Implement Purchase Choice into the Customer

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Management Summary

This research provides a literature basis on how subliminal stimuli could influence brand choice. Currently, studies are based on influencing customer brand choice directly by implementing subliminal stimuli in advertisements, which is a strong response. Since the current methods do not seem to give significant consistent answers, this research provides a new model. While a strong response is doubtful, that customers have a weak response towards subliminal stimuli is very convincing, such as a change in attitude, feeling, drive, etc. This weak response can be used to create brand equity and in turn influence brand choice. First, brand choice will be explained and what variables influence it. Secondly, a method is given how to apply subliminal stimuli. This information will be used to link subliminal stimuli to brand choice. Marketers have always been very interested in trying to influence the customer unconsciously because this could lead to an increase in sales. For academics it is interesting to investigate what influences human behavior: is it possible that subliminal stimuli do affect what people do? The final result is that stimuli in our environment do affect us. This research is just a literature bases so field experiments need to be executed on the new model made in this research. Besides, further research remains to be conducted on the exact effect of subliminal stimuli.
Chapter 1. Introduction

§ 1.1 Introduction

Did you ever have this enormous urge to eat delicious crispy warm salt popcorn with a big glass of bubbling cold cola while watching a movie in the cinema? Then possibly you have been tricked by some kind of marketing technique. In 1957 James Vicary tried out a new marketing technique, subliminal advertising. Vicary superimposed the messages ‘drink cola’ and ‘eat popcorn’ on the movie in progress. The audience was unaware of the messages because the time of exposure was very short. (Vicary, 1957, in Moore, 1982). But subliminally these messages would go in to our brain. James Vicary claimed that the sales of popcorn and cola increased with respectively 57.7% and 18.1% (James Vicary, 1957, in Bermeitinger, Goelz, Johr, Neumann, Ecker & Doerr, 2007).

Years after the uproar of Vicary’s experiment it appeared to be a publicity marketing hoax. This experiment did not significantly influence the customers unconsciously to purchase cola and popcorn (Moore, 1982). The studies on subliminal perception started way before 1957, but since Vicary’s experiment the phenomenon subliminal advertising has risen and caught marketers’ attention (Theus, 1994). Over forty years of research was conducted on the effectiveness of subliminal advertising (Landini, 2005). The goal of marketing is to increase the likelihood and frequency of transactions in the marketplace (Camenisch, 1991). This gives the reason why subliminal advertising is so interesting for marketers, because this technique tries to influence the likelihood and frequency of transactions by influencing the customer on an unconscious level (Trappey, 1996). Therefore many former scientists investigated how subliminal advertisements influence brand choice. Unfortunately, the ins and outs of subliminal advertising are still questionable (Karremans, Stroebe & Claus, 2006). There are many contradicting studies, and not one study can provide a waterproof answer how subliminal stimuli can influence customers brand choice. (Hawkins, 1970; Cuperfain & Clarke, 1985; Caccavale, Wanty & Edell, 1981; Kilbourne, Painton & Ridley, 1985; Rosen & Singh, 1992; Theus, 1994; Trappey, 1996; Landini, 2005; Stroebe & Claus, 2006). So whether subliminal stimuli are effective in marketing is still a mystery. Possibly, some subliminal advertising techniques are to some extend effective and possibly others might not work at all. In this case, it is probably a good idea to question the investigations that have been conducted. The point is that maybe scientists cannot find the answer because their focus is not on how subliminal stimuli in general can affect brand choice, but on how subliminal stimuli in
advertisements affect brand choice. This makes their view narrowed and not open for new insights. Possibly subliminal advertising might not be the right tool for subliminal stimuli to influence customers.

In short, scientist should take one step back and investigate how subliminal stimuli can contribute in the determination of customer brand choice instead of just focusing the one tool of subliminal perception: subliminal advertising. This study will thoroughly investigate what the link is between subliminal stimuli and brand choice, which will provide a basis for scientist to move on with experimenting with subliminal stimuli in marketing. Then maybe one day marketers do get the power to influence customer brand choice by the use of subliminal stimuli.

§ 1.2 Problem statement and research questions

How could subliminal stimuli influence customer brand choice?

1. What is brand choice?

2. What factors influence brand choice?

3. What are subliminal stimuli?

4. How are subliminal stimuli linked to brand choice?

§ 1.3 Relevance

§ 1.3.1 Managerial Relevance

This topic is very interesting for marketers; all techniques that might influence customer behavior are appealing for the business world. Since the main goal of business is the process of discovering and translating consumer needs and wants into products and services, creating demand for these products and services, and then, expanding this demand (Zeithaml & Zeithaml, 1984). Influencing customer brand choice creates and expands demand. Since the current subliminal advertising techniques are not very helpful to marketers it is essential that studies are being developed that are significantly effective. Therefore, further investigation on how subliminal stimuli should be applied
in marketing to effectively influence the customer brand choice is very relevant. This complies with one of the main business goals: creating demand. As a result, this research will give useful guidelines for marketers how to apply subliminal stimuli, which in turn can be used to set up better marketing campaigns and create competitive advantages. Besides, this study will give managers more insight in the possibilities of subliminal stimuli, in order that marketers can continue experimenting with subliminal advertising. In short, this research helps marketers with influencing customers unconsciously which can lead to more sales.

§ 1.3.2 Academic Relevance

This investigation will provide a new method on how subliminal stimuli could influence behavior. For academics it is very interesting to find the answer whether it is possible to influence behavior with subliminal stimuli. The answer to the question ‘Which stimuli in our environment impact what we do?’ will tremendously extend the academic knowledge on human behavior. If scientists know that subliminal stimuli do or do not affect people’s behavior, information is gained on big puzzles like the philosophy of the mind, paranormal abilities and the operation of the brain.

One way to measure behavior is by measuring brand choice. Brand choice is a very measurable variable in the field as the change in sales can be detected. And further to this, brand choice is easy to measure since there are only two options, you choose the brand or not. In a lab different scenarios with stimuli can measure what the conditions are for a choice. Besides, brand choice is a topic on which many investigations have been conducted. Unfortunately, there is no waterproof investigation of the effect of subliminal stimuli on brand choice. Mainly, because scientists only use one tool in their investigations: subliminal advertising. This investigation will show that there are more tools to implement subliminal stimuli. By linking subliminal stimuli with brand choice instead of subliminal advertising and brand choice, this investigation will give new insights on the effectiveness of subliminal perception. In conclusion, this research will give a new literature basis for further investigations to experiment with the effects of subliminal stimuli on customers' behavior.
Chapter 2. Brand choice

To understand how subliminal stimuli can influence brand choice it is important to thoroughly understand the concept of brand choice. This chapter will answer the research question ‘What is brand choice?’ Subsequently the chapter will explain what factors influence this brand choice. A division will be made between the value adding attributes of the product and the customers’ perception of the brand. See figure 1 for the graphical model.

§2.1 Concept

“A product is something that is made in a factory; a brand is something that is bought by a customer. A product can be copied by a competitor; a brand is unique. A product can be quickly outdated; a successful brand is timeless.” (Stephen King, 1973, p.37)

As Stephen King formulated very nicely, a brand is more than just a product name or logo. Brands are extremely important for sales. For example, just about every household will buy a television at some time, thus for business it is important that these households buy their television brand. Why does a customer buy one certain television? Is the reason for customer’s choice the low price, the size of the screen or perhaps style and reputation? There are so many brands, with hundreds of different attributes, and every brand has its own unique combination of attributes. Yet, one brand sells many more televisions than the other, and further to this some brands have a completely different customer base than others. Therefore it can be said that brand choice is not a completely random choice (Howard & Seth, 1969). In this study, brand choice is the final choice a customer makes after considering several options on many attributes. This chapter will now explain what factors influence brand choice.

§2.2 Value adding attributes

The customer will choose the product which is the most valuable to him or her (Borden, 1964). Therefore it is very important to know exactly what attributes are taken into consideration when a customer chooses between brands. Scientists have made many lists of different attributes that should be able to determine customer brand choice. Most methods of attributes were incomplete in some part or redundant on other attributes, this leads to inconsistent results (Borden, 1964). In 1942 Neil H. Borden created the concept ‘marketing mix’ in his first investigation. He used all
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the relevant product attributes and divided them under twelve production processes. It is just like baking a cake: How should the many ingredients be mixed to bake the best cake for your target group (Borden, 1964). Borden’s famous marketing mix of manufactures was:

<table>
<thead>
<tr>
<th>Product planning</th>
<th>Personnel selling</th>
<th>Display</th>
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<tbody>
<tr>
<td>Pricing,</td>
<td>Advertising</td>
<td>Service</td>
</tr>
<tr>
<td>Branding</td>
<td>Promotions</td>
<td>Physical handling</td>
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<tr>
<td>Channels of distribution</td>
<td>Packaging</td>
<td>Fact finding and analysis</td>
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Since this large list is not very practical, McCarthy made the 4P classification out of Borden’s marketing mix: Product, Price, Promotion and Place. The right mix of these four P’s determines customer brand choice (Borden, 1964). Until today this marketing mix is seen as a toolkit of transaction marketing and the foundation for operational marketing planning (Grönroos 1994). The world-marketers compete by matching the optimal combination of the marketing mix (Svensson, 2001). It is very important for marketers to know exactly what the customer needs, wants and likes are, before implementing the four P’s. This information can be obtained by extensive marketing research, where targeting will be essential since customers have different preferences.

**Product** can be defined as anything that can be offered to a market for attention, acquisition, use, or consumption that might satisfy a want or a need. Products include physical objects, services, events, persons, places, organizations, ideas, or mixes of these entities (Kotler, 2000).

**Price** can be defined as everything the customer gives up to obtain the product or service (Yudelson, 1999). This includes the monetary price, time, phone costs, travel costs, environmental cost, opportunity cost, fear, doubt, etc.

**Promotion** includes all the information that is transferred between the parties of the transaction. One party tries to encourage the other party into an exchange by providing information on the benefits to be obtained through the exchange (Yudelson, 1999). So the purpose of this information is to influence the customer to enter into a transaction, in other words choose to buy a product. Marketing communication has its own promotion mix with seven elements which all
are needed to set up a good marketing campaign (Pelsmacker, Geuens & vdBergh, 2007; Herrera, López & Rodríguez, 2002): Personal selling, Sales promotion, Public relations, Direct mail, Trade fairs and Exhibitions, Advertising and Sponsorship. Subliminal advertising is seen as a mild form of advertising (Rogers, 1992) and therefore a part of the promotion mix.

Place indicates everything that is done and required to facilitate or bring about the exchange (Yudelson, 1999). This includes all institutions and organizations performing transactions and activities to accomplish marketing exchanges of a product or service.

§ 2.3 Customer perception

A theory that just uses value adding attributes leads to a problem: When the quality of the product is qualified, the promotion efforts are high, the price is good and the place and distribution is correct, then still it is not sure if the customer will choose your brand over another. So brand choice is not only determined by product, price, promotion and place. It even could be possible that brand A and brand B have exactly the same quality, yet the consumer perceives the quality of brand A higher as the quality of brand B (Keller, 1993). Therefore, this research concludes that just using the famous marketing mix is not correct. Customers might perceive the added value different from what the value actually is, therefore this paragraph focuses on customers’ perception of the value adding attributes.

The fact that a customer can respond more favorably to one element of the marketing mix than to exact the same element of the marketing mix of another brand is explained by the theory of brand equity (Keller, 1993). Brand equity is the added value created by the brand of a product, in perception of the customer (Park & Srinivasan, 1994). When a customer is familiar with a brand, he automatically forms an image of this brand. This image can lead to brand equity if the customer holds favorable, strong and unique brand associations in memory (Keller, 1999). Brand equity can be summed up as: the perceived quality by customers, the relation between customers and brands, and the brand associations combined with brand awareness (Lee, Donthu & Yoo, 2008).

Creating brand equity leads to several competitive advantages for business. The main reason is of course that brand equity influences customer brand choice in general (Keller, 1993), which could lead to an increase in sales. Another reason is that brand equity can lead to more loyalty of
existing customers, which could lead to more sales as well (Taylor, Celuch & Goodwin, 2004). Further more, companies are able to ask higher prices if the brand equity is high (Keller, 1993), which directly could lead to a higher turnover. Moreover, brands with higher brand equity are able to use more effective advertising techniques (Keller, 1993) For example in advertisements of favorable brands, humor is more effective and accepted, for instance not every brand could make harsh jokes. And above all, retailers will make place on their shelves for products with high brand equity (Nijsen & Augustin, 2005).

§ 2.4 Research implications

So to come back to what factors influence brand choice is a combination two theories: the theory of the marketing mix and the theory of brand equity. Whereupon, the following variables influence brand choice: Product, Price, Promotion, Place and Brand Equity. Below the model is drawn on the factors that influence brand choice. Coming up, brand equity will be intensified since this is a new variable in the model of brand choice and subliminal stimuli.

Figure 1. Brand choice model

![Brand choice model diagram]

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§ 3. Brand equity
The former chapter concluded that there are five variables that influence brand choice: Product, Price, Promotion, Place and Brand Equity. This chapter is an intensification of chapter 2.3. In chapter one is mentioned that former investigations measured the effect of subliminal stimuli implemented in advertisements, a tool the promotion mix, inconsistently. Since, a lot of research on this topic has been conducted this investigation will provide more in-depth information on brand equity, a new variable in this model.

§ 3.1 Brand equity
This subchapter will provide more in-depth information on the four components of brand equity: Brand awareness, Brand associations, Perceived quality and Brand relations (Lee et al., 2008).

§ 3.1.1 Brand awareness
Brand awareness is probably the most important component of brand equity, someone must know the brand before he or she can purchase it (Aaker, 1996). Brand awareness is the strength of the brand in memory; in other words the customer’s ability to identify the brand under different conditions (Rossiter & Percy, 1887). Petry and Cacioppo (1986) suggest that customers base their choice on brand awareness in low-involvement decisions. Brand awareness consists of brand recognition, brand recall and brand breadth (Aaker, 1996). Brand recognition is gained when a customer recognizes a brand (Keller, 1993). Brand recognition is important for low-involvement products, when a customer takes little time to make a decision (Keller, 1993). Repeating exposure will cause for more familiarity which in turn will lead to brand recognition and maybe even to brand recall (Alba & Hutchinson, 1987). Brand recall is gained when a customer can name the brand when he or she thinks of a product. That is why brand recall is important for low involvement products. On top, brand recall could be of essence for high involvement products as well, since these brands create more appreciation with peers. Besides, for all well known brands, brand recall is very important (Aaker, 1996); since most people recognize these brands anyway. Brand recall is very important since changes in brand recall result in changes in market share (Axelrod, 1968; Haley & Case, 1979; Nedungadi, 1990). The last component of brand awareness is brand breadth refers to the range of purchase and consumption situations at which the brand comes to mind (Keller, 2001). It is important that the customer thinks of the brand at the right time in the right place. Sometimes companies do not
know all the usage situations of their brand, finding out when exactly the brand comes to mind and when the brand is used can help the overlooked consumption opportunities (Keller, 2001).

§ 3.1.2 Brand associations
When a consumer thinks of a brand there are certain associations that come to mind. For example, think of the brand ‘Nike’, consequently you might think of the attributes ‘innovative products’ and ‘peak athletic performance’ or when you think of ‘Disney’ you might think of the attributes ‘magical’, ‘fun’ and ‘family entertainment’ (Keller, 2001). These associations form the character of the brand. This can influence the customer’s reaction towards a brand and the response toward a marketing activity (Keller, 2003). In highly competitive marketplaces, linking a brand to other entities can improve the brand equity, such as people, places, things, or other brands (Keller, 2003). Brand associations can be divided into two subgroups, brand performance and brand imaginary. Brand performance refers to the associations linked to the functional aspect of the product or service (Keller, 2001). At first customers hold beliefs on the primary characteristics of the product and secondary features. Besides the basic characteristics of the brand, customers hold beliefs on reliability, durability, serviceability, service effectiveness, service efficiency, style, design and price level of the brand (Keller, 2001). Brand Imaginary refers to the more abstract associations a customer has towards a brand (Keller, 2001). For example the brand is associated by its user profile: what kind of consumer purchases or uses the brand. Besides association formed by the usage and purchase situation of the brand: what store sells the product or service and in which activity is the product or service consumed. At last a brand has human personality traits and takes on associations with personal experiences (Keller, 2001).

Finally it is important to first measure how strong the association is, secondly how important this association is and then how distinctively the brand is identified with this association (Keller, 2001).

§ 3.1.3 Perceived value
How consumers perceive the brand is the third key dimension of brand equity. When consumers are aware of the brand and hold associations with the brand they respond to the brand and its marketing activities in a certain way: perceived value (Keller, 2001). Punniyamoorthy and Raj
(2007) investigated the component perceived value further, they found that the perceived value is determined by four types of value. At first the functional value the product or service provides has impact on the perceived value. Simply this refers to the matter that the product does what it is supposed to do and more, with regard to the expected performance of the product. Quality is very important to create functional value. The second dimension is that the perceived value is influenced by the emotional value a product generates from customers. A customer can create different affective states/feelings/bonds towards a product or service, such as warmth, fun, excitement, security. Thirdly, price-worthiness does influence the perception of value. Logically when a product is very expensive, more quality is expected and visa versa. At last, the social value influences customer’s perception of value. The social value is determined by the products capabilities to improve the customers self concept and social approval (Punniyamoorthy & Raj, 2007).

Although there are different responses, ultimately it matters how positive these responses are (Keller, 2001). When a customer thinks of a brand, these responses should be accessible and come straight to mind.

§ 3.1.4 Brand Relation
Brand relation is defined by Aaker (1996) as the attachment that a customer has to a brand. The goal is to create loyal customers who will buy the brand on the next opportunity and recommend the brand to others. Brand loyalty creates a barrier for competitors to win those customers and it provides time for companies to react on innovations of competitors (Aaker, 1996). Customers who were satisfied with the brand in the past are more probable to become loyal. The benefit of brand loyalty is that the company can ask premium prices (Aaker, 1996).

There are different kinds of relations a customer can have with a brand (Keller, 2001). First, a behavioral loyalty means a customer repeats purchasing this brand. Secondly, attitudinal attachment means that the brand is personally more special in a broader context. Thirdly, a brand can have a broader meaning in sense of community; customers are attached to other people associated with the brand. And at last the most powerful relation is active engagement; customers are willing to invest time, money and effort into the brand beyond the purchase (Keller, 2001).
Loyalty is gained in three steps, purchase, satisfaction and trust. The first challenge for companies is to sell the product to the customer just once. Then it is important the customer becomes satisfied and creates a positive attitude towards the brand (Solomon, 2007). Variables such as durability, empathy, trendy, responsiveness etc create satisfaction. Besides satisfaction, the brand has to be trustworthy; a brand must minimize the uncertainty a customer has towards a brand (Chaudhuri, Arjun, Holbrook & Morris, 2001). Therefore, implementing honesty, reliability and safety play are essential to create trust.

§3.2 Research implications

It is known that the variable promotion tries to link subliminal stimuli and brand choice. For brand equity the link will be investigated in chapter five. The detailed information of the four components of brand equity will be needed for this investigation. To follow, more in-depth information on subliminal stimuli will be provided, consequently the links between subliminal stimuli and brand choice will be made.
Chapter 4. Subliminal stimuli

Now it is clear exactly what brand choice is and what factors influence brand choice, the next step is to thoroughly understand the concept subliminal stimuli. Because when we know both these concepts, the link between subliminal stimuli and brand choice can be created. First the definition of subliminal perception will be given. Then this chapter will explain how subliminal stimuli are processed in the brain. Consequently, all the relevant results from former research on subliminal techniques will be exemplified. Much can be learned of these studies and these results help to form an effective subliminal technique that can influence customers.

§4.1 Definition

Subliminal perception suggests that people's thoughts, feelings, and actions are influenced by stimuli that are perceived without any awareness of perceiving (Merikle, 2000). In other words, subliminal stimuli enter our brain unconsciously. Stimuli that enter our brain consciously are called supraliminal. For example, when viewers are shown a complete visual scene, they consciously see all the details. When a small detail of the scene is changed the viewers do process the change, though not all viewers process the change consciously. Whether the change is processed on a conscious or unconscious level depends on where the attention of the viewer is focused on (Dehaene, Changeux, Naccache, Sackur & Sergent, 2006). When a stimulus is not processed consciously it does not mean the stimulus is not processed at all, it just means people are not aware of the process. Many studies have shown us that these stimuli do have some effect on people. What this effect exactly is, is still under investigation.

Former research concluded that there are two different explanations of how subliminal stimuli are processed in the brain compared with supraliminal perceptions. The first one states that supraliminal and subliminal perceptions are processed in the same way and both activate the brain, yet supraliminal activates the brain to a greater extent (Cowey, Heywood, Milner & Blakemore, 2004). The conscious perception is an experience on top of the unconscious processes (Chalmers, 1996). So, it is only useful to use subliminal stimuli when supraliminal stimuli are for example inappropriate. The second explanation states that the supraliminal and subliminal perceptions are processed differently in the brain. Yet, the supraliminal process is connected to the consciousness center of the brain and the subliminal process not. This means that subliminal perception stimulates another part of the brain than supraliminal perception (Cowey et al., 2004). With this explanation subliminal stimuli are very important to apply in marketing next to supraliminal stimuli, since it
activates an extra part of the brain. For example, Talbot, Duberstein, and Schott (1991), conducted an experiment on the effects of subliminal stimuli related to loss. It appeared that subjects who were exposed to subliminal stimuli related to loss ate fewer crackers than those exposed to a supraliminal stimuli related to loss. The finding suggests that the subliminal message bypasses ego defenses and supraliminal messages stimulate a defense against anxiety (Theus, 1994). So this means subliminal stimuli have a different effect on people as supraliminal stimuli. There are many more experiments that discovered a difference in the activation of the brain between subliminal stimuli and supraliminal stimuli. Therefore, this investigation assumes the second explanation is true: supraliminal and subliminal stimuli follow a different pathway in the brain.

Either way, subliminal stimuli are processed in our brain automatically. Automatic processes take over regularities in one's life so that people have more conscious resources left to handle complex situations (Todorov & Bargh, 2002). Because of the automation it is so difficult to predict behavior; people often do not know themselves the underlying reasons for behavior.

4.2 Subliminal techniques

Reaching the brain unconsciously seems to be a very interesting idea. Therefore many experiments were conducted to find out which subliminal stimuli are processed in the brain and what the effect is of these stimuli. For this investigation it is important to know exactly how subliminal stimuli should be implemented to affect people, so what seems to work and what not. These techniques can be used when linking subliminal stimuli to brand choice in chapter 5. The significant results of the effect of subliminal stimuli on people will be illustrated next.

First, the emotional loading of subliminal stimuli can have a different effect on people (Theus, 1994). This means that positive words create a different effect than negative words. For example, subliminal stimuli that are related to death, motivate allegiance to cultural beliefs or worldview (Arndt, Greenberg, Pyszczynski & Solomon, 1997). Unpleasant stimuli have larger effect than pleasant stimuli (Bernat, Bunce & Shevrin, 2001). Although it is important to keep the individual in mind, since it has appeared that different people can have different effects from subliminal stimuli. For example, Kuilano (1954) found that neurotic people process emotional loaded words sooner than neutral words. People who show less repressiveness, more image ability, more passivity,
greater flexibility of report and less hostility, seem to process subliminal stimuli to a greater extend (Roney-Dougal, 1986).

Another interesting result was given attention at first in 1957 by Boardman. He concluded that subjects learn from subliminal stimuli. Boardman experimented on subjects by giving them a small electronic shock, while testing the effect of subliminal stimuli. As a result he found that subjects could discriminate better between subliminal words after several trials with an electric shock (Boardman, 1957).

Further, the subliminal stimuli must be as close to the threshold of awareness as possible. Research has shown that when the intensity of the stimuli increases, the effect of the stimuli increases as well. The intensity of the stimuli increases when the stimuli become closer to the supraliminal level (Lazerus & McClearly, 1951; Lowenfeld, 1961). The effects of stimuli that are exposed longer than 33 milliseconds are significant, the effect increases until 167 milliseconds. Yet the message remains subliminal at least until 50 milliseconds (Todorov, Pakrashi & Oosterhof, 2009).

Besides, repetition of the stimuli is effective. This result was retrieved by Bornstern, Leone, and Galley (1987). These men concluded that the attitude of a subject towards a new stimulus becomes more positive after repetition of the stimuli. This is in line with Freud’s Theory that human prefer the familiar. Familiarity causes for a detailed orientated perception, whereas novelty causes for a more abstract perception (Forster, 2008).

Another interesting result about subliminal techniques is that graphical presentation has a greater effectiveness than auditory presentation. For example Cuperfain and Clarke (1985) gained this result by adding subliminally a graphic presentation of a brand of washing soap brand during a film about washing techniques (Cuperfain & Clarke, 1985). A number of techniques are used to implement subliminal stimuli, most common are: images, primes and masks/human faces. Faces are typically evaluated more quickly than objects, which in turn are evaluated more quickly than words (Ferguson & Zayas, 2009).

At last something important to take into account when making a significant subliminal technique is that the subliminal stimuli must be organized into a drive system (Theus, 1994). This will lead to a greater chance of success, since drives move individuals.

§ 4.3 Research implications

The chapter clarifies in what way subliminal stimuli need to be implemented. This information is needed to fully understand what subliminal stimuli are, what makes it easier to link subliminal stimuli to brand choice.
Chapter H5. The link between subliminal stimuli and brand choice

This chapter will use the information provided in the former chapter to establish the link between subliminal stimuli and brand choice. Consequently the two links will be intensified to find out what link is the most convincing.

§ 5.1 Linking

Moore came in 1982 with a very interesting result: subliminal stimuli can arouse two different responses, a strong response and a weak response. A strong response means that subliminal stimuli cause for a direct change in customers’ behavior, such as purchase behavior. This is the relation between subliminal stimuli and brand choice that has been investigated for many of decades. Subliminal advertisement, as a part of the variable promotion, can directly influence customer brand choice, a change in behavior. The next paragraph will defend this relation between subliminal stimuli and brand choice.

Secondly subliminal stimuli can cause for a weak response: a change of feeling, attitude, attractiveness, belief, drives, etc (Moore, 1982). This result is very interesting for this study as it states that possibly there is another way to use subliminal stimuli to relate them with brand choice. Feelings, attitudes, beliefs, drives could be translated into brand equity, since this is the feeling/attitude a customer has towards a brand (Aaker, 1996). So subliminal stimuli could influence the brand equity customers hold on a brand and brand equity influences brand choice. Paragraph 5.3 will defend this relation.

The other variables: product, price and place are irrelevant since subliminal stimuli cannot change the quality of the product, the actual price or the way of distribution.

Figure 2

§ 5.2 Direct link, strong response of subliminal stimuli
This link refers to the technique that has been investigated for many decades: subliminal advertising is used for the direct link between promotion and brand choice. So, subliminal stimuli are linked to brand choice by implementing subliminal stimuli in advertisements. For example, Hawkins (1970) subliminally implemented advertisements with the word ‘coke’ to influence customer beverage choice. The next paragraph will provide the definition of subliminal advertisement; the second paragraph will illustrate the results of former investigations on this relation.

§ 5.2.1 Definition of subliminal advertising
"...a technique exposing consumers to product pictures, brand names or other marketing stimuli without the consumers having conscious awareness. Once exposed to a subliminal stimulus, the consumer is believed to decode the information and act upon it without being able to acknowledge a communication source." (Trappey, 1996, pp517).
Consequently, subliminal advertising is meant as a promotion tool where consumers are exposed to the product without interruption of their activities, thus the essence of a commercial can be shown repeatedly (Trappey, 1996).

§ 5.2.2 Former research of subliminal advertising
The next studies try to measure a strong response, a behavior, such as brand choice. After the experiment of James Vicary in 1957, several other scientists have tried to increase the purchase choice of customers. Vernon and Bagder (1959), and Calvin and Dollemayer (1959) tried to influence the customer’s choice by implementing subliminal stimuli as ‘choose right’ or ‘choose left’. Both experiments reported negative outcomes. Hawkins (1970) conducted an experiment with a beverage to influence customer brand choice. He concluded customers bought more coke after being exposed to the subliminal message ‘coke’. Later it was suggested that possibly only the participant’s basic drive of thirst was aroused (Karremans, Stroebe and Klaus, 2005).
Strahan investigated this matter further; he conducted three experiments in 2002. The first experiment investigated the effect of subliminal thirst related words. As a result participants who were exposed to the thirst-related words drank more than participants who were exposed to neutral words, when they were thirsty. In contrast, when participants were not thirsty, the subliminal stimuli had no effect (Strahan, 2002). The second experiment investigated the effect of thirst related ads on brand choice. As a result, thirsty subjects rated beverage with thirst related stimuli
better compared to the other beverage. On top of that subjects rated the beverage better compared to a similar ad without thirst-related stimuli. So, brand choice was influenced under the condition the subject was thirsty. In the third experiment of Strahan subliminally exposed a sad face which enhanced the sadness of the subject. The result suggested that people are more likely to buy a mood-restoring product when they were subliminally exposed to a sad face (Strahan, 2002). In conclusion, subliminal stimuli only work if they are goal related and the subject wants to pursue this goal. At last Karremans et al. (2006) conducted two experiments on brand choice. Thirsty and non-thirsty participants were exposed subliminally to ‘Lipton Ice’ and a control word. Lipton Ice was chosen as it is seen as thirsty quenching and is not the habitual choice of participants. Their outcome was that participants who had been exposed to ‘Lipton Ice’ subliminally were more likely to choose Lipton Ice when they had been made thirsty, compared to subjects who were exposed to a control word ‘Npeic Tol’ (Karremans et al., 2006).

In short, there are several experiments that try to influence customers’ purchase choice directly by using subliminal stimuli in advertisements. This chapter focused on the experiments that did show a direct influence of subliminal stimuli on brand choice, although this influence seems to be very small.

§ 5.3 Indirect link, weak response of subliminal stimuli

This link refers to a completely new relation between subliminal stimuli and brand choice. Subliminal stimuli influence brand equity by causing a weak response: a change in feeling, belief, drive, attitude, attractiveness, etc (Moore 1982). The idea is that when subliminal stimuli are implemented in such way that the right weak response is created, the brand equity increases which could influence brand choice. First, more arguments will be given on why this link possible exists. Second all the information of this investigation will be used to exemplify how subliminal stimuli could be implemented to create brand equity.

§ 5.3.1 Proof of the link

Brand equity is the strong association customers hold, the feeling and relation a customer has with the brand and the attractiveness towards the brand (Aaker, 1996), which seems to be in line with weak responses. There have been many investigations on the effect of subliminal stimuli, and a lot of these investigations did show a change in belief, drive, attitude, feeling or attractiveness, as can be seen below:
The investigations from the previous paragraph (Hawkins, 1970; Strahan, 2002, 2006; Karremans et al., 2006) tried to influence brand choice directly, until today no such results were retrieved. Nevertheless there were two significant results: customers with a certain basic drive became more positive or a basic drive was aroused. These results are in line with the ‘indirect link theory’ since a drive was created and an attitude was influenced. Another interesting study is one of Fazio, Sanbonmatsu, Powell, and Kardes (1986). Primes as “delightful” or “painful” were used to influence customers’ attitude. It appeared that participants could easier classify the target when the targets are in line with the valance of the prime. So depending on the attitude towards the prime before the experiment and the target used in the experiment, the attitude towards the prime after the experiment is determined. This is in line with the ‘indirect link theory’ that attitudes are influenced by subliminal stimuli.

Thirdly, Pleyers, Corneille, Luminet, and Yzerbyt (2007) conducted three experiments on the changes in evaluation of an item that is embedded with stimuli. The experiments resulted that evaluations were influenced by both subliminal and supraliminal stimuli. These results support the ‘indirect link theory’ as well, since this experiment proofs that evaluations can be influenced by subliminal stimuli.

Finally, Aarts (2005) found that the mood of a participant could be influenced by implementing success words subliminally into tasks.

In short, the former examples show that it is possible to create a weak response with subliminal stimuli, such as a change in feeling, attitude, drive, belief or attractiveness. These weak responses could be used to create brand equity.

§ 5.3.2 Implementation

In chapter three it is explained how brand equity can lead to brand choice and in chapter 4 it is explained how subliminal stimuli should be implemented. Now chapter five suggests that possibly better results will be found when subliminal stimuli are used to influence brand equity instead of brand choice directly. Now all the previous information on brand equity and subliminal perception will be used to exemplify the link between subliminal stimuli and brand equity. This will be done by using the four variables of brand equity, brand awareness, brand associations, perceived value and brand relations (Aaker, 1996).

5.3.2.1 Brand awareness
First, a customer needs to be aware of the existence of a brand (Akker, 1996) which will cause for a memory node in the brain (Pitta & Katsanis, 1995). There are no investigations yet that conclude that subliminal stimuli can create this node. Nevertheless it could be possible to make the node stronger by exposure, since in the former chapter it became clear that subliminal stimuli activate the brain. Repeating exposure will cause for more familiarity which in turn will lead to brand recognition and maybe even to brand recall (Alba & Hutchinson, 1987). So, subliminal stimuli can be used as an extra tool to expose customers to the brand as much as possible. Every time a customer gets reminded of the brand, the node in the brain will be activated (Pitta & Katsanis, 1995). It could help that customers think of the brand at the right time or place to create brand breath, the amount of purchase or consumption situations the brand comes to mind (Keller, 2001).

For low involvement buying decisions brand recognition plays a major role (Aaker, 1996). For example; subliminally implement the logo of a toothpaste brand into all kind of images of people smiling. This could create greater brand awareness: brand recognition and maybe even brand recall. On top, a good idea could be to subliminally implement a smiley into the toothpaste packaged. This could remind customers of the link between smiling and the toothpaste brand. Besides, a smiley can create a positive attitude, but this will be discussed in 5.4.2.4.

5.3.2.2 Brand associations
Customers make many associations when they think of a brand (Aaker, 1996; Keller, 1993): a brand be valued as cool, energetic, fast, new, powerful, fun, moral, tasty, fattening, expensive, etc. It is up to marketers to try and influence these associations. Linking a brand to other entities such as people, places, things, or other brands can improve the brand equity (Keller, 2003). In the second experiment of Strahan (2002), thirsty participants rated the brand better when the brand was subliminally implemented with thirst related words. Supposedly, participants associated the brand with thirst quenching.

Subliminal stimuli of a logo, name or color could be implemented in places, images of persons, attributes or feelings a marketer wants the brand to be associated with. For example, subliminal embed the youth telecom brand HI in a cool club will probably be more effective than at a dentist, although both places are visited by a lot of potential customers. This could cause for a youngster to rate HI better because he or she associates HI with young, hip, outgoing, energetic, and fun.
Another example is to implement images of Ipod at beach places or in holiday guides. People might associate Ipod with sun, fun, and chilling and are more likely to purchase an Ipod when going on holiday.

5.3.2.3 Perceived value
The third variable that creates brand equity is the perceived value of customers. Customers who are aware of the brand and hold certain associations on the brand, respond in a certain way toward the brand (Keller, 2001). Functional value, emotional value, price-worthiness, and social value determine customers’ perceived value (Punniyamoorthy & Raj, 2007).

In the third experiment of Strahan (2002), it appeared that customers’ emotional state could be influenced by a subliminal smiley. This could be useful when creating an emotional value of the customer. If the brand is a mood-restoring product, sad words or sad smileys should be used. On the other hand, subliminal stimuli could help when the customer is already in an emotional state. For example, subliminally embed brands on weddings is possibly very effective because the customer creates an emotional value towards the brand. Promoting the brand in different situations could increase brand breath, the amount of consumption possibilities (Keller, 2001), which could possibly lead to a higher functional value. A social value of a brand can be created by subliminally implement the brand in movies in which the situation is socially very acceptable.

5.3.2.4 Brand relations
The last variable that creates brand equity is brand relation, the attachment a customer has to a brand (Aaker, 1996). First the person must buy the product once, secondly it is important to make sure this customer is satisfied (Solomon, 2007). Then marketers must make sure the customer repeats purchasing the brand in the next opportunity he or she buys. Most likely satisfaction is not caused by subliminal stimuli, so subliminal stimuli can hardly contribute to a good brand relation. Nevertheless, it could be possible to create a more positive attitude towards the brand by using subliminal stimuli. A happy (sad) smiley influences the attitude positively (negatively) (Winkielman, Berridge & Wilbarger, 2005). On top, a happy (frowny) smiley leads to greater reliance (less reliance) (Ottati, Terkildsen & Hubbard, 1997). In paragraph 5.3.2.1 such an example was given; implementing a smiley into the brand or advertisements of the brand to create a more
positive attitude. This change in attitude could help to create an attitudinal attachment. Besides, subliminal stimuli could help to remind the customer on the next opportunity on the brand.

Figure 2. The new model:
Chapter 6. Discussion and conclusion

The main question of this investigation is: How could subliminal stimuli influence brand choice? This investigation shows two possible ways to influence brand choice with subliminal stimuli. At first, subliminal advertisement could directly influence brand choice. Secondly, subliminal stimuli could influence brand equity and brand equity could influence brand choice. But are both, one, or neither of the two relations credible?

First of all, let it be clear that subliminal stimuli do have an effect on human. Many experiments were conducted since the beginning of the twenties century and gave positive results (Lazerus & McClearly, 1951; Kuilano, 1954; Boardman, 1957; Lowenfeld, 1961; Roney-Dougal, Cuperfain & Clarke, 1985, 1986; Bornstern, Leone & Galley, 1987. Theus, 1994; Bernat, Bunce & Shevrin, 2001; Ferguson & Zayas, 2009).

Additionally, influencing customers unconsciously could violate the privacy rights. How far are marketers aloud to go? If this technique is completely developed and marketers really do have the power to influence what customers buy this can have a major impact on humanity. What if the power of influencing people’s behavior comes into the ‘wrong’ hands? Therefore it could be possible that scientist do not give away all the information on how behavior can be influenced by subliminal stimuli.

Whether subliminal stimuli have such a strong effect they can actually influence customer brand choice, remains a mystery. Researchers still seem to find positive results on the effect of subliminal stimuli on behavior, but not waterproof enough to claim it is true. For example, some investigations resulted that brand choice was influenced to some extend by implementing subliminal stimuli in advertisements (Hawkins, 1970; Karremans et al., 2005; Strahan 2002, 2006). On the other hand most investigations have shown that there is no effect at all. One explanation for these conflicting results could be that subliminal stimuli are only effective when they are goal related and the subject wants to pursue this goal (Strahan, 2002). Another cause could be different responds to subliminal stimuli by different people (Roney-Dougal, 1986). Or possibly researchers have not used the right techniques to implement subliminal stimuli as effective as possible. Though an advantage of the direct relation between subliminal stimuli and brand choice is that it is easy to model and execute. Finally this technique manipulates the image a client has of the brand, so this needs to be done with
great consideration since the image is almost impossible to be converted later. For that reason, there is a danger that subliminally stimuli could be used to negatively promote the competitor.

However, maybe the answer is that subliminal stimuli just do not create such a strong response as changing a person’s behavior. Possibly, we all are not so much like robots and do not behave in the way our environment wants us to. This statement defends a new theory: subliminal stimuli arouse weak responses, so brand choice can only be influenced indirect. In this scenario, the weak response of subliminal stimuli could be used to create brand equity and brand equity could influence brand choice. In the former mentioned investigations, (Hawkins, 1970; Karremans et al., 2006; Strahan 2002, 2006) were not convincing enough for proving that subliminal stimuli could directly change behavior, it is clear that a weak response was aroused: a change in belief, feeling, attitude, drive, or attractiveness (Moore, 1982). Now this weak response could be used to create brand equity, a variable of brand choice (Aaker, 1996; Keller, 2003). To create brand equity, subliminal stimuli should be implemented in such way that brand awareness, the right brand associations, a positive perceived value and a good brand relation is gained. The good thing about this theory is that it is not based on weak, conflicting, or insignificant results, but uses the existing results and transforms them into a new method of influencing brand choice. Since there is no doubt subliminal stimuli can cause for a weak response (Fazio et al., 1986; Ottati et al., 1997; Aarts, 2005; Winkielman et al., 2005; Pleyers et al., 2007). Though, trying to proof the level of brand equity by using subliminal stimuli would be very difficult to execute.

In conclusion, the indirect link is much more credible, since this is in line with former studies instead of trying to proof a relation which decades of research have not been able to do yet. To influence customers brand choice subliminal stimuli should be used to create brand equity and brand equity will lead to brand choice. The problem is that former investigation only focused on: Do subliminal stimuli affect human behavior? As the question should have been: How can subliminal stimuli influence human behavior? To give a complete answer, implementation of this relation between subliminal stimuli and brand equity will be summarized. More details can be found in 5.3.2. First, subliminal stimuli can be implemented almost anywhere and anytime to create brand awareness; the more exposure the better. Being creative with the different situations could increase the brand breath and the perceived functional value. Secondly, subliminal stimuli can be implemented in places, pictures of persons, or other things so that the brand gets associated with
them. This can make the brand cool, fun, fast, alternative, expensive, dull, elegant, etc. Thirdly, customers develop a different kind of value towards a brand. Subliminal smiley’s can help to arouse an emotional state to create a higher emotional value, or subliminal stimuli can be implemented in social accepted movies to create a higher social value. Finally, subliminal faces in the product or images of the product can create a more positive attitude towards the product. They cannot cause for complete product satisfaction.

In short, subliminal stimuli should be implemented correctly to create a weak response what would lead to brand awareness, the right brand associations, high perceived value, and a good brand relation. These variables create brand equity and consequently influence brand choice. Finally this means that subliminal stimuli in the environment to affect human.
Chapter 7. Limitations and future research

At first, the dependent variable in the new model is brand choice. Brand choice is influenced by product, price, promotion, place, and brand equity. The tendency is that everything that influences brand choice is explained by one of these five variables. Although, there is a possibility the model is incomplete, since other variables might exist that are not known yet. Since it is possible other unknown variables that create brand choice exist, it is possible subliminal stimuli can contribute in other unknown variables as well.

Secondly in this investigation I assume subliminal stimuli are processed different in the brain as supraliminal stimuli. This assumption makes subliminal stimuli a good new promotion tool, since additional part of the brain is activated. Nevertheless, since there are no hard facts on this assumption yet, it should be taken into account that this assumption might be wrong. When it appears that subliminal stimuli are processed the same as supraliminal stimuli, this investigation is less relevant for marketers. Yet it remains relevant for academics as this still proofs that everything around us influences our behavior. More research needs to be done on the general information of subliminal stimuli, the exact short term process in the brain, and the long-term effect of the subliminal stimuli.

Besides, the information on the effect on behavior or feelings, beliefs, attitudes, etc. by subliminal stimuli could be incomplete as new facts on subliminal stimuli might be discovered at this moment. More experiments needed to be conducted on the exact weak response from clients towards subliminal stimuli. Furthermore, keep in mind that my specialty is not psychology but economics, so there is a possibility the information on subliminal stimuli is not completely accurate due to a lack of knowledge on psychology.

Finally, subliminal stimuli do have an effect on human. Subliminal stimuli do not influence human behavior directly, but they can change the mind setting and what will finally influence behavior. Since humans will probably receive over a million of different stimuli during a day, this could have an enormous effect on human behavior in the end. This information helps further research on human behavior, psychology of the mind, paranormal abilities, and the operation of the brain. Yet there is still much to learn on human behavior.
Reference list


