

Bachelor thesis Marketing

*“The paradox of choice”*

*‘A study on the relationship of the number of choices in assortments on post-choice satisfaction and the moderating influence of product attractiveness.’*

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## **Abstract**

In this study the influence of product attractiveness on the relationship between the number of choices in a retailers assortment and consumers post-choice satisfaction will be investigated. One strategic decision that retailers face has to do with deciding about the number of choices they want to carry out in their assortments (Chernev & Hamilton, 2009). There used to be an overall belief for retailers that by carrying out a large number of choices in their assortment, it would give them strategic advantages. By possessing more choices in their assortments, retailers may satisfy the variety- seeking needs customers have, and it is more likely customers will find the product of preference in larger assortments (Inman, J. Jeffrey 2001).

However, previous research has shown that more choices in assortments may lead to a choice overload, which has a negative effect on deciding whether to purchase as well as on the post-choice satisfaction of consumers. This effect is called the too-much-choice effect (Iyengar & Lepper, 2000).

Thereby, it is said by several previous researchers that product attractiveness influences the relationship that the number of product choices in an assortment has on post-choice satisfaction. It is stated that the more attractive a product is to a consumer, the less number of choices within an assortment the consumer prefers (Chernev & Hamilton, 2009).

However, there are researchers that possess different thoughts about this subject. It is imaginable that the more preferable a product is to a decision maker, the more choices the decision maker would like to have. In this thesis it is investigated how researchers think oppositely about this relationship between number of choices and post choice satisfaction, and the influence product attractiveness has on this relationship. In the end it is concluded that even if researchers first thought different, there does not always appear to be a negative relationship between the number of options within an assortment, and the post choice satisfaction, the so called too-much-choice effect (Scheibehenne et. al, 2009). However, when product attractiveness influences this relationship, the too-much-choice effect does appear (Chernev & Hamilton, 2009).

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## **Chapter 1: Introduction**

In this chapter the background of the subject will be described, and later the problem statement and research questions will evolve. In the part of limitations, it will become clear what subjects will not be studied in this thesis and the reasons for those decisions. Thereafter, the academic and managerial relevance will be described. With the explanation of the thesis structure, it will become clear how the variety of information is handled to come to a final answer of the problem statement.

### **§1.1 Background**

Core theories in economics suggest that consumers prefer a lot of choice when shopping at a retailer's store (Baumol et. al, 1956; Boatwright et. al, 2001; Oppewal et. al, 2005). It is believed for decades that it is an advantage for retailers to possess a large assortment of products, so consumers will be more likely to find their product of preference. Also, in this way retailers satisfy the variety-seeking needs of consumers (Inman, Jeffrey J. 2001). However, there are researchers that believe that smaller assortments have greater strategic advantages over larger assortments (Greifeneder et. al, 2010; Iyengar & Lepper, 2000). Studies show that having lots of choices does not always lead to a choice. Or at least not to the optimum choice a consumer wishes to make (Dhar R., 1997). This effect is called the 'Too-Much-Choice effect'. According to the too-much-choice effect, a high number of options may decrease the satisfaction with the ultimate choice made (Iyengar and Lepper, 2000). Having too many options to choose from may cause post-choice dissatisfaction because consumers remember that there were so many options to choose from that it is very difficult to be certain enough you made the right choice. However, it is highly important for retailers to achieve post-choice satisfaction by consumers, because post-choice satisfaction will lead to customer retention (Chan et. al, 2010). Thereby, store attractiveness may increase by determining the optimum assortment size (Chernev & Hamilton, 2009). Therefore, it is an important strategic decision for retailers to decide about their assortment size. It is also said that consumer's preference for lots of choices decreases as the attractiveness of the products they are interested in, increases (Chernev & Hamilton, 2009). Product attractiveness can be determined by its level of design, quality and price (Chan et. al,

2010). So, the more attractive a product is to a consumer, the less options the consumer would like to choose from. But is this logical? It is imaginable that this could also be the case the other way around. If consumers are highly attracted to a product category, it can be imagined that they would prefer to shop at a place that possesses lots of choices within this product category the consumer favors.

Obviously, there are many different thoughts about the optimum assortment size, the relationship between assortment size and consumers' post-choice satisfaction and the influence product attractiveness has on this relationship.

## **§ 1.2 Problem statement**

With many contradicting thoughts between researchers about the optimum assortment size, the relation on consumers' satisfaction and the moderating variable product attractiveness, the focus in this thesis is on coming to a final conclusion about the certainty and direction of this relationship and the influence of product attractiveness on this relationship.

### **Problem statement**

Does the number of choices within an assortment influence the post-choice satisfaction of the consumer and to what extent plays product attractiveness a role in this relationship?

## **Research questions**

The following research questions will lead to a concluding part where the problem statement will be answered.

- \*What can be distinct within assortments?
- \*What is consumer post-choice satisfaction?
- \*How are the number of choices and consumer satisfaction related?
- \*What is meant with product attractiveness?
- \*How does product attractiveness influence the post-choice satisfaction?

## **§ 1.3 Limitations**

Within this investigation, a distinction can be made between luxury products and daily products and thereby there can be investigated if they influence the consumer's choice making processes in different ways (Kivetz R., 1999). But in this thesis the focus is on the relationship between assortment size and satisfaction, where there is no focus on a distinction between carrying out an assortment with luxury- or daily products respectively. Therefore, in this thesis there will be no focus on this distinction made, so there will be spoken about the choice making process of products in general.

## **§ 1.4 Academic Relevance**

This literature study on the influence that product attractiveness has on the relationship between number of choices and consumer satisfaction focuses on the contradicting thoughts about the direction of this relationship and the moderating role of product attractiveness in this relationship. Focus is on coming to a final conclusion about this relationship and the believed impact of the moderating variable product attractiveness.

## **§ 1.5 Managerial Relevance**

Providing this information to managers could be helpful if they can apply this information when choosing their assortment size. Choosing assortment size may cause a competitive advantage, so it could be important to address the importance for retailers of taking all facts into consideration when determining the number of options they want to carry out in their store. This thesis will help retailers deciding about their assortment size by showing them how they can decide how to determine their assortment size, and whether they want to choose for a broad or a deep assortment. Thereby, it will become clear how important it is for retailers to focus on product attractiveness, which influences the relationship between the number of choices within an assortment and consumers post choice satisfaction.

## **§1.6 Thesis structure**

First, there will be a focus on determining the optimum assortment size and on the different options possible to carry out the assortments in a retailer's store. Thereafter, something about post-choice satisfaction will be explained, and how this is caused. And later on the relationship between the number of choices and post-choice satisfaction will be described. In the end, product attractiveness will be inserted into the research, and the influence of product attractiveness on post-choice satisfaction will be described. In the last part, the conclusion, the problem statement will be answered.

## **Chapter 2: Number of choices within an assortment**

In this chapter the independent variable number of choices within an assortment will be described. By explaining relevant information about distinctions within assortments, the reader will obtain a clear view of all parts of assortment, which in the following chapter will help to understand the relationship between the number of choices within an assortment and post-choice satisfaction. In the conclusion the first research question will be answered; “What can be distinct within assortments?”

### **§ 2.1 Introduction**

One of the strategic decisions a retailer has to make is determining the number of options he wants to carry out in his store (Chernev and Hamilton, 2009). Important is the role of the number of options in determining consumers’ choice of a retailer’s store (Arnold et. al, 1983). Thereby, the retailer faces the decision about how to carry out his assortment. Therefore, the focus in this chapter is on the questions; what can be distinct within assortment size and how can assortments be carried out?

### **§ 2.2 Large versus small assortments**

The decision of the amount of options to carry out in a retailers store involves assessing the benefits and costs of the number of choices for the retailers, as well as the consumers (Stassen & Waller, 2002). A distinction can be made between large and small assortments.

#### **Advantages of large Assortments**

If a retailer carries out a lot of options to choose from in his assortment size, it is referred to as having a large assortment. In psychology, having personal choice has a positive effect on consumers. People are motivated internally to choose from more options, and they can handle lots of choices, so for personal reasons large assortments are a preference (Baumol et. al, 1956; Iyengar & Lepper, 2000; Morales et. al, 2005). Thereby, consumers tend to still look around for attractive options while purchasing their goods at the counter (Morales et. al, 2005).

Supermarkets with enormous amounts of options to choose from, have gained market share, while smaller retailers could not survive, or at least not be competitive (Greifeneder et. al, 2010). Also, from economic theories it is said that consumers purchase more when they are offered more options (Greifeneder et. al, 2010).



Thereby, in general, large assortments are more popular because they suppose to have a greater chance to supply consumers with their products of preference. When consumers know already what product they are looking for, larger assortments will probably bring more chance to consumers to find that specific product the consumer prefers (Chernev, A., 2003a; Chernev, A., 2003b). It is also said that large assortments are an advantage for the variety- seeking needs consumers have (Inman, J. Jeffrey, 2001) . Also, if there are many options to choose from, consumers may evaluate the product they select from the assortment more positively and even are willing to pay more for the selected product (Godek et. al, 2001). Large assortments seem to have lots of advantages for consumers.

### **Advantages of smaller assortments**

By deciding to carry out a small assortment, a smaller number of options will be possessed by the retailer. Obviously, for retailers it is the cheapest to carry smaller assortments, so they do not have to invest in too many different product categories. Thereby, cost related reasons like inventory and shelf space can lead to retailer's decision to slim down their assortment size, so it will increase their profit margins (Kurt Salmon Associates, 1993).

### **The disadvantages of large and small assortments**

Besides the advantages of large and small assortments, there are as many disadvantages. They will be shortly explained here, because the negative relationship between assortment size and consumers post choice satisfaction will be explained more broadly in chapter three, where the too-much-choice effect will come up.

Because core theories in economics, psychology and marketing suggest that consumers prefer larger assortments, in some ways, it seems that having many choices is the best strategy. However, whenever a consumer has to choose from so many options, they can become overwhelmed. Then a choice overload occurs which will have a negative effect on consumers. This effect is referred to as the too-much- choice effect (Iyengar & Lepper, 2000). But by carrying out smaller assortments, retailers are often afraid that their small assortments lead to a decrease in store attractiveness. And because store attractiveness is highly correlated with customers purchasing at that store, clearly, they are afraid of risking a decrease in store attractiveness (Arnold et. al, 1983; Broniarczyk et. al, 1998). Therefore, it is a difficult decision for retailers to decide whether to carry out a small or large assortment.

But knowing the pro's and con's of large versus small assortments how to determine assortment variety? A distinction can be made between broad and depth assortments.

### **§ 2.3 Broad versus depth assortments**

When increasing assortment size, retailers have to decide whether to do that by broadening or deepen their assortment. Deep assortments are assortments that possess variety in existing product categories (Hamilton & Richard, 2009). Larger assortments which increase in depth carry more different products within the same product category. So depth assortments are more specialized in their product categories. Broad assortments are assortments which possess a variety in product categories. So instead of deepening a specific category, it broadens the overall assortment by adding more product categories. Assortment depth can influence the consumer's choice for a retailer a lot (Stassen & Waller, 2002). There is a strong positive relationship between store assortment depth and store differentiation, because an increase in assortment depth leads to an increase in store differentiation (Hamilton & Richard, 2009). So, a deeper assortment means more variety within a certain category, which is positively related to the variety seeking needs consumers have. This also means that consumers are more likely to find their product of preference. Store differentiation can therefore lead to an increase in sales, which can lead to an increase in gross margins for the retailer. So increasing depth assortment may be a strategic decision for retailers, through the increased sales. Nevertheless, increasing assortment depth means more inventory investments (Stassen & Waller, 2002). And because retailers invest in purchasing more products, but they are stuck with the same shelf space, the possibility occurs that there will be inventory excess with products they cannot place on their shelves (Stassen & Waller, 2002). The costs the products they are left with bring, are called inventory holding costs. So, when deciding to deep their assortments, and to what extent, retailers must weigh the benefits of an increase in gross margin and the disadvantages of inventory costs (Stassen & Waller, 2002).

## **§ 2.4 Conclusion**

In this concluding part, the first research question will be answered; what can be distinct within assortments?

Within assortments, large versus small, and broad versus deep assortments can be distinct.

Large assortments seem to have lots of advantages for consumers. But whenever consumers get overwhelmed by too many options to choose from, this will result in a negative effect on consumers (Iyengar & Lepper, 2000). Small assortments are cheaper for retailers to carry out. However, by carrying out smaller assortments, retailers are afraid of the risk of a decrease in store attractiveness (Arnold et. al, 1983). For variety seeking consumers depth assortments would be a good strategy, because they offer more variety within a category. However, by retailers' choice to deepen their assortment, notice should be paid to possible inventory holding costs.

## **Chapter 3 Post-choice satisfaction**

In this chapter the dependent variable post-choice satisfaction will be described. It will become clear what post-choice satisfaction means, how to determine it, and in the end the relationship between post-choice satisfaction and assortment size will be described. Thereby, the too- much-choice effect will be described more broadly at the end of this chapter to get an insight in the negative direction of this relationship. In this chapter, the second and third research questions will be answered, namely; “What is consumer post-choice satisfaction”? And; “How are the number of choices and consumer satisfaction related”?

### **§ 3.1 Introduction**

Focusing on consumers post-choice satisfaction is crucial for retailers because consumers that are satisfied with their chosen products are more likely to retain at the retailers store, which brings higher value to the company because this will result in customer loyalty. Customer loyalty may lead to a better market position and greater market share (Chan et. al, 2010; Lal & Padmanabhan, 1995). Thereby, customers that are satisfied with their chosen option at a retailer’s store, tend to recommend the purchased product and the retailers store to friends and relatives (Zeithaml et. al, 1996). Thus, for strategic advantages retailers should focus on delivering post-choice satisfaction to their customers the best they can.

### **§3.2 What is post-choice satisfaction?**

Post-choice satisfaction is a part of the post-consumption experience of a consumer. Overall satisfaction exists out of satisfaction with the product itself and satisfaction with the information on which customers expectations are based (Spreng et. al, 1996). However, in this thesis the focus is on the product post-choice satisfaction. To derive product satisfaction, it is important to know how consumers evaluate their chosen products. There exists a relationship between the cognitive effects of a product and consumer satisfaction. Thereby, there exists a relationship between the emotions a product elicit to a consumer and satisfaction (Mano & Oliver 1993). Thus, product satisfaction has to do with cognitive judgments and affective reactions of consumers. Cognitive evaluations are based on evaluating the product attributes (Mano & Oliver, 1993). Product attributes can be tangible or intangible. Tangible attributes are the concrete, physical and objective attributes of a product, while intangible attributes can be described as the abstract, beneficial and subjective attributes like style and quality (Lefkoff-Hagius & Mason,

1990). Affective reactions of consumers have to do with emotions. Emotions have to do with the feeling a customer gets from the purchase made. Post-choice satisfaction can also be described as the confidence you have that you made the right choice. A consumer experiences post-choice satisfaction when he is happy with the product choice he made when evaluating the product after the purchase. Whenever a customer is not satisfied with the choice he made, the opposite could occur, namely negative post-choice arousal (Mano & Oliver, 1993). So it appears crucial to see if a consumer is satisfied with the product choice he made.

As stated before, the importance of examining consumers' satisfaction might be important for retailers. Therefore, they have to be able to measure post-choice satisfaction, so they can treat satisfaction in a more tangible way. According to Kuo et. al (2009), there are two ways to measure customer post-choice satisfaction, namely the transaction-specific perspective and the cumulative perspective. With the transaction- specific perspective, attention will be specifically paid to all recent purchases of the consumer. This is different from the cumulative perspective, where all purchase experience will be measured, not just the specific recently ones. The previous satisfaction literature focuses on the transaction specific way of measuring consumers' satisfaction (Johnson & Fornell, 1991), while newer literature started focusing more on the cumulative perspective (Boulding et. al, 1993). There will obviously be a more clear idea about the consumers' post-choice satisfaction when having evaluated all purchase experiences of the consumer. Also the measurement of service performance of firms and consumers overall satisfaction with the retailer is according to Parasuraman et al. (1988) more effective with the cumulative perspective. The cumulative measurement is also more effective in predicting consumers' post-purchase behaviors (Wang et al., 2004). Therefore, most researchers agree on the effective use of the cumulative perspective.

### **§ 3.3 How are the number of choices and consumer satisfaction related?**

The number of choices and consumer satisfaction are highly related in the way that the optimum assortment size a retailer should possess would be the assortment size which attracts most customers together with providing the highest post-choice satisfaction to consumers. But to attract customers and provide the most satisfaction, should a retailer possess a large or small assortment?

As explained in chapter two, there are many advantages as well as disadvantages for retailers when carrying out large assortments. To investigating the relationship between the number of choices within an assortment and consumers post-choice satisfaction, it is needed to go deeper into the effects of carrying out large assortments. With choosing from larger assortments, consumers cognitive cost increases. Because consumers have to choose from more options, it also takes greater cognitive effort for consumers (Iyengar & Lepper, 2000). When consumers do not have a specific preference, large assortments can be confusing because of the greater options that have to be evaluated to decide which product they like most, and make their decision (Huffman and Kahn, 1988). The time and money it costs to search through these alternatives can be described as search costs (Greifeneder et. al, 2009). Thereby, consumers try to simplify their decision processes as the number of choices increase so much that choice complexity occurs (Payne J., 1982). There will be an increased chance that consumers will go for the simple option not to choose at all, to end this complex decision (Dhar R., 1997). Also, as said earlier in chapter two, having too many options to choose from can be overwhelming to the consumer. This is referred to as choice overload, which leads to lower consumers' satisfaction with their options chosen, which could even lead to high regret (Iyengar et. al, 2006; Iyengar & Lepper, 2000). Even, no choice can lead to higher satisfaction compared to a choice made from an overload of choice, which could lead to dissatisfaction. The no-choice option is a common option for consumers who are overwhelmed by choice (Dhar, R. 1997).

From a psychological point, consumers that have too many options to choose from, will tend to end the choice complexity by making a choice that is more satisfactory, rather than optimal (Iyengar & Lepper, 2000). This is another characteristic of the too-much-choice effect. Because the too-much-choice effect is such a known effect of the relationship between number of choices and satisfaction, the next part will go deeper into the too-much-choice effect. Is this effect always vivid?

## **The vividness of the Too-Much-Choice Effect**

The negative relationship between the number of choices and consumers satisfaction is referred to as the too-much-choice effect. However, there are researchers that do not agree that more choice will always lead to a decrease in satisfaction (e.g. Chernev, 2003b; Scheibehenne et al, 2009). Obviously, there are contrasting views on whether larger assortments will lead to more, or less satisfaction. According to Scheibehenne, Greifeneder and Todd (2009), more choices do not always lead to a decrease in satisfaction; a meta-analysis actually found that the effect of number on choices on satisfaction across studies is almost zero. Three studies were examined where the too- much- choice effect was tested. In the first study, referred to as the restaurant study, participants chose from a large variety of restaurants, instead of choosing from the small set of restaurants that were given to them. Maybe this surprising result is explained by the fact that people are used to choose restaurants, even in daily life (Scheibehenne et. al, 2009). So a second study was examined where participants were asked to donate money to charity, or keep the given money to themselves. Again, results were surprising compared to other beliefs about the too-much-choice effect. Where participants could choose to donate from a large set of options, more participants chose to donate their money, while fewer participants who were asked to choose from a smaller set donated their money (Scheibehenne et. al, 2009). One reason for the different results than other studies already examined, could be that existence of the too- much- choice effect could be highly context-dependent. It seems that the too-much-choice effect can be highly dependent on moderating variables (Scheibehenne et. al, 2009). The third study was about cultural difference, but there was no effect in difference found between different cultures. It was even found that choice complexity did not moderate the too-much-choice effect either (Scheibehenne et. al, 2009).

According to Scheibehenne, Greifeneder and Todd (2009), concluded was that the too- much-choice effect was not that vivid as thought in previous studies. This means that it could be said that the number of choices do not necessarily have a negative influence on post-choice satisfaction.

Thereby, larger assortment can sometimes become easier to choose from, if increasing the number of options with two or three more options makes it easier and more confident to choose the one you preferred. The extra options can show the consumer that there are not that many preferences in other options as the one they had put their mind to, and this will lead to an

increase in satisfaction with the choice made (Dhar & Simonson, 2003). Also, concerning what was said about large assortments increasing search costs; in contrast, by offering a wider variety of products in a retailers store, search costs can be minimized, because the search of a product can be limited to this particular store, so the overall searching cost of a product decreases as the assortment size within a single store increases (Ratchford B., 1982). Also, in previous years, lots of researchers suggested that choice increases satisfaction (e.g. Langer and Rodin, 1976; Baumol et. al, 1956).

### **§ 3.4 Conclusion**

In this concluding part, the second and third research questions will be answered, namely; “What is consumer post-choice satisfaction?” And “How are the number of choices and consumer satisfaction related?”

Post-choice satisfaction is a part of the post-consumption experience of a consumer (Spreng et. al, 1996). It is about how confident a consumer is when evaluating the product after purchase that he made the right choice. It can best be measured trough the use of the cumulative perspective. For the second research question it can be concluded that the influence of the amount of number of choices on consumer satisfaction is important to take in mind when choosing an assortment size. The optimum assortment size a retailer should possess is the assortment size which attracts most customers together with providing the highest post-choice satisfaction to consumers.

It is believed by several researchers that there exists a negative relationship between a large number of choices and post-choice satisfaction (referred to as the too-much-choice effect) (e.g. Iyengar & Lepper, 2000). However, there are researchers who believe that this effect is highly context dependent and in some contexts there might not exist a negative relationship between the number of choices and post-choice satisfaction (Scheibehenne et. al, 2009).



## **Chapter 4: Product attractiveness**

In this chapter, relevant parts about the moderating variable product attractiveness will be explained. It is important to get an insight in the concept of product attractiveness, and in the end the influence of product attractiveness on post-choice satisfaction will be described. After having read this coming chapter, there should be a clear overview over the three variables and their relation. It should become clear how product attractiveness influences the relationship between number of choices within an assortment and consumers post-choice satisfaction. The last research questions will be answered; “What is meant with product attractiveness?” and “How does the product attractiveness influence the post-choice satisfaction?”

### **§ 4.1 Introduction**

Product attractiveness is highly important to consumers. The more attractive a product is to a consumer, the more likely the consumer is to purchase the product. But what is product attractiveness actually? And how can we determine whether a product is attractive? In what way is this relevant for retailers?

### **§ 4.2 What is product attractiveness?**

Retailers can distinct themselves through the attractiveness of the products they carry out in their stores. Product attractiveness can be determined by its product level of design, quality and price (Chan et. al, 2010). When designing products, manufacturers and the designers should focus on understanding the perceptions of the consumers towards consumer products. This is crucial because product perceptions of consumers are highly interrelated with the product attractiveness which then is related to customers' satisfaction (Kwong et. al, 2009). The firms' goal in design engineering is to design and launch a high quality product (Ryan & Riggs, 1996).

Retailers that carry products in their stores which have higher quality levels than others, will be perceived as more attractive. Quality of products can be measured through the use of the Quality Function Deployment tool (QFD). QFD is used to translate the needs of consumers into efficient communication through the planning stages, design stages, engineer stages and manufacturer stages (Chen & Ko, 2008). This will help many manufacturers improving the product design, the decision making process and customer satisfaction by improving the product attractiveness to consumers. So it is extremely important to focus on good quality products to achieve higher product attractiveness.

Thereby, retailers that have on average lower prices than others (think of Albert Hein versus Aldi) can attract certain consumers more easily. Competitive advantage is often achieved through price competition. By strategically deciding about price settings, retailers could seduce consumers to purchase the products they carry out in their store. An example of taking advantage through the use of price based competition could be for a retailer to give discounts on product prices when consumers buy two or more products from the same product category.

In addition, consumers can be drawn to certain stores because they possess products that match their preferences. There are retail stores that focus on a certain customer segment, where they will be more attracted to their products than other segments (Chernev et. al, 2009). Thought can be of a large-size clothing store versus the average clothing stores. Also, typical hair dress saloons for men versus the hair dress saloons where both men and women can go to for a haircut are a good example.

It is said that if the product attractiveness in the store increases, the impact of assortment size decreases (Chernev & Hamilton, 2009). But it is also said that when the product attractiveness increases in an assortment, consumers are less likely to make a decision from large assortments as the increase in product attractiveness results in a choice conflict, or choose for the option that is mere satisfactory, but not optimal (Iyengar et. al, 2006). That would mean that whenever the product attractiveness increases within an assortment, consumers who choose from a small assortment would be more satisfied with the choice they made.

In conclusion, retailers should carry out products that achieve advantages through their design, quality or price which can cause competitive advantage and draw consumers to their stores. If they want to carry out an on average more attractive assortment size, the impact of assortment size decreases, but they face a larger chance of consumers facing a choice conflict when choosing from a large assortment (Iyengar et. al, 2006).

#### **§ 4.3 How does product attractiveness influence the post-choice satisfaction?**

Increasing the product attractiveness in assortments, both in larger and smaller ones, is likely to cause more consumer benefits, which will lead to greater post-choice satisfaction. According to Han and Hong (2003), the product design is highly interrelated with the product attractiveness, which causes post-choice satisfaction. So, by increasing the product attractiveness (e.g. through good design engineering), product perceptions of consumers are increasing positively, which

causes customers' satisfaction (Kwong et. al, 2009).

Chernev and Hamilton (2009) showed that the higher the product attractiveness, the more satisfied consumers are when making a choice from smaller assortments. This is caused through the cost-benefit trade off, where smaller assortments will be more favorable to larger assortments if the product attractiveness of both assortments increases (Chernev & Hamilton, 2009).

However, there are studies that show that to achieve higher post-choice satisfaction, it is not always the case that consumers make a decision from the assortment with the highest product attractiveness, but this relation is highly context dependent when influenced by choice set size.

Like in the first study of Scheibehenne, Greifeneder and Todd (2009), referred to as the restaurant study, where participants chose from a large variety of restaurants to achieve their post-choice satisfaction, instead of given small set of restaurants, even though the restaurants in the small set were on average more attractive. So product attractiveness was not such a strong influence that consumers would choose from the small set, but they rather chose from the large set of options.

So there is no question that the more attractive products become, the more satisfied consumers are after purchasing. However, attention should be paid to the influence of assortment size on this relationship. The discussion is about how to adjust assortment size when products become more attractive, which will lead to the highest post-choice satisfaction.

### **§ 4.3 Conclusion**

With this conclusion, the last research questions will be answered, namely; "What is meant with product attractiveness?" And "How does the product attractiveness influence the post-choice satisfaction?"

Products are attractive if their design, quality or prices are attractive to consumers, which can cause competitive advantage and draw consumers to their stores (Chan et. al, 2010). For retailers it is highly important to focus on product attractiveness to achieve higher post-choice satisfaction. Increasing the product attractiveness in assortments (e.g. through good design engineering), is likely to cause more consumer benefits, which will lead to greater post-choice satisfaction (Kwong et. al, 2009). Attention should be paid to the influence of assortment size on this relationship. It seems that smaller assortments will cause more benefits than larger ones whenever the product attractiveness increases (Chernev & Hamilton, 2009).

## Chapter 5: Conclusion

In this last chapter, the problem statement will be answered. This problem statement is investigated in the previous chapters through answering several research questions. Thereby, several conclusions appeared. The problem statement is as follows;

“Does the number of choices within an assortment influence the post-choice satisfaction of the consumer and to what extent does product attractiveness play a role in this relationship?”

The number of choices within an assortment definitely influences the post-choice satisfaction. However, this investigation showed that the direction of this relationship changed over time. For a long time it was thought that the higher the number of choices within an assortment, the more attractive a retailer's store, and the higher consumers post-choice satisfaction became (Baumol et. al, 1956; Boatwright et. al, 2001). This was a result of the internal motivation for consumers to make choices, the greater chance of finding products consumers prefer and through fulfilling the variety-seeking needs consumers have ( Baumol et. al, 1956, Iyengar & Lepper, 2000; Inman, J. Jeffrey 2001; Morales et. al, 2005). So that would mean that retailers could best carry out large assortments in their stores. The fact that large assortments seemed to be a good strategy for a long time was also shown by the fact that supermarkets with large assortments gained market share, while supermarkets with smaller assortments could not be competitive anymore (Greifeneder et. al, 2010).

But later the belief changed that large assortments were the best choice. Research started showing facts about consumers getting overwhelmed by choice when choosing from large assortments, referred to as choice overload (Iyengar & lepper, 2000). This resulted in negative consequences. Consumers became less satisfied with their decision made, and sometimes they even decided not to choose at all when being overwhelmed with choice (Dhar, R. 1997). This negative relationship between number of choices within an assortment and post-choice satisfaction was called the too-much-choice effect (Iyengar & Lepper, 2000). But later contradicting thoughts appeared again, and this time on the too-much-choice effect. Even though researchers assumed the too- much-choice effect to be vivid in different situations (e.g. Iyengar & Lepper, 2000); Scheibehenne, Greifeneder and Todd (2009) concluded that the too-much-choice effect is highly context dependent. The effect did not always appear where it was

expected. A clear example of the abundance of the too-much-choice was the investigation Scheibehenne, Greifeneder and Todd (2009) did, referred to as the restaurant study. Participants preferred to choose a restaurant from a list covering a large number of restaurants over the smaller list of restaurants. After some more investigations, Scheibehenne, Greifeneder and Todd (2009) concluded that the appearance of the too-much-choice effect is highly context dependent. So what happens if product attractiveness is included in this relationship? In this thesis it was investigated how product attractiveness influences this relationship to come to a clear answer on the problem statement.

In the fourth chapter it was shown how important product attractiveness is for retailers. This is because product attractiveness seemed to increase post-choice satisfaction with consumers (Kwong et. al, 2009). However, product attractiveness had the strongest effect on post-choice satisfaction whenever the choice set consumers faced, was small (Chernev & Hamilton, 2009). Consumers were likely to choose from a smaller set of options whenever the attractiveness of the options increased. This was again caused by consumers being overwhelmed with choice when choosing from a large assortment consisting attractive products. So, even though Scheibehenne, Greifeneder and Todd (2009) successfully refuted beliefs that the too-much-choice effect would occur in different situations, they did conclude that the effect is highly context dependent, and in this thesis that is proven to be true. Because even if there is no vast, strong proof for occurrence of the too-much-choice effect, it is clear that this effect does appear whenever products become more attractive. Then consumers clearly prefer small assortments over large assortments (Chernev & Hamilton, 2009).

These results are striking with the idea that consumers would like to have many choices when choosing from a choice set with, to them, attractive products. The too-much-choice effect could indeed be refuted in some situations, but not with the moderating variable product attractiveness influencing this relationship.

## **Chapter 6: Discussion and Recommendations**

In this chapter firstly some advice for future research will be given, and later on some recommendations for managers will be described.

Even though a negative relationship exists between the number of choices within an assortment and post-choice satisfaction when products are perceived as attractive, it is not clear how strong this influence is. How attractive do products need to be for the occurrence of the too-much-choice effect with large assortments? In future research, it could be interesting to see if the too-much-choice effect appears in all situations where assortments carry attractive products, and if this is dependable on the degree of attractiveness. Investigating which variables can have the same effect on the too-much-choice effect as product attractiveness has, could also lead to important new insights.

Furthermore, more research could be done to discover if there is a distinction between luxury and daily goods and the too-much-choice effect. This might lead to even more knowledge on this subject, because Scheibehenne, Greifeneder and Todd (2009), already addressed the thought that the abundance of the too-much-choice effect in some situations may depend on the fact that the decision makers were used to making that certain choice.

For managers, it appears to be very important to focus on carrying products as attractive as possible. Attractive products cause more competitive advantage and will cause higher post-choice satisfaction compared to products that are less attractive (Kwong et. al, 2009). High product attractiveness can be reached by paying specific attention to a product's design, quality and price (Chan et. al, 2010). It is crucial for managers to focus on delivering post-choice satisfaction with consumers, because this leads to a greater chance of customer retention and customer's recommendation for retailers store to friends and relatives (Zeithaml et. al, 1996). If retailers carry assortments that are on average attractive to consumers, the best way is to choose for a smaller assortment compared to larger assortments. In that way they avoid choice conflict with consumers, and the appearance of the too-much-choice effect.

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