The Effect of Information Availability and Product Type on Store and Brand Switching Intentions During a Conflict Delisting

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MANAGEMENT SUMMARY

Dominant manufacturers no longer dictate the game. Retailers are bigger, smarter and more sophisticated than ever causing them to have gained bargaining power towards manufacturers. Sometimes, the negotiations between a manufacturer and a retailer come to an impasse, the result is a conflict delisting. Here, either the retailer declines to sell the manufacturer its product or the manufacturer refuses to sell its product at the retailer. For both parties this can have lasting consequences for both sales and brand equity. Therefore, this research investigates possible influences for store and brand switching intentions. It is tested how providing information on product availability (information availability), and type of product (hedonic or utilitarian), influence store and brand switching intentions. This research also looks at if there is an interaction effect between both information availability and type of product. This is interesting because previous research shows that customers behave different to hedonic and utilitarian products (Sloot & Verhoef, 2008). Thus, providing information might evoke a different reaction for hedonic products than for utilitarian products. Also, this research tries to understand the underlying mechanism that drives switching intentions by testing if switching barriers (store switching and brand switching barriers) have a mediating effect. To test this, an experiment is used with a total sample of 396 participants.

The results show that there is a significant effect of information availability, type of product and store switching barrier on store switching intentions. When information is provided, participants indicate higher intentions to switch between stores than when no information is provided. When a product is more hedonic, store switching intentions are higher than when a product is more utilitarian. And finally, when store switching barriers are high, participants indicate to have higher intentions to switch between stores. For the brand switching intentions, type of product is the only significant variable that has an effect. When a product is utilitarian, participants indicate higher brand switching intentions than when a product is hedonic. For both store and brand switching intentions there is no interaction effect or mediation found.

Managers in manufacturing companies now know that providing information on product availability can lead to customers switching between stores. It gives those managers a way to defend themselves in times of a conflict. On top of that, this research shows that customers tend to have higher store switching intentions for hedonic products. If retailers delist a product that is perceived as a hedonic product, chances are that this would lead customers to switch between stores. It would be thus wise to check beforehand which product type you are dealing with.

PREFACE

This thesis serves as the conclusion of my Master of Science in Marketing Analytics at Tilburg University. It is the result of a 5-month study on how providing information could influence consumer behavior during a conflict delisting.

I would like to thank my supervisor Jan Klein for always providing me with profound and valuable feedback. His comments, remarks and academic insights were of great help during the process of writing my thesis.

Furthermore, I want to thank the people at Nielsen for all the lessons I learned and for giving me the opportunity to follow an internship besides writing my thesis.

Last, I would like to thank the professors and the teaching staff of both marketing masters. Both programs were of exceptional quality and this would not be possible without all of you.

I hope you enjoy reading this thesis.

Laurens van der Hoeven
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CHAPTER 1: INTRODUCTION

The days where dominant manufacturers dictate the game are over. Retailers are more powerful than ever and gained bargaining power over the years. The reason for this lies in the facts that retailers are growing in size and are becoming smarter and more sophisticated (Corstjens & Steele, 2008). When negotiations between a retailer and a manufacturer end in a deadlock, a conflict delisting is often the result. A conflict delisting means that the retailer refuses to sell the manufacturer its product, or that the manufacturer refuses to sell its product through the retailer. This leads to the unavailability of the brand within the store. In the media, a conflict delisting is often dubbed as a “product boycott”.

For manufacturers such a conflict delisting can have harmful consequences for both sales and brand equity. If the product is not available, customers will need to adjust. The best scenario for a manufacturer would be that customers leave the store and go to another store to buy the manufacturer its brand. In the worst case they, will buy another brand and build loyalty towards it.

Next, there are two examples of conflict delistings to illustrate how conflict delistings can differ. The first example is a very recent conflict delisting where a manufacturer tried to influence customer behavior; the “Albert Heijn - Johma” conflict ("Geen salades van Johma bij AH na ruzie", 2018). At the start of 2018, both companies did not agree on the arrangements for the coming year. This resulted in a conflict where Johma (a company producing mainly salads) refused to supply Albert Heijn with their product, which lead to empty shelf space. On Twitter and other social media outlets, Johma stated that their salads were still for sale at other retailers in the Netherlands. Consumers responded positively on social media and indicated that they would go to the other retailer. The conflict was settled relatively fast.

Another example is the conflict between Albert Heijn and Coca Cola in 2007. The conflict started in July 2007 when Coca Cola increased their wholesale price again after an initial price increase in 2006 ("Supers hebben buik vol van Coca-Cola", 2007). Albert Heijn responded by delisting Coca Cola products (but not all products), and by informing customers in store about what is going on ("Coca-Cola: AH ziet meerwaarde niet", 2007). The conflict lasted for a couple of months and was eventually settled on the 3rd of December 2007. There are no details about the eventual wholesale price but customer price rose from €1.22 to €1.35, the same as for other retailers ("Geschil AH – Coca-Cola voorbij", 2007).

During this conflict, many Albert Heijn franchise holders indicated that they wanted the conflict to end. They stated that customers went to competitors to buy the product and that

many customers were willing to pay more for the product. The franchise holders also found the information provided towards customers to be insufficient ("AH’ers balen van boycot Coca-Cola", 2007).

There are three main differences between the “Albert Heijn - Coca Cola” conflict and the “Albert Heijn - Johma” conflict. First, the “Albert Heijn - Johma” conflict was a manufacturer boycotting a retailer, whereas the “Albert Heijn - Coca Cola” conflict was a retailer boycotting a manufacturer. Second, although 2007 is the year that the smartphone revolution started, many people were still not able to access needed information online whilst they were in a supermarket. During the “Albert Heijn - Johma” conflict, Johma was able to connect with customers in store by making use of social media to tell them that their product is still sold at other retailers. Providing information caused customers to indicate that they would switch stores and may had positive influences on the speed of the conflict resolution. Third, the products are different in terms of how customers see them. Products can be differentiated in many ways, for instance brand equity or hedonic motivation.

When conflict delistings happen, retailers or manufacturers often do not know what to do. Uncertainty exists on how customers will behave in such times. Customers may behave in several different ways, customers are forced either (1) to buy another brand, (2) to buy a substitute product, (3) to not buy a product at all or (4) go to another store where the brand is still sold (Corstjens & Corstjens, 1995). For example, a person goes to a store to buy a certain brand of cookies but it turns out they are not for sale in this store:

1. The person can buy another brand of cookies in the same store.
2. Instead of cookies, the person could buy sweets in the same store.
3. The person could decide to not buy cookies at all.
4. The person can go to another competing store to buy the cookies there.

For a retailer, option 1 and 2 would be less problematic compared to option 3 and 4. Of course, returns on the desired brand of cookies could be higher compared to the substitute products but the retailer at least does not miss out on sales. The goal for retailers is to gain new customers, increase loyalty for existing customers and to increase their spending within the supermarket. For retailers, a customer who switches brands and stays at the same retailer would not cause much harm. But it becomes a problem when customers leave the store to do their grocery shopping elsewhere since retailers will suffer negative consequences in terms of store sales and store profits (Borle, Boatwright, Kadane, Nunes, & Galit, 2005). Furthermore, store loyalty is proven to be an important driver of retail profitability if managed prudently (Kumar

& Shah, 2004). For retailers, customers that decide to switch stores would thus be by far the worst outcome.

For a manufacturer option 4 would be the best option since they would still sell their product. The other options are obviously a problem for the manufacturer, assuming that all products and brands produced by the manufacturer are delisted by the retailer. The goal for manufacturers is to sell their products and make customers loyal to their product and brand. For manufacturers it is thus not very important where the customers buy the product, as long as they do not switch to other brands.

This research seeks to provide both retailers and manufacturers with insights on how customers respond during a conflict delisting. First, it will create understanding of the effect of providing information on store switching intentions and brand switching intentions. Here, providing information means that a manufacturer informs the customer that there is a conflict delisting and that the product is still sold at other retailers. Second, this research will provide retailers and manufacturers with understanding of how information availability and product type might interact. Here, type of product is defined as hedonic motivation, where a product is assessed on a hedonic and utilitarian scale. Hedonic motivation is a way to define product categories used by other papers on product unavailability (Sloot, Verhoef, & Franses, 2005; Sloot & Verhoef, 2008). Third, it will explain the mechanism that drives store switching and brand switching; perceived switching barrier. Learning about the underlying mechanism will provide better understanding of what actually drives switching intentions and how to possibly influence switching behavior. And finally, based on the findings, this study will provide manufacturers with an appropriate strategy for when a conflict delisting is looming.

Against this backdrop, this research addresses the following three research questions:

1. How does information availability influence store switching intentions and brand switching intentions during a conflict delisting?
2. Does product type (hedonic or utilitarian) moderate the effect of information availability on store switching intentions and brand switching intentions during a conflict delisting?
3. What is the underlying mechanism that drives the effect of information availability on store switching intentions and brand switching intentions during a conflict delisting?

Answering the three aforementioned research questions contributes to several literature streams and marketing research practice. First, the key theoretical contribution is to fill the gap in the literature on information provided during times of a conflict delisting. There is no prior research that looks at the effects of information availability because only recently,

manufacturers can communicate directly with their customer by making use of social media. In prior research (Sloot & Verhoef, 2008) customers had to make assumptions on if the product might be back tomorrow, would never come back or if it might still be on sale at other retailers. These days, such information can be easily provided online and could possibly influence consumer behavior as is seen in the "Albert Heijn – Johma" example. Second, this study will contribute to the existing literature by adding insights on consumer behavior during a conflict delisting instead of a regular out of stock situation. Prior research did not specify explicitly that there was a conflict going on (Sloot et al., 2005). Customers may behave differently knowing that their wanted product is not available due to a conflict between the manufacturer and the retailer. This is because customers now know the reason why the product is unavailable. Third, this research will add to existing literature (Sloot & Verhoef, 2008) on how customers will behave for hedonic product categories and for utilitarian product categories and the underlying mechanism that drives both store switching and brand switching. Knowing this will provide a better understanding of what drives store and brand switching intentions.

CHAPTER 2: LITERATURE REVIEW AND CONCEPTUAL MODEL

2.1 Literature review

In academic literature only few papers focuses on product unavailability during a conflict delisting (e.g. Sloot & Verhoef, 2008; Van der Maelen, Breugelmans & Cleeren, 2017). Prior research has mainly focused on products going out of stock (e.g. Campo, Gijsbrechts, & Nisol, 2000; Sloot et al., 2005; Verbeke, Farris, & Thurik, 1998) and on products going completely out of the assortment (e.g., Broniarczyk, Hoyer, & McAlister, 1998; Boatwright & Nunes, 2001; Sloot, Fok, & Verhoef, 2006).

The difference between out of stock and conflict delistings is that for an out of stock a single product is not available. Often other products of the same brand or manufacturer are available in different sizes and flavors. Empirical studies reveal that customer reactions to out of stock vary strongly for different categories, stores and periods in time. Customers behave differently depending on the product category; 67% of the people that were interviewed indicated that they would refuse to buy a substitute brand for toothpaste, whereas only 29% said so for toilet paper (Peckham, 1963). During an out of stock, most customers would buy another brand of the same price but some customers would decide to return another day. Of those people that indicated that they would return another day, 39.9% said that if the product would be out of stock again they would go to another store (Walter & Grabner, 1975). Other

scientific research found that 13.7% of the customers would go to another store to buy the product there, averaged over several different product categories (Emmelhainz, Stock & Emmelhainz, 1991). When their favorite brand was out of stock, almost 45 percent of the customers in a store belonging to one of the largest retailers in The Netherlands, indicated that they were not willing to switch brands. Those customers would either switch stores or postpone the purchase at all (Verbeke et al., 1998).

Customers also behave differently depending on their shopping habits and on the specificities of the shopping occasion. Quantity required by the household, time available for shopping and attitude towards shopping all influence customer behavior. Surprisingly, product importance, store distance, shopping frequency, mobility and deal proneness do not affect out of stock response (Campo et al., 2000). Also, customers who buy brands in hedonic product groups were, compared to customers who buy brands in utilitarian product groups, less inclined to postpone the purchase but were more likely to switch to another item by the same brand (Sloot et al., 2005)

A retailer or manufacturer can decide to take a product completely out of the assortment to reduce costs and to adopt a more “efficient assortment”. Reducing the assortment does not necessarily have to negatively influence assortment perceptions and decrease the likelihood of store choice (Broniarczyk et al. 1998). As long as only low-preference items are eliminated and category space is held constant, there are no negative effects. Of the households that were loyal to a single preferred brand-size combination, nearly half continued purchasing within the category after the elimination (Boatwright & Nunes 2001). A large assortment reduction may cause short-term category sales losses but only a weak negative long-term sales effect. Short-term losses are caused by fewer category purchases by former buyers of delisted products. However, such an assortment reduction also attracts new buyers. These buyers partially offset the sales losses among former buyers of the delisted items (Sloot et al., 2006).

As indicated earlier, a product being out of stock or being taken out of the assortment is different from a conflict delisting. Research that focuses on out of stock allows the participants to still buy the same brand but with a different flavor or size. The research on assortment reduction/out of assortment looks mainly at the impact of delisting low-preference items or delisting one single product from a whole range of products from the same brand. During a conflict delisting all products by a brand are delisted, products in all sizes, flavors and popularities.

There are many independent variables that could influence behavior during a conflict delisting (Sloot & Verhoef 2008). Sloot & Verhoef (2008) use two dependent variables to

measure behavior being; store switching intentions and brand switching intentions. These dependent variables measure how likely people are to switch between brands and stores when the preferred product is delisted. Intuitively it seems like these two dependent variables are related, but both need to be measured to prove this. This is why Sloot and Verhoef (2008), and also this research, measures both the store and the brand switching intentions. Simply because measuring both variables provides a more fine-grained understanding of potential customer behavior. They found that brand equity, market share, the proportion of high-equity brands and product type (hedonic vs. utilitarian) all had a positive significant effect on store switching intentions. Brand type (retailer owned vs. manufacturer owned) and assortment size had a positive significant effect on brand switching intentions. And finally, brand equity, market share and product type had a negative significant effect on brand switching intentions.

Hence, hedonic products with high brand equity make people switch stores and not switch brands. But utilitarian products with low brand equity make people switch brands. Also, large assortment sizes and brands owned by retailers make people more likely to switch between brands and stay in the same store.

The problem with the experiment is that it did not specify that there was a conflict delisting going on. Participants had to make assumptions on why their preferred brand was not sold in that store anymore. But obviously, there can be many reasons for that. Back in 2008, people had to make assumptions when a product was not sold anymore. But now, customers can go online to immediately find out what is going on and if the product is still sold at other retailers (as in the Albert Heijn - Johma example). This development could result in different results than reported in the paper by Sloot & Verhoef (2008).

In the paper of Van der Maelen et al. (2017) the authors look at market share shifts during a long period of time. To do this, the authors look at one conflict delisting executed by a major retailer against a major manufacturer, involving multiple brands and categories. It turns out that both parties lost sales, yet the retailer was the most vulnerable party. A delisting of a high-brand equity in a small assortment is more dangerous for a retailer than for a manufacturer. Also, both parties lost more in necessity than in impulse categories. The paper also looked at long-term consequences once the conflict was settled. Eventually, the retailer’s market share recovered to pre-delisting level, while the manufacturer’s share rose.

One of the limitations stated in the paper is that the results are difficult to generalize to other conflict delistings. This because their natural experiment is only based on one scenario with two involved parties. Also the fact that this delisting was really big in size caused the conflict to receive high publicity, possibly influencing the results. Still, the paper offers a

number of interesting insights into the impact of conflict delistings. Drawing meaningful conclusions based on historical data is difficult. It is hard to generalize the results from one conflict delisting to another. The occurrence of conflict delistings is scarce and so is the data. On top of this, conflicts differ from each other in several ways and are thus difficult to compare.

As indicated earlier, there is no knowledge on how providing information influences choices during a conflict delisting. After the customer finds out that the product is not sold anymore, he or she has to decide on what to do next. Tradeoffs have to be made and with every decision there is a certain amount of risk and uncertainty involved. Substitute products could be inferior to the delisted product and going to another store might result in another disappointment if the product is not sold there as well. To manage these decisions, the risks involved and the uncertainties, customers make use of information available to them. Providing customers with information could potentially reduce uncertainty for a decision and would consequently increase the proportion of customers that actually take that decision. For example, stating that a product is still sold in a store nearby decreases the risk of not finding the product there. This would increase the likelihood that people switch to another store. But there is no known research on the effect of providing information.

In Table 1, an overview of the published studies about stock outs, delistings and conflict delistings is provided. As can be seen in the table, most papers on stock outs and delistings are centered on a single item going out of the assortment. During a conflict delisting, a whole brand range is out of the assortment. This means that switching to another product of the same brand is not an option during a conflict delisting. And finally, as stated before, there is no prior research that looks at the effect of information availability.

Following the literature that is discussed, three research questions will be covered by this research. These are the following, aforementioned, research questions:

1. How does information availability influence store switching intentions and brand switching intentions during a conflict delisting?
2. Does product type (hedonic or utilitarian) moderate the effect of information availability on store switching intentions and brand switching intentions during a conflict delisting?
3. What is the underlying mechanism that drives the effect of information availability on store switching intentions and brand switching intentions during a conflict delisting?

table 1: Relevant Literature on Product Delistings

	Author	Type of Research	Dependent Variables	Independent Variable: Information Availability	Independent Variable: Hed/Uti	Products (Real or Fictitious)	Range of Out of Stock (Item or Brand)	Number of Categories Involved
Out of Stock	Peckham, 1963	Natural experiment	Substitute Brand Bought	No	No	Real	Item	14
	Walter & Grabner, 1975	Survey	Switch Store, Switch Brand, Switch Item, Defer	No	No	Real	Item	1
	Emmelhainz et al., 1991	Field Experiment	Item Switch, Brand Switch, Product Swith , Delay purchase, Different store, Special trip	No	No	Real	Item	5
	Verbeke et al., 1998	Field Experiment	Brand Switching Intentions, Store Switching Intentions, Postpone Purchase	No	No	Real	Brand	5
	Campo et al., 2000	Survey	Switch Size, Switch Item, Switch Store, Defer Purchase, Cancel Purchase	No	No	Real	Item	2
	Sloot et al., 2005	Laboratory Experiment	Switch Category, Switch Brand, Switch Item, Switch Store, Defer Purchase, Cancel Purchase	No	Yes	Real	Item	8
Out of Assortment	Broniarczyk et al., 1998	Laboratory Experiment	Assortment Perceptions	No	No	Real	Item	1
	Boatwright & Nunes, 2001	Natural Experiment	Sales	No	No	Real	Item	42
	Sloot et al., 2006	Natural Experiment	Sales	No	No	Real	Item	1
Conflict Delistings	Sloot & Verhoef, 2008	Laboratory Experiment	Brand Switching Intentions, Store Switching Intentions	No	Yes	Real	Brand	*Study 1:* 1 *Study 2:* 10
	Van der Maelen et al., 2017	Natural Experiment	Change in Share	No	No	Real	Brand	47
	This Study	**Laboratory Experiment**	**Brand Switching Intentions, Store Switching Intentions**	**Yes**	**Yes**	**Fictitious**	**Brand**	**2**

2.2 Theoretical framework

A theory that explains possible behavior during a time of a conflict delisting is the balance theory by Heider (1946). The balance theory conceptualizes the cognitive consistency motive to achieve psychological balance. This means that people will try to avoid cognitive dissonance by have matching attitudes towards other people and/or objects (Cartwright & Harary, 1956). For example, a person [P] can have a positive or negative attitude towards another person [O] and a brand/product [X]. The other person [O] can in turn have a positive or negative attitude towards a brand/product [X]. Cognitive balance is achieved when all three signs multiply to a positive, cognitive dissonance is achieved when all three signs multiply to a negative. When there is cognitive dissonance one party must change their attitude to reinstate a cognitive balance. Figure 1 shows a visual depiction of the P-O-X model of Heider (1946).

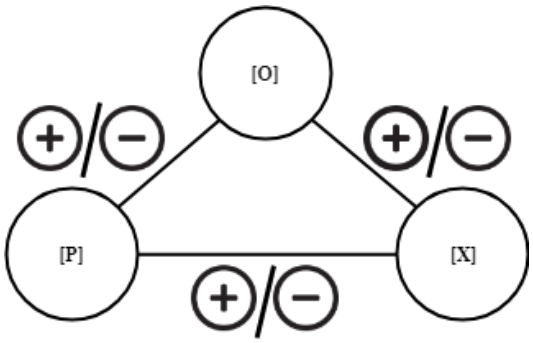


figure 1: P-O-X model of Heider (1946)

When there is no conflict delisting going on, all three parties are in a balanced state. The customer [P] has a positive attitude towards the retailer [O] and the manufacturer/brand [X]. But also the retailer [O] has a positive attitude towards the manufacturer/brand [X]. Now, a conflict arises and the retailer [O] and the manufacturer/brand [X] develop a negative attitude towards each other. This change in attitude is visualized in figure 2 below.

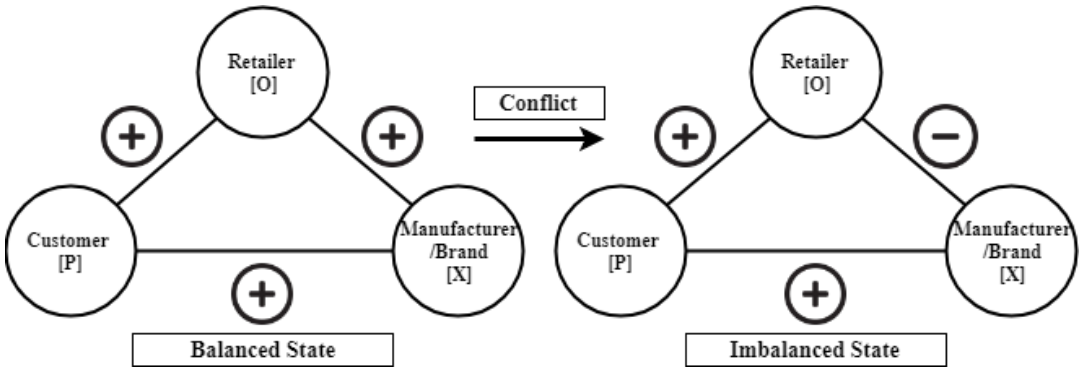


figure 2: Change in the P-O-X model when a conflict arises between the retailer and the manufacturer/brand

Consequently, something has to change for the imbalanced state to become balanced again. There are three options:

Option 1. The retailer and manufacturer/brand resolve the conflict, this will reinstate the positive attitude between the retailer [O] and the manufacturer [X].

Option 2. The customer changes his attitude towards the retailer meaning that the customer [P] gains a negative attitude towards the retailer [O].

Option 3. The customer changes his attitude towards the manufacturer/brand meaning that the customer [P] gains a negative attitude towards the retailer [X]

The three possible scenarios to reinstate a balanced state are visualized in figure 3 below. To avoid cognitive dissonance, a customer must decide on how to act when there is a conflict. The customer could stick with the retailer buying another brand or a substitute product. But the customer can also decide to be loyal towards the manufacturer and do their shopping at another store. An attitude change, as described by the P-O-X model, towards the retailer or the manufacturer (option 2 and option 3) can ultimately be translated to switching stores or to switching brands.

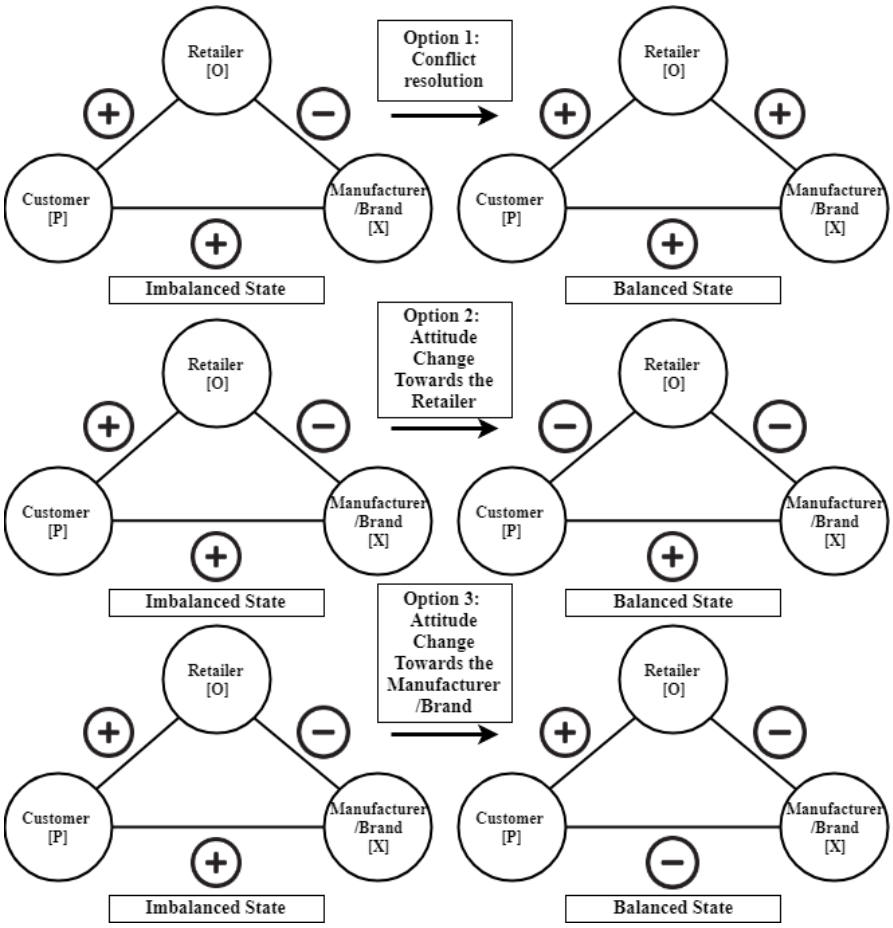


figure 3: Possible solutions to reinstate a balanced state

2.3 Hypotheses development

It is difficult for a customer to understand what is actually happening when standing in a supermarket. In light of the balance theory (Heider, 1946), customers first need to be aware of a conflict, before they can make a decision whether to support the manufacturer or the retailer. Knowing that there is an imbalanced state, customers will experience cognitive dissonance (Festinger, 1957). To avoid cognitive dissonance, customers need to reinstate the balanced state again. When recreating a balanced state, customers tend to rationalize their choice by enhancing the positive aspects of the chosen alternative and by suppressing its negative aspects (Mazursky, LaBarbera, & Aiello, 1987). On the other hand, customers will enhance the negative aspects of the rejected alternative and suppress its positive aspects. This supports the theory of Heider (1946), when there is a conflict between a manufacturer and a retailer, the customer must choose one of the two parties. The customer will do so by idolizing one party, whilst degrading the other (Sheth & Parvatlyar, 1995).

According to Abelson (1959), individuals whose beliefs are under attack may reject new information on the subject. They may try to bolster their own position by retrieving supportive prior knowledge. If this fails, people may practice denial again, but possible in a more effortful fashion on the basis of cognition they retrieve from prior knowledge. However, when a customer learns that there is a conflict after receiving the new information, the customer will tend to solve the imbalanced state and is in this case unable to alter the reception of the information (Albarracin, 2002). This means that when there is a conflict going on between a manufacturer and a retailer and the customer is not aware of this, providing information will force the customer to solve the imbalanced state, whilst not altering the reception of the information. This leads to the hypothesis that providing information will have an effect on switching intentions, but it is not certain in which direction. Therefore it is hypothesized that:

H_{1a}. When information is provided, store switching intentions will be different from when there is no information provided.

H_{1b}. When information is provided, brand switching intentions will be different from when there is no information provided.

To gain more understanding about the impact of providing information on store switching intentions and brand switching intentions, this research looks at the interaction with product type. Sloot & Verhoef (2008) make a separation between hedonic and utilitarian products to predict store switching and brand switching. They found that for hedonic products store

switching intentions are higher than for utilitarian products. And that for hedonic products brand switching intentions are lower than for utilitarian products. The consumption of many products involves both the hedonic and the utilitarian dimensions to varying degrees (Batra & Ahtola, 1991) but there is no doubt that customers characterize some products as being mainly hedonic and others as mainly utilitarian (Dhar & Wertenbroch, 2000). Hedonic goods are often dubbed as 'frivolous' or 'decadent', they are goods whose consumption is primarily characterized by an affective and sensory experience of aesthetic or sensual pleasure, fantasy, and fun (Hirschman & Holbrook, 1982) Utilitarian goods are often dubbed as "practical" or "necessary", they are goods whose consumption is more cognitively driven, instrumental, and goal oriented and accomplishes a functional or practical task (Strahilevitz & Myers, 1998). A product does not need to be mutually exclusive; hand-soap cleans your hands (utilitarian) but at the same time it can also smell good (hedonic) (Batra & Ahtola, 1991).

Crowley, Spangenberg, & Hughes (1992) looked into several product categories and measured the corresponding hedonic and utilitarian dimensions. They did this by making use of the three construct validation studies introduced by Batra & Ahtola (1991). Crowley et al. (1992) found that product categories such as cooking oil, dish detergent and paper towels score high for the utilitarian dimension. On the contrary, ice cream and chocolate bars score high for the hedonic dimension.

Dhar & Wertenbroch (2000) show that customers bond more to hedonic benefits of products. Fitzimons (2000) shows that dissatisfaction is larger when a hedonic product is not available. This leads to believe that people care more about hedonic products and that providing information would evoke a stronger effect. And as mentioned before, for hedonic products store switching intentions are higher than for utilitarian products (Sloot & Verhoef, 2008). So it is expected that customers will have higher store switching intentions when a hedonic product is unavailable, and will demonstrate even higher store switching intentions when there is information provided. On the other hand, customers will have lower store switching intentions when a utilitarian product is unavailable, and providing information will have no influence on store switching intentions.

H_{2a}. When information is provided, store switching intentions will be higher for hedonic products than for utilitarian products.

H_{2b}. When information is provided, brand switching intentions will be lower for hedonic products than for utilitarian products.

Switching barriers are factors that make it difficult for customers to change service providers (Jones, Mothersbaugh, & Beatty, 2000). When switching barriers are high, customers are likely to stay with the same service provider to avoid potential costs and losses, even if the customers are not satisfied (Jones et al., 2000; Lee, Lee, & Feick, 2001; Liu, Guo, & Lee, 2005). Such switching barriers are a consequence of a customer's perception of time, money and psychological effort that is needed to change from one service to another (Jones, Mothersbaugh, & Beatty, 2002). They influence the actual behavior of switching between stores or brands and may thus influence the intentions that customers show. When there is a conflict delisting, customers either switch stores or switch brands. When the perceived barrier to switch between stores is high, customers are more likely to buy another brand at the same store (Liu et al., 2005). Going to another store will make a customer spend more time, more effort and there is a risk; the customer is not certain if the product will be available at the other store. Communicating to a customer that the product is available at the other store will take this risk away, lowering the perceived barrier to switch stores. It will also give the customer an opportunity to remain loyal to their favored brand, increasing the barrier to switch brands. For this reason it is hypothesized that:

H_{3a}. The effect of information availability on store switching intentions is mediated by the perceived store switching barrier.

H_{3b}. The effect of information availability on brand switching intentions is mediated by the perceived brand switching barrier.

Finally, since customers tend to bond more to hedonic products (Dhar & Wertenbroch, 2000), it is believed that providing information will have a larger impact on the perceived switching barrier for hedonic products than for utilitarian products. Therefor it is hypothesized that:

H_{4a}. The effect of information availability on store switching intentions is moderated by the type of product.

H_{4b}. The effect of information availability on brand switching intentions is moderated by the type of product.

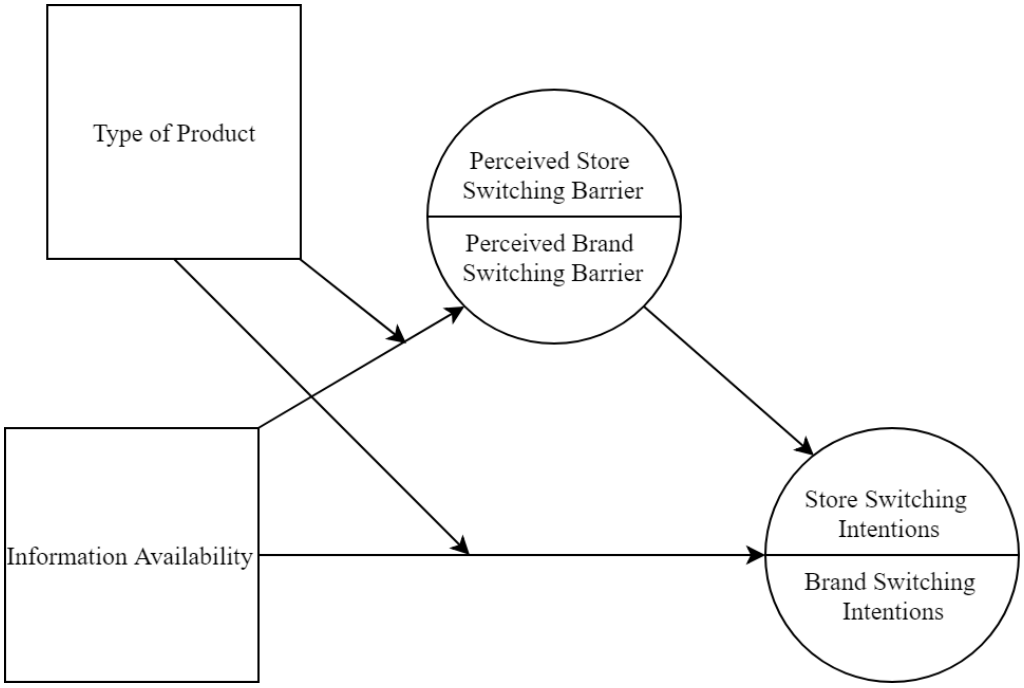


figure 4: Conceptual model

The aforementioned hypotheses lead to the conceptual model depicted in figure 4 above. Note that figure 4 depicts two separate studies, one on store switching and another on brand switching. In chapter 4, both studies will be analyzed separately. There are also covariates that could influence store and brand switching intentions; distance to another store, product pricing, package size, basket size, overall product category liking and several demographics. In the final experiment these covariates are either controlled for or used as a proof of randomization for the randomization check.

CHAPTER 3: PRETEST AND EXPERIMENTAL DESIGN

3.1 Company introduction

Nielsen Holdings PLC is a global information, data and measurement company that has presence in over 100 countries. Nielsen provides data about what consumers watch and what they buy on both a global and a local basis. The Nielsen Watch segment measures what consumers are watching and listening to across several devices such as; TV, radio, computers, mobile etc. Ratings provided by Nielsen are used by advertisers and networks to shape the buying and selling of advertising. The Nielsen Buy segment helps consumer packaged goods manufacturers and retailers understand what consumers are buying. The company measures all consumer purchases and puts the data together to provide an idea of what is happening in the market.

In the Netherlands, Nielsen is located in Diemen and is active in the Buy segment. For the Buy segment, clients include companies such as: Procter & Gamble, Unilever, Nestlé, Albert Heijn and Jumbo. Clients are provided with insights regarding the market for specific products, product categories, stores, regions etc.

3.2 Pretest

To determine the product category that will represent the hedonic condition and the utilitarian condition a pre-test is conducted.

3.2.1 Sample

For the pretest 50 participants are used. Each participant will answer questions concerning 8 randomly selected categories. Since there are 20 total categories evaluated, each category will have approximately 20 participants rating them. Data is collected using Amazon Mechanical Turk. Enabling the experiment to have a randomized group participating.

Woo, Keith & Thornton (2015) discuss some concerns for using Amazon Mechanical Turk. Their first concern is that Amazon Mechanical Turk allows for repeated participation. Mechanical Turk workers could participate in the same study using multiple accounts. However, this concern has been discounted by researchers who have found little to no evidence of such activity (Chandler, Mueller, & Paolacci, 2014). Another concern that they have is that there is a selection bias. Only workers who have access to a computer and internet and are online at that moment have access to your survey. If one's research involves psychological constructs that are harmed by this selection bias (e.g., access to computers, daily computer use, comfort with online task completion), then using Amazon Mechanical Turk as a primary source of data would cause a bias. But if you want to study a diverse population of workers, then Mechanical Turk workers would be preferred over college students or employees from a single organization. But, as Casler, Bickel & Hackett (2013) point out, Amazon Mechanical Turk allows to save a lot of time and money when acquiring a sample that is less prone to the aforementioned concerns. Therefor it is decided to use Amazon Mechanical Turk to collect a sample for this study.

3.2.2 Design

As indicated before, Crowley et al. (1992) found that cooking oil, dish detergent and paper towels score high for the utilitarian dimension. Ice cream and chocolate bars however, score high for the hedonic dimension. In the more recent paper by Sloot & Verhoef (2008), margarine

and rice scored high for the utilitarian dimension and cigarettes and beer were found to score high for the hedonic dimension.

To measure the hedonic value, the pretest asks participants to rate several product categories on the following items: pleasant/unpleasant, nice/awful, agreeable/disagreeable, and happy/sad (7 point scale) (Batra & Ahtola, 1991). These four items were found to be able to most validly measure the hedonic component. Then, as done by Sloot & Verhoef (2008), the average is computed for each product category resulting in an average hedonic value. To measure the utilitarian value, the pretest asks participants to rate several product categories on the following items: useful/useless, beneficial/harmful, and important/unimportant (7 point scale) (Batra & Ahtola, 1991). Again, the average is computed for each product category resulting in an average utilitarian value. However, some categories can score high on both utilitarian and hedonic values (e.g. shampoo). The product category with the highest hedonic value (and a low utilitarian value) will be selected for the hedonic condition, the product category with the highest utilitarian value (and a low hedonic value) will be selected for the utilitarian condition.

Participants for the pre-test were recruited by making use of Amazon Mechanical Turk. A total of 50 participants completed the questionnaire in return for a financial compensation. 20 categories were selected for the study based on profitability data by Nielsen. A selection of the 20 most profitable categories in the Netherlands was made (see appendix B). Tobacco and fresh produce were exempted from this selection although having a high share of sales. Tobacco was removed since not all customers buy cigarettes and would thus result in them have difficulty simulating themselves buying the product in the final experiment. Fresh produce was removed since customers tend to patronize different stores to buy these kinds of products (Yue & Tong, 2009). Also, retailers tend to have multiple suppliers for a single item. Meaning that a full delisting of a product rarely happens during a conflict. Each participant was randomly assigned to a total of 8 product categories, counterbalanced across subjects. Demographic questions were asked at the end of the survey to learn more about the sample. For the complete questionnaire, please see appendix C.

3.2.3 Results

For the pretest there were 75 responses collected but 25 were filtered out by making use of an attention check. By using such an attention check, inattentive and quick responders were automatically filtered out. Participants were on average 30.54 years old (*SD* = 7.75), 42 (84%) of the participants were male and eight (16%) participants were female.

First, the average hedonic values and the average utilitarian values were computed using the method described before. Then, all values were inverted so that a high value would mean that a product scores high on that dimension. Finally, all 20 products were mapped in a scatter plot and a 45 degree line was added (figure 5). The averages for each product category, together with the frequency table, can be found in appendix D.

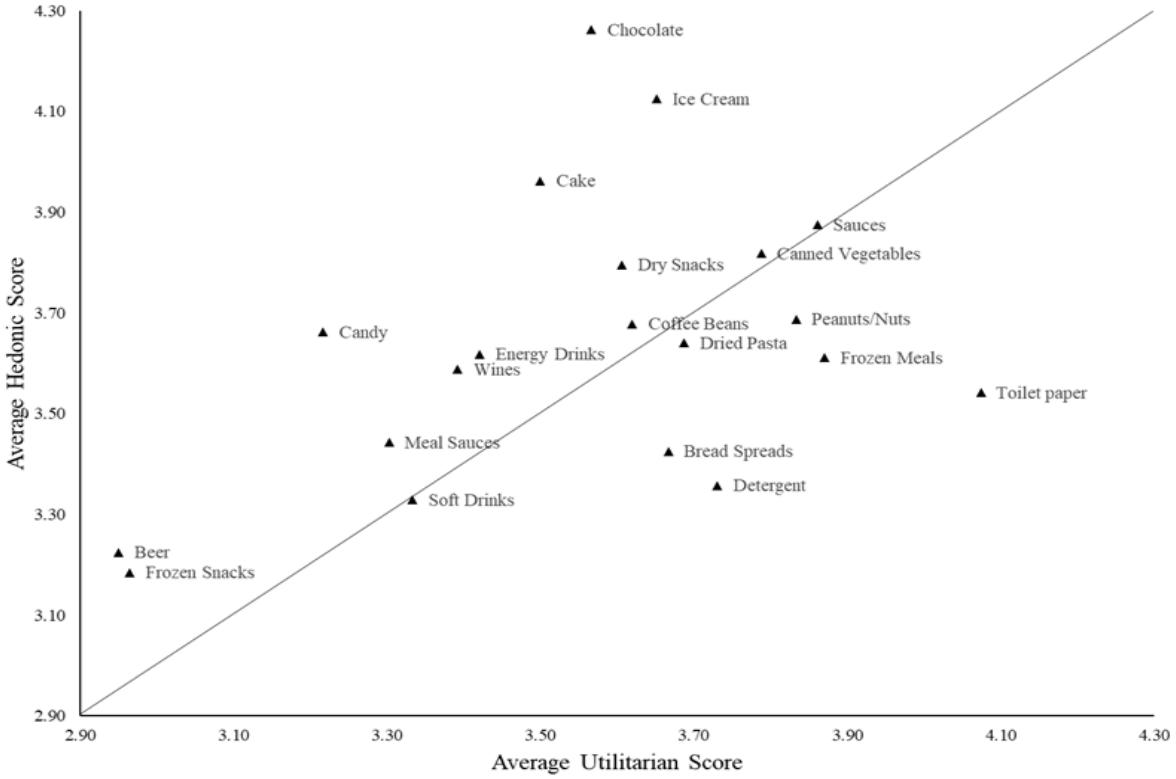


figure 5: Two-dimensional, hedonic/utilitarian product map

As can be seen in figure 5, there are many product categories that score almost equal on both scales (close to the 45 degree line). Overall, the mean for the hedonic value is 3.35 (*SD* = 1.23) and the mean for the utilitarian value is 3.45 (*SD* = 1.26). Some product categories are a bit more pronounced, for instance chocolate and toilet paper. Chocolate has the highest hedonic value of all categories (*M* = 4.26, *SD* = 1.21) and a utilitarian value close to the average (*M* = 3.57, *SD* = 1.00). Toilet paper however has a hedonic value that is close to the average (*M* = 3.54, *SD* = 1.02) and the highest utilitarian value (*M* = 4.07, *SD* = 1.28). Consequently, chocolate and toilet paper are used as respectively the hedonic and the utilitarian product category for the experiment.

3.3 Experiment

The goal of this experiment is to gain understanding of the effect of providing information on store switching intentions and brand switching intentions. The experiment will also shine some light on the moderation effect of product type and the underlying mechanism that drives the effect of information availability on store switching intentions and brand switching intentions.

3.3.1 Sample

To determine the sample size for the experiment it is needed to determine the expected effect size, the wanted significance/alpha level, the preferred power/beta level and the number of groups within the experiment.

Cohen (1992) formulated a rule of thumb in terms of effect size where he made a difference between small, medium and large effects. In the context of an F-test for ANOVA or multiple regression, as is the case in this experiment, Cohen's f is used. When Cohen's f is 0.1 the effect size is believed to be small, when Cohen's f is 0.25 the effect size is believed to be medium and when Cohen's f is 0.4 the effect size is believed to be large (Cohen, 1992). For this experiment it is expected that the effect size will be between small and medium and is thus fixed at $f = 0.2$.

An alpha level is the probability of a type I error, or you reject the null hypothesis when it is true. The significance level for this experiment is set at $\alpha = 0.05$, as is often the case for research.

A beta level is the probability of a type II error, or concluding there is no effect when, in fact, there is one. A high beta level, being high statistical power, lowers the chance that a type II error ($1- \beta$) occurs. Cohen (1992) reasoned that studies should be designed so that they have at least an 80% ($\beta = 0.2$) probability of detecting an effect when there actually is an effect. Since both the store switching intentions and the brand switching intentions will be measured at once, a β of 0.2 would not result in the aspired power of 80%. This since 80% x 80% would result in 64% power. Because of this reason, a β of 0.9 is used, resulting in a power of 81%.

There are a total of 4 groups in this experiment; hedonic - no information provided, hedonic - information provided, utilitarian - no information provided, utilitarian - information provided.

Calculations using these numbers result in a needed sample size of 360 participants, meaning there will be 90 participants per condition. Data is again collected by making use of Amazon Mechanical Turk. In this way, a randomized group can be selected to participate in the experiment.

3.3.2 Design

The study is an online experiment where participants will be asked to fill in a survey. The two dependent variables for this experiment are: store switching intentions and brand switching intentions. Independent variables for this experiment are information availability (is information provided by the manufacturer yes or no) and product type. For the product type, chocolate is used for the hedonic category and toilet paper is used for the utilitarian category. Both products are sold at most supermarkets but are perceived differently by customers in terms of their hedonic and utilitarian value. Participants are randomized in one of the four different conditions. The conditions are: hedonic - no information provided, hedonic - information provided, utilitarian - no information provided, utilitarian - information provided.

For this research a hypothetical situation is used, which is slightly altered from a previous study by Sloot et al. (2005). In the experiment, participants will be explained that they go to their local supermarket to buy their favored brand of a certain product (either hedonic - chocolate or utilitarian - toiletpaper, depending on which condition the participant is appointed to). Then the participant will see that the brand is not available. The participant goes online and either finds:

- No information
- Information explaining that there is a conflict delisting and that the product is still sold at the competing retailer nearby.

In the experiment the distance to the other retailer will be stated. This to control for the impact that the distance to another store might have on the switching barriers. When a store is further away, switching will take more time and might potentially cost more money, increase the store switching barrier. To determine the distance for the experiment, the average distance in the Netherlands to the next retailer is calculated in a small sample. A list of 460 different cities in the Netherlands was used to randomly select three cities; Staphorst, Rucphen and Veenendaal. The retailers situated in these cities were mapped and the distance to another retailer was measured linearly (for the maps and the distances, see appendix E). Then the average distance was calculated, a distance of 374 meters (appendix F). Since the experiment will be conducted amongst people from different cultural backgrounds, using meters might be confusing. Also, the density of supermarkets varies per country and thus the relative distance may differ per respondent. This is why in the experiment travel time will be used. Assuming that humans have an average walking speed of 5km/h, it would take approximately 8.66 minutes to arrive at the competing retailer. Because the distance was measured linearly, and

people would also need some time to leave the store, the amount of minutes it would take to visit another store is rounded to 10 minutes.

Prices are not given to participants in the experiment to avoid potential biases and it is stated that all products are similar in package size. It will be emphasized that the participant needs the product today but there will be no reason indicated to avoid potential biases caused. Because this research is focused on the effect of information availability and product type and not on the effect of basket size, it is decided to use a basket size of one product because a larger basket size can impose contrasting meaning to different participants. In the introduction of the experiment it is explained that you only go to the store to buy this single product to control for the influence of basket size. To be able to conduct a randomization check, participants are asked for the overall product category liking and demographics (age, gender, country of residence).

There are two dependent variables in the experiment. All participants will be asked for both their store switching intentions and their brand switching intentions, which are defined as two separate dependent variables that are conceptually different. To cope with the biases caused by this, questions assessing the intentions are asked separately and are counterbalanced. This means that some participants will be asked for the store switching intentions first and others will be asked for the brand switching intentions first. When a participant finishes the questions related to, for example, store switching intentions and starts the brand switching intentions questions, he/she cannot go back again to change the given answer.

At the end of the questionnaire there will be several attention checks to see if participants paid attention to the questionnaire. These checks are easy to answer if a participant paid attention but would make the participant fail if he or she did not. In this way, bad responses are filtered out of the sample.

3.3.3 Constructs

Store/brand switching intentions: The store and brand switching intentions will be measured as in Sloot & Verhoef (2008). Store switching intentions is defined as the degree of intended store switching in a post-delisting period on a 7-point scale (1= extremely unlikely; 7= extremely likely). Brand switching intentions is defined as the degree of intended brand switching in a post-delisting period on a same 7-point scale as for the store switching intentions. This results in the following two items to measure the two constructs:

- How likely are you to go to another store?
- How likely are you to buy another brand?

To avoid potential bias, both items will be assessed separately and will be counterbalanced. In general, marketing researchers prefer multiple-item measures over single-item measures (Churchill, 1979). However, using multiple items lead to higher costs, more respondent refusals, and irritation among respondents. Rossiter (2002) suggests that if the object or attribute can be conceptualized as concrete and singular, it does not require multiple items to measure. Moreover, single items for concrete objects predict equally well as multiple items (Bergkvist & Rossiter, 2007). Therefore, using multi-item scales to measure store switching and brand switching intentions would not be necessarily better.

Information availability: Participants are either put in a group where no information is provided or where there is information provided. When information is provided, the message will be objective and provides information regarding the availability of the product. The message will be similar to the statement of Johma (appendix A) but the name of the retailer and the manufacturer are left out:

Unfortunately our products are currently not available at Retailer A. We try our best to solve this problem together with Retailer A. You can still buy our products at Retailer B.

Qualitative pre-test: To see if this message would not evoke unwanted emotions and associations, a qualitative pretest was conducted. 13 people were asked to read the statement and then write down in their own words what the message was about (for the survey, see appendix G). Then, three reviewers read those explanations and decided how well those statements matched with the purpose of the statement on a scale of 1-7 (1 = very bad; 7 = very good). Finally, the average was estimated to see how well people understood the message. If the explanation would score over 5 (5 = good) for the total average, the message would be rated as being clear and not ambiguous, thus fitting the purpose of the experiment.

In appendix H there is an overview of all 13 explanations and the corresponding ratings that were provided by the three reviewers. The total average is 5.2, being above the threshold of 5. Thus, the statement will be used for the final experiment.

Type of product: Participants are either in a group where they are buying a hedonic product or in a group where they are buying a utilitarian product. To decide on the exact product category that would represent these dimensions the pretest discussed earlier was conducted. As stated before, chocolate will represent the hedonic dimension and toilet paper will represent the utilitarian dimension. As a manipulation check, participants will be asked to evaluate their

assigned product category on the same items used in the pretest. Participants will answer these 7 items after answering the items related to the dependent variables and the independent variables.

Perceived store/brand switching barrier: To measure the perceived store switching barrier and the perceived brand switching barrier, the same method is used as Liu et al. (2011). In their paper they measure the perceived switching barrier by making use of an adapted two-item scale originally from Kim, Park, & Jeong (2004). The items were all constructed using a 7-point scale ranging from strongly disagree to strongly agree (1 = disagree strongly; 7 = agree strongly). The two items that were used by Liu et al. (2011) are:

- Switching to other providers will bring economic loss
- Switching to other providers will bring psychological burden

The above mentioned items have a factor loading of 0.75 and 0.83 respectively and a Cronbach Alpha value of .77. Therefore, the scores for the two items will be summed and then divided by two to calculate the perceived switching barrier. For this experiment the items will be slightly altered to make it easier for participants to comprehend:

- Switching to another retailer/brand will cause me to lose time and/or money
- Switching to another retailer/brand gives me uncertainty (product quality/product availability)

Participants in the survey will answer all four questions after providing information on their store/brand switching intentions to avoid potential bias. The items will be counterbalanced, so participants will either answer the perceived retailer switching barrier items first or the perceived brand switching barrier items. These constructs will be measured after measuring the dependent variable.

Control variables: To check that the sample is randomized, participants are asked for how much they like the product category and several demographics (age, gender, country of residence) at the end of the survey. Overall product category liking will be measured with a 7-point scale (1 = dislike extremely; 7 = like extremely) (Ng, Chaya, & Hort, 2013).

In table 2 there is an overview provided of the variable that will be used together with the definition. In appendix I the complete questionnaire can be found.

Variable	Definition	Measurement Instrument
Dependent variables		
Store switching intention	The degree to which a consumer is likely to switch to another store in the case of a brand delisting	1 item 7-point scale measuring the likelihood of switching to another store (1= extremely unlikely; 7 = extremely likely)
Brand switching intention	The degree to which a consumer is likely to switch to another brand within the category in the case of a brand delisting	1 item 7-point scale measuring the likelihood of switching to another brand (1= extremely unlikely; 7 = extremely likely)
Independent variables		
Information availability	The extent to which information is provided to the consumer.	Information is either provided or not
Type of product	The level to which the product provides hedonic or utilitarian benefits to consumers (Batra and Ahtola 1991)	7-item scale consisting of pleasant/unpleasant, nice/awful, agreeable/disagreeable, happy/sad, useful/useless, beneficial/harmful and important/unimportant. Product categories evaluated by 50 participants
Perceived store switching barrier	The degree to which consumers experience a barrier to switch to another store (Liu et al., 2011)	2-item 7-point scale measuring the perceived store switching barrier (1 = disagree strongly; 7 = agree strongly)
Perceived brand switching barrier	The degree to which consumers experience a barrier to switch to another brand (Liu et al., 2011)	2-item 7-point scale measuring the perceived brand switching barrier (1 = disagree strongly; 7 = agree strongly)
Control variables		
Product category liking	The extent to how much the consumer likes the product category (Ng, et al., 2013)	7-point scale measuring category liking (1= dislike extremely; 7 = like extremely)
Age	Age of respondent	Four-point scale (1 = 30 years or younger, 4 = 65 years or older)
Gender	Gender of respondent	Binary variable (0 = male; 1 = female)
Country of residence	Country of residence of respondent	Nominal variable

table 2: Overview and definitions of variables

CHAPTER 4: EXPERIMENTAL RESULTS

4.1 Data collection and transformation

Before conducting the experiment there was a pretest among five respondents followed by an interview. The pretest showed that the questionnaire was working correctly but that the attention checks were too stringent. During the interviews a majority of participants indicated that especially the question regarding the distance to the store was difficult to answer correctly. Consequently, it was decided that participants who would answer this question wrong, would still be included in the sample.

As discussed in the previous chapter, 360 participants are needed for the experiment. A total of 531 responses were collected via Amazon Mechanical Turk, of which 136 responses were filtered out due to failed attention checks. This resulted in a total of 395 participants in the final sample. After collecting the data, qualitative responses were coded into numerical variables to enable analyses. All values assessing the hedonic and utilitarian value of either chocolate or toilet paper were inverted so that a high value would mean that a product scores high on that dimension. The hedonic and utilitarian value for a product was then calculated by using the same method as in the pretest.

Before computing the perceived barriers, a reliability analysis for both variables was conducted. Cronbach Alpha for the perceived store switching barrier and the perceived brand switching barrier were .54 and .61, respectively. This is lower than the Cronbach Alpha of .77 from the original scale (Liu et al., 2011). According to Sekaran & Bougie (2006), acceptable values should be at least higher than .60, therefore the Cronbach Alpha values indicate that the scales are not reliable. Still, the items were used for the analysis to compute the perceived barriers since they were the only items that were measured in the questionnaire.

A Pearson product-moment correlation coefficient was computed to assess the relationship between the dependent variables in the experiment. Store and brand switching have a weak significant negative correlation, $r(395) = -.161$, $p < .01$. When store switching intentions increase, brand switching intentions decrease. This means that the dependent variables are related to each other but they do not measure exactly the same, hence the weak correlation. This demonstrates the reason why both store and brand switching intentions are measured for this research.

4.2 Manipulation check

In the experiment there are 4 different conditions. One difference between the conditions is if the participant would go to the store to buy a hedonic (chocolate) or a utilitarian (toilet paper) product. To see if the products that were used caused the right manipulation a manipulation check is conducted. Here it is checked if perception of the product is significantly different between groups. There is no manipulation check for information availability because there was no measurement used to check if the participant understood the message. Instead, elaborate attention checks were used to filter out inattentive participants. In this way, it was checked if participants understood the whole questionnaire instead of merely checking the information availability manipulation.

To measure the product perception, the same scale is used as in the pre-test (Batra & Ahtola, 1991). Before the hedonic and the utilitarian score are computed, a scale reliability analysis is conducted. For the hedonic scale the Cronbach Alpha is .907. Since none of the Cronbach Alpha if Item Deleted is higher than .907 concluding that the scale is reliable. For the utilitarian scale the Cronbach Alpha is .861. Again, none of the Cronbach Alpha if Item Deleted is higher than the original Cronbach Alpha value. This means that also the utilitarian scale is deemed reliable. To see all the Cronbach Alpha if Item Deleted values, please see appendix J.

The means and the standard deviations for both groups can be found in table 3 below. The means are all above 5, which is higher than in the pre-test. Reason for this could be that the hedonic and the utilitarian scores were only measured for chocolate and toilet paper. During the pre-test, participants had to rate 8 product categories which might have influenced the anchor point.

To see if the hedonic and utilitarian values differ significantly, a paired samples t-test is conducted. This test shows that the utilitarian scores are significantly higher than the hedonic scores for the Toilet Paper Group $Mdiff = -.43$, $t(198) = -6.59$, $p < .001$. It also shows that the hedonic scores are significantly higher than the utilitarian scores for the Chocolate group $Mdiff = .51$, $t(195) = 7.34$, $p < .001$. Thus, the groups differ in how they perceive the product, meaning that the manipulation worked.

		Mean	**N**	**SD**
Utilitarian/Toilet Paper Group	Hedonic	5.07	199	1.22
	Utilitarian	5.50	199	1.36
Hedonic/Chocolate Group	Hedonic	5.60	196	1.31
	Utilitarian	5.09	196	1.38

table 3: Means and standard deviations for hedonic and utilitarian groups

4.3 Randomization check

To see if all participants were randomized over the four different conditions, a randomization check is conducted. Such a randomization check sees if the four different groups do not differ significantly. To see if the groups differ, four different variables are investigated: gender, liking of chocolate, liking of toilet paper and age. Since it is expected that there will be no significant difference for all four groups, the Bonferroni correction is used. The Alpha Corrected becomes 0.05/4 = 0.0125.

Since gender is a binary variable, a Chi-Square test is performed. The two assumptions of the Chi-Square test are met; 0 cells have expected count less than 5 and the minimum expected

count is 31.51. The Chi-Square test shows that groups did not differ by gender, $\chi^2(3, N = 395) = 0.79$, $p = .852$.

For the other three variables the Levene Test for Equality of Variances can be used. The assumption of Homogeneity of Variances is violated for liking of chocolate, $F(3,391) = 3.25$, $p = .022$. Therefor the Welch Test is performed instead of the ANOVA. The Welch test is not significant *Welch's* $F(3,215.26) = .08$, $p = .972$. So there are no significant differences between the groups for liking of chocolate. The assumption of Homogeneity of Variances is also violated for liking of toilet paper, $F(3,391) = 4.78$, $p = .003$. Therefor the Welch Test is again performed instead of the ANOVA, *Welch's* $F(3,214.42) = 2.72$, $p = .045$. Since the Alpha Corrected is 0.0125 there is also no significant difference between the groups for liking of toilet paper.

The assumption of Homogeneity of Variances is not violated for age, $F(3,391) = .37$, $p = .774$. So this time the ANOVA is used, $F(3,391) = .42$, $p = .741$. From the ANOVA it can be concluded that there are also no significant differences between the groups in terms of age.

According to the four variables that were used, all four groups were equal and thus randomized. Please see appendix K for a table containing the descriptive statistics for liking of chocolate, liking of toilet paper, age and gender

4.4 Analysis

4.4.1 Descriptive statistics

A table with all the descriptive statistics for store switching intentions, brand switching intentions, perceived store switching barrier and perceived brand switching barrier can be found in appendix L. As can be seen in the two figures below, the means differ between each condition for the store and brand switching intentions. Store switching intentions are higher for hedonic products ($M = 4.29$, $SD = 1.97$) than for utilitarian products ($M = 3.86$, $SD = 1.93$) when no information is provided. When information is provided, the store switching intentions increase for both hedonic and utilitarian products. On the contrary when no information is provided, brand switching intentions are higher for utilitarian products ($M = 5.29$, $SD = 1.66$) than for hedonic products ($M = 4.74$, $SD = 1.85$). The brand switching intentions decreases for both hedonic and utilitarian products when information is provided. Next, a 2x2 between-subjects ANOVA analysis is used to test if there is a significant interaction between information availability and type of product.

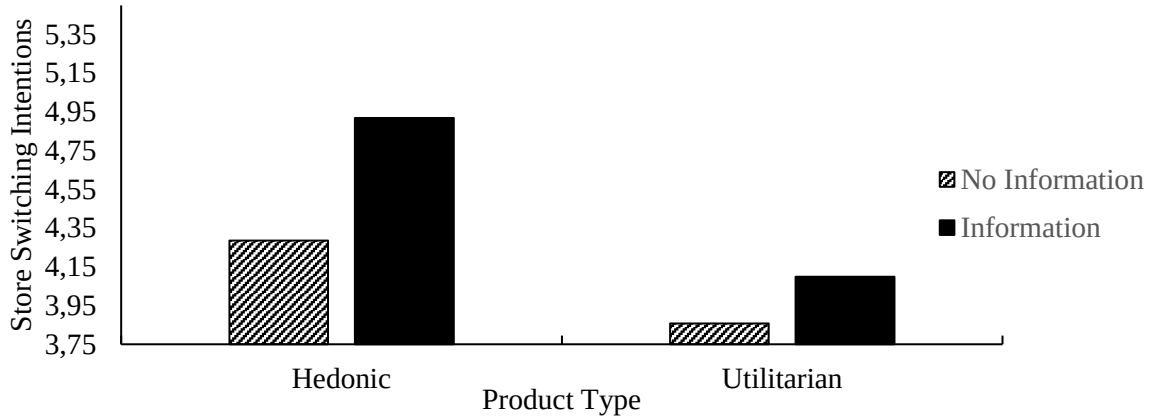


figure 6: Means for store switching intentions per condition

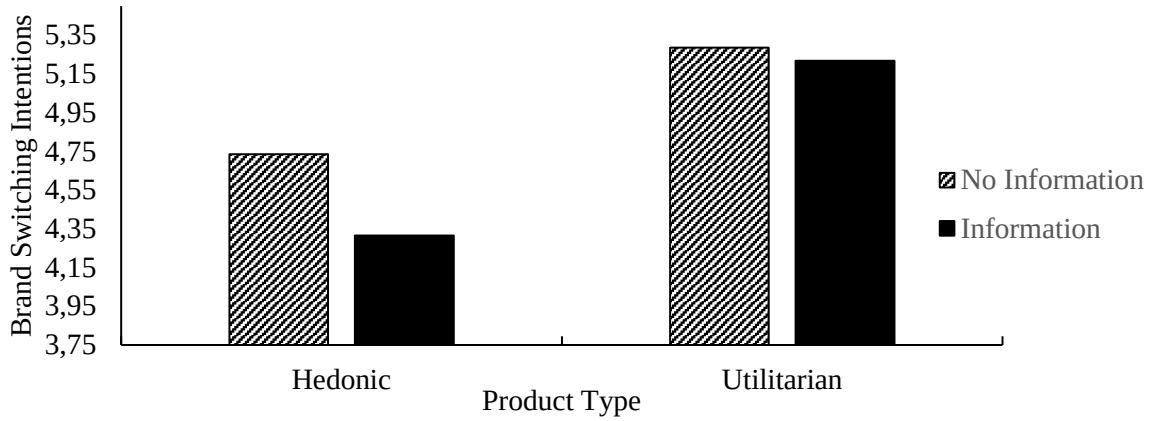


figure 7: Means for brand switching intentions per condition

4.4.2 ANOVA

4.4.2.1 Store Switching Intentions

A between-subjects ANOVA reveals no significant interaction between information availability and type of product $F(1,391) = 1.05$, $p = .306$. These results are inconsistent with hypothesis H_{2a}, meaning that the null hypothesis cannot be rejected. A main effect of information availability is observed, $F(1,391) = 5.27$, $p = .022$, $d = .23$, where overall, store switching intentions were higher for when information was provided ($M = 4.51$, $SE = .13$) than when information was not provided ($M = 4.07$, $SE = .16$). Confirming hypothesis H_{1a}, thus the null hypothesis can be rejected. Furthermore, a main effect of product type is observed, $F(1,391) = 10.73$, $p = .001$, $d = .33$, where overall, store switching intentions were higher for hedonic products ($M = 4.60$, $SE = .14$) than for utilitarian products ($M = 3.98$, $SE = .13$).

4.4.2.2 Brand Switching Intentions

The between-subjects ANOVA again reveals no significant interaction between information availability and type of product $F(1,391) = .99$, $p = .320$. This means that hypothesis H_{2b} cannot be rejected as well. There is no significant main effect of information availability observed, $F(1,391) = 1.91$, $p = .168$. Consequently, hypothesis H_{1b} cannot be confirmed either. Still, there is a main effect of product type, $F(1,391) = 17.03$, $p < .001$, $d = .42$, where overall, brand switching intentions were lower for hedonic products ($M = 4.53$, $SE = .13$) than for utilitarian products ($M = 5.25$, $SE = .12$)

4.4.3 Mediation and moderation analysis

To determine the effect of information availability, type of product and the effect of the perceived barrier on store and brand switching intentions, a mediation and moderation analysis is used. Next will be the results from this analysis showing all paths, for both store switching and brand switching intentions, as in the statistical diagram depicted in figure 8 below.

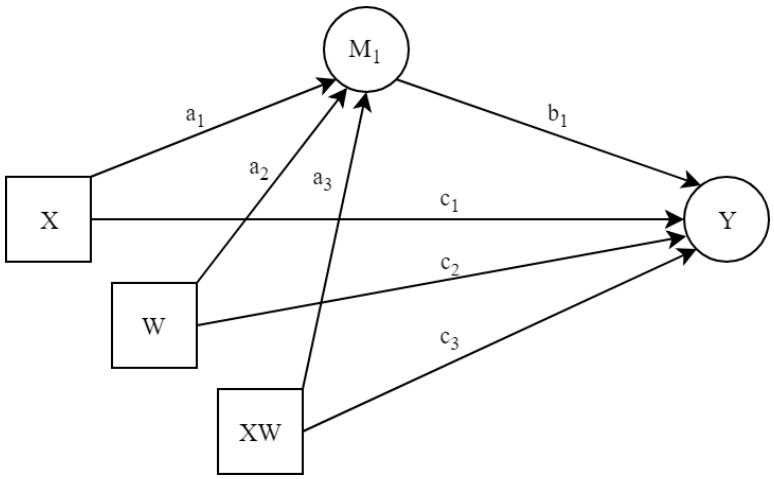


figure 8: Statistical diagram of the conceptual model

4.4.3.1 Store Switching Intentions

Table 4 shows the results from the mediation and moderation analysis for the store switching intentions. For this analysis the bootstrapping method was used to determine if there was a mediating effect. Since the confidence interval for the indirect effect includes zero ($LLCI = -.12$, $ULCI = .11$), it can be concluded that there is no mediating effect of perceived store switching barrier on store switching intentions. This means that the null hypothesis for hypothesis H_{3a} cannot be rejected.

Also, there are no moderated effects in this model since the a3 path (Information Availability x Type of Product) and the c3 path (Information Availability x Type of Product) are both not

significant (p = .371 and p = .3.92 respectively). Consequently, there is no support for hypothesis H_{4a}. The coefficient of determination (R^2) is very low for both models, meaning that the independent variables poorly predict the variance of the dependent variable.

Path b1 (Perceived Store Switching Barrier on Store Switching Intentions), c1 (Information Availability on Store Switching Intentions) and c2 (Type of Product on Store Switching Intentions) are significant, meaning that the three variables have a direct effect on the dependent variable. This is line with the results from the ANOVA analysis from before. Information availability has a significant positive effect on store switching intentions (β = .48, p < .001). Thus, if information is provided regarding the availability of the product at another retailer, store switching intentions increase. Store switching is significantly higher for hedonic products than for utilitarian products (β = .64, p = .001). And the perceived store switching barrier has a significant positive effect on store switching intentions (β = .28, p < .001)

Relationships			**Path**	**B**	**SE**	***p***	**95% CI**	
					Model 1			
Information Availability	to	Perceived Store Switching Barrier	a1	-.142	.129	.272	-.397	.112
Type of Product	to	Perceived Store Switching Barrier	a2	-.042	.130	.749	-.296	.213
Information Availability x Type of Product	to	Perceived Store Switching Barrier	a3	.232	.259	.371	-.277	.741
Model Summary								
Total R^2	**.005**							
p	**.487**							
F	**.814**							
					Model 2			
Perceived Store Switching Barrier	to	Store Switching Intentions	b1	.284	.440	.000	2.004	3.734
Information Availability	to	Store Switching Intentions	c1	.476	.187	.001	.117	.450
Type of Product	to	Store Switching Intentions	c2	.637	.189	.001	.266	1.008
Information Availability x Type of Product	to	Store Switching Intentions	c3	.325	.379	.392	-.420	1.070
Model Summary								
Total R^2	**.077**							
p	**.000**							
F	**7.761**							

table 4: Analysis for Store Switching Intentions

4.4.3.2 Brand Switching Intentions

Table 5 shows the results from the mediation and moderation analysis for the brand switching intentions. For this analysis the bootstrapping method was again used to see if there was a mediating effect. Again, the confidence interval for the indirect effect includes zero (*LLCI* = -.03, *ULCI* = .06), meaning that there is also no mediating effect of perceived brand switching barrier on brand switching intentions. Therefore, hypothesis H_{3b} is not supported.

There is also no moderation in this model since the a3 path (Information Availability x Type of Product) and the c3 path (Information Availability x Type of Product) are insignificant (p = .07 and p = .30 respectively). As a result of this, the null hypothesis for H_{4b}. cannot be rejected. The coefficient of determination (R^2) for both models is low, meaning that the independent variables poorly predict the variance of the dependent variable.

For the brand switching intentions there is only one path that is significant, the c2 path (Type of Product on Brand Switching Intentions). This means that only the type of product has an effect on brand switching intentions, intentions are lower for hedonic products compared to utilitarian products (β = -.73, p < .001). There is no significant effect of providing information on brand switching intentions found (β = -.24, p = .175). There is also no significant effect for perceived brand switching barrier on brand switching intentions (β = .29, p = .679).

Relationships			**Path**	**B**	**SE**	***p***	**95% CI**	
					Model 1			
Information Availability	to	Perceived Brand Switching Barrier	a1	-.033	.144	.820	-.316	.251
Type of Product	to	Perceived Brand Switching Barrier	a2	.135	.144	.350	-.149	.418
Information Availability x Type of Product	to	Perceived Brand Switching Barrier	a3	.521	.288	.071	-.046	1.088
Model Summary								
Total R^2	**.011**							
p	**.270**							
F	**1.311**							
					Model 2			
Perceived Brand Switching Barrier	to	Brand Switching Intentions	b1	.029	.069	.679	-.107	.165
Information Availability	to	Brand Switching Intentions	c1	-.241	.177	.175	-.590	.108
Type of Product	to	Brand Switching Intentions	c2	-.732	.178	.000	-1.082	-.381
Information Availability x Type of Product	to	Brand Switching Intentions	c3	-.365	.355	.304	-1.064	.333
Model Summary								
Total R^2	**.049**							
p	**.001**							
F	**4.715**							

table 5: Analysis for Brand Switching Intentions

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Discussion

The goal of this research was to look at the influences of information availability and product type on consumer behavior during conflict delisting and the interactions between those variables. To find these effects and interactions, three research questions were formulated.

The first research question of this research was; how does information availability influence store switching intentions and brand switching intentions during a conflict delisting? It was hypothesized that when information is provided, store and brand switching intentions will be different than when there is no information provided. From the analysis it follows that information availability indeed has a significant positive effect on store switching intentions (*d* = .23, which is a small effect size according to Cohen (1992)), but no significant effect of providing information on brand switching intentions is found. Reason for this could be that

customers now knew what was going on in the condition where information was provided. As the balance theory would suggest, participants who were aware of the imbalanced state would try to create a balanced state to avoid cognitive dissonance.

These results add a new insight on how consumer behavior can be influenced during a conflict delisting. In the example of the conflict between Albert Heijn and Johma, Johma provided information to customers regarding the availability of their product. At that moment, many people went to visit the other retailer to buy the Johma brand. As the results now show, providing information on product availability significantly increases the intention to go to another store. This means that manufacturers now have a way to repulse themselves by providing information during a conflict delisting

The second research question was aimed to identify a possible moderation effect between product type and information availability. The research question was; does product type (hedonic or utilitarian) moderate the effect of information availability on store switching intentions and brand switching intentions during a conflict delisting? The hypothesis for this research questions was that when information is provided, store switching intentions will be higher for hedonic products than for utilitarian products. The hypothesis for brand switching intentions was that when information is provided, brand switching intentions would be lower for hedonic product than for utilitarian products. The experiment, however, did not show any significant interaction effects, meaning that both hypotheses do not hold and that there is no moderation effect for both store and brand switching intentions. This could be because even though customers tend to bond more towards hedonic products, it does not necessarily mean that this would amplify the effect of information availability.

Sloot & Verhoef (2008) found that for hedonic products, store switching intentions are higher than for utilitarian products. They also found that for hedonic products, brand switching intentions are lower than for utilitarian products. The results of this experiment support the findings by Sloot & Verhoef (2008). The product type has a significant effect on store switching intentions with an effect size of d = .33, which is a small effect (Cohen, 1992). For brand switching intentions, this research shows an effect size of d = .42, which is a medium effect (Cohen, 1992). This confirms the notions in the literature, Dhar & Wertenbroch (2000) demonstrate that customers tend to bond more to hedonic product. Furthermore, Fitzimons (2000) shows that dissatisfaction is larger when a hedonic product is not available compared to a utilitarian product.

The third and last research question had the goal of identifying the underlying mechanism that drives the effect of information availability on store switching intentions and brand

switching intentions. The hypotheses was that the perceived store switching barrier and the perceived brand switching barrier would mediate the effect of information availability on switching intentions. Several authors argue that when switching barriers are high, customers are more likely to stay with the same service provider to avoid potential costs and losses, even if the customers are not satisfied (Jones et al., 2000; Lee et al., 2001; Liu, et al., 2005). However, the analysis shows no significant mediation for both store and brand switching intentions. Therefore it can be concluded that the perceived switching barrier is not the underlying construct that drives switching intentions. There could be other potential mediators such as who the customer believes is there to blame for the conflict or how the customer feels about towards the retailer/manufacturer. Such emotions might cause a negative impact on how customers try to achieve a balanced state in terms of the balance theory.

Still, there is a direct effect of perceived store switching barrier on store switching intentions ($\beta = .28$, $p < .001$). This means that the perceived store switching barrier does significantly influence store switching intentions but the switching barrier is not significantly affected by information availability. Consequently, it is not known what the underlying mechanism is that drives the effect of information availability on switching intentions.

In summation, there were no moderations or mediations found in the experiment. There were only variables that had a direct effect on the dependent variable. Information availability, type of product and perceived store switching barrier all significantly affect the store switching intentions. In case of the brand switching intentions there is only one variable that has significant influence; type of product.

5.2 Theoretical and managerial implications

The outcomes of this study have several theoretical and managerial implications. First, this research adds understanding of the effect of providing information on switching intentions. In prior literature it was never mentioned to customer why a product was delisted and customers would have to make assumptions (Sloot et al., 2005). Now we know that providing information will have a significant positive effect on store switching intentions. Meaning that when information is provided, customers indicate that they will have higher intentions to go to another store. This was something that, prior to this research, was not looked into. Until recently it was difficult for a manufacturer to connect with customers directly, making a research such as this inapplicable. Now, because of smartphones, it is possible to provide your customers with information on the availability of items at any given time and place. Further research can use these insights to build on and continue the literature on information

availability. Second, there was only research that looked at switching barriers in relation with service providers (Jones et al., 2000; Lee et al., 2001; Liu, et al., 2005). This research adds to this literature stream that switching barriers also have a significant effect on store switching intentions. The experiment shows that when store switching barriers increase, there is a positive effect on switching intentions. This is something that was never looked at in existing research. Third, this research supports the findings in previous research regarding the effect of type of product on switching intentions (Sloot & Verhoef, 2008). Finally, this research proves that there is no moderating or mediating effect between information availability, type of product and switching intentions.

This research also has some implications for managers. First of all, it is now clear that manufacturers can use information to influence store switching behavior. Providing information in the experiment causes store switching intentions to increase quite strongly ($\beta = .48$). Meaning that managers of manufacturing companies are able to strongly influence store switching intentions by just showing the customer that the product is still available elsewhere. Second, since there was no interaction effect between type of product and information availability, manufacturers of all sorts of products can use information availability to influence switching intentions. Third, both retailers and manufacturers now know that for utilitarian products, store switching intentions are significantly lower than for hedonic products. This means that if there is a conflict between a retailer and a manufacturer that produces a utilitarian product, the manufacturer is more reliable on the retailer than when the manufacturer would produce a more hedonic product.

5.3 Limitations and further research

A major limitation of this research is that the results are based on hypothetical situations, which could lower the external validity. Consequently it is advised that additional research should look into actual brand delistings even though the amount of data for conflict delistings is limited.

Another important limitation is that a single-item scale is used to measure the dependent variables. In general, marketing researchers prefer multiple-item scales (Churchill 1979). Still, it was decided to use a single item scale for this experiment because using a multi-item scale to measure store and brand switching intentions would not be necessarily better (Bergkvist & Rossiter, 2007). Further research should try to define an appropriate scale to measure switching intentions.

A third limitation of this research is that the scale for perceived switching barriers showed very low Cronbach Alpha values. This indicates that the scale that was used was not accurate and did not fully measure the perceived switching barrier. This could be of influence on the final results of the experiment since a better scale might show a significant mediation. Therefore, the bad reliability of the scale does not allow us to claim with absolute certainty that there is no mediation through perceived switching barrier.

A fourth limitation is that in this research people read the message regarding product availability when they are in-store. This assumes that customers would search proactively for information on the internet when their product is not available in the store. In practice, it is far more likely that most customers would not go online to find this information in the first place. This is why it would be interesting to see what happens when manufacturers would push the message towards their customers by means of for example advertisements. Although such an effort will be more costly, it could have a bigger impact on store switching intentions.

A final limitation is that this research did not take into account the basket size. Further research should look at how basket size could possibly influence the intentions to switch to another store. A customer with an empty basket is probably more likely to switch stores than a customer who has a full basket due to sunk costs. This would provide manufacturers and retailers with useful insights on how the basket size would influence behavior.

For this experiment the distance to another store was computed by taking the average distance to another store in three cities in the Netherlands. Further research could try to see if people show different switching intentions for different distances. This would show, especially retailers, the risk of people switching stores for a broad range of distances.

Finally, further research could look into other potential mediators. Current research does not look into who customers feel that there is to blame and if the customer has any negative feelings toward the retailer or the manufacturer. Research into this area could help explain what drives switching intentions and would provide new insights in the field of product unavailability.

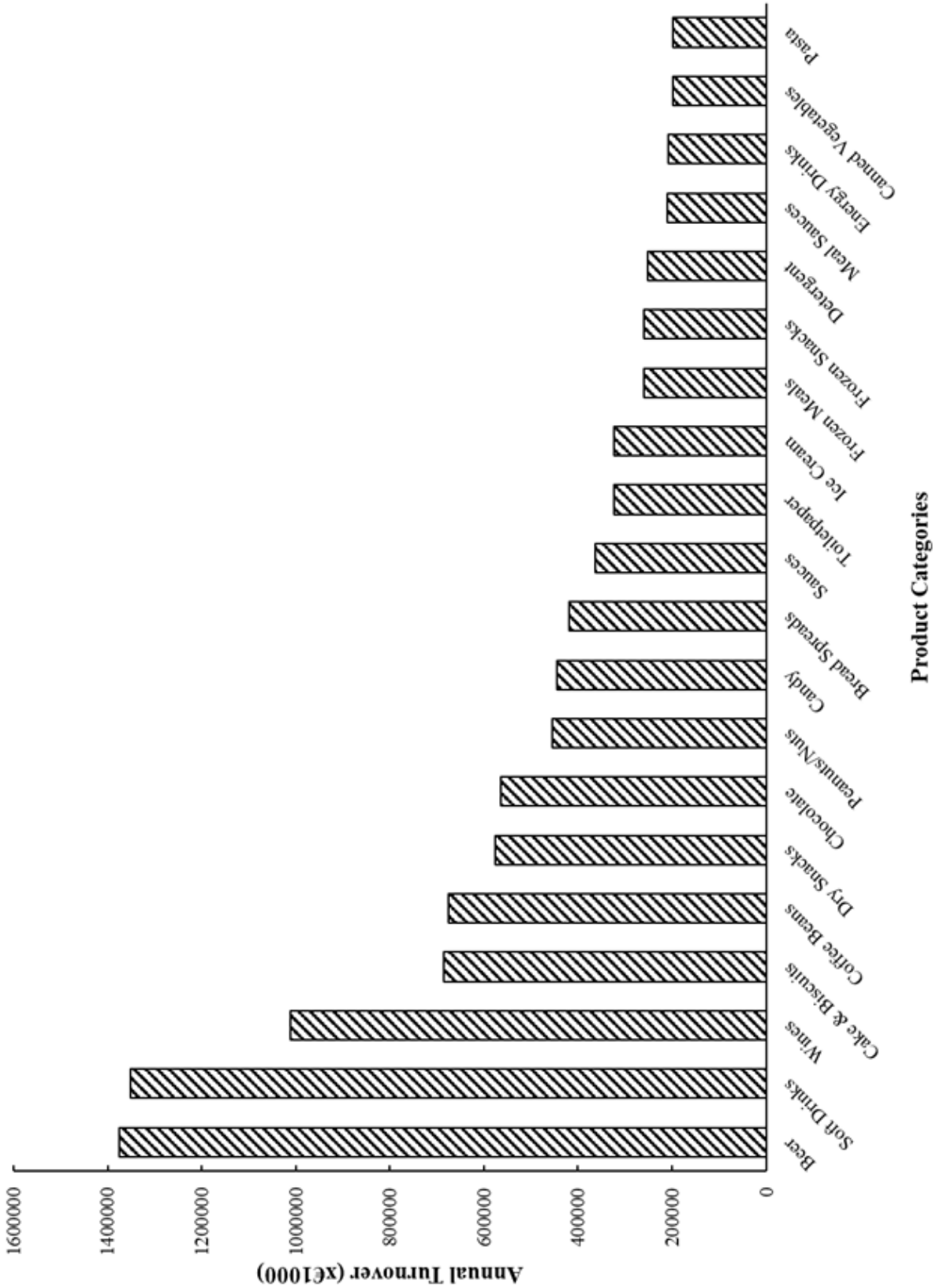
APPENDICES

Appendix A: Statement by Johma on the unavailability of their product

English translation:

Unfortunately our products are currently not available at Albert Heijn. We try our best to solve this problem together with Albert Heijn. We believe that this will be sooner rather than later. You can still buy our products at other retailers. Best, Johma

Appendix B: Highest performing categories in the Netherlands (MAT week 32 2018)



Appendix C: Pretest questionnaire

Introduction

Dear participant,

I am a university student looking into the perceptions of several product categories for academic research. You will find 8 different categories for you to evaluate. Please answer all the questions in an honest way.

The responses to the survey are completely anonymous and the survey should not take you more than 3 minutes.

Thank you for your time.

Category perceptions

Please indicate how you feel about <CATEGORY>.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Pleasant	o	o	o	o	o	o	o	Unpleasant
Nice	o	o	o	o	o	o	o	Awful
Agreeable	o	o	o	o	o	o	o	Disagreeable
Happy	o	o	o	o	o	o	o	Sad
Useful	o	o	o	o	o	o	o	Useless
Beneficial	o	o	o	o	o	o	o	Harmful
Important	o	o	o	o	o	o	o	Unimportant

Attention check

Check Make sure to select "Purple" at the following question: "What color is the sky?" so that I know you are paying attention. If you do not answer purple you are disqualified.

What color is the sky?

- o Green (1)
- o Blue (2)
- o Purple (3)

Demographics

1. What is your sex?

- o Male (1)
- o Female (2)

2. What is your age?

_____

3. In which country do you currently reside?

▼ Afghanistan (1) ... Zimbabwe (1357)

Appendix D: Average hedonic and utilitarian values for 20 product categories

Product Category	Frequency	Average Hedonic Value	Average Utilitarian Value
Beer	20	3.23	2.95
Soft Drinks	19	3.33	3.33
Wines	17	3.59	3.39
Cake	20	3.96	3.50
Coffee Beans	21	3.68	3.62
Dry Snacks	22	3.80	3.61
Chocolate	20	4.26	3.57
Peanuts/Nuts	20	3.69	3.83
Candy	20	3.66	3.22
Bread Spreads	20	3.43	3.67
Sauces	24	3.88	3.86
Toilet paper	18	3.54	4.07
Ice Cream	22	4.13	3.65
Frozen Meals	18	3.61	3.87
Frozen Snacks	19	3.18	2.96
Detergent	21	3.36	3.73
Meal Sauces	22	3.44	3.30
Energy Drinks	19	3.62	3.42
Canned Vegetables	22	3.82	3.79
Dried Pasta	16	3.64	3.69

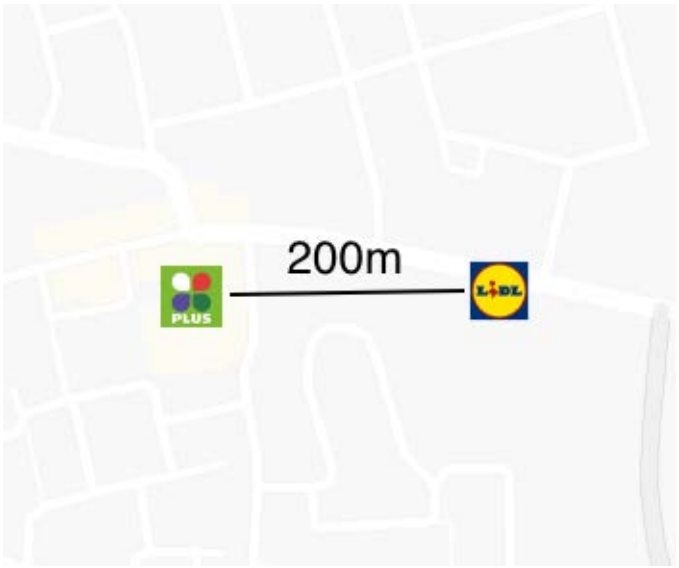
Appendix E: Retailer mapping of Staphorst, Rucphen and Veenendaal

Staphorst

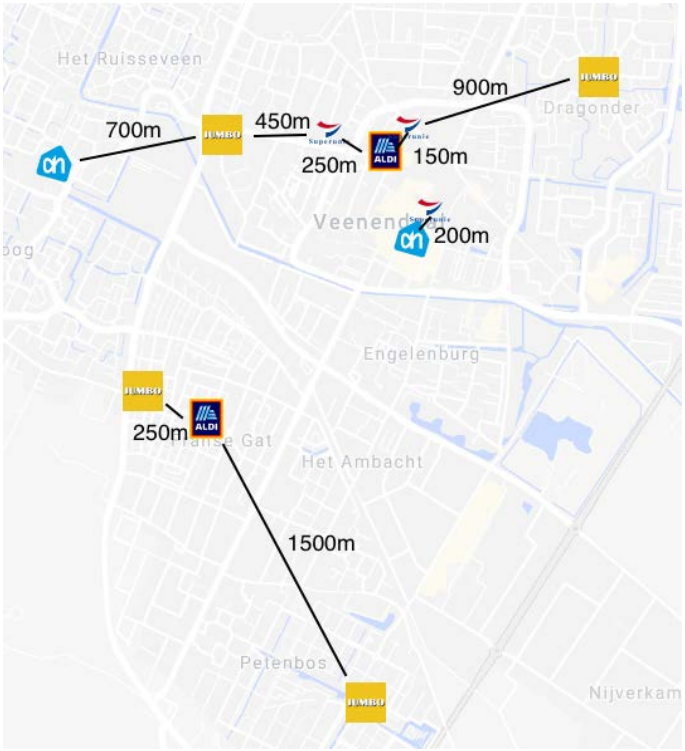
Superunie North: Boni

Superunie South: Poiesz

Rucphen



Veenendaal



Superunie West: Hoogvliet

Superunie North: Boni

Superunie South: Hoogvliet

Appendix F: Overview of distance to the closest competing retailer

Retailer A	Closest Retailer B	Distance (m)
Staphorst	**Staphorst**	
Aldi	Superunie North: Boni	150
Lidl	Superunie North: Boni	450
Superunie North: Boni	Aldi	150
Superunie South: Poiesz	Superunie North: Boni	200
Rucphen	**Rucphen**	
Lidl	Plus	200
Plus	Lidl	200
Veenendaal	**Veenendaal**	
Albert Heijn Centrum	Superunie South: Hoogvliet	200
Albert Heijn Hondzenelleboog	Jumbo Centrum	700
Aldi Centrum	Superunie North: Boni	150
Aldi Franse Gat	Jumbo Fransegat	250
Jumbo Centrum	Superunie West: Hoogvliet	450
Jumbo Dragonder	Superunie North: Boni	900
Jumbo Fransegat	Aldi Franse Gat	250
Jumbo Petenbos	Aldi Franse Gat	1500
Superunie North: Boni	Aldi Centrum	150
Superunie South: Hoogvliet	Albert Heijn Centrum	200
Superunie West: Hoogvliet	Aldi Centrum	250
Average		**374**

Appendix G: Pretest for the statement

Introduction

Dear participant,

Thank you for helping me by completing this survey. This survey will not take you a lot of time and will be of great value for my thesis.

Next, I will show you a statement. Please read the statement and write down in your own words what the statement is about. The statement is in English but you can answer in Dutch or English (whatever you feel the most comfortable with).

If you do not understand the statement, please write down "I do not understand".

There is only one statement, afterwards I will ask you a couple of questions regarding age, gender and your first language.

Thank you again.

Statement

You are in a supermarket and your favorite product is not available. You go online to look for information regarding the availability, you find the following statement:

> *Unfortunately our products are currently not available at Retailer A. We try our best to solve this problem together with Retailer A. You can still buy our products at Retailer B.*

Please write down what you think this means:
(If you do not understand the statement, please write down "I do not understand")

_____

Demographics

What is your age?

_____

What is your gender?

_____

What is your first language (NL: Moedertaal)?

_____

Appendix H: Ratings of the explanations

Statement	Age	Gender	First Language	First reviewer score	Second reviewer score	Third reviewer score	Mean
Ivm leveringsproblemen is het produkt tijdelijk niet verkrijgbaar bij retailer A. Bij retailer B is het produkt wel gewoon te koop.	60	Female	Dutch	6	5	6	5.7
The product is out of stock at retailer A but not B so it's probably an issue regarding distribution at the stores of retailer A	21	Female	English	4	5	5	4.7
My prodcut is not available anymore in Retailer A but it is still available at Retailer B	25	Female	Turkish	6	4	6	5.3
It means that one retailer does not currently hold the products from a particular brand, but these products can be obtained at another retailer (which is from another "retailer chain", not the same as retailer A)	23	Male	Italian	6	6	6	6.0
Retailer A for some reason cannot offer the product, so Retailer B is offered as the alternative to the consumer, while the issues with Retailer A are being solved.	23	Male	Spanish	7	7	5	6.3
Choose another store	25	Male	Chinese	3	2	4	3.0
There is probably some disagreement between the company and retailer A. This can be concluded from the fact that the products are still sold via retailer B. The exact reason for the disagreement cannot be derived from this statement.	24	Male	Dutch	5	5	5	5.0
That the product is not available at retailer a and so they recommend that you can buy the product at retailer b	22	Male	Dutch	5	7	5	5.7
This means they are informing clients that the product is available elsewhere and are seeking for solutions with retailer a	24	Male	Dutch	6	4	5	5.0
Dat de producten van een bepaald merk bij retailer a op zijn maar je het merk wel bij retailer b kan kopen	22	Male	Dutch	5	3	6	4.7
The manufacturer doesn't sell currently the product through retailer A so redirect the customers to retailer b	26	Male	Greek	6	6	5	5.7
It means that you accessed the brand's website and you can go to retailer b to shop for the product	24	Male	Dutch	5	5	5	5.0
Products of a certain brand aren't available at retailer A. Both the brand and retail A would like these product to be available a retailer A and they're working to make it happen. The brand suggest that these products can be found st retailer B in the meanwhile	24	Female	Italian	6	6	5	5.7
Total Average							**5.2**

Appendix I: Experiment questionnaire

Introduction

Dear participant,

I am a university student writing my master thesis. I am looking into consumer behavior for different product categories.

Next you will find an introduction and several questions related to this introduction. Then there will be some questions related to your age, gender and country of residence. Finally there will be some attention checks.

Please answer all the questions in an honest way and take your time. The questionnaire will take you approximately 3 minutes.

Captcha

Before you proceed to the survey, please complete the captcha below.

Consent

I check responses carefully in order to make sure that people have read the instructions for the task and responded carefully. I will only accept participants who clearly demonstrate that they have read and understood the survey.

Again, there will be some very simple questions in what follows that test whether you are reading the instructions. If you get these wrong, you will not be eligible for participation.

o I understand (1)

o I do not understand (2)

Introduction per condition

Imagine yourself going to the supermarket to buy your preferred brand of <PRODUCT>. You only need to buy <PRODUCT> but you do need it today. You go the supermarket that you visit most often and where you always buy your preferred brand of <PRODUCT>.

You enter the supermarket and you walk towards the <PRODUCT> aisle. You try to find your preferred brand of <PRODUCT> but all the <PRODUCT> of this brand is gone. There are still other brands available of the same package size and price.
You know that another supermarket is 10 minutes away (walking), but you do not know if they sell your preferred product.

Information if in the information provided condition

You go online to find some information on why your product is unavailable.
Online you find the following statement by the manufacturer of your preferred brand:

Unfortunately our products are currently not available at Retailer A. We try our best to solve this problem together with Retailer A. You can still buy our products at Retailer B.

You are now at Retailer A, you know that Retailer B is another competing retailer located 10 minutes away (walking).

Store Switching Intentions

How likely are you to go to another store?

o Extremely unlikely (1)

o Moderately unlikely (2)

o Slightly unlikely (3)

o Neither likely nor unlikely (4)

o Slightly likely (5)

o Moderately likely (6)

o Extremely likely (7)

Brand Switching Intentions

How likely are you to buy another brand?

o Extremely unlikely (1)

o Moderately unlikely (2)

o Slightly unlikely (3)

o Neither likely nor unlikely (4)

o Slightly likely (5)

o Moderately likely (6)

o Extremely likely (7)

Perceived Store Switching Barrier

	Disagree strongly (1)	Disagree (2)	Disagree slightly (3)	Neither agree nor disagree (4)	Agree slightly (5)	Agree (6)	Agree strongly (7)
Switching to another retailer will cause me to lose time and/or money (1)	o	o	o	o	o	o	o
Switching to another retailer gives me uncertainty (product quality/product availability) (2)	o	o	o	o	o	o	o

Perceived Brand Switching Barrier

	Disagree strongly (1)	Disagree (2)	Disagree slightly (3)	Neither agree nor disagree (4)	Agree slightly (5)	Agree (6)	Agree strongly (7)
Switching to another brand will cause me to lose time and/or money (1)	o	o	o		o	o	o
Switching to another brand gives me uncertainty (product quality/product availability) (2)	o	o	o	o	o	o	o

Manipulation check hedonic/utilitarian

Please indicate how you feel about <CATEGORY>.

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)	
Pleasant	o	o	o	o	o	o	o	Unpleasant
Nice	o	o	o	o	o	o	o	Awful
Agreeable	o	o	o	o	o	o	o	Disagreeable
Happy	o	o	o	o	o	o	o	Sad
Useful	o	o	o	o	o	o	o	Useless
Beneficial	o	o	o	o	o	o	o	Harmful
Important	o	o	o	o	o	o	o	Unimportant

Product category liking

How do you feel about chocolate?

o Dislike extremely (1)

o Dislike moderately (2)

o Dislike slightly (3)

o Neither like nor dislike (4)

o Like slightly (5)

o Like moderately (6)

o Like extremely (7)

Demographics

1. What is your gender?

o Male (0)

o Female (1)

2. What is your age?

o 30 years or younger (1)

o 31-45 years old (2)

o 46-64 years old (3)

o 65 years or older (4)

3. In which country do you currently reside?

▼ Afghanistan (1) ... Zimbabwe (1357)

Attention checks

1. Please indicate which product was unavailable at the supermarket:

▼ Beer (1) ... Dried Pasta (20)

2. Make sure to select "Purple" at the following question: "What color is the sky?" so that I know you are paying attention. If you do not answer purple you are disqualified.

What color is the sky?

o Green (1)

o Blue (2)

o Purple (3)

3. Please indicate how far away the competing supermarket was in minutes.

(Answer with only a number, no decimals eg. 6)

_____

Appendix J: Scale reliability analysis for the hedonic and the utilitarian scale

Item-total statistics	Corrected item-total correlation	Alpha if item deleted
Hedonic Scale		
Hedonic_1	.779	.884
Hedonic_2	.818	.869
Hedonic_3	.760	.890
Hedonic_4	.803	.875
Alpha: .907	N of items = 4	
Utilitarian Scale		
Utilitarian_1	.760	.782
Utilitarian_2	.732	.810
Utilitarian_3	.720	.821
Alpha: .861	N of items = 3	

Appendix K: Descriptive statistics for control variables

		N	Mean	SD	SE	95% CI Lower Bound	95% CI Upper Bound	Min	Max
Liking of chocolate	H - no info	98	5.980	.963	.097	5.787	6.173	3	7
	H - info	98	5.990	1.162	.117	5.757	6.223	2	7
	U - no info	98	5.908	1.451	.147	5.617	6.199	1	7
	U - info	101	5.950	1.211	.121	5.711	6.190	2	7
	Total	395	5.957	1.205	.061	5.838	6.076	1	7
Liking of toilet paper	H - no info	98	4.663	1.656	.167	4.331	4.995	1	7
	H - info	98	4.776	1.672	.169	4.440	5.111	1	7
	U - no info	98	5.204	1.377	.139	4.928	5.480	1	7
	U - info	101	5.069	1.185	.118	4.835	5.303	2	7
	Total	395	4.929	1.495	.075	4.781	5.077	1	7
Age	H - no info	98	1.520	.692	.070	1.382	1.659	1	3
	H - info	98	1.592	.730	.074	1.446	1.738	1	3
	U - no info	98	1.633	.751	.076	1.482	1.783	1	4
	U - info	101	1.594	.695	.069	1.457	1.731	1	4
	Total	395	1.585	.716	.036	1.514	1.656	1	4
Gender	H - no info	98	.306	.463	.047	.213	.399	0	1
	H - info	98	.316	.467	.047	.223	.410	0	1
	U - no info	98	.306	.463	.047	.213	.399	0	1
	U - info	101	.356	.481	.048	.261	.451	0	1
	Total	395	.322	.468	.024	.275	.368	0	1

Appendix L: Descriptive statistics

		N	Mean	SD	SE	95% CI Lower Bound	95% CI Upper Bound	Min	Max
Store Switching Intention	H - no info	98	4.286	1.969	.199	3.891	4.680	1	7
	H - info	98	4.918	1.837	.186	4.550	5.287	1	7
	U - no info	98	3.857	1.932	.195	3.470	4.244	1	7
	U - info	101	4.099	1.830	.182	3.738	4.460	1	7
	Total	395	4.289	1.926	.097	4.098	4.479	1	7
Brand Switching Intention	H - no info	98	4.735	1.853	.187	4.363	5.106	1	7
	H - info	98	4.316	1.919	.194	3.932	4.701	1	7
	U - no info	98	5.286	1.662	.168	4.953	5.619	1	7
	U - info	101	5.218	1.540	.153	4.914	5.522	1	7
	Total	395	4.891	1.786	.090	4.715	5.068	1	7
Perceived Store Switching Barrier	H - no info	98	5.000	1.362	.138	4.727	5.273	1	7
	H - info	98	4.975	1.336	.135	4.707	5.242	1	7
	U - no info	98	5.158	1.137	.115	4.930	5.386	2	7
	U - info	101	4.901	1.271	.126	4.650	5.152	1	7
	Total	395	5.008	1.278	.064	4.881	5.134	1	7
Perceived Brand Switching Barrier	H - no info	98	4.683	1.374	.139	4.408	4.959	1	7
	H - info	98	4.913	1.431	.145	4.627	5.200	1	7
	U - no info	98	4.811	1.367	.138	4.537	5.085	1	7
	U - info	101	4.520	1.525	.152	4.219	4.821	1	7
	Total	395	4.730	1.429	.072	4.589	4.872	1	7

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