involvement (r_{Inf}=.252, r_{Fun}=.641, r_{Pro}=.403).

Brand functional involvement has a very strong association with brandability (r=.641), which indicates that highly functionally involved customers consider their already chosen brand as the most important factor in their brand choice. Although, to some extent, S1 and S7 are also taken into, account the main factor is brand *per se*. On the other hand, in informational brand involvement, there is not one strong item that predominantly influences brand choice. Rather, there are several items with approximately the same strength that have the power to have an impact on consumer brand choice.

The strongest is S7 (r=.384), or the existence of adverts at the point of sale. After that, with approximately the same strength, is S6 (the assortment of the products) and S1 (the seller's recommendations). After those items, S3 (temporary price reductions and coupons) and S4 (opening hours of the store) have some positive associations with informational brand involvement.

Table 27 Correlation among SKC products:

		1SA	2SA	3SA	4SA	5SA	6SA	7SA	**Brandability**
Brand informational involvement	Pearson's correlation	.343**	.164*	.256**	.227**	.120	.344**	.384**	.252**
	Sig. (2-tailed)	.000	.039	.001	.004	.132	.000	.000	.001
	N	160	159	158	159	159	160	161	162
Brand functional involvement	Pearson's correlation	.271**	-.041	-.010	-.042	-.095	.152	.254**	.641**
	Sig. (2-tailed)	.001	.612	.903	.605	.233	.056	.001	.000
	N	159	158	157	157	159	159	159	161
Product involvement	Pearson's correlation	.299**	.026	-.020	.003	-.018	.117	.130	.403**
	Sig. (2-tailed)	.001	.768	.818	.971	.844	.188	.139	.000
	N	130	128	128	129	128	129	130	130

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

3.3371One-way analysis of variance (ANOVA)

This method is used for comparing the scores of more than two different groups or conditions. In this research, ANOVA is applied to determine whether there are differences in the mean score of low involvement, neutral and high involvement participants towards dependent variables.

The dependent variables were divided into three groups: low involvement, which consists of the score 3 and under 3; neutral which consists of scores between 3 and 4; and high involvement, which consists of scores more than 4 up to 7. SPSS 19 is used to apply ANOVA and the results are as follows.

3.3372 ANOVA in OTC products: Brand informational involvement

A one-way "between-groups" analysis of variance is conducted to explore the impact of brand informational involvement level on situational variables. As mentioned previously, involvement variables are divided into three groups based on the level of involvement, and ANOVA is applied to find out if there is any significant difference in the mean scores of these groups.

From the eight situational variables, S2 and S5 violated the assumption of homogeneity of variance and also the Robust Test of Equality of Means, therefore they are excluded from the analysis. S3 and S5 show no statistically significant difference at the $p<.05$.

There was a statistically significant difference at the $P<.05$ level of the three levels of involvement in S1: [$F(2,221)=5.309$, $p=.06$], S4: [$F(2,216)=12.868$, $p=.000$], S6: [$F(2,220)=8.775$, $p=.000$], S7: [$F(2,220)=9.211$, $p=.000$], brandability: [$F(2,222)=6.176$, $p=.002$] **(Appendix VI).**

Table 28 ANOVA brand informational involvement and situational variables for OTC products

		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	28.745	2	14.373	5.309	.006
	Within Groups	598.250	221	2.707		
	Total	626.996	223			
S2	Between Groups	24.235	2	12.118	3.060	.049
	Within Groups	867.116	219	3.959		
	Total	891.351	221			

S3	Between Groups	12.066	2	6.033	1.825	.164
	Within Groups	724.118	219	3.306		
	Total	736.185	221			
S4	Between Groups	75.732	2	37.866	12.868	.000
	Within Groups	635.610	216	2.943		
	Total	711.342	218			
S5	Between Groups	15.512	2	7.756	2.423	.091
	Within Groups	704.219	220	3.201		
	Total	719.731	222			
S6	Between Groups	65.083	2	32.541	8.775	.000
	Within Groups	815.841	220	3.708		
	Total	880.924	222			
S7	Between Groups	50.148	2	25.074	9.211	.000
	Within Groups	598.848	220	2.722		
	Total	648.996	222			
Brabdability	Between Groups	29.143	2	14.572	6.176	.002
	Within Groups	523.746	222	2.359		
	Total	552.889	224			

Because the sample size of groups is different, it was decided to use Hochberg's GT2 along with Tukey for the post-hoc test. The results of the post-hoc test indicate that in all the aforementioned variables (S1, S4, S6, S7 and brandability), the mean scores of low involvement and high involvement groups are significantly different. In S1 and brandability, the neutral group's mean score is closer to the low involvement group, while in S3, S6 and S7, it is closer to the high involvement group. The means and SD of the aforementioned variables are as follows:

Table 29 Means and SD of the dependent variables (OTC products):

		N	Mean	Std. Deviation
S1	**<= 3**	**45**	**4.67**	**1.942**
	3 - 4.00	**121**	**3.94**	**1.572**
	4.01+	**58**	**3.62**	**1.543**
S4	**<= 3**	**44**	**1.91**	**1.626**
	3 - 4.00	**118**	**2.99**	**1.636**
	4.01+	**57**	**3.65**	**1.932**
S6	**<= 3**	**45**	**2.78**	**2.077**
	3 - 4.00	**120**	**3.83**	**1.858**
	4.01+	**58**	**4.36**	**1.944**
S7	**<= 3**	**45**	**3.16**	**1.637**
	3 - 4.00	**120**	**4.06**	**1.584**
	4.01+	**58**	**4.55**	**1.789**
Brandability	**<= 3**	**45**	**4.80**	**2.040**
	3 - 4.00	**121**	**5.03**	**1.543**
	4.01+	**59**	**5.76**	**.971**

Considering that large enough samples could generate significant results without significant differences in mean scores (Pallant 2006), there is a requirement to measure the effect size to establish the trustworthiness of the results. The Eta-squared, one of the most common effect size statistics (Pallant 2006) is calculated for measuring the effect size.

Table 30 Effect size for brand informational involvement in OTC:

	S1	S6	S7	Brandability
Eta-squared	0.0458	0.0747	0.0772	0.0526

The calculated effect size mentioned above shows a moderate effect size that makes the ANOVA outcomes highly reliable.

The ANOVA results show that the strength of the different situational variables as potential stimuli is different depending upon brand informational involvement level: the higher the customers' involvement, the higher the strength of these stimuli (except for S1, in which the relation is negative).

3.3373 ANOVA in OTC products: Brand functional involvement

In the same way as informational brand involvement, the brand functional involvement is divided into three groups (low involvement <3, neutral between 3 and 4, high involvement <=7) and ANOVA is used to find out whether the mean scores of these three groups are different.

ANOVA results indicates that there is a significant difference in the mean score of two dependent variables S1 [F(2,214)=5.937, p=.003] and brandability [F(2,215)=36.641, p=.000]. The post-hoc analysis is performed using Tukey and Hochberg's GT2 and the results indicate that, in S1, the low involvement and high involvement groups shows significant differences at the p<.05, while in brandability all three groups have significant differences at the p<.05. The means scores and SD are shown in the following table **(Appendix X)**:

Table 31 ANOVA brand functional involvement and situational variables for OTC products

		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	31.541	2	15.770	5.937	.003
	Within Groups	568.441	214	2.656		

	Total	599.982	216			
Brandability	Between Groups	130.371	2	65.185	36.641	.000
	Within Groups	382.496	215	1.779		
	Total	512.867	217			

Table 32 Means and SD of the dependent variables:

		N	Mean	Std. Deviation
		22	5	1.069
S1	3.01 - 4.00	26	4.35	1.495
	4.01 - 7.00	169	3.80	1.705
Brandability	<= 3.00	22	3.27	1.549
	3.01 - 4.00	26	4.31	1.543
	4.01 - 7.00	170	5.61	1.270

The effect size of these variables ranges from medium effect to large effect. Eta-squared for S1 is 0.05256, and for brandability is 0.2542. It could be argued that the results are reliable and the significance does not arise from the sample size. Considering that dependent variables show very little correlation with product involvement, it was decided not to apply ANOVA for product involvement in OTC products.

3.3374 ANOVA in skincare products: Brand informational involvement

A one-way "between-subjects" ANOVA was conducted to compare the effect of informational brand involvement on dependent variables in three different levels of involvement in skincare products. As for the OTC products, the informational brand involvement is divided into three groups based on involvement level.

There was a significant effect of informational brand involvement on S1, S3, S6, S7 and brandability at the p<.05. for the three levels of involvement for S1: [F(2,157)=9.596, p =.000], for S3: [F(2,155)=3.877, p =.023], for S6: [F(2,157)=8.726, p=.000], for S7: [F(2,158)=11.011, p =.000] and for brandability: [F(2,159)=5.799, p=.004] **(Appendix VII).**

Table 33 ANOVA for brand informational involvement and situational variables for SKC products

		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	52.392	2	26.196	9.596	.000
	Within Groups	428.583	157	2.730		
	Total	480.975	159			
S2	Between Groups	18.252	2	9.126	2.604	.077

	Within Groups	546.691	156	3.504		
	Total	564.943	158			
S3	Between Groups	27.241	2	13.621	3.877	.023
	Within Groups	544.480	155	3.513		
	Total	571.722	157			
S4	Between Groups	19.911	2	9.956	2.814	.063
	Within Groups	551.913	156	3.538		
	Total	571.824	158			
S5	Between Groups	2.956	2	1.478	.448	.639
	Within Groups	514.138	156	3.296		
	Total	517.094	158			
S6	Between Groups	62.984	2	31.492	8.726	.000
	Within Groups	566.610	157	3.609		
	Total	629.594	159			
S7	Between Groups	71.941	2	35.971	11.011	.000
	Within Groups	516.146	158	3.267		
	Total	588.087	160			
Brandability	Between Groups	28.507	2	14.254	5.799	.004
	Within Groups	390.801	159	2.458		
	Total	419.309	161			

Because some of the results are statistically significant, it was decided to apply post-hoc study. Two different post-hoc tests were selected; Tukey and, to account for the difference in sample sizes, "Games-Howell".

Post-hoc comparisons using the Tukey HSD and "Games-Howell" tests indicated that the mean score for the low involvement and high involvement groups are significantly different for all variables (S1, S3, S6, S7 and brandability). However, the neutral level of involvement in S1 and S7 is different from high and low levels of involvement, while in S3, S6 and brandability, the neutral level of involvement is very close to either low or high levels of involvement.

The means and SD of the variables discussed are provided in the following table:

Table 34 Means and SD of the dependent variables:

		Mean	Std. Deviation
S1	<= 3.00	3.88	1.830
	3.01 - 4.00	3.96	1.398
	4.01 - 7.00	5.06	1.521
S3	<= 3.00	3.39	1.873
	3.01 - 4.00	4.04	1.745
	4.01 - 7.00	4.27	1.919
S6	<= 3.00	3.29	1.947
	3.01 - 4.00	3.83	1.880
	4.01 - 7.00	4.65	1.851
S7	<= 3.00	3.73	1.873
	3.01 - 4.00	3.88	1.513
	4.01 - 7.00	5.13	1.830
Brandability	<= 3.00	4.88	1.835
	3.01 - 4.00	5.46	1.414
	4.01 - 7.00	5.78	1.253

As has been mentioned previously, for testing whether the significance of the results comes from a large sample size, or is specifically because of the differences among mean scores, the effect size, or Eta-squared, is calculated and the results are satisfactory, showing a medium to large effect:

Table 35 Effect size for brand informational involvement in SKC:

	S1	**S3**	**S6**	**S7**	**Brandability**
Eta squared	**0.1**	**.047**	**0.1**	**0.12**	**.067**

3.3375 ANOVA in skincare products: Brand functional involvement

The same procedure was applied for brand functional involvement. A one-way "between-groups" analysis was conducted to explore the impact of brand functional involvement level in dependent variables. There is a statistically significant difference at the p<.05 in S1: [F(2,156)=8.2, p=.00], S6:[F(2,156)=3.299, p=.04], S7:[F(2,156)=11.246, p=.00] and brandability: [F(2,158)=32.495, p=.00] **(Appendix VIII).**

Table 36 ANOVA brand functional involvement and situational variables for SKC products

		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	44.979	2	22.489	8.200	.000
	Within Groups	427.864	156	2.743		
	Total	472.843	158			
S2	Between Groups	6.022	2	3.011	.822	.441
	Within Groups	567.751	155	3.663		
	Total	573.772	157			
S3	Between Groups	8.531	2	4.265	1.149	.320
	Within Groups	571.826	154	3.713		
	Total	580.357	156			
S4	Between Groups	.288	2	.144	.038	.962
	Within Groups	580.234	154	3.768		
	Total	580.522	156			
S5	Between Groups	.995	2	.497	.147	.863
	Within Groups	526.377	156	3.374		
	Total	527.371	158			
S6	Between Groups	25.889	2	12.944	3.299	.040
	Within Groups	612.048	156	3.923		
	Total	637.937	158			
S7	Between Groups	73.173	2	36.587	11.246	.000
	Within Groups	507.518	156	3.253		
	Total	580.692	158			
Brandabiliy	Between Groups	117.640	2	58.820	32.495	.000
	Within Groups	285.999	158	1.810		
	Total	403.640	160			

Post-hoc comparisons using Tukey and "Games-Howell" tests indicate that the mean score of the S1, S6 and S7 in the low involvement and high involvement groups are significantly different, but the neutral group mean is close to either high involvement or low involvement, whereas in brandability, the mean scores of all three groups are substantially different. The means and SD of the mentioned variables is provided in the following table:

Table 37 Means and SD of the dependent variables:

		N	Mean	Std. Deviation
S1	<= 3.00	6	2.37	1.366
	3.01 - 4.00	19	3.32	1.416
	4.01 - 7.00	134	4.59	1.696
S6	<= 3.00	6	2.67	1.966
	3.01 - 4.00	19	3.11	1.969
	4.01 - 7.00	134	4.09	1.983
S7	<= 3.00	6	1.83	1.169
	3.01 - 4.00	19	3.11	1.729
	4.01 - 7.00	134	4.57	1.833
Brandability	<= 3.00	6	1.83	1.169
	3.01 - 4.00	19	4.16	1.500
	4.01 - 7.00	136	5.70	1.330

For confirming the reliability of the significance discovered, Eta-squared is measured for the four dependent variables, and the results are satisfactory; the significance can be considered as actual differences among mean scores, and not an artefact of sample size. The Eta-squared figures are as follows:

Table 38 Effect size for brand functional involvement in SKC:

	S1	S6	S7	Brandability
Eta squared	0.095	0.040	0.126	0.291

3.3376Product involvement

A one-way "between-subjects" ANOVA was conducted to compare the effect of three different levels of product involvement on situational variables. Subjects are divided into three groups based on their particular level of product involvement and a significant difference is found at the p<05 for S1: [F(2, 127) = 5.468, p = .005], S7: [F(2,127)=3.595, p=.03] and finally brandability: [F(2,127)=16.500, p=.000]**(Appendix IX).**

Table 39 ANOVA for product involvement and situational variables for SKC products

		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	32.326	2	16.163	5.468	.005
	Within Groups	375.397	127	2.956		
	Total	407.723	129			
S2	Between Groups	1.055	2	.527	.133	.876
	Within Groups	497.000	125	3.976		
	Total	498.055	127			
S3	Between Groups	4.899	2	2.449	.623	.538
	Within Groups	491.406	125	3.931		
	Total	496.305	127			
S4	Between Groups	9.968	2	4.984	1.416	.247
	Within Groups	443.613	126	3.521		
	Total	453.581	128			
S5	Between Groups	3.731	2	1.866	.531	.589
	Within Groups	439.198	125	3.514		
	Total	442.930	127			
S6	Between Groups	18.267	2	9.134	2.275	.107
	Within Groups	505.888	126	4.015		
	Total	524.155	128			
S7	Between Groups	26.053	2	13.027	3.595	.030
	Within Groups	460.139	127	3.623		
	Total	486.192	129			
Brandabilty	Between Groups	66.436	2	33.218	16.500	.000
	Within Groups	255.687	127	2.013		
	Total	322.123	129			

For post-hoc analysis, because sample sizes are very different, it was decided to use Hochberg's GT2 along with Tukey. The results indicate that the mean score of S1, S7 and brandability is significantly different in the low and high brand involvement groups; in S7 and brandability, the neutral group is closer to the high involvement group, while in S1 the neutral group's mean score is close to the low involvement group's mean score. The means and SD of the variables are as follows:

Table 40 Means and SD of the dependent variables:

		N	Mean	Std. Deviation
S1	<= 3.00	9	3.00	2.179
	3.01 - 4.00	28	3.82	1.657
	4.01+	93	4.65	1.692
S7	<= 3.00	9	2.56	2.128
	3.01 - 4.00	28	4.25	1.713
	4.01+	93	4.33	1.936
Brandability	<= 3.00	9	3.00	2.179
	3.01 - 4.00	28	5.14	1.268
	4.01+	93	5.77	1.376

For finding the potential impact of sample size on the significance of the results, Eta-squared is calculated for the dependent variables and the results show an effect size from medium to large that makes the significances highly acceptable:

Table 41 Effect size for product involvement in SKC:

	S1	S7	Brandability
Eta-squared	0.0792	.0535	.02062

3.3377 Multiple regression

Multiple regression is used in this exercise to discover to what extent dependent variables could be explained and predicted by independent variables, and also which independent variables is the best predictor of dependent variables.

Multiple regression is based on correlation, but this technique generates a new and more sophisticated understanding about the relation among a dependent variable and a number of independent variables. In this thesis, the relation among these variable has been investigated and established by using correlation but in this part, multiple regression has been deployed to look at the relation between variables in a different way. Using multiple regression allows us to realize that some situational variables could be used for predicting the level of brandability and also the type of consumer involvement.

In a situation, that organizations' strength is on controlling situational variables, not branding activities. This way of looking at data could provide them information for

a better understanding about situational variables that are more important to consider in their advertising planning. These results could be used for answering different types of research questions and predicting particular outcomes that correlation's results could not directly address although the basic principle used for the techniques is the same. For instance, it could befind out that which special situational variable is highly considered with consumer with high level of brand informational involvement.

3.3378 Regression in OTC products

The dependent variables showing the highest correlation with independent variables are chosen for applying multiple correlation. In OTC products, brandability and S1 (the support and recommendation of the seller for a particular brand) and S7 (the existence of advertising materials at point of sale) have the highest significant correlation with independent variables.

Brandability:

For brandability, using the Enter method, a significant model emerged [F(3,138)=20.753, p<.000]. Adjusted R square=.296. Significant variable is shown below:

Table 42 Significant variables for brand functional involvement

Predictor variable	**Beta**	**P**
Brand functional involvement	**.523**	**p<.000**

Brand informational involvement and product involvement are not significant in this model.

For S1, a relatively low-adjusted R squared emerged =.069, [F(3,138)=4.477, p<.005], and the results for S7 are as follows: adjusted R squared is: .058, [F(3,137)=3.884,p<.011] the significant variable is shown below:

Table 43 Significant variables S1 and S7 for BFI and BII

(S1) **Predictor variable**	**Beta**	**P**
Brand functional involvement	-.194	p<.024
(S7) **Predictor variable**	Beta	P
Brand informational involvement	.198	p<.022

BFI= Brand functional involvement/ BII= Brand informational involvement

3.3379 Regression in skincare products

The same procedure is also applied for skincare products, and the highest correlated dependent variables are chosen for regression test: these are brandability, S7, S6 and S1.

Brandability:

By using the Enter method, the following results were obtained: [F(3,119)=26.015, p<.000], Adjusted R squared =.381 and significant variables are:

Table 44 Significant variables for brand functional involvement and product involvement

Predictor variable	**Beta**	**P**
Brand functional involvement	**.478**	**p<.000**
Product involvement	**.201**	**p<.013**

Brand informational involvement is not a significant predictor for this variable.

A significant result was discovered for S7 [F(3,119)=10.656,p<.000], and adjusted R squared =.192. The only significant variable is brand informational involvement. For S1 a significant result also emerged, [F(3,119)=7.330, p<.000], and adjusted R squared =.135, just one of the variables shows the quality to explain S1.The same procedure is also applied for S6 and the result is also significant. Adjusted R squared is: .112, [F(3,118)=6.101,p<.001], and, again, one of the variables has the potential to explain S6 to some extent:

Table 45 Significant variables S1 and S7 for Brand informational involvement

(S7) Predictor variable	Beta	P
Brand informational involvement	.398	p<.000
(S1) Predictor variable	Beta	P
Brand informational involvement	.230	p<.011
(S6) Predictor variable	Beta	P
Brand informational involvement	.338	p<.000

Brand functional and product involvement do not show any significance in predicting S7.Brand functional and product involvement has no predictive capacity for S1.In S6, as with S1 and S7 but unlike brandability, brand functional and product involvement could not explain this variable.

3.4 Discussion

In this part the results of the three methodologies have been compared and briefly explained. The main discussion about the outcomes based on what has been proposed in conceptual framework has been provided in the conclusion.

By having all the quantitative and qualitative data it is possible to properly examine the hypothesize. The first question was addressed the brandability of these products and the difference in their level of brandability.

Hypothesis two: In different groups of products, brand as a potential situational variable has a different level of strength. as stimuli in a purchase and consumption environment.

What is the level of brandability of these two groups of products? How different is the level of brandability in these two groups of product?

Hypothesis three: In any purchase and consumption environment, there are other situational variables with the capability to compete with brand to become the discriminative stimuli.

The quantitative results confirmed the results from qualitative methodologies. High brandability that was observed in interviews and focus groups is established by quantitative analysis as well. Brandability is slightly higher in Skin care products, which confirm the interviews outcomes.

Based on quantitative outcomes it could be concluded that these products are highly brandable. Cumulative percentages show that in OTC products 70.9%, and in skincare products 74.7% (options 5 and above), of respondents have already some brand in their mind before the point of sale.

This high level of brandability justifies investment in branding activities, because it shows that brand is the strongest variable in the purchase environment that significantly determines customer behaviour, particularly given that other situational variables that were determined by focus groups do not show any very strong contribution to consumer brand choice behaviour.

The second hypothesis is about consumer brand expectation:

Hypothesis four: One of the two brand images (functional or symbolic) is expected to be the dominant brand image by customers in different groups of products.

What is the expected brand image by customers in these two groups of products? Do customers expect the same brand's benefits and consequently brand image for these two groups of products?

The quantitative results confirm the outcomes of qualitative outcomes and indicate that the involvement to brand is functional in these two groups of products. In OTC products, 80.3% of respondents' choice in brand functional involvement items is 5 or above. For skincare products, this figure is 85.1%, which indicates a strong functional involvement to brand. Referring to the brand image selection discussion in the literature review, this information could lead to the conclusion that brand image for these products should be predominantly functional. However, in skincare products there is some level of informational brand involvement.

In the next part, an attempt is made to explore the relationships among variables and to determine potential differences between groups in the variables in order to test the following hypothesis:

Hypothesis five: The impact of brand and other situational variables on consumer behaviour varies based on their different levels and types of involvement to product and brand.

What is the impact of involvement in considering different situational variables by consumer in their brand choice?

The correlation analysis is performed to discover firstly whether there is any association between situational variables and involvement variables, and, secondly, whether this relation is positive or negative, and how strong it is. In other words, the attempt is to discover if the consideration of situational variables varies depending on involvement, and which of the situational variables have the greatest impact.

This issue could be explained by saying that the main focus is to determine that, by an increase in involvement, which one of the situational variables is employed more by customers as a reliable indicator for their brand choice. This would naturally lead to the conclusion that these reliable indicators have to be considered by brand managers for their advertising planning.

Situational variables and involvement: (differences in OTC and skincare products)

In comparing the correlation results of the groups of products, what is most striking is the different correlations of the brand informational involvement with S1 or "sellers' recommendations about a brand or support of a brand". **In terms of OTC products, this relationship is negative; the more informational involved in brand and product customers are, the less they take into account sellers' recommendations.** However, **in skincare products, there is a relatively strong positive association; the more informational involved customers are, the more they consider sellers' recommendation' in their brand choice.** This difference shows that, in different product categories, the same factors could be considered entirely differently by customers (Appendix V).

Brandability and involvement: (differences in OTC and skincare products)

The second major difference with these two groups of products is the association of independent variables (informational/functional involvement to brand and product involvement) and brandability.

In the case of OTC products, this relationship is weaker for brand involvement variables as compared to skincare products. For product, involvement there is no

association at all in OTC products. Brand informational and functional involvement and product involvement do not have meaningful impact on brandability of OTC products. While in skincare, this association is very strong. The higher the involvement to product and brands the higher the level of brandability. (Appendix V).

As was mentioned in the outcomes of interview methodology in project one, the reason that involvement to product and brand does not increase brandability in OTC product is because consumers believe that OTC products are highly regulated and all the brands to a high extent, are trustworthy. This issue is not in contradiction with high brandability in OTC products, the consideration that the quality of these products has been approved by tight rules and regulation has decreased the association of involvement and brandability.

Situational variables and informational involvement: (Similarities in OTC and skincare products)

Excluding the dissimilarity of brand informational involvement toward S1 (the support and recommendation of a seller for a particular brand), which in OTC products is negative and in skincare products is positive, this involvement tends to show the same associations with dependent variables in the two groups of products, but is marginally stronger in terms of skincare products (Appendix V).

The informationally involved customers to some degree consider the situational variables, other than brand itself, as a stimulus, and none of these factors has a very dominant position in comparison to the others.

Situational variables and functional involvement: (Similarities in OTC and skincare products)

In the case of functionally involved customers, in the two groups of products a single factor, brand *per se*, is dominant. S7 (the presence of advertising materials in point of sale) and S1 (the support and recommendation of sellers for a particular brand) has a positive correlation with brand functional involvement as well (Appendix V).

The correlation strength of S1, S7 and brandability is much higher in skincare products than in OTC products. This means that for brand choice in skincare products,

the brand is primarily the strongest variable in behaviour setting followed by S1 and S7, which both have a moderate impact on consumer brand choice.

Situational variables and different levels of involvement (Low, medium and high):

The ANOVA test was performed for a better understanding of the nature of the relationship amongst different levels of involvement with dependent variables. Put simply: are there any differences in the mean scores of low involved, medium and high-involved customers in their association with situational variables?

Based on the ANOVA results, it could be concluded that there are significant differences among the mean scores based on different levels of involvement. The higher level of involvement is associated with a higher level of consideration, positive or negative, for the situational factors. The situational factor that has been associated most positively with involvement, and especially functional involvement, is brandability, which indicates that, in these two groups of products, brandability deserves the highest level of investment.

Although brand is the main contender amongst situational variables in terms of generating the discriminative based on involvement, **there are other variables that have some level of association with increased involvement, in informational involvement and particularly in the case of skincare products**. These other variables must also be considered in any marketing campaign.

Multiple regression:

Finally, multiple regression was applied to uncover to what extent the consideration of situational factors can be explained by involvement level. The results indicate that, in both OTC and skincare products, brand functional involvement could be used as a predictor of brandability. In addition to brandability, other situational variables could be associated with informational brand involvement. It could also be argued that customers who have an informational brand involvement use other situational cues, as well as the brand itself, to ultimately determine their brand choices.

In summary, it could be argued that measuring brand involvement and its type could be used by brand managers to determine a suitable brand image type. Following

that, by measuring brandability they could attempt to ascertain how much they could expect from investments in the brand *per se*.

By finding the association of situational variables with brand functional/informational involvement level and product involvement type, brand managers could determine what situational variables are more important in different categories of customers. Consumers could be categorised based on their different levels of involvement to product and brand. In other words, brand informational/functional involvement and product involvement could be used for consumer segmentation. Knowledge of the situational variables that are considered by each segment will help brand managers to target the appropriate situational variable for maximum influence on the chosen segment.

Once they have determined the strength of all the situational variables and the kind of customers they could influence, this information could help brand managers plan advertising campaigns.

Chapter 4: Conclusion

Creating strong brands is an organisation's first priority. Brands are the most precious, intangible asset of any organisation. In a highly competitive environment, brand is one of the most important sustainable advantages that organisations can rely on, since they are specific to organisations, highly protected by law and, more importantly, inimitable and unique. Strong brands enable organisations to expand their brands more effectively, decrease the effect of competitors' promotional activities, generate a powerful barrier to entry and increase the willingness of customers to pay a higher price (Batey 2006).

There is a very high rate of failure in branding endeavours and high investment in branding does not guaranty success in this practice (Greenway, 2012;Leuthesser, L., Kohli, C., & Suri, R, 2003; Völkner and Sattler, 2006). Creating and managing a brand involves not only brand managers but also consumers. In a branding campaign consumers are not passive recipients of branding endeavours. In contrast they actively participate in these endeavours by having expectations from brand separate from product based on different product categories.

In any branding endeavour consumers and brand managers co-exist and sometimes these two parties have very different ideas about brand values. Marketers do not have total control on branding because they do not have control of actual customers' brand expectation and brand reputation (Boyle 2006). In every product category, consumers expect specific benefits from brand. Negligence of fulfilling these anticipations from brand and rather considering brand as something to "do to the customers" could prevent branding activities from generating the right brand associations with consumers. This could lead to failure of branding. In reality "brand is what consumer do things with" (De Chernatony and McDonald 2006). Brand per se has the capability of delivering some benefits to customers besides benefits consumers want from products.

Following the mentioned arguments, exploring the following questions was the centre of attention of this thesis: **what variables could be used for understanding and explaining consumer behaviour toward brand and branding activities? How**

could these variables be evaluated both quantitatively and qualitatively? Finally how they could be utilized for developing successful brand strategies in different product categories?

Two factors have been presented in this thesis for understanding and explaining consumer brand choice. It is argued that these two variables together could generate a thorough insight regarding how consumers evaluate brand in their purchase behaviour. The first factor is the consumer side of brand which consists of three different variables. The second one is the consideration of situational factors in the purchase and consumption environment. Informational and functional Involvement to brand and product involvement has been deployed for quantifying consumer brandability and discovering consumers' brand expectations in addition to involvement variables. These variables have been tested to find any potential relation among these variables and situational variables. BPM has been used as a framework to address the mentioned variables.

4.1Methodology

Three different methodologies have been applied in this research for gathering data to test the hypotheses.

Research objectives of the project one were to explore the consumer side of brand and testing hypotheses one, two and four by using interviews as the methodology. The interview is the best methodology for the early stage of research work because of the interview can be tailored with different types of questions. This may clarify neglected topics or vague ideas, especially because the direct interaction during interviews can help in understanding the interviewees' ideas in more detail.

Semi-structured interviews were used to obtain initial insight into the topics, and some information about common terminology and expressions that are used by interviewees to express ideas about these topics.

Main research objectives of projects two were; firstly, generating an inventory of potential situational variables in purchase and consumption setting or "all those aspects of environment that affect consumer behaviour"(Srivasta 1981). Additionally, comparing these situational variables with brand and finding any relation between brand and these variables. Secondly, verifying the results of interviews as a

triangulation strategy by a new methodology to overcome the limitations of interview in project one. Considering that generating as many situational variables as possible was the first priority of this project, focus groups were used as methodology. Focus groups as methodology are capable of generating more ideas than other methodologies.

The research objective of the third project was to quantify situational and involvement variables in order to compare the situational variable's strength and to measure brandability and compare its strength with other situational variables to test hypotheses two and three. Besides that quantifying brand informational/functional involvement in order to discover the proper brand image for each product and test hypothesis four and finally, to find any potential relation among situational variables and involvement variables for evaluating hypothesis five.

4.2BPM in this research

BPM was chosen as framework for this research, the behaviouristic approach of BPM to consumer behaviour provides several advantages this research, firstly as a behaviouristic approach attitude is no longer considered as determinant of behaviour. The low correlation between attitude and behaviour has been compensated in this framework by considering both setting and learning history as determinant of behaviour. Secondly, the pattern of reinforcement in this framework is the same as the benefit that brand could provide as benefits to customers. Thirdly, the setting and learning history introduced by BPM are the equivalent of situational variables and involvement that has been considered in this research for understanding and explaining consumer behaviour. That is BPM has provided a practical behaviouristic framework that could be used in different consumer behaviour researches. Different elements of BPM could be adapted to different main variables of different studies, which make BPM a flexible framework for behaviouristic studies. BPM has been explained briefly in next paragraph.

A setting consists of both social and physical environment and rules generating stimuli. These stimuli, through interaction with the consumer learning history, which represent the individuality of the customer, create discriminative stimuli. The intersection between setting and learning history is a consumer situation. In Foxall's words (1996): "a consumer situation is a particular (concrete, real world) consumer behaviour setting and a learning history".

What is important about the consumer situation is that it is a more empirically available unit than consumer behaviour setting and consumer behaviour setting scope, which are hypothetically constructed. Consumer situation relates any consumer response to the setting; setting without a customer learning history could not generate discriminative stimuli.

According to the BPM, any behaviour is a function of two separate variables: learning history and current setting (where current setting could feasibly be specified in time and place.) Any consumer behaviour is associated and related to the above-mentioned variables or, in other words, is originated by the interaction of a learning history and a current setting. It is argued by Foxall (1998) that, understanding any behaviour "involves identifying the discriminative stimuli that compose the setting, the consequences to which they point, and as far as is feasible, the learning history of the individual". In this thesis, to a very high extent, all of the situational variables with potential impact on consumer brand choice have been determined to find out which one has the highest potential to become discriminative stimuli. Consumer expected consequences from brand choice have been determined. Finally, involvement has been deployed for understanding learning history of the individuals.

In the following setting and learning history has been discussed based on variables of this thesis. The results of the three empirical studies and their implication has been explained according to the hypothesis provided in conceptual framework.

4.21Setting:

The first important factor, which has to be in the centre of attention for a successful branding is the situational factors in purchase and consumption environment. A full knowledge about any situational factors, which could be considered by consumers in his/her purchase behaviour, is a prerequisite of a successful branding.

In any environment or setting in which a purchase or consumption takes place, several stimuli exist (according to the definition of setting in this research), but only one will turn into a discriminative stimulus because of the consumer's learning history. This concept has been explained by Ferreira and Castro as follows(2010): "To understand consumer behaviour, it is necessary to define how each attribute of the consumer setting will interact with the consumer learning history, based on his past experience in

similar settings. Situations that high probability of each type of consequence will influence the consumer to behave accordingly".

In this thesis, environmental factors are classified into two categories: "consumer side of brand", and other situational factors besides brand. These environmental factors are distinct from each other, but in the prescence of learning history, they could turn into a different customer situation. There is a ompetition amongst these variables to become discriminative stimuli. However, as was mentioned previously, learning history or consumers' previous experiences actually establishes which one will be transferred to discriminative stimuli and determine the actual behaviour.

The consumer side of brand as a notion consists of three different variables that together could be used for explaining and understanding brand as a situational variable. For understanding brand as a situational variable, it is required to determine every one of the three variables of consumer side of brand.

4.22The relation between brand and product

The first variable is about how customers consider the relation between brand and product. Two approaches exist among scholars about the relation between product and brand. The classic approach to this topic argues that consumers consider brand as a separate unit from product, which could deliver its own benefits independent from products. The second approach to this subject argues that brand and product are inseparable in the mind of consumers. In other words, consumers evaluate brand and product simultaneously and could not differentiate between brand benefits and product benefits.

In different product categories the understanding of consumers from the relation between product and brand is different and could be one of the mentioned understandings. What is important for a brand manager is to find out which one of these two relations exist and plan accordingly (each one requires different consideration for branding activities.) Therefore, for understanding brand as a situational variable the first step is to find out how customers consider the relation between product and brand in every product category. The following hypotheses is developed to address the mentioned argument:

Hypothesis one: The relation between product and brand has been considered differently in different product categories by consumers, either as one entity or as two separate elements.

The results of empirical study of project one indicates that consumers could clearly distinguish product and brand in these products and associate different benefits to brands and products. Consumers consider brand and product as two separate sources of benefits that could independently convey their benefits to customers.

This understanding has important practical implementations for marketers to consider in their branding endeavours. The most important implication of this understanding is that it is highly reasonable to invest on branding endeavours in these products in order to provide the benefits that customers expect from brand. In OTC and skincare products consumers believe that they receive benefits from brand; they could evaluate brands based on the level of benefits they could deliver to them independent from product. Accordingly, marketers have to discover the benefits that customers expect from brand per se and associate their brand to the expected benefits. The mentioned argument would be much more significant in situation in which brandability of the product category is high.

What makes investing on brand worthy in situations that customers considered brand and products as two separate sources of benefits is that brand remains in the consumer mind for a long period of time while products become out of date after a while. Additionally, a product could be imitated by other competitors while a strong brand could not be copied and remains a source of differentiation.

4.23Brandability

The second component of "consumer side of brand" is brandability. The higher the brand influence consumer behaviour which in the case of this research is brand choice, the higher is the brandability. That is brandability indicates the power of brand to become discriminate stimuli in comparison with other situational variables. Brand, unlike other situational variables has different features. To understand brand it is required to take into account other aspects of brand that together are called consumer side of brand.

A thorough understanding of the power of brand in a setting helps an organisation to allocate their resources appropriately. In a low brandability environment, spending financial resources in branding does not make any difference because brand is not considered by consumers as a stimulus. In this situation, marketers have to discover stronger situational variables. While in a high brandability situation, the marketers have to focus on brand to influence consumer choice. Based on the mentioned argument the following hypotheses have been produced:

Hypothesis two: In different groups of products, brand as a potential situational variable has a different levels of strength as stimuli in purchase and consumption environment.

Hypothesis three: In any purchase and consumption environment, there are other situational variables with the capability to compete with brand to become the discriminative stimuli.

Empirical studies specify that brand is a very strong situational variable, influencing consumer choice in these products. The strength of brand is slightly higher in skin care products in comparison with OTC products. The quantitative results indicate that the strength of other situational variables is much lower than brand. This finding highly increases brand significance, which is the most important and influential stimuli of the setting. It also has the highest probability to transfer to the discriminative stimuli. Indentifying discriminative stimuli is one of the variables that Foxall (1998) considers essential for understanding consumer behaviour.

The high brandability of OTC and skin care products indicates that marketers and brand managers have to spend most of their resources on branding. Investing in brand could be highly rewarding for these two groups of products considering that other situational variables are not strong enough to compete with brand.

4.24Consumer brand expectation

The third variable of "consumer side of brand" is brand image. As was mentioned in the literature review, a brand could have two main purposes distinct from a product; utilitarian and symbolic. The informational or symbolic task of brand is more external; it could include guaranteeing a level of social status or signalling conformity to a particular group. Conversely, it could also be internal, for instance by providing sensory

pleasure, variety or cognitive pleasure. The utilitarian function of the brand is about guaranteeing the promised level of quality of the product or service.

One of the objectives of this research is to identify the stimuli, which are most likely to be turned into discriminative stimuli by learning history. This objective is in harmony with the essence of the BPM: "In brief, the BPM assumes that, in any given consumption situation, choice is directed towards maximising reinforcement and minimising punishment. In pursuit of such an outcome, the individual consumer selects between available choice options by looking to stimuli in the immediate behaviour setting, applying her/his own idiosyncratic learning history to identify those discriminative stimuli that have been shown to most reliably predict outcomes in identical or similar situations in the past" (Nicholson and Xiao 2010). Therefore it becomes very important to understand what "maximising reinforcement and minimising punishment" means and how different environmental variables signal these reinforcements and punishments based on customers' previous experiences.

Given this argument, consumers could potentially expect different kinds of outcomes as reinforcement from a brand *per se* as an environmental factor in these two groups of products: skincare products and OTC products, in the context of Iranian culture.

Maximising reinforcement is based on what benefits brands are able to deliver to customers. A dominant functional brand image in general guarantees some functional benefits about products for the customers. Functional brand image secures promises about aspects of quality depend on the product category: "the more intrinsic advantages of the product", which "usually correspond to the product related-attributes" (Belen del Rio et al. 2001). When the expected benefits from a brand by customers is assurance regarding functional qualities of the purchase and brand choice, maximising benefits for this consumer could happen by looking for an attitude-based brand image. A functional brand image minimise punishment by guaranteeing characteristics such as performance, reliability, conformation to specification and serviceability. The functional brand image is generally used by consumers before and during purchase. while symbolic brand image delivers its benefits not only before and during purchase but also mainly after the purchase and during consumption.

A symbolic brand image could be the choice for customers who want to maximise their symbolic and informational benefits from their purchase. A dominant informational brand image is about expressing social and financial status, or conformity to a social group. A symbolic brand image has to provide an image that demonstrates a special lifestyle or identity of the consumers. For many consumers symbolic brand image is a way of indirect communication to others. That is, by using a fitting brand image with their lifestyle, maximising their benefits by sending the right message to others. The following hypothesis is for testing the mentioned argument:

Hypothesis four: One of the two brand images (functional or symbolic) is expected to be the dominant brand image by customers in different groups of products.

The qualitative and quantitative outcomes show that the expected benefit from brand in OTC and skin care products is functional or attribute based; consumers expect a dominant functional brand image.

That is what consumers expect from brand in OTC and skin care products is to guaranty for them some functional benefits of the product, promise of some level of quality. In other words, they expect that brand image could associate some functional benefits to the product. In skin care products symbolic benefits or non-attribute based brand image are also desired by customer. However, consumers expect a dominant functional brand image for these two group products. The implication of the outcomes for brand managers is to generate a functional attitude-based brand image for these products. Considering that OTC products have to have a fully functional brand image while in skin care products some level of symbolic benefits are also expected, it is highly rational to provide two different brand images based on precise consumer brand expectations.

4.25Learning history

Learning history has been defined by Foxall (2007) as:" ...the cumulative effect of rewarding and punishing outcomes of past behaviour; it represents the personal factors influencing consumer choice and primes the consumer's approach/avoidance responses; and state variables, moods, ability to pay, deprivation, influence momentary purchase and consumption, etc". A Learning history of reinforcement and punishment is

formed over time based on the consequences that consumers face in a given situation (Foxall 2008).

Involvement which is the same as learning history represents personal factors that influence consumer choice. Involvement definitions are constructed based on the following factors: "interest", "goals and consequences", "personal relevance" and "perceived importance" (Fin, 1983; Zaichkowsky 1985) which are demonstrations of the personal factors mentioned by Foxall. Individuals' interest and expected consequences over time shapes and defines involvement. In this thesis, informational/functional involvement and product involvement has been considered for understanding and quantifying learning history.

Learning history is developed by consumers' previous experience and allows them to understand and interpret the behaviour setting and accordingly the consequences of their behaviour. The likelihood of a special behaviour depends on the reinforcing and aversive consequences that the setting signals to the consumer. Based on the mentioned argument Foxall argues that: "According to this theoretical perspective, one of the main tasks in marketing is to identify what events can function as benefits (or aversive stimuli), to what extent, for what consumers, and under what circumstances" (Foxall 1992). It is argued in this thesis that a method that could be used for finding the mentioned information is using the concept of involvement. Involvement has been deployed in this article to qualitatively capture functional and informational brand involvement and product involvement.

Determining informational and functional involvement could be used for understanding what consumers consider as benefits from brand. Quantifying the involvement type also could demonstrate to what extent consumers expect these benefits. Involvement also has been used in this thesis for consumer segmentations based on their level and type of involvement.

Knowing the level of brand informational/functional involvement is deployed for selecting suitable brand image and it is tried to uncover the relation between "involvement types and level" and potential situational variables. Based on the mentioned argument the following hypothesis has been proposed:

Hypothesis five: The impact of brand and other situational variables on consumer behaviour varies based their different levels and types of involvement to product and brand.

The outcomes of project three prove that the level of and types of involvement are related to consumers' situational consideration. The type and level of involvement determine which one of the situational variables has the highest chance to become discriminative stimuli. Marketers could deploy this information to categorise consumers based on their involvement level and type, and target the category that they are more familiar with, controlling the situational variable that has the highest impact on that category.

For example, when an organization is good at working with sellers and could manage them to recommend its brand they have to find out; firstly is there any positive relation between involvement type and this situational variable. Secondly, if the size of the segment is satisfactory for their organization. Finally, to focus on that segment by training sellers and providing them with suitable motivations. Besides that, by knowing the type of involvement marketers could allocate resources to provide a brand image for that type of involvement to strengthen their brand influence.

4.26Differences of OTC and skincare products

The results of the quantitative study in project three indicate that there are important differences in relation between situational variables and involvement variables in OTC and skin care products.

Interestingly, involvement variables have a negative correlation with "sellers' recommendation about a brand or support of a brand" in OTC products. The higher the consumer is involved in brand the less they take recommendation from sellers in their brand choice in OTC products. While in skin care products, this correlation is positive and relatively strong.

In Iran, that is the more informationally, consumers are involved in brand the more they seek sellers' recommendation for their brand choice in skin care products.

Sellers' recommendation of a brand is a very common practice .Companies invest highly on this matter. The results show that this practice in OTC products is a waste of resources and has negative effect on consumer brand choice. This finding is one of the reasons that companies have launched two different brand images for these two types of products, considering that the same situational variable has very different impact on consumer brand choice.

The quantitative data of project three reveals that the correlation between brandability and involvement variables is higher in skin care products in comparison with OTC products. The main reason for this matter was discovered in interviews. Participants mentioned that although the quality of OTC products is important for them, these products are highly regulated. These regulations have decreased the correlation between brandability and involvement variables in OTC products in comparison with skincare products. This is another difference between OTC and skin care products. This conclusion makes it vital to generate two different brands for these two groups of products, even if the producer of these two groups of products is the same.

4.27Similarity in skincare and OTC products

Informational brand involvement has roughly the same correlation with all the situational variables even brand. Informationally involved consumers consider all the situational variables roughly the same for their brand choice in OTC and skin care products. It could be argued that informationally brand involvement consumers consider more clues in their brand choice than functionally brand involvement customers. It could be argued that informationally involved consumers consider all the situation variables of the setting almost as the same level of importance.

Considering that, consumers are mainly functionally involved this outcome could be very interesting for marketers that their companies' brand is not strong enough or they have not enough financial resources to spend on branding. If the size of informationally involved consumers is big enough for them they could focus on this niche of the market and allocate their resources to control the situational variables that they could manage based on their resources.

Functional involvement to brand has a high correlation with brandability. The more functionally involved consumer to brand the more they consider brand per se as

the strongest stimuli in the market. For the OTC product brand is the dominant variable, but in skin care products, the sellers' recommendation and advertising in point of sale have positive effects, but much weaker than brand. In a very competitive environment, it would be useful for marketers to consider these two variables although their influence is much lower than brand but it could support brand in influencing consumer brand choice.

4.28Low involved, high involved and situational variables (ANOVA Test)

It was decided to apply ANOVA test to see if there are significant differences between three groups of consumers based on their level of involvement. Consumers were divided in three groups: low, medium and high involved. The results support correlation outcomes and indicate that there is a significant difference among the means score of these three groups and situational variables.

The results indicate that the high involved group consider positively situational more than the low involved group. The only exception was among situational variables, for example, "sellers' recommendation" which in the high involved group was more negative than the low involved group. The results are similar to correlation results and no unexpected results were found. The results of ANOVA for instance confirms the results of informationally involved customers to brand by correlation; the high involved group showed a higher consideration of all situational variables than the low involved consumers and this consideration was approximately the same with brandability.

4.29Regression

Regression was applied to generate a new way of looking at the relations among variables. Regression results illustrate to what extent dependent variables could be explained and predicted by independent variables.

The regression outcomes show that brand functional involvement in OTC and skin care products could be used as a predictor of brandability, unlike brand functional involvement, brand informational involvement could be associated to not only brand but also to other situational variables. Brand is not the dominant stimuli of the setting for informationally involved customers.

4.3Results

The interviews and focus groups results show that these two groups of products are highly brandable. Customers rely highly on brand in their brand choice. The customers consider brand and product as two different and independent entities, and their expectations from brand differ slightly between these two groups of products. With OTC products, they expect a highly functional role from brands; in skincare products, as well as the functional expectations, there is a level of demand for an informational role for brands. Qualitative analysis of the questionnaires indicates that, although brand is the most important contender amongst situational variables in terms of generating the discriminative stimuli, there are other variables that have some level of impact on consumer brand choice. These other variables must also be considered in any marketing campaigns.

The implementation of the aforementioned results shows that, when the high levels of brandability and involvement to brand are considered, it is justifiable to invest in brand in these two groups of products in Iran. In OTC products brand image should be either functional or attribute-based according to the types of involvement, while for skincare products brand image should be predominantly functional with informational aspects.

There are other situational factors that are important in consumer brand choice apart from brand image. In skincare products, the support of the sellers and also point of sale advertisements are the most important situational variables; in OTC products, the sellers' recommendation for a brand actually has a negative impact on consumer brand choice, while the point of sale advertisement has a positive impact as with the skincare products.

4.4Contribution

This research was conducted to find answers for the following questions:

What variables could be used for understanding and explaining consumer behaviour toward brand and branding activities? How could these variables be evaluated quantitatively and qualitatively? Finally, how they could be utilized for developing successful brand strategies in different product categories?

The reason that these questions were developed was the gap in the knowledge about variables that could explain different aspects of consumers' contribution in branding. It is argued by researchers that one of the important reasons for high rate of failure in branding activities is not considering the consumer as an active participant in branding endeavours, but there were no thorough and practical explanations about how this participation could be understood, evaluated, and utilized for branding planning.

BPM as a behaviouristic approach to consumer behaviour is selected as the conceptual research framework for this thesis. The reasons for that have been thoroughly discussed in literature review. BPM considers setting and learning history as the two determinants of consumer behaviour. Variables of this research have been explained according to BPM framework.

The first theoretical contribution of this thesis is introducing variables that to a very high extent could explain and evaluate the participation of consumer in branding activities. The first concept that introduced in this research for explaining consumer contribution to brand is the concept of consumer side of brand.

Brand is considered more complicated than other situational variables, and consumers consider brand from different aspects. It is argued that to understand and evaluate brand, three different variables have to be explored to fully realize all features of brand as a situational variable. These three variables together are called "consumer side of brand" which together explain different aspects of brand in relation to customers. These variables were already introduced by scholars and researchers, but the combination of these variables provides a new insight. This understanding of brand explains brand from the point of view of the customers, is one of the theoretical contribution of this research.

Three different variables, of "consumer side of branding", are brandability, the relation between brand and product and finally consumer brand expectations. These three variables cover all aspects of brand, and explain methodically how customers understand a brand; it should serve as an important consideration for brand managers in their branding activities. An accurate knowledge of these three factors should be the focal point of any branding and advertising in order to make the best use of different resources, based on the consideration of these factors, in any product category.

The second contribution of this research is contribution to practice by providing methodological techniques for evaluating these variables quantitatively and qualitatively. The concept of involvement has been deployed as a manifestation of learning history and has been used for firstly quantifying consumer brand expectations as one of the variables of consumer side of brand. Secondly, to find out the relation between involvement variables and setting variables;using involvement questionnaires as learning history is one the contributions of this study. These questionnaires serve to transfer theoretical concepts into practical results with managerial implementations.

The mentioned contribution could be considered as methodological for practical use; this contribution produces structures for evaluating the variables that could explain consumer contribution in branding activities. Accurate definitions were developed for consumers' side of brand variables to be referred to for analysing qualitative methodologies.

Customised questionnaires were produced based on standard involvement questionnaires. They were translated accurately to Farsi for exploring quantitatively situational variables of purchase and consumption setting and consumer side of brand.The questionnaires and instruction for analysing qualitative data could be used in different categories of products and are generalised. This technique would allow a new method for consumer segmentation based on type and level of involvement. Followingthe segmentation, enable brand managers to discover the situational variables that are important for each category and manage branding activities consequently.

The third contribution of this thesis is providing a framework about how this information could be implemented in practice. , in other words how these variables and the relation among these variables could be used in branding planning as active participation of consumer in branding. The results about each variable of consumer side of brand and involvement variables need to be implemented in branding efforts, each one of these variables contribute differently in branding and in this study this issue has been considered and the implementation of outcomes about variables toward branding have been thoroughly explored and explained.

Another contribution of this thesis is a theoretical contribution to a quantitative approach to BPM variables by quantifying learning history with

involvement variables. Learning history is a complicated concept, in this research invovlvement was employed as a manifestation of learning history. That is providing a behaviouristic approach to branding and brand image management, in which brand image is considered as a situational factor in competition with other situational factors. The application of the BPM to this argument is one of the contributions of this thesis. This offers a new framework to explain the interaction of situational factors in purchase and consumption setting as well as their potential impact on consumer brand choice with learning history

4.5Future research

This research identified and examined the most important variables with potential roles in consumer brand choice. For future research, it is recommended that new variables be taken into account. This will generate both a more accurate data and a more comprehensive understanding of consumer brand choice. Price is a variable that could be considered in future research, although it was ascertained at the interview stage that the high level of concern about quality in both groups of products has highly decreased the consideration of price by customers in their brand choice. This could nevertheless produce interesting results. Age is another variable that potentially could help to determine whether or not different generations have different priorities in the variables that they consider in their brand choice. Studying this could provide researchers with additional insight as to how these perceptions have changed over time.

Another suggestion for future research is to research each product within these two product categories separately. There is the potential that some products within these two product groups could be considered differently by customers from the whole product category for a variety of reasons. In such situations that particular product will require a different approach for advertising and branding. Conducting research for each product is one toption to understand and interpret whether results obtained for each of these groups could be applied generally across all of the products within that category.

References

Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: a theoretical analysis and review of empirical research. [Article]. Psychological Bulletin, 84(5), 888-918. doi: 10.1037/0033-2909.84.5.888

Ajzen, I., & Fishbein, M. (2004). Questions Raised by a Reasoned Action Approach: Comment on Ogden (2003). [Article]. Health Psychology, 23(4), 431-434. doi: 10.1037/0278-6133.23.4.431

Ajzen, I., & Fishbein, M. (2005). The Influence of Attitudes on Behavior. In D. Albarracín, B. T. Johnson & M. P. Zanna (Eds.) The handbook of attitudes. (pp. 173-221). Mahwah, NJ: Lawrence Erlbaum Associates Publishers.

Aaker, D. A. A. (1991). Managing brand equity: capitalizing on the value of a brand name. New York: Free Press.

Ambler, T. (1997). How much of brand equity is explained by trust? [Article]. Management Decision, 35(4), 283-292. doi: 10.1108/00251749710169666

Andrews, J. C., Durvasula, S., & Akhter, S. H. (1990). A Framework for Conceptualizing and Measuring the Involvement Construct in Advertising Research. [Article]. Journal of Advertising, 19(4), 27-40.

Antil, J. H. (1984). Conceptualization and Operationalization of Involvement. [Article]. Advances in Consumer Research, 11(1), 203-209.

Arbor, (1984). "The Benefit Pyramid" Media, PA:ARBOR:.

Baker, J., Parasuraman, A., Grewal, D., & Voss, G. B. (2002). The Influence of Multiple Store Environment Cues on Perceived Merchandise Value and Patronage Intentions. [Article]. Journal of Marketing, 66(2), 120-141.

Barker, R. G., & Wicker, A. W. (1975). Commentaries on Belk, 'Situational Variables and Consumer Behavior'. Journal of Consumer Research, 2(3), 165-167. doi: 10.1086/208628

Batra, R., & Homer, P. M. (2004). The Situational Impact of Brand Image Beliefs. [Article]. Journal of Consumer Psychology (Lawrence Erlbaum Associates), 14(3), 318-330.

Batey Mark (2008). Brand meaning. London: Routledge. ISBN-0805864555.

Batra, R., Lehmann, D.R., & Singh, D.(1993). The brand personality component of brand goodwill: Some antecedents and consequences. In D.A. Aaker & A. Biel (Eds.), Brand equity and advertising. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc. 83-96.

Bearden, W. O., & Etzel, M. J. (1982). Reference Group Influence on Product and Brand Purchase Decisions. [Article]. Journal of Consumer Research, 9(2), 183-194.

Belk, R. W. (1975a). Situational Variables and Consumer Behavior. [Article]. Journal of Consumer Research, 2(3), 157-164.

Belk, R. W. (1975b). The objective situation as a determinant of consumer behavior. [Article]. Advances in Consumer Research, 2(1), 427.

Belk, R. W. (1986). What should ACR want to be when it grows up? [Article]. Advances in Consumer Research, 13(1), 423-424.

Berry, J. W. (1989). Imposed Etics-Emics-derived Etics: the operationalisation of a compelling idea. [Article]. International Journal of Psychology, 24(6), 721.

Berry, J. W., Poortinga, Y. H., Segall, M.H. Dasen, P.R. (2002) Cross-cultural psychology: research and applications

Bhat, S., & Reddy, S. K. (1998). Symbolic and functional positioning of brands. [Article]. Journal of Consumer Marketing, 15(1), 32-43.

Bitner, M. J. (1992). Servicescapes: The Impact of Physical Surroundings on Customers and Employees. [Article]. Journal of Marketing, 56(2), 57-71.

Bloch, P. H. (1981). An exploration into the scaling of consumer involvement with a product class. [Article]. Advances in Consumer Research, 8(1), 61-65.

Bloch, P. H. (1982). Involvement beyond the purchase process: conceptual issues and empirical investigation. [Article]. Advances in Consumer Research, 9(1), 413-417.

Bloch, P. H., & Richins, M. L. (1983). A Theoretical Model for the Study of Product Importance Perceptions. [Article]. Journal of Marketing, 47(3), 69.

Boyd Jr, H. W., & Levy, S. J. (1963). New Dimension in Consumer Analysis. [Article]. Harvard Business Review, 41(6), 129-140.

Bowen, L. and Chaffee, S.H. (1974), Product Involvement and Pertinent Advertising Appeals. [Article]. Journalism Quarterly, 51 (Winter), 613-621, 644.

Brislin, R. W. (1970). Back-translation for cross-cultural research. [Article.] Journal of Cross-Cultural Psychology, 1(3), 185-216. doi: 10.1177/135910457000100301

Brown, S., Kozinets, R. V. and Sherry, J. F. (2003) Teaching old brands new tricks: Retro branding and the revival of brand meaning. [Article.] Journal of Marketing 67, 19–33.

Buchanan, D. I. (1964). How Interest in the Product Affects Recall: Print Ads vs. Commercials. [Article,] Journal of Advertising Research, 4 (1), 9-14.

Calder, B. J., & Tybout, A. M. (1987). What Consumer Research Is. [Article]. Journal of Consumer Research, 14(1), 136-140.

Celsi, R. L., Chow, S., Olson, J. C., & Walker, B. A. (1992). The Construct Validity of Intrinsic Sources of Personal Relevance: An Intraindividual Source of Felt Involvement. [Article]. Journal of Business Research, 25(2), 165-185.

Celsi, R. L., & Olson, J. C. (1988). The Role of Involvement in Attention and Comprehension Processes. [Article]. Journal of Consumer Research, 15(2), 210-224.

Celuch, K., Goodwin, S., & Taylor, S. A. (2007). Understanding small scale industrial user internet purchase and information management intentions: A test of two attitude models. [Article]. Industrial Marketing Management, 36(1), 109-120. doi: 10.1016/j.indmarman.2005.08.004

Celuch, K., & Taylor, S. A. (1999). Involvement with services: An empirical replication and extension of Zaichkowsky's personal involvement inventory. [Article.] Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior, 109-122.

Chay, R. F. (1991). How Marketing Researchers Can Harness the Power of Brand Equity. [Article]. Marketing Research, 3(2), 30-37.

Chatzidakis, A., Hibbert, S., & Smith, A. (2007). Why people don't take their concerns about Fairtrade to the supermarket: The role of neutralisation. *Journal of Business Ethics*, *74*(1),89–100.

Chernatony, L. D., Abimbola, T., & Cottam, S. (2007). Editorial: Critical Issues in Brand Management. [Article]. Journal of Marketing Management, 23(1/2), 1-5.

Churchill, G. A. Jr. (1979), "A Paradigm for Developing Better Measures of Marketing Constructs. [Article.] Journal of Marketing Research, 16 (February), 64-73

Clarke, K. and Belk, R. W. (1978), "The Effects of Product Involvement and Task Definition On Anticipated Consumer Effort," in Advances In Consumer Research, Vol. 5, ed. H. Keith Hunt, Ann Arbor, MI: Association for Consumer Research, 313-318.

Cian, L., & Cervai, S. (2011). The Multi-Sensory Sort (MuSeS): A new projective technique to investigate and improve the brand image. *Qualitative Market Research: An International Journal*, *14*(2), 138-159.

Day, E., Stafford, M. R., & Camacho, A. (1995). Research Note: Opportunities for Involvement Research: A Scale-Development Approach. [Article]. Journal of Advertising, 24(3), 69-75.

Day, G. S. (1969). A Two-Dimensional Concept Of Brand Loyalty. [Article]. Journal of Advertising Research, 9(3), 29-35.

Day, G. S.(1990), Market Driven Strategy. New York: Free Press

Day, G. S. (1970), Buyer Attitudes and Brand Choice. New York: Free Press.

DeBruicker, F. S. (1979), "An Appraisal of Low-Involvement Consumer Information Processing," in Attitude Research Plays for High Stakes, eds. J. C. Maloney and B. Silverman. Chicago: American Marketing Association. 112-132.

de Chernatony, L. (1993). Categorizing Brands: Evolutionary Processes Underpinned by Two Key Dimensions. [Article]. Journal of Marketing Management, 9(2), 173-188.

De Chernatony, Malcolm macdonald. "creating powerfull brand" 2006, Elsevier

Deighton J. The territory of consumer research: Walking the fences. *Journal Of Consumer Research* [serial online]. October 2007;34(3):279-282. Available from: PsycINFO, Ipswich, MA. Accessed January 14, 2014.

del Rio, A. B., Vázquez, R., & Iglesias, V. (2001). The role of the brand name in obtaining differential advantages. [Article]. Journal of Product & Brand Management, 10(7), 452.

Douglas, S. P., & Craig, C. S. (2007). Collaborative and Iterative Translation: An Alternative Approach to Back Translation. [Article]. Journal of International Marketing, 15(1), 30-43.

Douglas, S. P., & Nijssen, E. J. (2003). On the use of "borrowed" scales in cross-national research: A cautionary note. [Article]. International Marketing Review, 20(6), 621-642.

Doyle, P. (2001). Building value-based branding strategies. [Article]. Journal of Strategic Marketing, 9(4), 255-268. doi: 10.1080/09652540110079038

Dulany, D. E. "Awareness, Rules, and Propositional Con- trol: A Confrontation with S-R Behavior Theory." In D. Horton and T. Dixon (Eds.), Verbal Behavior and General Behavior Theory. New York: Prentice-Hall. 1968. 340-87

Engel, J. E., Kollat, D. & Blackwell, R.D. (1982). Consumer Behavior. New York: Dryden Press.

Erdem, T., Mayhew, G., & Sun, B. (2001). Understanding Reference-Price Shoppers: A Within- and Cross-Category Analysis. [Article]. Journal of Marketing Research, 38(4), 445-457.

Erdem, T., Swait, J., & Louviere, J. (2002). The impact of brand credibility on consumer price sensitivity. [Article]. International Journal of Research in Marketing, 19(1), 1-19.

Eskin, G. J., & Baron, P. H. (1977). Effects of Price and Advertising in Test-Market Experiments. [Article]. Journal of Marketing Research (JMR), 14(4), 499-508.

Farquhar, Peter Managing Brand Equity. Journal of Advertising Research. [Article]. 30(4),

Ferreira Marta, Lu´ısa Canto e Castro, “Asymptotic and pre-asymptotic tail behaviour of a power max-autoregressive model”, 2010, ProbStat Forum, Volume 03, July 2010, Pages 91-107 ISSN 0974-3235

Finn, D. W. (1983). Low Involvement Isn’t Low Involving [Article]. Advances in Consumer Research, 10(1), 419-424.

Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. [Article]. Journal of Consumer Research, 24(4), 343-373.

Fishbein, M., & Ajzen, I. (2010). Predicting and changing behavior: the reasoned action approach. New York, NY US: Psychology Press.

Foxall, G. (1997). Affective responses to consumer situations. [Article]. International Review of Retail, Distribution & Consumer Research, 7(3), 191-225. doi: 10.1080/095939697342996

Foxall, G., & Greenley, G. (1998). The affective structure of consumer situations. [Article]. Environment and Behavior, 30(6), 781-798. doi: 10.1177/001391659803000603

Foxall, G. R. (1984a). Consumer's intentions and behaviour. [Article]. Journal of the Market Research Society, 26(3), 231-241.

Foxall, G. R. (1984b). Consumers' intentions and behaviour: A note on research and a challenge to researchers. Journal of the Market Research Society, 26(3), 231-241.

Foxall, G. R. (1990). Consumer psychology in behavioural perspective. Florence, KY: Taylor & Frances/Routledge.

Foxall, G. R. (1992a). The Behavioral Perspective Model of Purchase and Consumption: From Consumer Theory to Marketing Practice. [Article]. Journal of the Academy of Marketing Science, 20(2), 189.

Foxall, G. R. (1992b). The Consumer Situation: An Integrative Model for Research in Marketing. [Article]. Journal of Marketing Management, 8(4), 383-404.

Foxall, G. R. (1995). Environment-Impacting Consumer Behavior: An Operant Analysis. [Article]. Advances in Consumer Research, 22(1), 262-268.

Foxall, G. R. (1997). The emotional texture of consumer environments: A systematic approach to atmospherics. [Article]. Journal of Economic Psychology, 18(5), 505.

Foxall, G. R. (1998). Intention versus Context in Consumer Psychology. [Article]. Journal of Marketing Management, 14(1/3), 29-62.

Foxall, G. R. (1999). Putting consumer behaviour in its place: the Behavioural Perspective Model research programme. [Article]. International Journal of Management Reviews, 1(2), 133.

Foxall, G. R. (2007). Intentional behaviorism. [Article]. Behavior and Philosophy, 35, 1-55.

Foxall, G. R., & Goldsmith, R. E. (1994). Consumer psychology for marketing. London etc.: Routledge.

Foxall, G. R., & Pallister, J. G. (1998). Measuring purchase decision involvement for financial services:. [Article]. International Journal of Bank Marketing, 16(4/5), 180.

Foxall, G. R., & Yani-de-Soriano, M. M. (2005). Situational influences on consumers' attitudes and behavior. [Article]. Journal of Business Research, 58(4), 518-525.

Foxall, G.R. (2010a). Invitation to consumer behavior analysis. Journal of Organizational Behavior Management, 30, 92–109.

Foxall, G. R. (2010b). *Interpreting consumer choice: The behavioral perspective model*. New York, NY: Routledge.

Gardner, B. B., & Levy, S. J. (1955). The Product and the Brand. [Article]. Harvard Business Review, 33(2), 33-39.

Garvin, D. A. (1987). Competing on the eight dimensions of quality. [Article]. Harvard Business Review, 65(6), 101-109.

Greenwald, A. G., & Leavitt, C. (1984). Audience Involvement in Advertising: Four Levels. [Article]. Journal of Consumer Research, 11(1), 581-592.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, *18*(1), 59-82. doi:10.1177/1525822X05279903

Haley, R. I. (1968). Benefit Segmentation: A Decision-oriented Research Tool. [Article]. Journal of Marketing, 32(3), 30-35.

Hal Lee, (1970) management consultant, New York City The benefit chain is a copyrighted technique created by Hal Lee.

Harkness, J. A. & Schoua-Glusberg, A. (1998). Questionnaires in Translation. In ZUMA-Nachtrichten Spezial, No. 3: Cross-Cultural Survey Equivalence (Ed. Janet A. Harkness). Mannheim, Germany: ZUMA.

Harkness, J. A. (2003), "Questionnaire Translation," in Cross-Cultural Survey Methods. (Ed. Janet A. Harkness, Fons J.R. van de Vijver, and Peter Ph. Mohler). New York: John Wiley & Sons. 35–56.

Harrison, R., Newholm, T., & Shaw, D. (2005). *The ethical consumer*. London: Sage.

Hawkins, D. I., Best, R.J. & Coney, K. A. (1989). Consumer Behaviour: Implications for Marketing Strategy (4th ed). BPI Irwin: Boston

Hini, D., Gendall, P. et al. (1995). The link between environmental attitudes and behaviour. [Article]. Marketing Bulletin, 6, 22.

Hoeffler, S., & Keller, K. L. (2003). The marketing advantages of strong brands. [Article]. Journal of Brand Management, 10(6), 421.

Hoffman, R. C., & Hegarty, W. H. (1983/08//). A Model for Development of a Data Collection Instrument.

Holbrook, M. B. (1978). Beyond Attitude Structure: Toward the Informational Determinants of Attitude. [Article]. Journal of Marketing Research, 15(4), 545-556.

Holbrook, M. B. (1987). What Is Consumer Research? [Article]. Journal of Consumer Research, 14(1), 128-132.

Holbrook, M. B., Lehmann, D. R., & O'Shaughnessy, J. (1986). Using versus Choosing: The Relationship of the Consumption Experience to Reasons for Purchasing. [Article]. European Journal of Marketing, 20(8), 49-62.

Hooley, G. J. & Saunders, J. (1993). Competitive positioning: The key to marketing strategy. New York: Prentice Hall

Houston, M. J. & Rothschild, M. L. (1978), "Conceptual and Methodological Perspectives on Involvement" in Educators' Proceedings, ed. S. C. Jain, Chicago: American Marketing Association, 184-187.

Houston, M. J. & Rothschild M. L. (1978). A Paradigm for Research on Consumer Involvement, unpublished working paper. University of Wisconsin-Madison.

Houston, M. J. & Rothschild, M. L. 1977. A paradigm for research on consumer involvement. Working paper 11-77-46, University of Wisconsin-Madison

Howard, J. A. & Sheth, J. N. (1969). *The Theory of Buyer Behavior*. New York: John Wiley.

Hsieh, M. H., Pan, S. L., & Setiono, R. (2004). Product-, corporate-, and country-image dimensions and purchase behavior: A multicountry analysis. *Journal of the Academy of Marketing Science, 32*(3), 251–270.

Hupfer, N. & Gardner, D. (1971). Differential Involvement with Products and Issues: An Exploratory Study. In Proceedings: Association for Consumer Research. (Ed. David M. Gardner.) College Park, MD; Association for Consumer Research, 262-269.

Iyer, R., & Muncy, J. A. (2005). The Role of Brand Parity in Developing Loyal Customers. [Article]. Journal of Advertising Research, 45(2), 222-228.

Johar, J. S., & Sirgy, M. J. (1991). Value-Expressive Versus Utilitarian Advertising Appeals: When And Why To Use Which Appeal. [Article]. Journal of Advertising, 20(3), 23-33.

John W. Berry, Ype H. Poortinga, Marshall H. Segall, Pierre R. Dasen (2002)Cross-cultural psychology: research and applications, September

Julie Pallant, J. (2006) SPSS Survival Manual: A step by step guide to data analysis using SPSS

Kapferer, J.-N., & Laurent, G. (1985). Consumer Involvement Profiles: A New Practical Approach to Consumer Involvement. [Article]. Journal of Advertising Research, 25(6), 48-56.

Kassarjian, H. H. (1981). Low involvement: a second look. [Article]. Advances in Consumer Research, 8(1), 31-34.

Keller, K. L. (2003). Brand Synthesis: The Multidimensionality of Brand Knowledge. [Article]. Journal of Consumer Research, 29(4), 595-600.

Keller, K. L., & Lehmann, D. R. (2006). Brands and Branding: Research Findings and Future Priorities. [Article]. Marketing Science, 25(6), 740-759.

Kitzinger J. (1995) 'Introducing focus groups', *British Medical Journal* 311: 299-302.

Kotler, P. (1973). Atmospherics as a Marketing Tool. *Journal Of Retailing*, *49*(4), 48

Kotler, P. (1997). Marketing Management (7th edn.). Englewood Cliffs, NJ: Prentice-Hall.

Krugman, H. E. (1965). The impact of television advertising: learning without involvement. [Article]. Public Opinion Quarterly, 29(3), 349-356.

Krugman, H. E. (1966). The measurement of advertising involvement. [Article]. Public Opinion Quarterly, 30(4), 583-596.

Krugman, H. E. (1971). Brain wave measures of media involvement. [Article]. Journal of Advertising Research, 11(1), 3-9.

Kuzel, A. J. (1992). Sampling in qualitative inquiry. In: B. F. Crabtree & W. L. Miller (eds.), Doing qualitative research. *Research Methods for Primary Care*. Vol. 3. Newbury Park, CA: Sage, pp. 31–44.

Lai, A. W. (1994). Consumption Schemata: Their Effects on Consumer Decision Making. [Article]. Advances in Consumer Research, 21(1), 489-494.

LaPiere, R. T. (2008). Attitudes vs. actions. In R. H. Fazio & R. E. Petty (Eds.), Attitudes: Their structure, function, and consequences. 403-409. New York: Psychology Press.

La Pierre, R. T. (1934). Attitudes vs actions. [Article]. Social Forces, 13, 230-237.

Lastovicka, J. L., & Gardner, D. M. (1978). Low involvement versus high involvement cognitive structures. [Article]. Advances in Consumer Research, 5(1), 87-92.

Laurent, G., & Kapferer, J.-N. (1985). Measuring Consumer Involvement Profiles. [Article]. Journal of Marketing Research (JMR), 22(1), 41-53.

Leek, S., Maddock, S., & Foxall, G. (1998). Concept testing an unfamiliar fish. [Article]. Qualitative Market Research: An International Journal, 1(2), 77-87. doi: 10.1108/13522759810214253

Leuthesser, L., Kohli, C., & Suri, R. (2003). Academic papers 2 +2 =5? A framework focusing co-branding to leverage a brand. *Journal Of Brand Management*, *11*(1), 35

Loudon D. L., & Della Bitta A. J. (1993). Consumer Behaviour: Concepts and Applications (4th edn). McGraw Hill: Auckland.

Malcolm, H. B. M., Leslie de, C., & Fiona, H. (2001). Corporate marketing and service brands - Moving beyond the fast-moving consumer goods model. [Article]. European Journal of Marketing, 35(3/4), 335-352.

McGorry, S. Y. (2000). Measurement in a cross-cultural environment: Survey translation issues. Qualitative Market Research: An International Journal, 3(2), 74-81. doi: 10.1108/13522750010322070

McQuarrie, E. F., & Munson, J. M. (1987). The Zaichowsky Personal Involvement Inventory: modification and extension. [Article]. Advances in Consumer Research, 14(1), 36-40.

McQuarrie, E. F., & Munson, J. M. (1992). A revised product involvement inventory: Improved usability and validity. [Article]. Advances in Consumer Research, 19(1), 108.

Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology. Cambridge, MA: The MIT Press.

Mitchell, A. A. (1979). Involvement: a potentially important mediator of consumer behavior. [Article]. Advances in Consumer Research, 6(1), 191-196.

Mitchell, A. A. (1981). The dimensions of advertising involvement. [Article]. Advances in Consumer Research, 8(1), 25-30.

Mittal, B. (1989a). A Theoretical Analysis of Two Recent Measures of Involvement. [Article]. Advances in Consumer Research, 16(1), 697-702.

Mittal, B. (1989b). Measuring Purchase-Decision Involvement. [Article]. Psychology & Marketing, 6(2), 147-162.

Mittal, B. (1989c). Must Consumer Involvement Always Imply More Information Search? [Article]. Advances in Consumer Research, 16(1), 167-172.

Mittal, B. (1994). A Study of the Concept of Affective Choice Mode for Consumer Decisions. [Article]. Advances in Consumer Research, 21(1), 256-263.

Mittal, B. (1995). A Comparative Analysis of Four Scales of Consumer Involvement. [Article]. Psychology & Marketing, 12(7), 663-682.

Mittal, B., & Myung-Soo, L. (1988). Separating Brand-Choice Involvement from Product Involvement Via Consumer Involvement Profiles. [Article]. Advances in Consumer Research, 15(1), 43-49.

Mittal, B., & Myung-Soo, L. (1989a). A CAUSAL MODEL OF CONSUMER INVOLVEMENT. [Article]. Journal of Economic Psychology, 10(3), 363.

Mittal, B., & Myung-Soo, L. (1989b). A CAUSAL MODEL OF CONSUMER INVOLVEMENT. [Article]. Journal of Economic Psychology, 10(3), 363.

Moore, J. (1981). On mentalism, methodological behaviorism, and radical behaviorism. Behaviorism, 9(1), 55-77.

Morrison, M., Eastburn, M, 2006. A study of brand equity in a commodity market. Australasian Marketing Journal 14(1), 62-78.

Moraes C, Carrigan M, Szmigin I. The coherence of inconsistencies: Attitude–behaviour gaps and new consumption communities. *Journal Of Marketing Management* [serial online]. February 2012;28(1/2):103-128. Available from: Business Source Complete, Ipswich, MA. Accessed January 16, 2014.

Morgan, D. L. (1997). *Focus Groups as Qualitative Research*. 2nd ed., Qualitative Research Methods Series 16. Thousand Oaks, CA: Sage.

Mowle, James; Merrilees, (2005) Bill. Journal of Product & Brand Management., Vol. 14 Issue 4, p220-227. 8p. DOI: 10.1108/10610420510609221. , Database: Business Source Alumni Edition

Muehling, D. D., Laczniak, R. N., & Andrews, J. C. (1993). Defining, Operationalizing, and Using Involvement in Advertising Research: A Review. [Article]. Journal of Current Issues & Research in Advertising, 15(1), 21.

Muncy, J. A., & Hunt, S. D. (1984). Consumer involvement: definitional issues and research directions. [Article]. Advances in Consumer Research, 11(1), 193-196.

Murthi, B. P. S., & Srinivasan, K. (1999). Consumers' Extent of Evaluation in Brand Choice. [Article]. Journal of Business, 72(2), 229-256.

Myers, J. H., & Shocker, A. D. (1981). The nature of product-related attributes. [Article]. Research in Marketing, 5, 211.

Nandan, S. (2005). An exploration of the brand identity-brand image linkage: A communications perspective. [Article]. Journal of Brand Management, 12(4), 264-278.

Nicholson, M., & Xiao, S. H. (2010). On the Evolutionary Bases of Consumer Reinforcement. [Article]. Journal of Organizational Behavior Management, 30(2), 127-144. doi: 10.1080/01608061003756356

Nicholson, M., & Xiao, S. (2011). Consumer behaviour analysis and social marketing practice. Service Industries Journal, 31(15), 2529-2542. doi:10.1080/02642069.2011.531124

O'Mahony, G. B., Hall, J., & Binney, W. (2005). A situational model development in hospitality retailing: the case of Irish pubs. [Article]. Journal of Services Research, 5(2), 77-95.

O'Shaughnessy, J. (1985). A return to reason in consumer behaviour: an hermeneutical approach. [Article]. Advances in Consumer Research, 12(1), 305-311.

Oliveira-Castro, J. M., Foxall, G. R., James, V. K., Pohl, R. H. B. F., Dias, M. B., & Chang, S. W. (2008). Consumer-based brand equity and brand performance. [Article]. Service Industries Journal, 28(4), 445-461. doi: 10.1080/02642060801917554

Olshavsky, R. W., & Granbois, D. H. (1979). Consumer Decision Making - Fact or Fiction? [Article]. Journal of Consumer Research, 6(2), 93-100.

Orth, U. R. (2005). Consumer personality and other factors in situational brand choice variation. [Article]. Journal of Brand Management, 13(2), 115-133.

Orth, U. R., & de Marchi, R. (2007). Understanding the relationships between functional, symbolic, and experiential brand beliefs, product experiential attributes, and product schema advertising – trial interactions revisited. [Article]. Journal of Marketing Theory & Practice, 15(3), 219-233. doi: 10.2753/mtp1069-6679150303

Orth, U. R., McDaniel, M., Shellhammer, T., & Lopetcharat, K. (2004). Promoting brand benefits: the role of consumer the role of consumer psychographics and lifestyle.

[Article]. Journal of Consumer Marketing, 21(2), 97-108. doi: 10.1108/07363760410525669

Osgood, C. E., Suci, G. J., & Tannenbaum, P. H. (1957). The measurement of meaning. Champaign, IL: University of Illinois Press.

Ourusoff, Alexandra (1992), "What's In a Name?" [Article]. Financial World, 161 (September 1), 32-46.

Ourusoff, Alexandra (1993), "Who Said Brands Are Dead?" [Article]. Brandweek, 34 (August 9), 20-33.

Pallister, J. G., Wang, H.-C., & Foxall, G. R. (2007). An application of the style/involvement model to financial services. [Article]. Technovation, 27(1/2), 78-88. doi: 10.1016/j.technovation.2005.10.001

Park, C. W., Jaworski, B. J., & Maclnnis, D. J. (1986a). Strategic Brand Concept-Image Management. [Article]. Journal of Marketing, 50(4), 135-145.

Park, C. W., Jaworski, B. J., & Maclnnis, D. J. (1986b). Strategic Brand Concept-Image Management. [Article]. Journal of Marketing, 50(4), 135-145.

Park, C. W. & Mittal, B. (1985) A theory of involvement in consumer behavior: Problems and issues. [Article]. Research in Consumer Behavior, 1, 201-231

Park, C. W., & Young, S. M. (1983). Types and levels of involvement and brand attitude formation. [Article]. Advances in Consumer Research, 10(1), 320-324.

Park, C. W., & Young, S. M. (1986). Consumer Response to Television Commercials: The Impact of Involvement and Background Music on Brand Attitude Formation. [Article]. Journal of Marketing Research (JMR), 23(1), 11-24.

Peter, J. Paul and Jerry C. Olson (1987). Consumer Behavior: Marketing Strategy Perspectives. Homewood, IL: Richard D. Irwin.

Ponsonby-McCabe, S., & Boyle, E. (2006). Understanding brands as experiential spaces: axiological implications for marketing strategists. [Article]. Journal of Strategic Marketing, 14(2), 175-189. doi: 10.1080/10427710600662983

Porter, M. E.(1980). Competitive Strategy. New York: Free Press.

Quester, P. G., & Smart, J. (1998). The influence of consumption situation and product involvement over consumers' use of product attribute. [Article]. Journal of Consumer Marketing, 15(3), 220.

Ray, M. L. (1979). Involvement and other variables mediating communication effects as opposed to explaining all consumer behaviour. [Article]. Advances in Consumer Research, 6(1), 197-199.

Research Methods for Business: A Skill Building Approach (Book). (1993). [Book Review]. Long Range Planning, 26(2), 136-136.

Richins, M. L., & Bloch, P. H. (1986). After the New Wears Off: The Temporal Context of Product Involvement. [Article]. Journal of Consumer Research, 13(2), 280-285.

Richins, M. L., Bloch, P. H., & McQuarrie, E. F. (1992). How Enduring and Situational Involvement Combine to Create Involvement Responses. [Article]. Journal of Consumer Psychology (Lawrence Erlbaum Associates), 1(2), 143.

Rocereto, J. F., Puzakova, M., Anderson, R. E., & Hyokjin, K. (2011). The role of response formats on extreme response style: a case of Likert-type vs. semantic differential scales. [Article]. Advances in International Marketing, 10(22), 53-71. doi: 10.1108/s1474-7979(2011)0000022006

Rockwell, J. R. and Particelli, M. C. (1982). New Product Strategy: How the Pros Do It. Industrial Marketing, May, pp. 49-60.

Rokeach, M. (1973). The nature of human values. New York: Free Press.

Roscoe, J.T. (1975) *Fundamental Research Statistics for the Behavioural Sciences*, 2nd edition. New York: Holt Rinehart & Winston.

Rothschild, M. L., & Houston, M. J. (1980a). Individual differences in voting behaviour: further investigation involvement. [Article]. Advances in Consumer Research, 7(1), 655-658.

Rothschild, M. L., & Houston, M. J. (1980b). Internal validity, external validity and the passage of time as issues in developing advertising effectiveness measures. [Article]. Advances in Consumer Research, 7(1), 572-576.

Ryan, M. J., & Bonfield, E. H. (1975a). The extended Fishbein model: additional insights…and problems. [Article]. Advances in Consumer Research, 2(1), 265.

Ryan, M. J., & Bonfield, E. H. (1975b). The Fishbein Extended Model and Consumer Behavior. [Article]. Journal of Consumer Research, 2(2), 118-136.

Salciuviene L, Lee K, Chung-Chih Y. THE IMPACT OF BRAND IMAGE DIMENSIONS ON BRAND PREFERENCE. *Economics & Management* [serial online]. August 2007;:464-469. Available from: Business Source Complete, Ipswich, MA. Accessed December 18, 2013.

Sampson, Peter(I972). "Qualitative Research and Motivation Research," *in Consumer Market Re.iearch Handbook.* Robert M. Worchester. ed, Maindenhead. England: McGraw-Hill Book Co. (U.K.). Ltd,, 7-27.

Sekaran, U. (1983). Methodological and theoretical issues and advancements in cross-cultural research. [Article]. Journal of International Business Studies, 14(2), 6

Shelly Greenway, May 2012, www.reachbrands.co.uk. http://www.reachbrands.co.uk/new-launches/may-2012.html1-73.

Sherif, M., & Cantril, H. (1947). The psychology of ego-involvements: social attitudes and identifications. Hoboken, NJ: John Wiley & Sons Inc.

Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why We Buy What We Buy: A Theory of Consumption Values. [Article]. Journal of Business Research, 22(2), 159-170.

Simonson, I., Carmon, Z., Dhar, R., & Drolet, A. (2001). Consumer Research: In Search of Identity. [Article]. Annual Review of Psychology, 52(1), 249.

Sirgy, M. J., & Johar, J. S. (1992). Value Expressive Versus Utilitarian Appeals: A Reply to Shavitt. [Article]. Journal of Advertising, 21(2), 53-54.

Skinner, B. F. (1945). The operational analysis of psychological terms. Psychological Review, 52, 270-277.

Skinner, B. F. (1953). Science and human behavior. New York: Macmillan.

Skinner, B. F. (1957). Verbal behavior. New York: Appleton-Century-Crofts.

Skinner, B. F. (1974). About behaviorism. New York: Knopf.

Smith, T. L. (1994). Behavior and its causes: Philosophical foundations of operant psychology. Dordrecht: Kluwer.

Smith, M.F., & Carsky, M.L. (1996), Grocery shopping behavior: a comparison of involved and uninvolved consumers. [Article]. Journal of Retailing and Consumer Services, 3(2), 73-80.

Solomon, M. (2008), The Truth About What Customers Want. H Press.

Srinivasan, S. S., & Till, B. D. (2002). Evaluation of search, experience and credence attributes: role of brand name and product trial. [Article]. Journal of Product & Brand Management, 11(6/7), 417.

Srinivasan, V. V., Chan Su, P., & Dae Ryun, C. (2005). An Approach to the Measurement, Analysis, and Prediction of Brand Equity and Its Sources. *Management Science*, *51*(9), 1433-1448. doi:10.1287/mnsc.1050.0405

Srivastava, R. K. (1981a). Usage-situational influences on perceptions of product-markets: theoretical and empirical issues. [Article]. Advances in Consumer Research, 8(1), 106-111.

Srivastava, R. K., Shocker, A. D., & Day, G. S. (1978). An exploration study of the influences of usage situation on perceptions of product-markets. [Article]. Advances in Consumer Research, 5(1), 32-38.

Stanton, J. L., & Bonner, P. G. (1980). An investigation of the differential impact of purchase situation on levels of consumer choice behaviour. [Article]. Advances in Consumer Research, 7(1), 639-643.

Stewart, D. W., Shamdasani, P. N., & Rook, D. W. (2007). *Focus groups: Theory and practice (2nd ed.)*. Thousand Oaks, CA US: Sage Publications, Inc.

Stone, R. N. (1984). The marketing characteristics of involvement. [Article]. Advances in Consumer Research, 11(1), 210-215.

Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. [Article]. Journal of Retailing, 77(2), 203.

Tauber, E. M. (1988). Brand leverage: strategy for growth in a cost-control world. [Article]. Journal of Advertising Research, 28(4), 26-30.

Tony, M., & Meenaghan, T. (1995). The role of advertising in brand image development. [Article]. Journal of Product & Brand Management, 4(4), 23.

Traylor, M. B. (1981). Product Involvement and Brand Commitment. [Article]. Journal of Advertising Research, 21(6), 51.

Traylor, M. B. (1983). Ego involvement and brand commitment: not necessarily the same. [Article]. Journal of Consumer Marketing, 1(2), 75-79.

Traylor, M. B., & Joseph, W. B. (1984). Measuring Consumer Involvement in Products: Developing a General Scale. [Article]. Psychology & Marketing, 1(2), 65-77.

Tyebjee, Tyzoon T. (1979), Response Time, Conflict, and Involvement in Brand Choice. [Article]. Journal of Consumer Research, 6 (December), 295-304.

Ulrich R. Orth, Mina McDaniel, Tom Shellhammer, Kannapon Lopetcharat, (2004) "Promoting brand benefits: the role of consumer psychographics and lifestyle", Journal of Consumer Marketing, Vol. 21 Iss: 2, pp.97 - 108

Vázquez, R., Del Río, A. B., & Iglesias, V. (2002). Consumer-based Brand Equity: Development and Validation of a Measurement Instrument. [Article]. Journal of Marketing Management, 18(1/2), 27-48.

Völckner, F., & Sattler, H. (2006). Drivers of Brand Extension Success. *Journal Of Marketing*, *70*(2), 18-34. doi:10.1509/jmkg.70.2.18

Wearden, John H. 1988. "Some Neglected Problems in the Analysis of Human Operant Behavior." In Human Operant Conditioning and Behavior Modification. Eds. G. Davey and Chris Cullen. Chichester: Wiley.

Wenben Lai, A. (1991). Consumption Situation and Product Knowledge in the Adoption of a New Product. [Article]. European Journal of Marketing, 25(10), 55.

Wicker, A. W. (1969). Attitudes versus actions: The relationship of verbal and overt behavioral responses to attitude objects. [Article]. Journal of Social Issues, 25(4), 41-78.

Wojdynski, B. (2009, August). A multi-dimensional model of involvement with news. Paper presented at the annual convention of the Association for Education of Journalism and Mass Communication, Boston.

Woods, W. A. (1960). Psychological Dimensions of Consumer Decision. [Article]. Journal of Marketing, 24(3), 15-19.

Young, S., & Feigin, B. (1975a). Using the Benefit Chain for Improved Strategy Formulation. [Article]. Journal of Marketing, 39(3), 72-74.

Young, S., & Feigin, B. (1975b). Using the Benefit Chain for Improved Strategy Formulation. [Article]. Journal of Marketing, 39(3), 72-74.

Zaichkowsky, J. L. (1985a). Familiarity: product use, involvement or expertise. [Article]. Advances in Consumer Research, 12(1), 296-299.

Zaichkowsky, J. L. (1985b). Measuring the Involvement Construct. [Article]. Journal of Consumer Research, 12(3), 341-352.

Zaichkowsky, J. L. (1986). Conceptualising involvement. [Article]. Journal of Advertising, 15(2), 4-34.

Zaichkowsky, J. L. (1987). The emotional aspect of product involvement. [Article]. Advances in Consumer Research, 14(1), 32-35.

Zaichkowsky, J. L. (1988). Involvement and the Price Cue. [Article]. Advances in Consumer Research, 15(1), 323-327.

Zaichkowsky, J. L. (1990). Issues in Measuring Abstract Constructs. [Article]. Advances in Consumer Research, 17(1), 616-618.

Zaichkowsky, J. L. (1994). Research Notes: The Personal Involvement Inventory: Reduction, Revision, and Application to Advertising. [Article]. Journal of Advertising, 23(4), 59-70.

Zaichkowsky, J. L., & Sood, J. H. (1989). A Global Look at Consumer Involvement and Use of Products. [Article]. International Marketing Review, 6(1), 20.

Appendices

Appendix **I**
Interview questions:

Could you please mention some brand names in different categories of products?

How do you define them and why do you remember them?

Do you think that your mentioned brand name guarantees something about the products? If yes, what is that?

Would you please tell us some of the products that you buy by paying attention to the brand name?

Are you ready to pay more money and spend more time to find those special brands?

Which products do you buy without paying attention to the brands at all?

How do you justify your compromise of time and money?

How important is brand name for you in this category of products and why?

How do you define a brand in these two group of products?

Why do you think you remember a particular brand?

Appendix II
Focus group questions

Are you ready to pay more money and spend more time to find those special brands?

Which products do you buy without paying attention to the brands at all?

How do you justify your compromise of time and money?

How important is brand name for you in this category of products and why?

How do you define a brand in these two group of products?

In these products, to what extent do you think brand could guarantee quality or more generally what they claim?

In these products do you choose a brand name mainly because they guarantee quality, or because they show your type to others; in another words, for sort of showing off?

Do you think you have benefited more by social status or prestige gained by these products or by an assurance that you are buying a good quality product?

Do you like other people to know your brand name or you do not care?

Is there any very outstanding brand name in these two group of products, or you consider all to some degree the same?

To what extent you are loyal to your previous brand choice? What factors do you consider for changing your brand name?

Do you think brand names in these products have the capacity to generate prestige and social status?

After you feel you need these products what comes to your head first, a brand name or a product?

Do you have a particular brand in mind before purchase? If yes, what factors could change your mind?

What factors do you consider for your brand choice in the purchase environment and outside the purchase environment?

What are other clues that you use for your brand choice?

Appendix III

Zaichkowsky involvement scale and Mittal involvement questionnaire

1	Important	Unimportant
2	Of concern to me	Of no concern
3	Irrelevant	Relevant
4	Means a lot to me	Means nothing to me
5	Useless	Useful
6	Valuable	Worthless
7	Trivial	Fundamental
8	Beneficial	Not beneficial
9	Matters to me	Doesn't matter
10	Uninterested	Interested
11	Significant	Insignificant

12	Vital	Superfluous
13	Boring	Interesting
14	Unexciting	Exciting
15	Appealing	Unappealing
16	Mundane	Fascinating
17	Essential	Non-essential
18	Undesirable	Desirable
19	Wanted	Unwanted
20	Not needed	Needed

PII construct validity questions:

1- I would be interested in reading information about how the product is made.

2- I would be interested in reading the consumer reports article about this product category.

3- I have compared product characteristics among brands of this product.

4- I think there are a great deal of differences among brands of this product.

5- I have a most preferred brand of this product.

Mittal involvement questionnaire for brand and products involvements and its type

A. Product involvement

1. I have a strong interest in _____.
2. _____are very important to me.
3. For me_____ do not matter.

B. Brand decision involvement

1. I would choose my_____very carefully.
2. Deciding which _____to buy would be an important decision for me.
3. Which_____I buy matters to me a lot.

C. Product sign-value

1. Using_____helps me express my personality.
2. I like the way I see myself when I am using _____.
3. Knowing whether or not someone uses _____tells a lot about that person.

D. Brand sign-value

1. You can tell a lot about a person from the brand of _____he/she buys.
2. Judging someone by the brand of _____that he/she buys would be a mistake.
3. If I know the brand of _____that someone uses, I could pretty much guess what kind of a person he/she might be.

G. Product utility

1. Using _____would be beneficial.
2. _____ are basically a useful thing.
3. _____ make everyday life easier.

H. Brand risk

1. When you buy _____it is not a big deal if you buy a wrong brand by mistake.
2. It is very annoying to buy a _____which isn't right.
3. A bad buy of _____could bring you grief.

Questions chosen from Traylor and Joseph (1984) involvement scale:

1- One brand of this product is as good as any other brand.

2- Listen closely to people's comments about this product.

3- When other people see me using this product, they form an opinion of me.

4- You can tell a lot about a person by seeing what brand of this product he/she uses.

5- My favourite brand represents who I am.

6- This product helps me express who I am.

7- When I go to purchase this product, I have a particular brand in mind, but certain things may make me change my mind.

8- This product is me.

9- Seeing somebody else use this product tells me a lot about that person.

10- Some brands of this product are definitely not for me.

11- If my first choice is not available, I would gladly choose another brand.

12- There are no substitutes for my brand.

13- When I use this product, others see me the way I want them to see me.

Situational factor questions

To what extent will lack of your chosen brand at point of sale change your first choice?

To what extent will store atmosphere like colour and music change your already chosen brand?

To what extent will the sales person's help and support of another brand lead to a change in your previous desire of brand?

To what extent could a crowded shop change your already chosen brand to a new brand in order to prevent wasting your time in the shop?

To what extent could coupons, price reductions and sales promotions change your first choice?

To what extent could the presence of a companion lead you to change your desire brand?

To what extent could shop opening hours change your already chosen brand to another one?

To what extent could price differences among different brands cause a shift in your decision about your already chosen brand?

To what extent could merchandise assortment influence your decision in changing your mind about your already chosen brand?

To what extent could adverts at point of sale change your decision about your already chosen brand?

ضمن تشکر صمیمانه از وقتی که صرف پر کردن این پرسش نامه می کنید توجه شما را به موارد ذیل جلب می کنم:

یکم: در این قسمت از پرسشنامه در مورد جملات ذکر شده با انتخاب عدد مناسب مقدار موافقت خود را اعلام فرمائید. به طور مثال اگرکاملا موافقید عدد7 و اگر کاملا مخالفید عدد1 را انتخاب نمائید یا به هرنسبتی بین دو عدد ذکر شده.

دوم و خیلی مهم:
برای ما اولین چیزی که به فکر شما می رسد مهم است(احتیاجی به تجزیه و تحلیل گزینه ها نیست) به همین دلیل بر روی سوالات خیلی مکث نکنید و هر گزینه را به صورت مستقل در نظر بگیرید. در این پرسشنامه هر جا از کلمه مارک استفاده شده منظور"برند" می باشد .

سوم:همه سؤالات این قسمت از پرسشنامه در مورد **محصولات داروئی بدون نیاز به نسخه** مانند ویتامینهاو پروتئینها شربتهای تقویت کننده و مانند اینها می باشد یعنی کلیهء مجصولات داروئی که بدون نسخه پزشک قابل خریداری می باشند.

1) **S** در مورد (محصولات داروئی بدون نیاز به نسخه) تا چه حد حمایت و تعریف فروشنده از یک مارک خاص روی تصمیم گیری شما موثر است ؟
2) **S**در این گروه از محصولات تا چه حد شلوغی فروشگاه میتواند باعث شود جهت هدر نرفتن وقتتان، از خرید مارک مورد نظر تان منصرف شوید؟
3) **S**در (محصولات داروئی بدون نیاز به نسخه)تا چه حد کوپن مالی، تخفیف و حرا ج های تشویقی می تواند انتخاب اولیه شما را تغییر دهد؟
4) در این گروه از محصولات ساعت باز بودن فروشگاه تاچه میزان می تواند نظر شما را از مارکی که انتخاب کرده اید به مارک دیگری تغییر دهد؟

5)تفاوت قیمت تا چه میزان در انتخاب شما میان مارکهای محصولات داروئی بدون نیاز به نسخه مختلف تاثیر دارد؟
6)آیا نوع چیدمان کالا در فروشگاه می تواند درتصمیم گیری شما در مورد مارک انتخابیتان تاثیر گذارباشد؟
7)تا چه حد تبلیغات موجود در محل خرید می تواند در تغییر مارک منتخبتان موثرباشد؟

8)در (محصولات داروئی بدون نیاز به نسخه)مارک مورد علاقه ی من نمایا نگر شخصیت من است.
9)در این گروه از محصولات اگر بدانیم شخصی کدام مارک را میخرد، میتوانیم حدس بزنیم چطور شخصی میباشد.
10) استفاده از یک مارک خاص در این گروه از محصولات درقضاوت دیگران در مورد من تاثیرگذار است.

11) دراین دسته از محصولات(محصولات داروئی بدون نیاز به نسخه) زیاد مهم نیست چه مارکی را میخرید.
12) انتخاب مارک نادرست در این گروه ازمحصولات بسیارآزار دهنده است.
13) دراین گروه ازمحصولات خرید مارک نادرست میتواند باعث ایجاد مشکلات زیادی شود.

14) زمانی که برای خرید این محصول می روم مارک خاصی را مد نظر دارم.

در این قسمت از پرسشنامه از شما درخواست می شود نظر تان را در مورد محصولات داروئی که بدون نسخه پزشک قابل خریداری می باشند با انتخاب یکی از اعداد بین دو صفت ذکر شده مشخص کنید:

مهم:
برای ما اولین چیزی که به فکر شما می رسد مهم است به همین دلیل(احتیاجی به تجزیه و تحلیل گزینه ها نیست) بر روی سوالات خیلی مکث نکنید و هر گزینه را به صورت مستقل در نظر بگیرید.
مجددا از وقتی که صرف پر کردن این پرسشنامه می کنید متشکریم.

15) با ارزش ---------- بی ارزش
16) پرفایده ---------- بی فایده
17) مهم ---------- بی اهمیت
18) مربوط ---------- نامربوط
19) مفید ---------- غیر مفید
20) قابل توجه ---------- غیر قابل توجه

از شما درخواست می شود در مورد جملات ذکر شده با انتخاب عدد مناسب مقدار موافقت خود را اعلام فرمائید. به طور مثال اگرکاملا

موافقید عدد7 و اگر کاملا مخالفید عدد1 را انتخاب نمائید یا به هرنسبتی بین دو عدد ذکر شده.

1) در خرید محصولات آرایشی تا چه حد حمایت و تعریف فروشنده از یک مارک خاص روی تصمیم گیری شما موثر است ؟
2) تا چه حد شلوغی فروشگاه میتواند باعث شود جهت هدر نرفتن وقتتان، از خرید مارک(محصولات آرایشی) مورد نظر منصرف شوید؟
3) در خرید محصولات آرایشی تا چه حد کوپن مالی، تخفیف و حرا ج های تشویقی می تواند روی انتخاب شما تاثیر گذار باشد؟
4) ساعت باز بودن فروشگاه تاچه میزان می تواند نظر شما را از مارکی که انتخاب کرده اید به مارک دیگری تغییر دهد؟
5) در خرید محصولات آرایشی تفاوت قیمت تا چه میزان در انتخاب شما میان مارکهای مختلف تاثیر دارد؟
6) آیا نوع چیدمان کالا در فروشگاه می تواند درتصمیم گیری شما در مورد مارک انتخابیتان تاثیر گذارباشد؟
7) در خرید محصولات آرایشی تا چه حد تبلیغات موجود در محل خرید می تواند در انتخابتان موثرباشد؟
8) استفاده از یک مارک خاص در محصولات آرایشی در قضاوت دیگران در مورد من تاثیرگذار است.
9) مارک مورد علاقه ی من نماینگر شخصیت من است.

10) در این گروه از محصولات اگر بدانیم شخصی کدام مارک را میخرد، میتوانیم حدس بزنیم چطور شخصی میباشد.
11) دراین دسته از محصولات زیاد مهم نیست چه مارکی را میخرید.
12) انتخاب مارک نادرست در این گروه ازمحصولات زیان آور است.
13) دراین گروه ازمحصولات خرید مارک نادرست میتواند باعث ایجاد مشکلات زیادی شود.
14) زمانی که برای خرید این محصول می روم مارک خاصی را مد نظر دارم.

در این قسمت از پرسشنامه از شما درخواست می شود نظر تان را در مورد محصولات آرایشی با انتخاب یکی از اعداد بین دو صفت ذکر شده مشخص کنید:

به طور مثال اگر فکر می کنید نظر کلی شما در مورد محصولات آرایشی به صفت سمت راست خیلی نزدیک است، نزدیک ترین خانه به صفت سمت راست را انتخاب نمائید یا به هر نسبت که نظر شما بین این دو صفت متضاد قرار می گیرد.

مهم.:
برای ما اولین پاسخی که به ذهن شما می رسد مهم است. (احتیاجی به تجزیه و تحلیل گزینه ها نیست) بنابراین بر روی سوالات خیلی مکث

نکنید و هر گزینه را به صورت مستقل در نظر بگیرید. در این پرسشنامه هر جا از کلمه "برند" استفاده شده منظور" مارک " می باشد.
مجددا از وقتی که صرف پر کردن این پرسشنامه می کنید متشکریم.

15) با ارزش ---------- بی ارزش
16) پرفایده ---------- بی فایده
17) مهم ---------- بی اهمیت
18) مربوط ---------- نامربوط
19) مفید ---------- غیر مفید
20) قابل توجه ---------- غیر قابل توجه

Appendix IV

Situational variables

S1: To what extent could the information and support provided by the sales person at the point of sale influence your brand choice?

S2: To what extent could crowding at point of sale have an impact on your brand purchase?

S3: How much could the existence of promotion or temporary price reductions and coupons at a point of sale influence your brand choice?

S4: To what extent could store opening times have an influence on your brand purchase?

S5: How much would price variations among brands influence your brand choice?

S6: To what extent would an assortment of products impact your brand choice?

S7: To what extent could the existence of advertising materials at point of sales influence your brand choice?

Appendix V

Table 46 S1 correlation with independent variables: Appendix V

	S1 (OTC)	S1 (SKC)
Brand informational involvement	**.343****	**-.174****
Brand functional involvement	**.271****	**-.239****
Product involvement	**.299****	**-.172***

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 47 Brandability correlation with independent variables: Appendix V

	Brandability (SKC)	Brandability (OTC)
Brand informational involvement	**.252****	**.236****
Brand functional involvement	**.641****	**.535****
Product involvement	**.403****	**.106**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 48 Brand informational involvement with dependent variables: Appendix V

	S1	**S2**	**S3**	**S4**	**S5**	**S6**	**S7**	**Brandability**
Brand informational involvement (SKC)	.343**	.164*	.256**	.227**	.120	.344**	.384**	.252**
Brand informational involvement (OTC)	-.174**	-.101	.152*	.258**	.092	.237**	.267**	.236**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 49 Brand functional involvement with dependent variables: Appendix V

	S1	S2	S3	S4	S5	S6	S7	Brandability
Brand functional involvement (SKC)	.271**	-.041	-.010	-.042	-.095	.152	.254**	.641**
Brand functional involvement (OTC)	-.239**	-.025	-.057	-.025	-.010	.171*	.170*	.535**

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Appendix VI

Table 50 **ANOVA in OTC products: Brand informational involvement**

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
S1	<= 3	45	4.67	1.942	.290	4.08	5.25	1	7
	3 - 4.00	121	3.94	1.572	.143	3.66	4.23	1	7
	4.01+	58	3.62	1.543	.203	3.22	4.03	1	7
	Total	224	4.00	1.677	.112	3.78	4.23	1	7
S2	<= 3	43	4.70	2.305	.351	3.99	5.41	1	7
	3 - 4.00	121	3.98	1.823	.166	3.65	4.30	1	7
	4.01+	58	3.74	2.074	.272	3.20	4.29	1	7
	Total	222	4.05	2.008	.135	3.79	4.32	1	7
S3	<= 3	44	2.86	2.064	.311	2.24	3.49	1	7
	3 - 4.00	120	3.19	1.716	.157	2.88	3.50	1	7
	4.01+	58	3.55	1.827	.240	3.07	4.03	1	7
	Total	222	3.22	1.825	.122	2.98	3.46	1	7
S4	<= 3	44	1.91	1.626	.245	1.41	2.40	1	7
	3 - 4.00	118	2.99	1.636	.151	2.69	3.29	1	7
	4.01+	57	3.65	1.932	.256	3.14	4.16	1	7
	Total	219	2.95	1.806	.122	2.70	3.19	1	7
S5	<= 3	45	3.36	2.123	.316	2.72	3.99	1	7
	3 - 4.00	120	4.03	1.632	.149	3.73	4.32	1	7
	4.01+	58	3.98	1.821	.239	3.50	4.46	1	7
	Total	223	3.88	1.801	.121	3.64	4.12	1	7
S6	<= 3	45	2.78	2.077	.310	2.15	3.40	1	7
	3 - 4.00	120	3.83	1.858	.170	3.50	4.17	1	7
	4.01+	58	4.36	1.944	.255	3.85	4.87	1	7

	Total	223	3.76	1.992	.133	3.49	4.02	1	7
S7	<= 3	45	3.16	1.637	.244	2.66	3.65	1	7
	3 - 4.00	120	4.06	1.584	.145	3.77	4.34	1	7
	4.01+	58	4.55	1.789	.235	4.08	5.02	1	7
	Total	223	4.00	1.710	.114	3.78	4.23	1	7
4BF	<= 3	45	4.80	2.040	.304	4.19	5.41	1	7
	3 - 4.00	121	5.03	1.543	.140	4.76	5.31	1	7
	4.01+	59	5.76	.971	.126	5.51	6.02	3	7
	Total	225	5.18	1.571	.105	4.97	5.38	1	7

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
S1	2.209	2	221	.112
S2	5.586	2	219	.004
S3	2.180	2	219	.115
S4	3.020	2	216	.051
S5	4.385	2	220	.014
S6	.665	2	220	.515
S7	1.057	2	220	.349
4BF	16.030	2	222	.000

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	28.745	2	14.373	5.309	.006
	Within Groups	598.250	221	2.707		
	Total	626.996	223			
S2	Between Groups	24.235	2	12.118	3.060	.049
	Within Groups	867.116	219	3.959		
	Total	891.351	221			
S3	Between Groups	12.066	2	6.033	1.825	.164
	Within Groups	724.118	219	3.306		
	Total	736.185	221			
S4	Between Groups	75.732	2	37.866	12.868	.000
	Within Groups	635.610	216	2.943		
	Total	711.342	218			
S5	Between Groups	15.512	2	7.756	2.423	.091
	Within Groups	704.219	220	3.201		
	Total	719.731	222			

S6	Between Groups	65.083	2	32.541	8.775	.000
	Within Groups	815.841	220	3.708		
	Total	880.924	222			
S7	Between Groups	50.148	2	25.074	9.211	.000
	Within Groups	598.848	220	2.722		
	Total	648.996	222			
4BF	Between Groups	29.143	2	14.572	6.176	.002
	Within Groups	523.746	222	2.359		
	Total	552.889	224			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
S1	Welch	4.356	2	97.785	.015
	Brown-Forsythe	4.860	2	128.674	.009
S2	Welch	2.402	2	91.605	.096
	Brown-Forsythe	2.701	2	127.205	.071
S3	Welch	1.610	2	95.545	.205
	Brown-Forsythe	1.667	2	133.074	.193
S4	Welch	12.553	2	98.416	.000
	Brown-Forsythe	12.403	2	147.482	.000
S5	Welch	1.860	2	94.532	.161
	Brown-Forsythe	2.131	2	128.528	.123
S6	Welch	7.836	2	99.239	.001
	Brown-Forsythe	8.309	2	143.385	.000
S7	Welch	8.758	2	100.123	.000
	Brown-Forsythe	8.852	2	150.266	.000
4BF	Welch	9.397	2	102.185	.000
	Brown-Forsythe	5.684	2	97.160	.005

a. Asymptotically F distributed.

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) @BIaverage (Binned)	(J) @BIaverage (Binned)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
S1	<= 3	3 - 4.00	.725*	.287	.033	.05	1.40
		4.01+	1.046*	.327	.004	.27	1.82
	3 - 4.00	<= 3	-.725*	.287	.033	-1.40	-.05

		4.01+	.321	.263	.441	-.30	.94
	4.01+	<= 3	-1.046*	.327	.004	-1.82	-.27
		3 - 4.00	-.321	.263	.441	-.94	.30
S2	<= 3	3 - 4.00	.722	.353	.104	-.11	1.56
		4.01+	.956*	.400	.047	.01	1.90
	3 - 4.00	<= 3	-.722	.353	.104	-1.56	.11
		4.01+	.234	.318	.742	-.52	.98
	4.01+	<= 3	-.956*	.400	.047	-1.90	-.01
		3 - 4.00	-.234	.318	.742	-.98	.52
S3	<= 3	3 - 4.00	-.328	.320	.563	-1.08	.43
		4.01+	-.688	.364	.143	-1.55	.17
	3 - 4.00	<= 3	.328	.320	.563	-.43	1.08
		4.01+	-.360	.291	.432	-1.05	.33
	4.01+	<= 3	.688	.364	.143	-.17	1.55
		3 - 4.00	.360	.291	.432	-.33	1.05
S4	<= 3	3 - 4.00	-1.082*	.303	.001	-1.80	-.37
		4.01+	-1.740*	.344	.000	-2.55	-.93
	3 - 4.00	<= 3	1.082*	.303	.001	.37	1.80
		4.01+	-.658*	.277	.048	-1.31	.00
	4.01+	<= 3	1.740*	.344	.000	.93	2.55
		3 - 4.00	.658*	.277	.048	.00	1.31
S5	<= 3	3 - 4.00	-.669	.313	.084	-1.41	.07
		4.01+	-.627	.355	.184	-1.47	.21
	3 - 4.00	<= 3	.669	.313	.084	-.07	1.41
		4.01+	.042	.286	.988	-.63	.72
	4.01+	<= 3	.627	.355	.184	-.21	1.47
		3 - 4.00	-.042	.286	.988	-.72	.63
S6	<= 3	3 - 4.00	-1.056*	.337	.006	-1.85	-.26
		4.01+	-1.584*	.383	.000	-2.49	-.68
	3 - 4.00	<= 3	1.056*	.337	.006	.26	1.85
		4.01+	-.529	.308	.201	-1.26	.20
	4.01+	<= 3	1.584*	.383	.000	.68	2.49
		3 - 4.00	.529	.308	.201	-.20	1.26
S7	<= 3	3 - 4.00	-.903*	.288	.006	-1.58	-.22
		4.01+	-1.396*	.328	.000	-2.17	-.62
	3 - 4.00	<= 3	.903*	.288	.006	.22	1.58
		4.01+	-.493	.264	.150	-1.12	.13
	4.01+	<= 3	1.396*	.328	.000	.62	2.17
		3 - 4.00	.493	.264	.150	-.13	1.12

*. The mean difference is significant at the 0.05 level.

Appendix VII

Table 51 ANOVA for brand informational involvement and situational variables for SKC products

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
1SA	<= 3.00	72	3.88	1.830	.216	3.44	4.31	1	7
	3.01 - 4.00	24	3.96	1.398	.285	3.37	4.55	1	6
	4.01 - 7.00	64	5.06	1.521	.190	4.68	5.44	2	7
	Total	160	4.36	1.739	.138	4.09	4.63	1	7
2SA	<= 3.00	73	3.63	1.969	.230	3.17	4.09	1	7
	3.01 - 4.00	24	4.50	1.668	.341	3.80	5.20	1	7
	4.01 - 7.00	62	4.19	1.827	.232	3.73	4.66	1	7
	Total	159	3.98	1.891	.150	3.68	4.28	1	7
3SA	<= 3.00	72	3.39	1.873	.221	2.95	3.83	1	7
	3.01 - 4.00	23	4.04	1.745	.364	3.29	4.80	1	7
	4.01 - 7.00	63	4.27	1.919	.242	3.79	4.75	1	7
	Total	158	3.84	1.908	.152	3.54	4.14	1	7
4SA	<= 3.00	72	3.03	1.831	.216	2.60	3.46	1	7
	3.01 - 4.00	23	2.87	1.632	.340	2.16	3.58	1	7
	4.01 - 7.00	64	3.70	2.013	.252	3.20	4.21	1	7
	Total	159	3.28	1.902	.151	2.98	3.57	1	7
5SA	<= 3.00	73	4.03	1.771	.207	3.61	4.44	1	7
	3.01 - 4.00	23	3.83	1.497	.312	3.18	4.47	2	7
	4.01 - 7.00	63	4.22	1.963	.247	3.73	4.72	1	7
	Total	159	4.08	1.809	.143	3.79	4.36	1	7
6SA	<= 3.00	73	3.29	1.947	.228	2.83	3.74	1	7
	3.01 - 4.00	24	3.83	1.880	.384	3.04	4.63	1	7
	4.01 - 7.00	63	4.65	1.851	.233	4.18	5.12	1	7
	Total	160	3.91	1.990	.157	3.60	4.22	1	7
7SA	<= 3.00	73	3.73	1.873	.219	3.29	4.16	1	7
	3.01 - 4.00	24	3.88	1.513	.309	3.24	4.51	1	6
	4.01 - 7.00	64	5.13	1.830	.229	4.67	5.58	1	7

	Total	161	4.30	1.917	.151	4.01	4.60	1	7
BFA4	<= 3.00	74	4.88	1.835	.213	4.45	5.30	1	7
	3.01 - 4.00	24	5.46	1.414	.289	4.86	6.06	2	7
	4.01 - 7.00	64	5.78	1.253	.157	5.47	6.09	1	7
	Total	162	5.32	1.614	.127	5.07	5.57	1	7

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
1SA	2.424	2	157	.092
2SA	.573	2	156	.565
3SA	.339	2	155	.713
4SA	1.802	2	156	.168
5SA	2.736	2	156	.068
6SA	.954	2	157	.387
7SA	1.211	2	158	.301
BFA4	6.129	2	159	.003

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
1SA	Between Groups	52.392	2	26.196	9.596	.000
	Within Groups	428.583	157	2.730		
	Total	480.975	159			
2SA	Between Groups	18.252	2	9.126	2.604	.077
	Within Groups	546.691	156	3.504		
	Total	564.943	158			
3SA	Between Groups	27.241	2	13.621	3.877	.023
	Within Groups	544.480	155	3.513		
	Total	571.722	157			
4SA	Between Groups	19.911	2	9.956	2.814	.063
	Within Groups	551.913	156	3.538		
	Total	571.824	158			
5SA	Between Groups	2.956	2	1.478	.448	.639
	Within Groups	514.138	156	3.296		
	Total	517.094	158			
6SA	Between Groups	62.984	2	31.492	8.726	.000
	Within Groups	566.610	157	3.609		
	Total	629.594	159			
7SA	Between Groups	71.941	2	35.971	11.011	.000

	Within Groups	516.146	158	3.267		
	Total	588.087	160			
BFA4	Between Groups	28.507	2	14.254	5.799	.004
	Within Groups	390.801	159	2.458		
	Total	419.309	161			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
1SA	Welch	10.111	2	69.110	.000
	Brown-Forsythe	10.709	2	120.617	.000
2SA	Welch	2.678	2	67.692	.076
	Brown-Forsythe	2.810	2	113.504	.064
3SA	Welch	3.783	2	63.575	.028
	Brown-Forsythe	4.051	2	103.291	.020
4SA	Welch	2.739	2	65.386	.072
	Brown-Forsythe	3.047	2	113.410	.051
5SA	Welch	.501	2	66.809	.608
	Brown-Forsythe	.498	2	119.903	.609
6SA	Welch	8.693	2	64.707	.000
	Brown-Forsythe	8.817	2	97.873	.000
7SA	Welch	10.772	2	69.853	.000
	Brown-Forsythe	12.231	2	123.343	.000
BFA4	Welch	5.759	2	65.462	.005
	Brown-Forsythe	6.360	2	107.907	.002

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable		(I) BIAaverage (Binned)	(J) BIAaverage (Binned)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
1SA	Tukey HSD	<= 3.00	3.01 - 4.00	-.083	.389	.975	-1.00	.84
			4.01 - 7.00	-1.188*	.284	.000	-1.86	-.52
		3.01 - 4.00	<= 3.00	.083	.389	.975	-.84	1.00
			4.01 - 7.00	-1.104*	.395	.016	-2.04	-.17
		4.01 - 7.00	<= 3.00	1.188*	.284	.000	.52	1.86
			3.01 - 4.00	1.104*	.395	.016	.17	2.04
	Hochberg	<= 3.00	3.01 - 4.00	-.083	.389	.995	-1.02	.86
			4.01 - 7.00	-1.188*	.284	.000	-1.87	-.50
		3.01 - 4.00	<= 3.00	.083	.389	.995	-.86	1.02

			4.01 - 7.00	-1.104*	.395	.018	-2.06	-.15
		4.01 - 7.00	<= 3.00	1.188*	.284	.000	.50	1.87
			3.01 - 4.00	1.104*	.395	.018	.15	2.06
	Games-Howell	<= 3.00	3.01 - 4.00	-.083	.358	.971	-.95	.78
			4.01 - 7.00	-1.188*	.288	.000	-1.87	-.51
		3.01 - 4.00	<= 3.00	.083	.358	.971	-.78	.95
			4.01 - 7.00	-1.104*	.343	.007	-1.94	-.27
		4.01 - 7.00	<= 3.00	1.188*	.288	.000	.51	1.87
			3.01 - 4.00	1.104*	.343	.007	.27	1.94
2SA	Tukey HSD	<= 3.00	3.01 - 4.00	-.870	.440	.122	-1.91	.17
			4.01 - 7.00	-.563	.323	.193	-1.33	.20
		3.01 - 4.00	<= 3.00	.870	.440	.122	-.17	1.91
			4.01 - 7.00	.306	.450	.775	-.76	1.37
		4.01 - 7.00	<= 3.00	.563	.323	.193	-.20	1.33
			3.01 - 4.00	-.306	.450	.775	-1.37	.76
	Hochberg	<= 3.00	3.01 - 4.00	-.870	.440	.142	-1.93	.19
			4.01 - 7.00	-.563	.323	.229	-1.34	.22
		3.01 - 4.00	<= 3.00	.870	.440	.142	-.19	1.93
			4.01 - 7.00	.306	.450	.872	-.78	1.39
		4.01 - 7.00	<= 3.00	.563	.323	.229	-.22	1.34
			3.01 - 4.00	-.306	.450	.872	-1.39	.78
	Games-Howell	<= 3.00	3.01 - 4.00	-.870	.411	.098	-1.87	.13
			4.01 - 7.00	-.563	.327	.200	-1.34	.21
		3.01 - 4.00	<= 3.00	.870	.411	.098	-.13	1.87
			4.01 - 7.00	.306	.412	.739	-.69	1.30
		4.01 - 7.00	<= 3.00	.563	.327	.200	-.21	1.34
			3.01 - 4.00	-.306	.412	.739	-1.30	.69
3SA	Tukey HSD	<= 3.00	3.01 - 4.00	-.655	.449	.314	-1.72	.41
			4.01 - 7.00	-.881*	.323	.020	-1.65	-.12
		3.01 - 4.00	<= 3.00	.655	.449	.314	-.41	1.72
			4.01 - 7.00	-.226	.457	.873	-1.31	.85
		4.01 - 7.00	<= 3.00	.881*	.323	.020	.12	1.65
			3.01 - 4.00	.226	.457	.873	-.85	1.31
	Hochberg	<= 3.00	3.01 - 4.00	-.655	.449	.378	-1.74	.43
			4.01 - 7.00	-.881*	.323	.021	-1.66	-.10
		3.01 - 4.00	<= 3.00	.655	.449	.378	-.43	1.74
			4.01 - 7.00	-.226	.457	.945	-1.33	.88
		4.01 - 7.00	<= 3.00	.881*	.323	.021	.10	1.66
			3.01 - 4.00	.226	.457	.945	-.88	1.33
	Games-Howell	<= 3.00	3.01 - 4.00	-.655	.426	.284	-1.69	.38

			4.01 - 7.00	-.881*	.327	.022	-1.66	-.10
		3.01 - 4.00	<= 3.00	.655	.426	.284	-.38	1.69
			4.01 - 7.00	-.226	.437	.863	-1.29	.83
		4.01 - 7.00	<= 3.00	.881*	.327	.022	.10	1.66
			3.01 - 4.00	.226	.437	.863	-.83	1.29
4SA	Tukey HSD	<= 3.00	3.01 - 4.00	.158	.451	.934	-.91	1.22
			4.01 - 7.00	-.675	.323	.095	-1.44	.09
		3.01 - 4.00	<= 3.00	-.158	.451	.934	-1.22	.91
			4.01 - 7.00	-.834	.457	.165	-1.92	.25
		4.01 - 7.00	<= 3.00	.675	.323	.095	-.09	1.44
			3.01 - 4.00	.834	.457	.165	-.25	1.92
	Hochberg	<= 3.00	3.01 - 4.00	.158	.451	.979	-.93	1.25
			4.01 - 7.00	-.675	.323	.110	-1.45	.10
		3.01 - 4.00	<= 3.00	-.158	.451	.979	-1.25	.93
			4.01 - 7.00	-.834	.457	.196	-1.94	.27
		4.01 - 7.00	<= 3.00	.675	.323	.110	-.10	1.45
			3.01 - 4.00	.834	.457	.196	-.27	1.94
	Games-Howell	<= 3.00	3.01 - 4.00	.158	.403	.919	-.82	1.14
			4.01 - 7.00	-.675	.331	.107	-1.46	.11
		3.01 - 4.00	<= 3.00	-.158	.403	.919	-1.14	.82
			4.01 - 7.00	-.834	.423	.131	-1.86	.19
		4.01 - 7.00	<= 3.00	.675	.331	.107	-.11	1.46
			3.01 - 4.00	.834	.423	.131	-.19	1.86
5SA	Tukey HSD	<= 3.00	3.01 - 4.00	.201	.434	.888	-.83	1.23
			4.01 - 7.00	-.195	.312	.807	-.93	.54
		3.01 - 4.00	<= 3.00	-.201	.434	.888	-1.23	.83
			4.01 - 7.00	-.396	.442	.644	-1.44	.65
		4.01 - 7.00	<= 3.00	.195	.312	.807	-.54	.93
			3.01 - 4.00	.396	.442	.644	-.65	1.44
	Hochberg	<= 3.00	3.01 - 4.00	.201	.434	.954	-.85	1.25
			4.01 - 7.00	-.195	.312	.898	-.95	.56
		3.01 - 4.00	<= 3.00	-.201	.434	.954	-1.25	.85
			4.01 - 7.00	-.396	.442	.751	-1.46	.67
		4.01 - 7.00	<= 3.00	.195	.312	.898	-.56	.95
			3.01 - 4.00	.396	.442	.751	-.67	1.46
	Games-Howell	<= 3.00	3.01 - 4.00	.201	.375	.853	-.71	1.11
			4.01 - 7.00	-.195	.323	.818	-.96	.57
		3.01 - 4.00	<= 3.00	-.201	.375	.853	-1.11	.71
			4.01 - 7.00	-.396	.398	.584	-1.36	.57
		4.01 - 7.00	<= 3.00	.195	.323	.818	-.57	.96

			3.01 - 4.00	.396	.398	.584	-.57	1.36
6SA	Tukey HSD	<= 3.00	3.01 - 4.00	-.546	.447	.443	-1.60	.51
			4.01 - 7.00	-1.363*	.327	.000	-2.14	-.59
		3.01 - 4.00	<= 3.00	.546	.447	.443	-.51	1.60
			4.01 - 7.00	-.817	.456	.175	-1.90	.26
		4.01 - 7.00	<= 3.00	1.363*	.327	.000	.59	2.14
			3.01 - 4.00	.817	.456	.175	-.26	1.90
	Hochberg	<= 3.00	3.01 - 4.00	-.546	.447	.531	-1.62	.53
			4.01 - 7.00	-1.363*	.327	.000	-2.15	-.57
		3.01 - 4.00	<= 3.00	.546	.447	.531	-.53	1.62
			4.01 - 7.00	-.817	.456	.207	-1.92	.28
		4.01 - 7.00	<= 3.00	1.363*	.327	.000	.57	2.15
			3.01 - 4.00	.817	.456	.207	-.28	1.92
	Games-Howell	<= 3.00	3.01 - 4.00	-.546	.446	.447	-1.63	.54
			4.01 - 7.00	-1.363*	.326	.000	-2.14	-.59
		3.01 - 4.00	<= 3.00	.546	.446	.447	-.54	1.63
			4.01 - 7.00	-.817	.449	.176	-1.91	.27
		4.01 - 7.00	<= 3.00	1.363*	.326	.000	.59	2.14
			3.01 - 4.00	.817	.449	.176	-.27	1.91
7SA	Tukey HSD	<= 3.00	3.01 - 4.00	-.149	.425	.935	-1.16	.86
			4.01 - 7.00	-1.399*	.310	.000	-2.13	-.67
		3.01 - 4.00	<= 3.00	.149	.425	.935	-.86	1.16
			4.01 - 7.00	-1.250*	.433	.012	-2.27	-.23
		4.01 - 7.00	<= 3.00	1.399*	.310	.000	.67	2.13
			3.01 - 4.00	1.250*	.433	.012	.23	2.27
	Hochberg	<= 3.00	3.01 - 4.00	-.149	.425	.979	-1.17	.88
			4.01 - 7.00	-1.399*	.310	.000	-2.15	-.65
		3.01 - 4.00	<= 3.00	.149	.425	.979	-.88	1.17
			4.01 - 7.00	-1.250*	.433	.013	-2.29	-.21
		4.01 - 7.00	<= 3.00	1.399*	.310	.000	.65	2.15
			3.01 - 4.00	1.250*	.433	.013	.21	2.29
	Games-Howell	<= 3.00	3.01 - 4.00	-.149	.379	.918	-1.06	.77
			4.01 - 7.00	-1.399*	.317	.000	-2.15	-.65
		3.01 - 4.00	<= 3.00	.149	.379	.918	-.77	1.06
			4.01 - 7.00	-1.250*	.384	.006	-2.18	-.32
		4.01 - 7.00	<= 3.00	1.399*	.317	.000	.65	2.15
			3.01 - 4.00	1.250*	.384	.006	.32	2.18
BFA4	Tukey HSD	<= 3.00	3.01 - 4.00	-.580	.368	.260	-1.45	.29
			4.01 - 7.00	-.903*	.268	.003	-1.54	-.27
		3.01 - 4.00	<= 3.00	.580	.368	.260	-.29	1.45

		4.01 - 7.00	-.323	.375	.666	-1.21	.56
	4.01 - 7.00	<= 3.00	.903*	.268	.003	.27	1.54
		3.01 - 4.00	.323	.375	.666	-.56	1.21
Hochberg	<= 3.00	3.01 - 4.00	-.580	.368	.311	-1.47	.31
		4.01 - 7.00	-.903*	.268	.003	-1.55	-.26
	3.01 - 4.00	<= 3.00	.580	.368	.311	-.31	1.47
		4.01 - 7.00	-.323	.375	.773	-1.23	.58
	4.01 - 7.00	<= 3.00	.903*	.268	.003	.26	1.55
		3.01 - 4.00	.323	.375	.773	-.58	1.23
Games-Howell	<= 3.00	3.01 - 4.00	-.580	.359	.248	-1.45	.29
		4.01 - 7.00	-.903*	.265	.002	-1.53	-.28
	3.01 - 4.00	<= 3.00	.580	.359	.248	-.29	1.45
		4.01 - 7.00	-.323	.328	.592	-1.12	.48
	4.01 - 7.00	<= 3.00	.903*	.265	.002	.28	1.53
		3.01 - 4.00	.323	.328	.592	-.48	1.12

*. The mean difference is significant at the 0.05 level.

Appendix VIII

Table 52 ANOVA brand functional involvement and situational variables for SKC products

Descriptives

						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
1SA	<= 3.00	6	2.67	1.366	.558	1.23	4.10	1	4
	3.01 - 4.00	19	3.32	1.416	.325	2.63	4.00	1	6
	4.01 - 7.00	134	4.59	1.696	.146	4.30	4.88	1	7
	Total	159	4.36	1.730	.137	4.09	4.64	1	7
2SA	<= 3.00	6	4.83	2.137	.872	2.59	7.08	2	7
	3.01 - 4.00	19	3.68	1.916	.440	2.76	4.61	1	7
	4.01 - 7.00	133	3.96	1.905	.165	3.64	4.29	1	7
	Total	158	3.96	1.912	.152	3.66	4.26	1	7
3SA	<= 3.00	6	2.67	1.966	.803	.60	4.73	1	5
	3.01 - 4.00	19	3.95	1.580	.363	3.19	4.71	1	7
	4.01 - 7.00	132	3.86	1.968	.171	3.52	4.20	1	7
	Total	157	3.83	1.929	.154	3.52	4.13	1	7
4SA	<= 3.00	6	3.50	2.074	.847	1.32	5.68	1	6

	3.01 - 4.00	19	3.32	1.887	.433	2.41	4.23	1	7
	4.01 - 7.00	132	3.28	1.943	.169	2.95	3.61	1	7
	Total	157	3.29	1.929	.154	2.99	3.60	1	7
5SA	<= 3.00	6	3.67	1.966	.803	1.60	5.73	1	6
	3.01 - 4.00	19	4.11	1.629	.374	3.32	4.89	1	7
	4.01 - 7.00	134	4.07	1.858	.161	3.76	4.39	1	7
	Total	159	4.06	1.827	.145	3.78	4.35	1	7
6SA	<= 3.00	6	2.67	1.966	.803	.60	4.73	1	6
	3.01 - 4.00	19	3.11	1.969	.452	2.16	4.05	1	7
	4.01 - 7.00	134	4.09	1.983	.171	3.75	4.43	1	7
	Total	159	3.92	2.009	.159	3.60	4.23	1	7
7SA	<= 3.00	6	1.83	1.169	.477	.61	3.06	1	4
	3.01 - 4.00	19	3.11	1.729	.397	2.27	3.94	1	6
	4.01 - 7.00	134	4.57	1.833	.158	4.25	4.88	1	7
	Total	159	4.29	1.917	.152	3.99	4.59	1	7
BFA4	<= 3.00	6	1.83	1.169	.477	.61	3.06	1	4
	3.01 - 4.00	19	4.16	1.500	.344	3.43	4.88	2	7
	4.01 - 7.00	136	5.70	1.330	.114	5.47	5.92	1	7
	Total	161	5.37	1.588	.125	5.13	5.62	1	7

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
1SA	.862	2	156	.425
2SA	.235	2	155	.791
3SA	2.471	2	154	.088
4SA	.329	2	154	.720
5SA	1.189	2	156	.307
6SA	.076	2	156	.927
7SA	1.483	2	156	.230
BFA4	.345	2	158	.709

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
1SA	Between Groups	44.979	2	22.489	8.200	.000
	Within Groups	427.864	156	2.743		
	Total	472.843	158			
2SA	Between Groups	6.022	2	3.011	.822	.441
	Within Groups	567.751	155	3.663		

	Total	573.772	157			
3SA	Between Groups	8.531	2	4.265	1.149	.320
	Within Groups	571.826	154	3.713		
	Total	580.357	156			
4SA	Between Groups	.288	2	.144	.038	.962
	Within Groups	580.234	154	3.768		
	Total	580.522	156			
5SA	Between Groups	.995	2	.497	.147	.863
	Within Groups	526.377	156	3.374		
	Total	527.371	158			
6SA	Between Groups	25.889	2	12.944	3.299	.040
	Within Groups	612.048	156	3.923		
	Total	637.937	158			
7SA	Between Groups	73.173	2	36.587	11.246	.000
	Within Groups	507.518	156	3.253		
	Total	580.692	158			
BFA4	Between Groups	117.640	2	58.820	32.495	.000
	Within Groups	285.999	158	1.810		
	Total	403.640	160			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
1SA	Welch	10.259	2	12.206	.002
	Brown-Forsythe	11.204	2	19.651	.001
2SA	Welch	.659	2	11.533	.536
	Brown-Forsythe	.735	2	15.128	.496
3SA	Welch	1.062	2	11.907	.376
	Brown-Forsythe	1.306	2	14.045	.302
4SA	Welch	.032	2	11.631	.968
	Brown-Forsythe	.037	2	15.599	.964
5SA	Welch	.124	2	11.722	.885
	Brown-Forsythe	.151	2	14.174	.862
6SA	Welch	3.155	2	11.691	.080
	Brown-Forsythe	3.339	2	17.579	.059
7SA	Welch	17.788	2	12.721	.000
	Brown-Forsythe	16.353	2	27.330	.000
BFA4	Welch	35.779	2	11.765	.000
	Brown-Forsythe	32.897	2	22.599	.000

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable		(I) BFAaverage (Binned)	(J) BFAaverage (Binned)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
1SA	Tukey HSD	1	3.01 - 4.00	-.649	.776	.681	-2.48	1.19
			4.01 - 7.00	-1.923*	.691	.017	-3.56	-.29
		3.01 - 4.00	1	.649	.776	.681	-1.19	2.48
			4.01 - 7.00	-1.274*	.406	.006	-2.23	-.31
		4.01 - 7.00	1	1.923*	.691	.017	.29	3.56
			3.01 - 4.00	1.274*	.406	.006	.31	2.23
	Hochberg	1	3.01 - 4.00	-.649	.776	.787	-2.52	1.22
			4.01 - 7.00	-1.923*	.691	.018	-3.59	-.26
		3.01 - 4.00	1	.649	.776	.787	-1.22	2.52
			4.01 - 7.00	-1.274*	.406	.006	-2.25	-.29
		4.01 - 7.00	1	1.923*	.691	.018	.26	3.59
			3.01 - 4.00	1.274*	.406	.006	.29	2.25
	Games-Howell	1	3.01 - 4.00	-.649	.646	.592	-2.46	1.17
			4.01 - 7.00	-1.923*	.577	.039	-3.72	-.13
		3.01 - 4.00	1	.649	.646	.592	-1.17	2.46
			4.01 - 7.00	-1.274*	.356	.004	-2.16	-.39
		4.01 - 7.00	1	1.923*	.577	.039	.13	3.72
			3.01 - 4.00	1.274*	.356	.004	.39	2.16
2SA	Tukey HSD	1	3.01 - 4.00	1.149	.896	.407	-.97	3.27
			4.01 - 7.00	.871	.799	.521	-1.02	2.76
		3.01 - 4.00	1	-1.149	.896	.407	-3.27	.97
			4.01 - 7.00	-.278	.469	.824	-1.39	.83
		4.01 - 7.00	1	-.871	.799	.521	-2.76	1.02
			3.01 - 4.00	.278	.469	.824	-.83	1.39
	Hochberg	1	3.01 - 4.00	1.149	.896	.490	-1.01	3.31
			4.01 - 7.00	.871	.799	.621	-1.06	2.80
		3.01 - 4.00	1	-1.149	.896	.490	-3.31	1.01
			4.01 - 7.00	-.278	.469	.911	-1.41	.85
		4.01 - 7.00	1	-.871	.799	.621	-2.80	1.06
			3.01 - 4.00	.278	.469	.911	-.85	1.41
	Games-Howell	1	3.01 - 4.00	1.149	.977	.499	-1.66	3.96
			4.01 - 7.00	.871	.888	.617	-1.95	3.69
		3.01 - 4.00	1	-1.149	.977	.499	-3.96	1.66
			4.01 - 7.00	-.278	.470	.826	-1.45	.90
		4.01 - 7.00	1	-.871	.888	.617	-3.69	1.95

			3.01 - 4.00	.278	.470	.826	-.90	1.45
3SA	Tukey HSD	1	3.01 - 4.00	-1.281	.902	.334	-3.42	.85
			4.01 - 7.00	-1.197	.804	.299	-3.10	.71
		3.01 - 4.00	1	1.281	.902	.334	-.85	3.42
			4.01 - 7.00	.084	.473	.983	-1.04	1.20
		4.01 - 7.00	1	1.197	.804	.299	-.71	3.10
			3.01 - 4.00	-.084	.473	.983	-1.20	1.04
	Hochberg	1	3.01 - 4.00	-1.281	.902	.401	-3.46	.90
			4.01 - 7.00	-1.197	.804	.360	-3.14	.74
		3.01 - 4.00	1	1.281	.902	.401	-.90	3.46
			4.01 - 7.00	.084	.473	.997	-1.06	1.22
		4.01 - 7.00	1	1.197	.804	.360	-.74	3.14
			3.01 - 4.00	-.084	.473	.997	-1.22	1.06
	Games-Howell	1	3.01 - 4.00	-1.281	.881	.366	-3.86	1.30
			4.01 - 7.00	-1.197	.821	.378	-3.79	1.39
		3.01 - 4.00	1	1.281	.881	.366	-1.30	3.86
			4.01 - 7.00	.084	.401	.976	-.91	1.08
		4.01 - 7.00	1	1.197	.821	.378	-1.39	3.79
			3.01 - 4.00	-.084	.401	.976	-1.08	.91
4SA	Tukey HSD	1	3.01 - 4.00	.184	.909	.978	-1.97	2.34
			4.01 - 7.00	.220	.810	.960	-1.70	2.14
		3.01 - 4.00	1	-.184	.909	.978	-2.34	1.97
			4.01 - 7.00	.035	.476	.997	-1.09	1.16
		4.01 - 7.00	1	-.220	.810	.960	-2.14	1.70
			3.01 - 4.00	-.035	.476	.997	-1.16	1.09
	Hochberg	1	3.01 - 4.00	.184	.909	.996	-2.01	2.38
			4.01 - 7.00	.220	.810	.990	-1.74	2.17
		3.01 - 4.00	1	-.184	.909	.996	-2.38	2.01
			4.01 - 7.00	.035	.476	1.000	-1.11	1.18
		4.01 - 7.00	1	-.220	.810	.990	-2.17	1.74
			3.01 - 4.00	-.035	.476	1.000	-1.18	1.11
	Games-Howell	1	3.01 - 4.00	.184	.951	.980	-2.55	2.92
			4.01 - 7.00	.220	.863	.965	-2.52	2.95
		3.01 - 4.00	1	-.184	.951	.980	-2.92	2.55
			4.01 - 7.00	.035	.465	.997	-1.13	1.20
		4.01 - 7.00	1	-.220	.863	.965	-2.95	2.52
			3.01 - 4.00	-.035	.465	.997	-1.20	1.13
5SA	Tukey HSD	1	3.01 - 4.00	-.439	.860	.867	-2.47	1.60
			4.01 - 7.00	-.408	.767	.856	-2.22	1.41
		3.01 - 4.00	1	.439	.860	.867	-1.60	2.47

			4.01 - 7.00	.031	.450	.997	-1.03	1.10
		4.01 - 7.00	1	.408	.767	.856	-1.41	2.22
			3.01 - 4.00	-.031	.450	.997	-1.10	1.03
	Hochberg	1	3.01 - 4.00	-.439	.860	.941	-2.51	1.64
			4.01 - 7.00	-.408	.767	.933	-2.26	1.44
		3.01 - 4.00	1	.439	.860	.941	-1.64	2.51
			4.01 - 7.00	.031	.450	1.000	-1.06	1.12
		4.01 - 7.00	1	.408	.767	.933	-1.44	2.26
			3.01 - 4.00	-.031	.450	1.000	-1.12	1.06
	Games-Howell	1	3.01 - 4.00	-.439	.886	.876	-3.02	2.14
			4.01 - 7.00	-.408	.819	.875	-3.00	2.19
		3.01 - 4.00	1	.439	.886	.876	-2.14	3.02
			4.01 - 7.00	.031	.407	.997	-.98	1.04
		4.01 - 7.00	1	.408	.819	.875	-2.19	3.00
			3.01 - 4.00	-.031	.407	.997	-1.04	.98
6SA	Tukey HSD	1	3.01 - 4.00	-.439	.928	.884	-2.63	1.76
			4.01 - 7.00	-1.423	.827	.200	-3.38	.53
		3.01 - 4.00	1	.439	.928	.884	-1.76	2.63
			4.01 - 7.00	-.984	.486	.109	-2.13	.16
		4.01 - 7.00	1	1.423	.827	.200	-.53	3.38
			3.01 - 4.00	.984	.486	.109	-.16	2.13
	Hochberg	1	3.01 - 4.00	-.439	.928	.952	-2.68	1.80
			4.01 - 7.00	-1.423	.827	.238	-3.42	.57
		3.01 - 4.00	1	.439	.928	.952	-1.80	2.68
			4.01 - 7.00	-.984	.486	.127	-2.16	.19
		4.01 - 7.00	1	1.423	.827	.238	-.57	3.42
			3.01 - 4.00	.984	.486	.127	-.19	2.16
	Games-Howell	1	3.01 - 4.00	-.439	.921	.884	-3.04	2.17
			4.01 - 7.00	-1.423	.821	.275	-4.01	1.17
		3.01 - 4.00	1	.439	.921	.884	-2.17	3.04
			4.01 - 7.00	-.984	.483	.125	-2.19	.22
		4.01 - 7.00	1	1.423	.821	.275	-1.17	4.01
			3.01 - 4.00	.984	.483	.125	-.22	2.19
7SA	Tukey HSD	1	3.01 - 4.00	-1.272	.845	.291	-3.27	.73
			4.01 - 7.00	-2.734*	.753	.001	-4.51	-.95
		3.01 - 4.00	1	1.272	.845	.291	-.73	3.27
			4.01 - 7.00	-1.462*	.442	.003	-2.51	-.42
		4.01 - 7.00	1	2.734*	.753	.001	.95	4.51
			3.01 - 4.00	1.462*	.442	.003	.42	2.51
	Hochberg	1	3.01 - 4.00	-1.272	.845	.350	-3.31	.77

			4.01 - 7.00	-2.734*	.753	.001	-4.55	-.92
		3.01 - 4.00	1	1.272	.845	.350	-.77	3.31
			4.01 - 7.00	-1.462*	.442	.004	-2.53	-.40
		4.01 - 7.00	1	2.734*	.753	.001	.92	4.55
			3.01 - 4.00	1.462*	.442	.004	.40	2.53
	Games-Howell	1	3.01 - 4.00	-1.272	.621	.141	-2.92	.37
			4.01 - 7.00	-2.734*	.503	.004	-4.27	-1.20
		3.01 - 4.00	1	1.272	.621	.141	-.37	2.92
			4.01 - 7.00	-1.462*	.427	.006	-2.53	-.40
		4.01 - 7.00	1	2.734*	.503	.004	1.20	4.27
			3.01 - 4.00	1.462*	.427	.006	.40	2.53
BFA4	Tukey HSD	1	3.01 - 4.00	-2.325*	.630	.001	-3.82	-.83
			4.01 - 7.00	-3.865*	.561	.000	-5.19	-2.54
		3.01 - 4.00	1	2.325*	.630	.001	.83	3.82
			4.01 - 7.00	-1.541*	.330	.000	-2.32	-.76
		4.01 - 7.00	1	3.865*	.561	.000	2.54	5.19
			3.01 - 4.00	1.541*	.330	.000	.76	2.32
	Hochberg	1	3.01 - 4.00	-2.325*	.630	.001	-3.84	-.80
			4.01 - 7.00	-3.865*	.561	.000	-5.22	-2.51
		3.01 - 4.00	1	2.325*	.630	.001	.80	3.84
			4.01 - 7.00	-1.541*	.330	.000	-2.34	-.75
		4.01 - 7.00	1	3.865*	.561	.000	2.51	5.22
			3.01 - 4.00	1.541*	.330	.000	.75	2.34
	Games-Howell	1	3.01 - 4.00	-2.325*	.588	.006	-3.92	-.73
			4.01 - 7.00	-3.865*	.491	.001	-5.40	-2.33
		3.01 - 4.00	1	2.325*	.588	.006	.73	3.92
			4.01 - 7.00	-1.541*	.363	.001	-2.45	-.63
		4.01 - 7.00	1	3.865*	.491	.001	2.33	5.40
			3.01 - 4.00	1.541*	.363	.001	.63	2.45

*. The mean difference is significant at the 0.05 level.

Appendix IX

Table 53 Table 54 ANOVA for product involvement and situational variables for SKC products

Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
1SA	1	9	3.00	2.179	.726	1.32	4.68	1	7
	2	28	3.82	1.657	.313	3.18	4.46	1	7
	3	93	4.65	1.692	.175	4.30	4.99	1	7
	Total	130	4.35	1.778	.156	4.05	4.66	1	7
2SA	1	9	4.00	2.550	.850	2.04	5.96	1	7
	2	28	4.07	2.017	.381	3.29	4.85	1	7
	3	91	3.86	1.930	.202	3.46	4.26	1	7
	Total	128	3.91	1.980	.175	3.57	4.26	1	7
3SA	1	9	3.00	2.062	.687	1.42	4.58	1	6
	2	27	3.78	1.625	.313	3.13	4.42	1	7
	3	92	3.76	2.067	.215	3.33	4.19	1	7
	Total	128	3.71	1.977	.175	3.37	4.06	1	7
4SA	1	9	2.67	2.121	.707	1.04	4.30	1	7
	2	27	3.67	1.861	.358	2.93	4.40	1	7
	3	93	3.06	1.858	.193	2.68	3.45	1	7
	Total	129	3.16	1.882	.166	2.83	3.49	1	7
5SA	1	9	3.44	2.128	.709	1.81	5.08	1	6
	2	27	4.19	1.388	.267	3.64	4.73	1	7
	3	92	4.03	1.969	.205	3.62	4.44	1	7
	Total	128	4.02	1.868	.165	3.70	4.35	1	7
6SA	1	9	2.67	1.936	.645	1.18	4.16	1	6
	2	27	4.30	1.918	.369	3.54	5.05	1	7
	3	93	3.77	2.033	.211	3.36	4.19	1	7
	Total	129	3.81	2.024	.178	3.45	4.16	1	7
7SA	1	9	2.56	2.128	.709	.92	4.19	1	7
	2	28	4.25	1.713	.324	3.59	4.91	1	7
	3	93	4.33	1.936	.201	3.93	4.73	1	7
	Total	130	4.19	1.941	.170	3.86	4.53	1	7
BFA4	1	9	3.00	2.179	.726	1.32	4.68	1	7
	2	28	5.14	1.268	.240	4.65	5.63	2	7
	3	93	5.77	1.376	.143	5.49	6.06	1	7
	Total	130	5.45	1.580	.139	5.17	5.72	1	7

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
1SA	.945	2	127	.392
2SA	1.377	2	125	.256
3SA	2.479	2	125	.088
4SA	.021	2	126	.980
5SA	4.005	2	125	.021
6SA	.151	2	126	.860
7SA	1.047	2	127	.354
BFA4	3.336	2	127	.039

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
1SA	Between Groups	32.326	2	16.163	5.468	.005
	Within Groups	375.397	127	2.956		
	Total	407.723	129			
2SA	Between Groups	1.055	2	.527	.133	.876
	Within Groups	497.000	125	3.976		
	Total	498.055	127			
3SA	Between Groups	4.899	2	2.449	.623	.538
	Within Groups	491.406	125	3.931		
	Total	496.305	127			
4SA	Between Groups	9.968	2	4.984	1.416	.247
	Within Groups	443.613	126	3.521		
	Total	453.581	128			
5SA	Between Groups	3.731	2	1.866	.531	.589
	Within Groups	439.198	125	3.514		
	Total	442.930	127			
6SA	Between Groups	18.267	2	9.134	2.275	.107
	Within Groups	505.888	126	4.015		
	Total	524.155	128			
7SA	Between Groups	26.053	2	13.027	3.595	.030
	Within Groups	460.139	127	3.623		
	Total	486.192	129			
BFA4	Between Groups	66.436	2	33.218	16.500	.000
	Within Groups	255.687	127	2.013		
	Total	322.123	129			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
1SA	Welch	4.386	2	19.403	.027
	Brown-Forsythe	4.375	2	20.822	.026
2SA	Welch	.125	2	19.262	.883
	Brown-Forsythe	.102	2	21.417	.903
3SA	Welch	.566	2	20.502	.577
	Brown-Forsythe	.677	2	24.536	.517
4SA	Welch	1.320	2	19.551	.290
	Brown-Forsythe	1.264	2	24.993	.300
5SA	Welch	.479	2	20.404	.626
	Brown-Forsythe	.547	2	20.075	.587
6SA	Welch	2.373	2	20.354	.118
	Brown-Forsythe	2.419	2	30.633	.106
7SA	Welch	2.823	2	20.058	.083
	Brown-Forsythe	3.436	2	23.678	.049
BFA4	Welch	8.533	2	19.099	.002
	Brown-Forsythe	10.677	2	15.453	.001

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable		(I) ZAaverage (Binned)	(J) ZAaverage (Binned)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
1SA	Tukey HSD	1	2	-.821	.659	.428	-2.38	.74
			3	-1.645*	.600	.019	-3.07	-.22
		2	1	.821	.659	.428	-.74	2.38
			3	-.824	.371	.071	-1.70	.06
		3	1	1.645*	.600	.019	.22	3.07
			2	.824	.371	.071	-.06	1.70
	Hochberg	1	2	-.821	.659	.514	-2.41	.77
			3	-1.645*	.600	.021	-3.10	-.19
		2	1	.821	.659	.514	-.77	2.41
			3	-.824	.371	.081	-1.72	.07
		3	1	1.645*	.600	.021	.19	3.10
			2	.824	.371	.081	-.07	1.72
	Games-Howell	1	2	-.821	.791	.569	-2.95	1.31
			3	-1.645	.747	.125	-3.73	.44
		2	1	.821	.791	.569	-1.31	2.95

			3	-.824	.359	.067	-1.69	.05
		3	1	1.645	.747	.125	-.44	3.73
			2	.824	.359	.067	-.05	1.69
2SA	Tukey HSD	1	2	-.071	.764	.995	-1.88	1.74
			3	.143	.697	.977	-1.51	1.80
		2	1	.071	.764	.995	-1.74	1.88
			3	.214	.431	.873	-.81	1.24
		3	1	-.143	.697	.977	-1.80	1.51
			2	-.214	.431	.873	-1.24	.81
	Hochberg	1	2	-.071	.764	1.000	-1.92	1.78
			3	.143	.697	.996	-1.54	1.83
		2	1	.071	.764	1.000	-1.78	1.92
			3	.214	.431	.945	-.83	1.26
		3	1	-.143	.697	.996	-1.83	1.54
			2	-.214	.431	.945	-1.26	.83
	Games-Howell	1	2	-.071	.931	.997	-2.57	2.43
			3	.143	.874	.985	-2.30	2.59
		2	1	.071	.931	.997	-2.43	2.57
			3	.214	.432	.873	-.83	1.26
		3	1	-.143	.874	.985	-2.59	2.30
			2	-.214	.432	.873	-1.26	.83
3SA	Tukey HSD	1	2	-.778	.763	.566	-2.59	1.03
			3	-.761	.692	.517	-2.40	.88
		2	1	.778	.763	.566	-1.03	2.59
			3	.017	.434	.999	-1.01	1.05
		3	1	.761	.692	.517	-.88	2.40
			2	-.017	.434	.999	-1.05	1.01
	Hochberg	1	2	-.778	.763	.670	-2.62	1.07
			3	-.761	.692	.615	-2.44	.91
		2	1	.778	.763	.670	-1.07	2.62
			3	.017	.434	1.000	-1.03	1.07
		3	1	.761	.692	.615	-.91	2.44
			2	-.017	.434	1.000	-1.07	1.03
	Games-Howell	1	2	-.778	.755	.574	-2.80	1.25
			3	-.761	.720	.561	-2.75	1.23
		2	1	.778	.755	.574	-1.25	2.80
			3	.017	.380	.999	-.90	.93
		3	1	.761	.720	.561	-1.23	2.75
			2	-.017	.380	.999	-.93	.90
4SA	Tukey HSD	1	2	-1.000	.722	.352	-2.71	.71

			3	-.398	.655	.816	-1.95	1.16
		2	1	1.000	.722	.352	-.71	2.71
			3	.602	.410	.310	-.37	1.58
		3	1	.398	.655	.816	-1.16	1.95
			2	-.602	.410	.310	-1.58	.37
	Hochberg	1	2	-1.000	.722	.424	-2.75	.75
			3	-.398	.655	.905	-1.98	1.19
		2	1	1.000	.722	.424	-.75	2.75
			3	.602	.410	.372	-.39	1.59
		3	1	.398	.655	.905	-1.19	1.98
			2	-.602	.410	.372	-1.59	.39
	Games-Howell	1	2	-1.000	.793	.441	-3.11	1.11
			3	-.398	.733	.853	-2.43	1.64
		2	1	1.000	.793	.441	-1.11	3.11
			3	.602	.407	.310	-.39	1.59
		3	1	.398	.733	.853	-1.64	2.43
			2	-.602	.407	.310	-1.59	.39
5SA	Tukey HSD	1	2	-.741	.721	.561	-2.45	.97
			3	-.588	.655	.642	-2.14	.96
		2	1	.741	.721	.561	-.97	2.45
			3	.153	.410	.927	-.82	1.13
		3	1	.588	.655	.642	-.96	2.14
			2	-.153	.410	.927	-1.13	.82
	Hochberg	1	2	-.741	.721	.665	-2.49	1.00
			3	-.588	.655	.749	-2.17	1.00
		2	1	.741	.721	.665	-1.00	2.49
			3	.153	.410	.975	-.84	1.15
		3	1	.588	.655	.749	-1.00	2.17
			2	-.153	.410	.975	-1.15	.84
	Games-Howell	1	2	-.741	.758	.606	-2.81	1.32
			3	-.588	.738	.714	-2.63	1.46
		2	1	.741	.758	.606	-1.32	2.81
			3	.153	.337	.893	-.66	.96
		3	1	.588	.738	.714	-1.46	2.63
			2	-.153	.337	.893	-.96	.66
6SA	Tukey HSD	1	2	-1.630	.771	.091	-3.46	.20
			3	-1.108	.699	.257	-2.77	.55
		2	1	1.630	.771	.091	-.20	3.46
			3	.522	.438	.460	-.52	1.56
		3	1	1.108	.699	.257	-.55	2.77

			2	-.522	.438	.460	-1.56	.52
	Hochberg	1	2	-1.630	.771	.105	-3.50	.24
			3	-1.108	.699	.307	-2.80	.58
		2	1	1.630	.771	.105	-.24	3.50
			3	.522	.438	.551	-.54	1.58
		3	1	1.108	.699	.307	-.58	2.80
			2	-.522	.438	.551	-1.58	.54
	Games-Howell	1	2	-1.630	.744	.108	-3.58	.32
			3	-1.108	.679	.279	-2.98	.76
		2	1	1.630	.744	.108	-.32	3.58
			3	.522	.425	.443	-.51	1.55
		3	1	1.108	.679	.279	-.76	2.98
			2	-.522	.425	.443	-1.55	.51
7SA	Tukey HSD	1	2	-1.694	.729	.056	-3.42	.04
			3	-1.778*	.664	.023	-3.35	-.20
		2	1	1.694	.729	.056	-.04	3.42
			3	-.083	.410	.978	-1.06	.89
		3	1	1.778*	.664	.023	.20	3.35
			2	.083	.410	.978	-.89	1.06
	Hochberg	1	2	-1.694	.729	.064	-3.46	.07
			3	-1.778*	.664	.025	-3.38	-.17
		2	1	1.694	.729	.064	-.07	3.46
			3	-.083	.410	.996	-1.08	.91
		3	1	1.778*	.664	.025	.17	3.38
			2	.083	.410	.996	-.91	1.08
	Games-Howell	1	2	-1.694	.780	.118	-3.79	.40
			3	-1.778	.737	.089	-3.82	.27
		2	1	1.694	.780	.118	-.40	3.79
			3	-.083	.381	.974	-1.00	.84
		3	1	1.778	.737	.089	-.27	3.82
			2	.083	.381	.974	-.84	1.00
BFA4	Tukey HSD	1	2	-2.143*	.544	.000	-3.43	-.85
			3	-2.774*	.495	.000	-3.95	-1.60
		2	1	2.143*	.544	.000	.85	3.43
			3	-.631	.306	.102	-1.36	.09
		3	1	2.774*	.495	.000	1.60	3.95
			2	.631	.306	.102	-.09	1.36
	Hochberg	1	2	-2.143*	.544	.000	-3.46	-.83
			3	-2.774*	.495	.000	-3.97	-1.58
		2	1	2.143*	.544	.000	.83	3.46

		3	-.631	.306	.118	-1.37	.11
	3	1	2.774*	.495	.000	1.58	3.97
		2	.631	.306	.118	-.11	1.37
Games-Howell	1	2	-2.143*	.765	.046	-4.25	-.04
		3	-2.774*	.740	.012	-4.86	-.69
	2	1	2.143*	.765	.046	.04	4.25
		3	-.631	.279	.071	-1.31	.04
	3	1	2.774*	.740	.012	.69	4.86
		2	.631	.279	.071	-.04	1.31

*. The mean difference is significant at the 0.05 level.

Appendix X

Table 55 ANOVA brand functional involvement and situational variables for OTC products

Descriptives

						95% Confidence Interval for Mean			
		N	Mean	Std. Deviation	Std. Error	Lower Bound	Upper Bound	Minimum	Maximum
S1	<= 3.00	22	5.00	1.069	.228	4.53	5.47	3	7
	3.01 - 4.00	26	4.35	1.495	.293	3.74	4.95	1	7
	4.01 - 7.00	169	3.80	1.705	.131	3.55	4.06	1	7
	Total	217	3.99	1.667	.113	3.77	4.21	1	7
S2	<= 3.00	21	4.19	1.834	.400	3.36	5.03	2	7
	3.01 - 4.00	26	3.92	1.958	.384	3.13	4.71	1	7
	4.01 - 7.00	168	4.10	2.017	.156	3.79	4.41	1	7
	Total	215	4.09	1.985	.135	3.82	4.36	1	7
S3	<= 3.00	21	3.14	1.682	.367	2.38	3.91	1	6
	3.01 - 4.00	26	3.54	1.529	.300	2.92	4.16	1	7
	4.01 - 7.00	168	3.18	1.885	.145	2.90	3.47	1	7
	Total	215	3.22	1.823	.124	2.98	3.47	1	7
S4	<= 3.00	22	2.77	1.602	.341	2.06	3.48	1	6
	3.01 - 4.00	26	2.96	1.865	.366	2.21	3.71	1	7
	4.01 - 7.00	165	2.92	1.798	.140	2.64	3.20	1	7
	Total	213	2.91	1.779	.122	2.67	3.15	1	7
S5	<= 3.00	22	3.77	1.445	.308	3.13	4.41	1	7
	3.01 - 4.00	26	4.19	1.625	.319	3.54	4.85	1	7

	4.01 - 7.00	168	3.82	1.839	.142	3.54	4.10	1	7
	Total	216	3.86	1.776	.121	3.62	4.10	1	7
S6	<= 3.00	22	2.64	1.465	.312	1.99	3.29	1	6
	3.01 - 4.00	26	3.73	1.971	.387	2.93	4.53	1	7
	4.01 - 7.00	168	3.86	2.034	.157	3.55	4.17	1	7
	Total	216	3.72	2.002	.136	3.45	3.99	1	7
S7	<= 3.00	22	3.14	1.583	.337	2.43	3.84	1	7
	3.01 - 4.00	26	4.08	1.547	.303	3.45	4.70	1	7
	4.01 - 7.00	168	4.06	1.715	.132	3.80	4.32	1	7
	Total	216	3.97	1.699	.116	3.74	4.20	1	7
4BF	<= 3.00	22	3.27	1.549	.330	2.59	3.96	2	7
	3.01 - 4.00	26	4.31	1.543	.303	3.68	4.93	2	7
	4.01 - 7.00	170	5.61	1.270	.097	5.41	5.80	1	7
	Total	218	5.22	1.537	.104	5.01	5.42	1	7

Test of Homogeneity of Variances

	Levene Statistic	df1	df2	Sig.
S1	5.756	2	214	.004
S2	.080	2	212	.923
S3	3.082	2	212	.048
S4	.279	2	210	.757
S5	2.750	2	213	.066
S6	2.588	2	213	.078
S7	.638	2	213	.529
4BF	2.352	2	215	.098

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
S1	Between Groups	31.541	2	15.770	5.937	.003
	Within Groups	568.441	214	2.656		
	Total	599.982	216			
S2	Between Groups	.957	2	.478	.120	.887
	Within Groups	842.364	212	3.973		
	Total	843.321	214			
S3	Between Groups	2.971	2	1.485	.445	.642
	Within Groups	708.313	212	3.341		
	Total	711.284	214			
S4	Between Groups	.504	2	.252	.079	.924
	Within Groups	670.801	210	3.194		

	Total	671.305	212			
S5	Between Groups	3.288	2	1.644	.519	.596
	Within Groups	674.545	213	3.167		
	Total	677.833	215			
S6	Between Groups	28.995	2	14.498	3.708	.026
	Within Groups	832.778	213	3.910		
	Total	861.773	215			
S7	Between Groups	16.931	2	8.466	2.986	.053
	Within Groups	603.842	213	2.835		
	Total	620.773	215			
4BF	Between Groups	130.371	2	65.185	36.641	.000
	Within Groups	382.496	215	1.779		
	Total	512.867	217			

Robust Tests of Equality of Means

		Statistic[a]	df1	df2	Sig.
S1	Welch	10.473	2	44.303	.000
	Brown-Forsythe	8.670	2	63.765	.000
S2	Welch	.126	2	38.016	.882
	Brown-Forsythe	.131	2	57.863	.877
S3	Welch	.593	2	39.528	.558
	Brown-Forsythe	.552	2	58.179	.579
S4	Welch	.092	2	39.124	.912
	Brown-Forsythe	.083	2	58.887	.921
S5	Welch	.609	2	41.385	.549
	Brown-Forsythe	.664	2	63.349	.518
S6	Welch	6.043	2	41.709	.005
	Brown-Forsythe	4.629	2	60.449	.013
S7	Welch	3.281	2	39.676	.048
	Brown-Forsythe	3.380	2	59.617	.041
4BF	Welch	28.593	2	35.840	.000
	Brown-Forsythe	28.287	2	53.355	.000

a. Asymptotically F distributed.

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) BFaverage (Binned)	(J) BFaverage (Binned)	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound

S1	<= 3.00	3.01 - 4.00	.654	.472	.351	-.46	1.77
		4.01 - 7.00	1.195*	.369	.004	.32	2.07
	3.01 - 4.00	<= 3.00	-.654	.472	.351	-1.77	.46
		4.01 - 7.00	.541	.343	.258	-.27	1.35
	4.01 - 7.00	<= 3.00	-1.195*	.369	.004	-2.07	-.32
		3.01 - 4.00	-.541	.343	.258	-1.35	.27
S2	<= 3.00	3.01 - 4.00	.267	.585	.891	-1.11	1.65
		4.01 - 7.00	.089	.461	.980	-1.00	1.18
	3.01 - 4.00	<= 3.00	-.267	.585	.891	-1.65	1.11
		4.01 - 7.00	-.178	.420	.906	-1.17	.81
	4.01 - 7.00	<= 3.00	-.089	.461	.980	-1.18	1.00
		3.01 - 4.00	.178	.420	.906	-.81	1.17
S3	<= 3.00	3.01 - 4.00	-.396	.536	.741	-1.66	.87
		4.01 - 7.00	-.042	.423	.995	-1.04	.96
	3.01 - 4.00	<= 3.00	.396	.536	.741	-.87	1.66
		4.01 - 7.00	.354	.385	.629	-.56	1.26
	4.01 - 7.00	<= 3.00	.042	.423	.995	-.96	1.04
		3.01 - 4.00	-.354	.385	.629	-1.26	.56
S4	<= 3.00	3.01 - 4.00	-.189	.518	.929	-1.41	1.03
		4.01 - 7.00	-.148	.406	.929	-1.11	.81
	3.01 - 4.00	<= 3.00	.189	.518	.929	-1.03	1.41
		4.01 - 7.00	.040	.377	.994	-.85	.93
	4.01 - 7.00	<= 3.00	.148	.406	.929	-.81	1.11
		3.01 - 4.00	-.040	.377	.994	-.93	.85
S5	<= 3.00	3.01 - 4.00	-.420	.516	.695	-1.64	.80
		4.01 - 7.00	-.049	.403	.992	-1.00	.90
	3.01 - 4.00	<= 3.00	.420	.516	.695	-.80	1.64
		4.01 - 7.00	.371	.375	.585	-.51	1.26
	4.01 - 7.00	<= 3.00	.049	.403	.992	-.90	1.00
		3.01 - 4.00	-.371	.375	.585	-1.26	.51
S6	<= 3.00	3.01 - 4.00	-1.094	.573	.138	-2.45	.26
		4.01 - 7.00	-1.221*	.448	.019	-2.28	-.16
	3.01 - 4.00	<= 3.00	1.094	.573	.138	-.26	2.45
		4.01 - 7.00	-.126	.417	.951	-1.11	.86
	4.01 - 7.00	<= 3.00	1.221*	.448	.019	.16	2.28
		3.01 - 4.00	.126	.417	.951	-.86	1.11
S7	<= 3.00	3.01 - 4.00	-.941	.488	.133	-2.09	.21
		4.01 - 7.00	-.923*	.382	.043	-1.82	-.02
	3.01 - 4.00	<= 3.00	.941	.488	.133	-.21	2.09
		4.01 - 7.00	.017	.355	.999	-.82	.85

	4.01 - 7.00	<= 3.00	.923*	.382	.043	.02	1.82
		3.01 - 4.00	-.017	.355	.999	-.85	.82
4BF	<= 3.00	3.01 - 4.00	-1.035*	.386	.022	-1.95	-.12
		4.01 - 7.00	-2.333*	.302	.000	-3.05	-1.62
	3.01 - 4.00	<= 3.00	1.035*	.386	.022	.12	1.95
		4.01 - 7.00	-1.298*	.281	.000	-1.96	-.64
	4.01 - 7.00	<= 3.00	2.333*	.302	.000	1.62	3.05
		3.01 - 4.00	1.298*	.281	.000	.64	1.96

*. The mean difference is significant at the 0.05 level.