

The moderating role of self-confidence on the relationship between deceptive advertisement and consumer purchase intention.

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1. Introduction

Since 2005 the law of the European directive of Unfair Commercial Practises (UCP) has been introduced (The European parliament and the council of the European Union, 2019). This law was created to protect the consumer against deception. The law says that deception, defined as a situation in which an average consumer passes a transaction when they otherwise would not, is forbidden. In Chapter 2, deceptive advertisement will be defined more in depth. In the Netherlands the advertising code committee (RCC) monitors compliance with the directives of the Dutch Advertising Code (NRC) (Stichting reclame code, 2020). This code is based on the UCP, but it is not mandatory for companies to comply with. The RCC can let consumers know that companies are acting against the NRC, but cannot forbid the companies to continue with their advertisements. Only the law of UCP is mandatory for companies. To judge if an advertisement is deceiving, it will be tested against the opinion/behavior of the average customer. The customers will be asked if they perceive the advertisement as deceptive or not. The average customer is considered as someone who is reasonably informed, cautious and attentive. Also, although normally the customer is inattentive, the customer would be considered as being attentive when asked to provide an opinion (Vaal, 2013).

The advertisements of supermarkets in the Netherlands frequently can be seen as deceptive. According to Mason & Wilkinson (1978) 48% of advertisements, which promote price discounts, used the original price at which they normally sell against the advertised price. Even today supermarkets still use deception. An example of deceptive advertisement is one of Albert Heijn (the grocery store with the biggest market share in 2019 in the Netherlands). In the flyer of Albert Heijn, 11–17 January 2021, a red pepper was listed as discounted in price. The discounted price of the red pepper was exactly the same as when the red pepper had no discount (Albert Heijn, 2021). Therefore the customers got the idea that they made a good deal buying the red pepper, while in reality they did not get any discount.

Supermarkets, unlike the new law that was introduced in 2005, are still using deceptive advertisements. This is because, (1) their advertisements are not seen as a violation of the rules of the UCP, and (2) customers still fall for it. Even though most people will report that they will not fall for deceptive advertisements, literature tells us otherwise. Customers love a good deal. So when they assume they will get a good deal they will buy the product (Traa, 2019). Not only customers with low income are sensitive to discounts. Research shows that higher

educated customers are even more likely to buy products that seem to be discounted (Teunter, 2002). Besides, the attractive displays in the supermarket will let customers buy the product, even when they did not intend to (Traa, 2019). Another remarkable characteristic of customers who buy discounted products, is that 80% of them are loyal customers. Presumably, they would have bought the product even when it was not discounted (Levine, 1989).

One reason why consumers react differently to advertisements is explained in so-called consumer self-confidence theory. This theory is based on the principle that consumers vary regarding their level of self-esteem. According to Bearden et al. (2001) consumers with low consumer self-confidence may avoid absorbing the ad's information or may be less motivated to process the ads than customers with high consumer self-confidence.

According to Traa (2019) one third of the shoppers in supermarkets are not even paying attention to discounts. This means that they will buy products no matter if they are discounted or not, which results in supermarkets giving discounts "away" and getting nothing in return. So why do supermarkets use so many discounts? The branch of supermarkets is a highly competitive one. All supermarkets use many discounts (Redman, 2018). If a supermarket is the first to quit the advertisements, they are not able to compete anymore. Customers are not loyal and will easily switch to other supermarkets (Traa, 2019). To keep up with the competition supermarkets need advertisements, but they want to make them as efficient as possible. Therefore it is interesting to know what type of consumers will react more easily to which type of discount. This research aims to do exactly that.

This research will look at different characteristics of supermarket consumers, to see if there are any differences in purchase intention after seeing deceptive advertisements. It is important for supermarkets that they can make the best out of each discount. On average one-fifth of the revenue comes from discounted products. But according to Van Heerde (2005) only the discounts on new and seasonal products (like sunscreen) are effective. Supermarkets have a hard time to keep up with the competition and need to attract customers to their stores with different types of discounts. If a supermarket can target the advertisement to the right group and make the advertisement more efficient, the supermarket has an advantage on the competition (Beales, 2010). Besides, according to Traa (2019) not only supermarkets suffer from the discount war, but also the consumers. Most of the time, the consumers spend even more money in the supermarkets than without the discounts. Besides, the discounts provide a decrease in quality of the products. Economists believe that discounts decrease the price level of the products, which in turn decreases the profits of the manufacturers and the supermarkets. In reaction to this, they need to produce and sell cheaper, at the expense of the quality of the

products (Traa, 2019). When supermarkets can make their discounts more efficient, consumers, manufacturers and supermarkets will benefit all.

The aim of this research is to see if consumers with a high or low self-confidence react differently to deceptive advertisements. The effect will be measured on the customer's purchase intention. If the deceptive advertisement leads to purchase intention of that particular customer, then the advertisement will be seen as effective. An advertisement mainly drives customers to purchase their advertised product. Therefore the problem statement of this research will be as follows:

To what extent does the level of consumer self-confidence moderate the effect of deceptive advertisement on the customers purchase intention?

A lot of research on advertisements has already been done. Self-confidence theory is also a popular topic in academic literature. Especially in combination with customer behavior (Chelminski & Coulter, 2007; Jürgenson & Guesalaga, 2018; Mossman & Ziller, 1968; Utkarsh, Sangwam & Agarwal, 2018). However, the combination of self-confidence theory and advertisement, and in particular deceptive advertisement, has not yet been investigated. Besides, research has mainly focused on differences in the advertisement rather than on differences in the behavior of the consumer (Moore & Hutchinson, 1983; Van Raaij, 2015). Bearden et al (2001) advised for further research to look at the moderating effect of consumer confidence. Since the focus of this research is the moderating effect of self-confidence on the relation between deceptive advertising and customers purchase intention this research will contribute to the academic literature.

This research starts with a theoretical background of deceptive advertising and consumer self-confidence theory. Next, a conceptual framework of the research is composed. Chapter 3 discusses the method of the research. An analysis of the results of the research can be found in Chapter 4. A discussion and conclusion of the results will follow in Chapter 5. Lastly, the practical implications, reflection and recommendation of the research are given in Chapter 6.

2. Theoretical background

In this chapter a conceptual model of the research is constructed. This conceptual model is based on the definition of deceptive advertisement, self-confidence theory and the relation between both concepts. First the concept of deceptive advertisement is explained based on existing literature. Next, self-confidence theory will be explained. This chapter ends with a conceptual model of the research.

2.1 Deceptive advertisement

According to the UCP, an advertisement is seen as deceptive when the average consumer passes a transaction when they otherwise would not. So if a customer sees an advertisement and based on this advertisement buys the product, while without the advertisement the customer would not have bought the product, the advertisement is labeled deceptive (Vaal, 2013). Hall and Poirier (2001) define deception as inducing a false belief in another person. It is communication from the company that is not truthful without technically telling a lie. An example of this is the advertisement of the red pepper mentioned in the introduction section. In the flyer the red pepper was displayed (implicitly, by showing a price reduction) as one of the products that was on discount that week, but nowhere on the pages was explicitly stated that the red pepper was on discount. This made consumers believe that the red pepper was discounted, while this was not explicitly said in the flyer. This false-belief definition is also supported by Olson and Dover (1978). They say that deceptive advertisements happen when consumers falsely believe the advertisement. In comparison to many other definitions of deceptive advertisement, Olson and Dover (1978) say that deceptive advertisement can already occur after seeing an advertisement. The intention of buying the advertised product does not matter according to them. In comparison with Hall and Poirier (2001), and Olson and Dover (1978) a lot of the literature about deceptive advertising focuses on the later stages of the customer journey. Aaker (1974), Dillon (1973), and Dyer and Kuehl (1974) all define deceptive advertisement as the difference between the communicated advertisement and the reality. According to those studies deception exists when the communication expressions differ from the perceived reality of the consumer. Armstrong, Kendall and Russ (1975) expanded the definition of deceptive advertisement and concluded that deceptive advertisement exists when the following three factors are included. Deceptive advertisement occurs when 1) the consumer perceives or sees the advertisement, 2) the consumer must believe the content of the advertisement, and 3) the advertisement must be salient or impact the consumer's buying

behavior. This definition was also supported by Shimp and Preston (1981), and Gardner (1975) agreed that it is about the perception of the advertisement of the consumer. It does not matter if the content is true or not, it is about what the consumer perceived. However, there are many different definitions of deceptive advertisement. Some definitions include an aspect of false believe, while others leave this out of their definition. This research focuses on deceptive advertisements with a false belief of the consumer.

Serota (2019) made an overview of the different kinds of deceptive advertisement. A distinction was made between how the sender intended the message (either intended to be deceptive or intended not to be deceptive). The next step was how the consumer received the advertisement. The consumer can judge the advertisement as either deceptive or truthful. Linking the point of view of the sender and the consumer, consumers can be either accurate or not accurate about their judgment of the advertisement. This creates four paths with each one positive outcome and one negative outcome of deceptive advertisements. If the message is sent as truthful and the receiver judges the message as truthful then the positive outcome is that the consumer will trust and use the information. The negative outcome of that path is the truth-bias or susceptibility. This way Serota (2019) created four positive outcomes and four negative outcomes of deceptive advertisement, as can be seen in Figure 1.

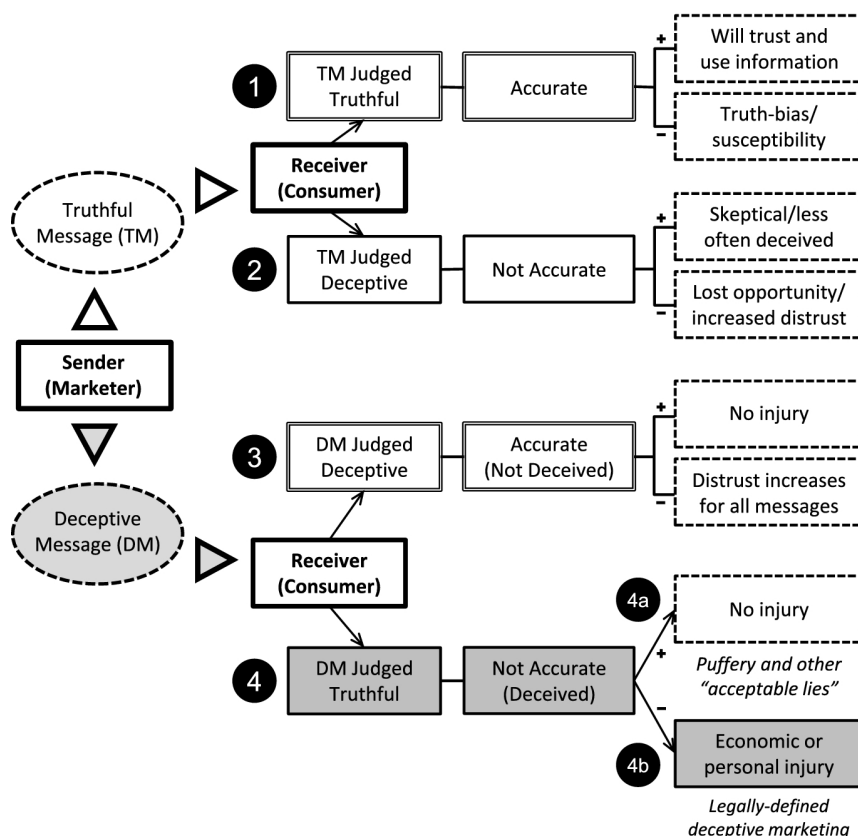


Figure 1: Deceptive marketing outcomes model. Taken from Deceptive marketing outcomes model by Serota, K.B., 2019 (https://link.springer.com/chapter/10.1007%2F978-3-319-96334-1_42) Copyright 2019, Serota, K.B.

This research focuses on the path in which the message is sent as deceptive and the consumer judges the message as truthful (Path 4, Figure 1). Therefore the judgment is not accurate and the message is seen as deceptive. The positive outcome of that path is no injury and the negative outcome is economic or personal injury. As the negative outcome is illegal, the focus of this research is on the deceptive advertisements that have an outcome of no injury (Path 4a, Figure 1). These deceptive advertisements are seen as “acceptable lies.” Based on the literature, deceptive advertisement in this research is defined as: “The customer's perception on the advertisement is not in line with reality, the customer believes the advertisement and the advertisement influences the buying intention of the customer, but will not lead to economic or personal injury.”

The different paths of Figure 1 will have different effects on the purchase intention of the customer. Path 1, the purchase intention in both the positive as negative outcome is assumed to lead to higher purchase intention. The purchase intention of path 2, both negative as positive, is assumed that the consumer has less purchase intention. The anticipated purchase intention of path 3 and 4 is different for the positive and negative outcome. Expected is for the positive outcome of no injury in both path 3 and 4, the consumer will have a higher purchase intention. The purchase intention of the negative outcomes of path 3 and 4 will lead to less purchase intention of the consumer. Besides, the negative outcome of path 1 till 4 has probably on the long run a negative effect on the purchase behavior of the brand of the product of the advertisement. This, due to the distrust in the advertisement that is created.

When looking in a supermarket context, different kinds of deceptive advertisements pass by. As the example of the red pepper described in the introduction section, deceptive advertisements can be on the monetary level (discounted price). Alternatively, deceptive advertisement can also occur in the form of a claim (Gardner, 1975). An example of this is when a packing states: “The best coffee of the Netherlands!” The company claims to be the best, but this claim is not tested. There is no evidence that they are indeed the best. Figure 2 gives an overview of the concept of deceptive advertisement.

This leads to the first two hypotheses of this research. Hypothesis 1 and 2 are about the main effect of deceptive advertisement on purchase intention. The effect of the hypotheses are

expected in terms of the definition of deceptive advertisement where consumers are inaccurate about the advertisement being not deceptive.

H1: Claim deceptive advertisements lead to higher purchase intentions than claim non-deceptive advertisements.

H2: Monetary deceptive advertisements lead to higher purchase intentions than monetary non-deceptive advertisements.

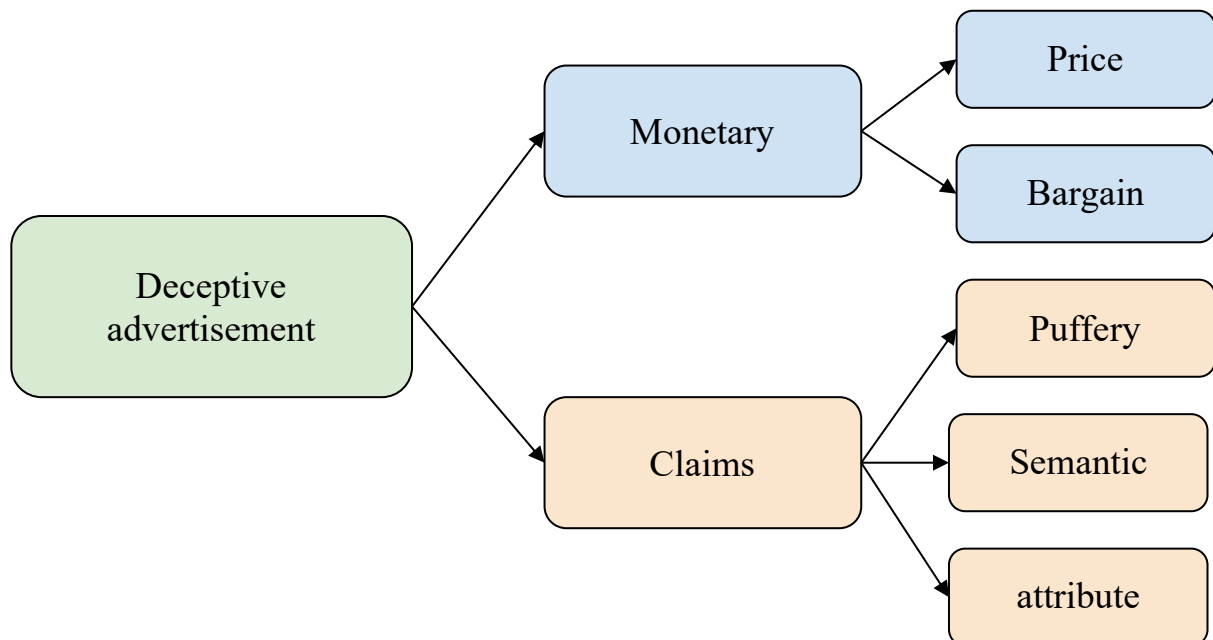


Figure 2: The concept of deceptive advertisement

As seen from Figure 2 both monetary advertisement and claims consist of several subdimensions. Monetary deceptive advertisements are all deceptive advertisements where the deception is associated with the price of the product on display. All deceptive advertisements that are not directly linked to the price of the product are considered as claims.

The subdimensions of monetary deceptive advertisements consist of price comparison (PC) and bargain offers (BO). PC occurs when in the advertisement the price of the product is compared to competitors' prices or previously used own prices. An example of this is the so-called "lowest price guarantee" of Jumbo, a Dutch supermarket. This statement claims that Jumbo has the lowest price on that product. This is deceptive when this is actually not true.

Another PC that happens is that products will be compared to one another when this is not even possible (Federal Trade Commission, 2019). An example is when a supermarket states that their peanut butter costs €1,- and the competitor sells it for €1,50, but in reality the peanut butter of €1,50 weighs 500gram while the peanut butter of €1,- only weighs 250gram. When leaving the weights out of the advertisement, the advertisement is deceptive.

A bargain offer (BO) is a form of additional merchandise that the consumer gets, provided that the consumer buys an article at the usually offered price. Examples of this can be “Buy one, get one free,” “2-for-1 sale” or “50% off.” These advertisements can be deceptive when the supermarket increases the regular price, decreases the quantity and quality of the product or requires other attached strings to the offer. With attached strings other rules, not included in the advertisement, are applicable to the promotion. These attached strings can be in the fine prints, without telling in on the ad itself (Federal Trade Commission, 2019).

The dimension of claims consists of three subdimensions. These are puffery, semantic confusion (SC) and attribute misleading (AM). Preston (1996) defines puffery as “Advertising and other sales presentations often praise a product with vague and general subjective opinions, superlatives, or exaggerations, but without stating specific facts.” (p. 64). The aforementioned claim of “The best coffee” is an example of puffery. When consumers believe the claim and think that the claim is truthful, the advertisement can be seen as deceptive. A lot of discussion is going on about whether puffery exists in the grey area between truth and lies or whether it is a form of deceptive advertisement. Consumers perceive puffery claims as mostly not true and do not rely on the claims (Rotfeld & Rotzoll, 1981). However, Kaufman, Smith and Ortmeyer (1994) found that consumers do fall for puffery claims. The expected quality of the product with the puffery claim was often higher than the received quality. According to them puffery is a form of deceptive advertisement.

Semantic confusion (SC) is also a form of deceptive advertisement of claims. SC occurs when on the packaging or advertisement of a product unclear or deliberately confusing language, symbols or images are placed. The use of the words or symbols can create an image of a product that might not be true. For example, the packaging of a processed product states “fresh frozen.” The word fresh is confusing, because the product is processed and not fresh from the land (Harris & Monaco, 1978). Consumers perceive the advertising differently than the reality and therefore semantic confusion is deceptive.

The last subdimension of deceptive claims is attribute misleading (AM). AM occurs when the claim about one attribute of the product leads to misleading inferences about another attribute or the same attribute. An example of misleading inferences about another attribute is

when a product description states that it causes low cholesterol in the body, but the consumer thinks that this also means that the product is low in fat. The consumer thinks one attribute immediately means also the other attribute (Serota, 2019). This can also happen among different brands/products. This is misleading on the same attribute. An example is when a certain product states being gluten free, and the consumer thinks that the other products in the same product category contain gluten, while this does not have to be the case (Burke, Milberg & Moe, 1997).

Since deceptive advertising may persuade consumers to behave in a particular way (e.g., buying the advertised product), it becomes of interest which type of consumers are more or less easily persuaded. Consumer self-confidence has been considered as a relevant factor in this respect and will be considered next.

2.2 Consumer self-confidence theory

Consumers with a high self-esteem are more difficult to persuade than consumers with a low self-esteem according to the assumption made by many studies about persuasion. The reason for this is that consumers with high self-esteem are less influenced by the opinions of others and they are less afraid of being rejected by others (Wood and Stagner, 1994). According to Bearden et al. (2001) self-esteem and self-confidence are related to one another other, but also differ from each other. Self-esteem is a variable of the self-concept. Knowing the self-esteem of someone one can evaluate the extent to which someone sees themselves as valuable or worthy (Bearden et al, 2001). Self-esteem is a part of self-confidence, since a high self-esteem should enhance a consumer's self-confidence. Bearden at al. (2001) defines consumer self-confidence as "the extent to which an individual feels capable and assured with respect to his or her marketplace decisions and behaviors" (p. 122). Jürgenson and Guesalaga (2017) define consumer self-confidence the same as Bearden et al. (2001) and state that it is the confidence in the ability of someone to decide all by himself or herself. Consumer self-confidence can, like other consumer measures, be able to predict tendencies. This means that it is able to predict consumer behavior based on the consumer's high or low self-confidence. For example, consumers with low self-confidence are more subjected to environmental factors and they are more inclined to inconsistent decision making than consumers with high self-confidence (Mossman and Ziller, 1968). This means that consumers with a low self-confidence are more sensitive to deceptive advertisements than consumers with high self-confidence.

Mossman and Ziller (1968) constructed consumer self-confidence as a multidimensional concept with two higher-order factors. These two higher-order factors

represent the two main functions served by consumer self-confidence, namely 1) to make effective consumer decisions and 2) to protect themselves. The first factor means that the degree of self-confidence influences the ability to acquire and process information for the decision-making part of the customer journey. The second factor, to protect themselves, is the degree of self-confidence that leads to the ability of the customer to recognize and protect themselves from being misled, deceived or treated unfairly (Bearden et al, 2001). Both higher-order factors consist of multiple dimensions which define specific domains of content. Every dimension is another step in the buying process of the customer, where self-confidence can influence the ultimate buying behavior.

The higher-order factor of decision making consists of four subdimensions. The ability of information acquisition (AI) is an important antecedent of effective decision making. The self-confidence in information acquisition reflects the way consumers will obtain and understand the information available in the marketplace. Consumers with low self-confidence are less willing to obtain and process the information. This may indicate that they are more sensitive to deceptive advertisement than consumers that are willing to obtain and process the information (Bearden et al., 2001).

After acquisition of information and processing of information, the consumer looks at alternatives. If the alternatives are the other products on the shelves in the supermarket or the variety of cars that one can buy, consumers will form a consideration set (CSF). The consideration set is the dimension in which consumers screen the (large) number of alternatives available to create a more manageable and relevant set of possible products to buy (Hauser & Wernerfelt, 1990). If consumers have high self-confidence, they will believe that they can identify acceptable choice alternatives. Consumers with low self-confidence do not believe they can identify acceptable choice alternatives, and are therefore more sensitive towards deceptive advertisements (Bearden et al., 2001).

Consumer self-confidence also plays a role in the personal (PO) and social outcome (SO) of the purchase. Buying a product creates personal feelings of satisfaction and reactions from others. The consumer's self-confidence in the ability to realize positive personal and social outcomes reflects that the consumer is able to make a choice that meets the personal beliefs and judgments on how others would react (Bearden et al., 2001).

The other higher-order dimension, protection, consists of two subdimensions. Namely persuasion knowledge (PK) and marketplace interfaces (MI). Persuasion knowledge reflects the consumer's belief about their own knowledge of the marketing tactics that marketers use to persuade or deceive consumers. Someone with high self-confidence believes he or she is

capable of understanding the cause-and-effect relationship between the marketing communication and customer behavior. When a consumer does believe that he or she has this knowledge, categorized as high self-confidence, then this consumer would be less sensitive to deceptive advertisements than consumers with low self-confidence.

The other dimension is the confidence in the ability to stand up for one's rights and to share opinions when dealing with others in the marketplace: self-confidence in the marketplace interfaces (MI). This self-confidence influences the way consumers will react to others, mostly people with lower self-confidence. For example, consumers with high self-confidence will more easily ask for product demonstrations or explanations of the advertisement than consumers with low self-confidence. By doing this, they will be less sensitive towards deceptive advertisements than consumers with low self-confidence (Bearden et al., 2001).

2.3 Effects of deceptive advertising and self-confidence on purchase intention

This research focuses on supermarkets. Supermarkets are a typical example of stores who sell fast moving consumer goods (FMCG). These are products that are easily sold out and are sold at a relatively low price. These products are meant for daily and frequent consumption (Mugeshkannan & Ganapathy, 2019). The buying process of a consumer for a FMCG is different than for a product with high involvement. Consumers in a buying process of high involvement goods, like a car, take every step of the decision-making process. This does not apply to consumers who buy a FMCG. If consumers see an advertisement for a FMCG they will acquire the information and will take the product into the consideration set (if the advertisement is attractive to them). However, for most FMCGs, consumers will not take into account what their personal or social outcomes of the purchase are (Kotler & Armstrong, 2015). If one compares the consumer's buying process for a cucumber with one for a bottle of wine, the buying process of the bottle of wine will be longer. After the products are entered in the consideration set, the consumer who will buy the cucumber buys the cucumber or something else in the consideration set. There is not much thought about the decision. For the bottle of wine, consumers may think, for example: "What would my friends think of me if I buy the cheaper wine?" The social environment and the impact on their personal lives is greater. This also counts for the dimensions of protection. Persuasion knowledge is in order when seeing an advertisement. This is the case in both advertisements, whether about low-involvement products or high-involvement products. Marketplace interfaces do not happen (a lot) in the buying process of low-involvement products. When buying a wine, it is more common to ask an expert about it than for buying a cucumber. Because of this, the aspects of PO, SO and MI

will not have a moderating effect on the relation between deceptive advertisement and purchase intention. These activities do not happen in the buying process of the consumer for FMCG. Based on those dimensions the follow hypotheses can be formulated.

H3: Consumers with high self-confidence in information acquisition (IA) have a lower purchase intention after seeing deceptive advertisements than consumers with low self-confidence in information acquisition.

H4: Consumers with high self-confidence in forming a consideration set (CSF) have a lower purchase intention after seeing deceptive advertisements than consumers with low self-confidence in forming a consideration set.

H5: Consumers with high self-confidence in persuasion knowledge (PK) have a lower purchase intention after seeing deceptive advertisements than consumers with low self-confidence in persuasion knowledge.

Although high consumer self-confidence can help the consumer to identify deceptive advertisement, they can also be overconfident. The overconfidence of a consumer can undermine the quality of the decision making (Alba & Hutchinson, 2000). This means that consumers with overconfidence misweigh the different dimensions of the deceptive advertisement. For example, consumers may believe their persuasion knowledge is at a high enough level to understand what marketers try to obtain, but this belief is not accurate. Therefore they will interpret the advertisement differently than when they are accurate about how the deceptive advertisement works. Therefore, the consumer can overlook the deception of the advertisement and will be more easily persuaded to purchase. Overconfident consumer choices are based on biased perceptions of the advertisement (Grubb, 2015). The Dunning-Kruger effect also explains this effect. According to Kruger and Dunning (1999) consumers who lack the knowledge about a certain topic often do not recognize their incompetence about that topic. This creates incomplete and even corrupted knowledge. The lack of knowledge leaves the customers with a double burden. Not only does this incomplete knowledge lead customers to make mistakes, but they also do not recognize making those mistakes (Dunning, 2011). The effect of overconfidence leads to hypotheses 6a and 6b.

H6a: Consumers with overconfidence have a higher purchase intention after seeing deceptive advertisements than consumers with no overconfidence.

H6b: Consumers with overconfidence have a higher purchase intention after seeing non-deceptive advertisements than consumers with no overconfidence.

The self-confidence of a consumer moderates the effect of deceptive advertisement on the purchase intention. Self-confidence theory is multidimensional. Every aspect that occurs in the buying process of the consumer from self-confidence theory in FMCG can have a moderating effect. Besides these moderators, overconfidence can be considered as a moderator as well. Therefore, this research studies four different moderators of the effect of deceptive advertisement on purchase intention. All hypotheses will be tested against both monetary deceptive advertisements and claim deceptive advertisements. This conceptual model is shown in Figure 3.

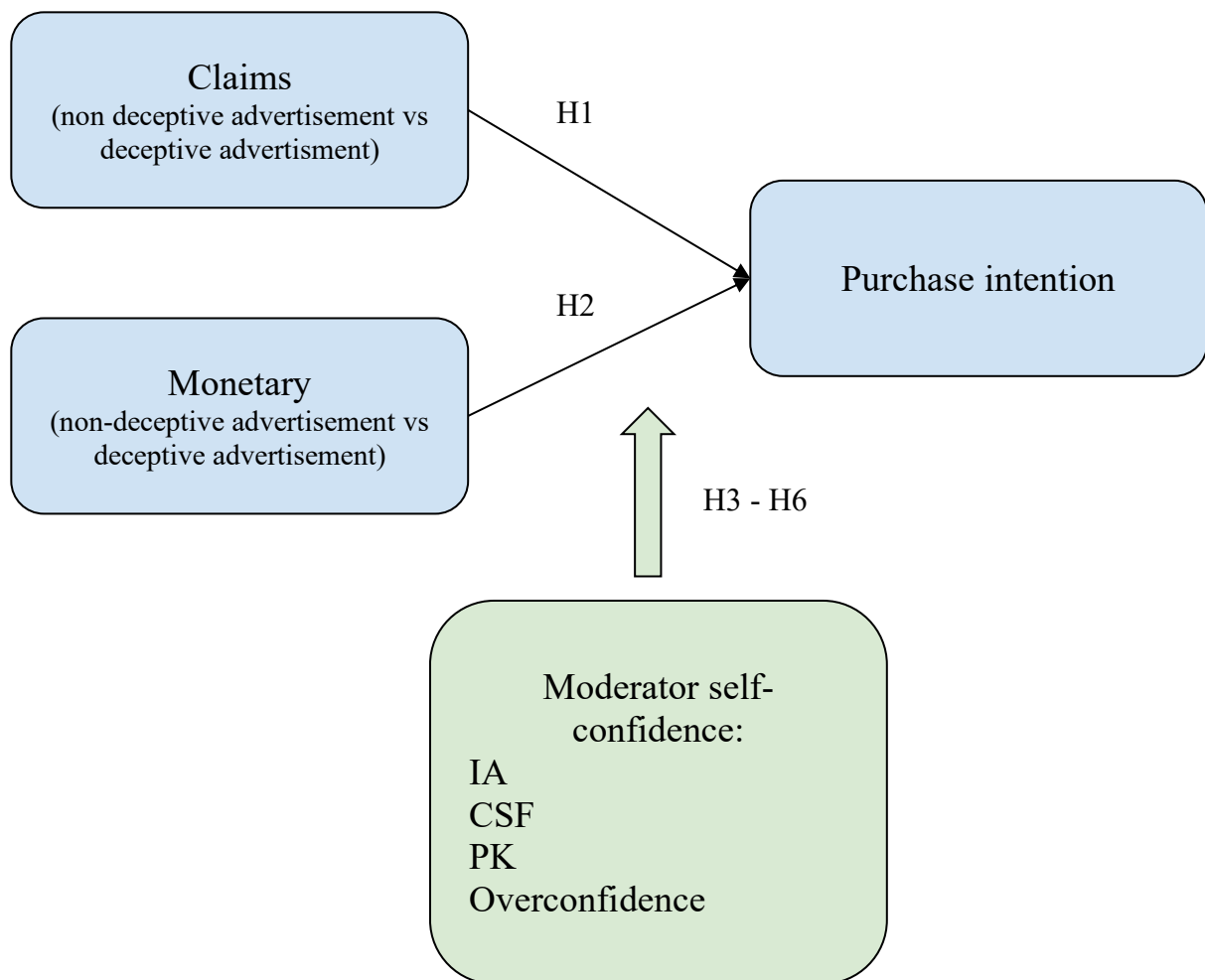


Figure 3: Conceptual model

3. Method

This chapter explains how the research will be carried out. The design of the research will be explained. After that, the population to be reached for this research and how they will be reached will be explained. Next, the measurements of the different variables used in this research are explained and the statistical analysis of these measurements. Lastly, the limitations of the research and the ethical considerations are addressed.

3.1 Design

To test the hypotheses mentioned in Chapter 2 a quantitative research has been conducted. In this research consumers with different consumer self-confidence have been compared. Therefore, it is best to get a variety of data that can be compared to find significant differences in the behavior towards the deceptive advertisements. Via a survey a large group can be reached, which also increases the reliability of the research.

The research has been conducted online. Via an online survey multiple respondents have been reached. Due to the COVID-19 measures it also was not possible to get physically in touch with many people. An online survey was an outcome to reach many customers in a safe way.

Because of the online survey, advertisements that customers can find in supermarkets have been transformed to ones that can be used in an online survey. The supermarket environmental factors that can influence customer behavior were left out of the research. Via a survey a situation has been created where only the advertisement influenced the behavior of the consumer. Other factors, like other brands and other customers, have not influenced customer behavior in this way.

The survey has been split randomly into two groups of equal size. One control group, who had only seen non-deceptive advertisements, and one who had only seen deceptive advertisements, the experimental group. Both groups had gotten the exact same questions, only the advertisements they saw were different. They each were shown a monetary and a claim advertisement in random order. Hence, a 2 (deception vs non-deception, between-subjects) $\times$ 2 (monetary vs claim, within-subjects) mixed design was employed. Besides, the respondents did not know in which group they were and they did not know that there were multiple groups. This way, the answers of the questions could not be influenced by other factors, such as beforehand knowing that the advertisements are deceptive.

3.2 Participants

The target group of this research were Dutch people who physically shop for groceries for their household at least once a week. According to Statistics Netherlands, the Netherlands has around 8 million households (Slob, 2020).

A selected sample was drawn, because there was no ability to get all the information of the 8 million people in the population to do an a-select sample. Still, the variety of respondents in both groups needed to represent the variety in the population. This was checked by studying the demographic information in the survey (i.e., age, gender, province). In general, in the Netherlands, only a quarter of the men are responsible for buying the groceries. Furthermore, the people who are responsible for doing the groceries have a minimum age of 23 years (CBS, 2019). The goal was to get two groups of respondents consisting of 75% women and with a minimum age of 23 years.

In order to assess the number of participants required for the mixed 2×2 design a power analysis was run, using G*Power, specified with two repeated measures (purchase intentions in case of claim and monetary advertisement) within two groups (deception vs no deception), effect size equal to 0.14, power of 0.95, significance level of .05, and correlation of intention measures of 0.5. These specifications resulted in a requirement of at least 148 participants.

These participants have been reached via online forums and through snowball sampling. The snowball sampling started with the researchers family, friends, colleagues and fellow students. To make sure that the respondents were of different ages, the different starts of the snowball sampling was strategically picked. The starting point of distributing the survey was a group of elderly (two people, >60 years), a group of students (two people studying in the city Nijmegen), a group of young adults (two people in the age of 25-40) and a group of 40/50 year old (two people). The researcher lived in Nijmegen, therefore the starting points of the snowball sampling were people who do not live in the surroundings of Nijmegen, except for the students. The starting points were asked to spread the survey to their family and friends as well, with a minimum of three people. Also it was encouraged to ask those people to spread the survey as well. The start of the snowball sampling was to people who are from different ages, gender and places. These demographic variables can also influence the behavior of the participant towards deceptive advertisement. It is important to check that both groups have equal demographic distributions to enable comparisons between both groups.

Besides, the survey was also spread via online forums/offline advertisements to reach out as many respondents as possible. With the idea in mind that people are willing to help graduates, even more diverse participants have been reached. The forums were online groups

that collected and spread surveys. The offline advertisements were flyers with a link and QR-code which were spread around different supermarkets in the surroundings of Nijmegen and Dronten (Flevoland). Lastly, the local paper published the advertisement of the survey in their readers helping readers section. This was done in the Gelderlander.

3.3 Measures

The survey consisted of four different sections to measure the dependent variable, the multiple independent variables and the moderators. The dependent variable, purchase intention, was measured with a 5-point-Likert scale. To see if the respondents had purchase intention after seeing the advertisement four items were used (Kozup et al., 2003). These items are shown in Appendix A. The 5-point Likert Scale ranged from 1 (totally disagree) to 5 (totally agree) (Golnaz et al., 2012).

This research has multiple independent variables. These are deceptive advertisements, claims and monetary, and the non-deceptive advertisements, also in the form of claims and monetary (Figure 3). To find out if the effect was stronger with deceptive advertisements than non-deceptive advertisements, a control group was used. Both groups saw four advertisements. Two with monetary advertisements and two with claim advertisements. To compare the groups, the advertisements were about the same products. The claim deceptive advertisement types which were shown is one puffery and one semantic confusion. The same advertisements were used for both the control group and experimental group. Only in the control group the text that makes the advertisement deceptive was omitted. The monetary deceptive advertisements consisted of one bargain offer and one price comparison. The advertisements are shown in appendix B.

From the four moderators, IA, CSF and PK were measured with the self-confidence scale of Bearden et al. (2001). The consumer self-confidence scale was used in the survey to assess how high the respondents score on consumer self-confidence. The moderators IA and CSF had five items. PK had six items. The respondents were asked to rate those items on a 5-point scale as characterizations of themselves. The 5-point scale ranged from 1 (extremely uncharacteristic) to 5 (extremely characteristic). The items of IA, CSF and PK are shown in appendix C.

Consumers with overconfidence misweigh the different dimensions of the deceptive advertisement. This means that they do not recognize if an advertisement is deceptive, but they think they would. There is no measurement for consumer-overconfidence yet. Nonetheless, overconfidence is researched in other settings like job applications and by managers (Glaser et

al., 2013). The common aspect of those measurements is that they test a certain topic and ask how the respondents think they would react to those topics. In this case, this means that at the end of the survey the consumers were asked if they would recognize deceptive advertisements. Next, they were asked if those advertisements they saw were deceptive. In case respondents would answer “Yes, I would recognize deceptive advertisements,” but also answer “No, I do not think those advertisements were deceptive” (when in the experimental group) the respondent is overconfident. In the case of the control group, the consumer was overconfident when they think they recognize deceptive advertisements and they do think that the advertisements they saw were deceptive.

To make sure the survey was valid, a pre-test of the survey was done. High validity is reached when every respondent interpreted the questions the same way as they were intended (Field, 2016). With a pre-test, unclear or ambiguous questions were analyzed and adjusted. The pre-test was done in a group of nine respondents who did not have a lot of knowledge about the subject. People with little knowledge about the subject are more easily able to misunderstand the questions than people who have knowledge about the subject. Hence the pre-test was a conservative one.

3.4 Statistical treatment

First of all, the questions concerning the moderators AI, CSF and PK were analyzed first via a factor analysis. Bearden et al. (2001) already conducted factor analysis with these items. To be sure if the same outcome was the same in this research as well, a factor analysis as Bearden et al (2001) conducted has been done. The questions matching with the factors AI, CSF and PK were not allowed to cross-load with another factor. If this was the case, as expected, the rest of the analysis could be done. An analysis of variances is conducted to investigate a possible moderator effect and difference between non-deceptive and deceptive advertisement. More specifically, a repeated measures ANOVA was run with two groups (deception versus no deception), two repeated measures (purchase intentions in case of claim and monetary advertisement), and four moderators.

3.5 Limitations and Ethics

This research also has some limitations. People who buy their groceries online were not included in this research, because the practical relevance for the research is for the supermarkets to target the right customer in the stores. Therefore, the respondents needed to be customers who are going to the supermarkets. Also, control variables that can influence

customer behavior in supermarkets were not included in this research. During the time that this research was executed, the COVID-19 pandemic was still happening. This might have (still unknown) effects on the behavior of customers and the ways of grocery shopping of the respondents. This made it more difficult to obtain participants for the survey.

Besides those limitations, it has been important that the research is ethical. The respondents' privacy was kept by running the survey anonymously. Only some demographic information (gender, ages and province) was asked to check the representativity of the sample. Before a respondent would start the survey they were informed about the goal of the survey. Important to mention is that the respondent knew, partially, what the research was about, so they knew what they were getting into, but they could not know that it was about deceptive advertisement. If they would know the exact topic, it would no longer be possible to measure the overconfidence of the respondents anymore. Besides, the respondents have been told what would happen with their responses. The respondents also had the possibility to enter their email address if they wanted to know what the outcome of the research was. This part was not obligatory, because of privacy reasons and being able to participate anonymous.

4. Analyse

In this chapter the analysis of the responses was described. First of all, a descriptive analysis was made of the respondents of the survey. Secondly, the dataset was reviewed and the hypotheses were tested (as represented in Chapter 2).

4.1 Descriptive analysis

The survey had a total response of 256 respondents. 50 of them have stopped the survey early and therefore did not finish the survey completely. For this reason, those responses were excluded from the research. 206 responses were useful for analyses, resulting in a completion rate of 80.5%. The respondents were divided into the control group (N=102) and the experiment group (N=104).

To test if the respondents represented the population of the research, three demographic questions were asked: age, gender and province. The age of the respondents were divided into five categories: a group of 1–20 years, 21–40 years, 41–60 years, 61–80 years and a group of 81–100 years (Table 1). The range in age of the respondents was between 18 to 85 years. The median lies between the age of 41 and 60 years. The age of the respondents was normally distributed with both skewness (0.003) and kurtosis (-0.599) smaller than three. The control group and the experiment group both had a median age between 41 and 60 years and were both normally distributed. According to the CBS (2021) the largest group in the population is with 34% the people of an age between 40 and 65 in the Netherlands. The average age of consumers in the Netherlands is 42.2 years. This is equal to the population of grocery shoppers, because people start doing grocery at an average age of 23 and will continue doing this for almost the rest of their lives. The respondents of the survey had an average age of 48.6 years. The age group from 41 - 60 years was with 38.4% (36.6% control group, 40.1% experimental group) also the most represented group in the survey.

Table 1: Overview age of respondents in percentages

Group	0 - 20 years	21 - 40 years	41 - 60 years	61 - 80 years	81 - 100 years	Total
Control group	3%	33.6%	36.6%	24.8%	2%	100%
Experiment group	3.9%	24.5%	40.1%	28.4%	2.9%	100%
Total	3.4%	29.1%	38.4%	26.6%	2.5%	100%

Another demographic variable that was tested was the gender of the respondents. The population of consumers who are shopping at a supermarket consists of an average of 75% women and 25% men. Three respondents did not want to say which gender they are (category Unknown in Table 2), which resulted in 203 respondents being men (34%) or women (64.6%). This deviates slightly from the core population, but women were more represented than men, which is in accordance with the population of the research. The deviations in the control group and the experimental group between men and women (Table 2) were 31.4% men and 67.6% women in the control group and 36.5% men and 61.5% women in the experimental group.

Table 2: Overview of gender of respondents in percentages

Group	Men	Women	Unknown	Total
Control group	31.4%	67.6%	1%	100%
Experiment group	36.5%	61.5%	1.9%	100%
Total of overall	34.0%	64.6%	1.4%	100%

Lastly the respondents were asked for the province where they currently are living. All of the twelve provinces were represented in the survey (Table 3). Unfortunately, these were not equally distributed. Of the total respondents the province Flevoland and Gelderland were over-represented in comparison with the rest with respectively 23.2% and 44.4%. The distribution of the provinces in both the control group and the experimental group were equal to each other. Both the province of Flevoland as Gelderland were overrepresented in the control group (22.5% and 44.1%) as well as the experimental group (24.0% and 45.2%). The living area was not

representative for the population of the research. However, both groups had the same deviation. Therefore, the groups could still be compared.

Table 3: Overview of represented provinces in percentages

Province	Control group	Experiment group	Total of all
Friesland	3.9%	4.8%	4.4%
Groningen	0%	1%	0.5%
Drenthe	3.9%	1.9%	2.9%
Overijssel	5.9%	3.8%	4.9%
Flevoland	22.5%	24.0%	23.3%
Gelderland	44.1%	45.2%	44.7%
Utrecht	2.9%	4.8%	3.9%
Noord-Holland	3.9%	3.8%	3.9%
Zuid-Holland	1.9%	2.9%	2.4%
Zeeland	1.9%	1.9%	1.9%
Noord-Brabant	5.9%	3.8%	4.9%
Limburg	2.9%	1.9%	2.4%

The respondents were roughly representative of the Dutch population on age and gender. This did not count for the living area. Despite this, the two groups are roughly equal. Therefore the analysis could still be made.

4.2 Dataset

The dependent variable purchase intention was measured by four different items. These items needed to be closely related to one another to reach internal consistency. This was measured with the Cronbach's alpha. All eight advertisements had four questions related to purchase intention. To measure the overall purchase intention per advertisement, those four items needed to be recoded into one variable. To make sure if this was possible the Cronbach's alpha of each advertisement needed to be above .70. The Cronbach's alpha of the eight advertisements ranged from .879 and .925 (Appendix D). This meant that the items were closely related and could be used together to form a new variable of purchase intention by averaging the items. The purchase

intention was measured on a 5-point scale, where 1 means high purchase intention and 5 means a low purchase intention. To increase the ease of reading, the purchase intention scale was recoded. The purchase intention which was shown in the analysis was high when it was (close to) 5 and low when it was (close to) 1. The Cronbach's alpha is a coefficient of reliability, which meant that the items for purchase intention were a reliable scale.

Besides the variable of purchase intention, the variable of the consumer self-confidence also needed to be recoded. The consumer self-confidence scale was divided into three different groups, namely IA (information acquisition), CSF (consideration set formation) and PK (persuasion knowledge). To see if the structure of the data of the consumer self-confidence matches with the theory a factor analysis has been performed. A factor analysis can be performed when there are at least five respondents per variable (preferred ten respondents per variable). There were sixteen variables (five IA, five CSF and six PK), which means that at least 80 respondents were needed with a preferred minimum of 160. The number of respondents for these questions were 206, therefore the factor analysis could be performed. Another test that needs to be met before performing a factor analysis is the KMO (Kaiser-Meyer-Olkin) and Bartlett's test. The KMO needs to be above .5 to be useful to do a factor analysis. Bartlett's test needs to be significant to perform a factor analysis. Both assumptions were met: KMO is .887 and Bartlett's test is $< .000$. For the factor analysis a fixed amount of factors was used.

The survey held three different sets of items, so three different factors. When looking at the eigenvalues of the factor analysis (appendix E), four components had a score above 1. This indicates that there were four components. The fourth component had an eigenvalue of 1.007, which is very close to 1. This indicates that three components could be used. In the survey three components of the consumer self-confident theories were used, therefore a fixed number of three components was used in this factor analysis as well. The factor analysis from the survey slightly deviates from the theory. The output of the factor analysis with varimax rotation is displayed in Table 1. All non-significant loadings (loading $\leq .300$) were removed from the table to increase the ease of use of the table.

Table 4: Output factor analysis with varimax rotation

Question	Factor 1	Factor 2	Factor 3
Q1_1		0.585	
Q1_2			0.730
Q1_3		0.511	
Q1_4		0.727	
Q1_5		0.762	
Q2_1	0.495		
Q2_2			0.741
Q2_3			0.506
Q2_4			0.565
Q2_5		0.595	
Q3_1	0.625		
Q3_2	0.644		
Q3_3	0.693		
Q3_4	0.779		
Q3_5	0.801		
Q3_6	0.638		

The questions 1_1–1_5 belong to IA, questions 2_1–2_5 belong to CSF and questions 3_1–3_6 belong to PK. Table 4 shows that the different groups of IA, CSF and PK had some overlap, but there were no cross loadings between the items. The items that load on each factor were put together to check the reliability with Cronbach's alpha (Appendix F). The Cronbach's alpha of factor 2 was under .7 (.691). When deleting item Q1_2 (I know where to look to find the product information I need) the Cronbach's alpha would increase to .753. Besides, when deleting item Q2_5 Cronbach's alpha of Factor 2 would increase to .758. A new factor analysis without Q1_2 and Q2_5 has been performed. The output of this factor analysis with varimax rotation is displayed in Table 5.

Table 5: Output factor analysis without Q1_2, Q2_5 and with varimax rotation

Question	Factor 1	Factor 2	Factor 3
Q1_1		0.587	
Q1_3		0.512	
Q1_4		0.776	
Q1_5		0.743	
Q2_1			0.470
Q2_2			0.830
Q2_3			0.497
Q2_4			0.689
Q3_1	0.612		
Q3_2	0.643		
Q3_3	0.690		
Q3_4	0.774		
Q3_5	0.800		
Q3_6	0.608		

The results of the factor analysis without question 1_2 were almost the same as in the theory. Only question 2_5 loads on factor 2 instead of factor 3 which the theory claims. When the above presented items per factor were used, all Cronbach's alphas were above .7 (For items loading on Factor 1 alpha = .835, for Factor 2 = .705 and for Factor 3 = .753). Because the internal reliability of the relevant items for all factors was above the threshold, the average of the above-mentioned items per factor were used instead of the theory described in Chapter 2. The questions that load on the same factor were transformed into one variable by averaging the items (Appendix F). This was done to see if respondents score high or low on the IA (Factor 2), CSF (Factor 3) and PK (Factor 1).

Next, all three factors were combined to one variable of consumer self-confidence. This was done to see if the total consumer self-confidence had a moderator effect as well. The Cronbach's alpha of all items of consumer self-confidence together was .883 (appendix F).

Besides the moderator effects of IA, CSF and PK, overconfidence was also a possible moderator of the main effect. Overconfidence was measured with two sets of questions. The

first question was asked if respondents thought they would fall for deceptive advertisements. The following question was if they had deceptive advertisements in their survey. Because there was a control group and an experimental group the overconfidence of both groups needed to be measured differently. The control group was overconfident when the respondent had chosen 'I recognize deceptive advertisements' and 'The advertisements were deceptive', otherwise the consumer was not overconfident. The same was used in the opposite direction for the experimental group. The respondent in the experimental group was overconfident when they chose 'I recognize deceptive advertisements' and 'The advertisements were not deceptive'. This resulted in a variable with 1 as respondents were overconfident and 2 with respondents who were not overconfident.

4.3 Hypotheses

To test the hypotheses of Chapter 2 a mixed repeated measures ANOVA was executed. A couple of assumptions need to be met to perform the repeated measures ANOVA. The dependent variables needed to be independent from each other. During the survey the respondents had no opportunity to talk to each other, because when they opened the survey they got a different survey (control group or experimental group). Besides, the order of the questions were randomly asked. So if one respondent started with the advertisement of Coca-Cola, another respondent started with the advertisement of wine. Therefore it was assumed that the assumption on independence had been met. Another assumption that needs to be met was that the purchase intention in each group needs to be normally distributed. When the response of the survey is above 30, it is generally assumed that the groups are normally distributed. With a response of 206 it was assumed that the purchase intention of both groups were equally distributed. The different groups formed by the within-subjects (claim vs monetary advertisements) and the between-subjects manipulations (deceptive vs non deceptive) showed all a normal distribution of purchase intention. There were no outliers. To perform the repeated measures ANOVA the dependent variable needs to be of at least interval scale. The items concerning the dependent variable purchase intention were combined to create a new variable. This variable comprised the average of the answers of the four items about purchase intention. With the transformation of the dependent variable into average purchase intention all assumptions to perform a repeated measures ANOVA were met.

First, the effect of claim advertisements and monetary advertisements between the two groups was tested (H1 & H2). Both groups (deceptive and non-deceptive) were shown advertisements based on monetary advertisements and claim advertisements. To test hypothesis

1 and 2 a repeated measures ANOVA was performed (Appendix G). For both hypotheses there were no significant differences at a p -value of .05. The effect between the groups on purchase intention was not significant ($F(1, 204) = .208, p = .648$). However, a marginally significant effect within the monetary advertisements and the different groups (deceptive vs non-deceptive) was found with a p -value of .10 ($F(1, 204) = 3.500, p = .063$) (Appendix G). The effect showed that the mean purchase intention of both deceptive monetary advertisements (advertisements of the lamb and the wine) was lower (Table 6) than for the non-deceptive advertisements. This means that there was a lower purchase intention for the deceptive advertisements than the non-deceptive advertisements. This effect was visible for both the total of the advertisements and for the Lamb advertisement separately. For the wine advertisements, the purchase intention of the non-deceptive advertisements was slightly lower than for the deceptive advertisements. Therefore H2 was not supported. Appendix H shows the negative effect on the monetary advertisements. Conclusively, the monetary advertisements have a higher purchase intention when they are not deceptive. However, this effect was not found for claim advertisements ($F(1, 204) = .238, p = .626$). Therefore H1 was not supported.

Table 6: Mean purchase intention by monetary advertising condition

	Non-deceptive	Deceptive
Lamb	2.797	2.650
Wine	2.703	2.766
Total	2.750	2.708

Although the claim advertisements showed no significant effect between the two groups, the claim advertisements showed significant differences within the two claim advertisements. The effect $F(1, 204) = 11,984, p > .000$, showed that the purchase intention of the deceptive puffery advertisement (cola) was lower than the purchase intention of the deceptive semantic confusion advertisement (frozen fruit). For the non-deceptive advertisements the frozen fruit advertisements had a lower purchase intention than the cola advertisement. The mean purchase intention of both advertisements is shown in Table 7. Within the monetary advertisements no significant differences were found ($F(1, 204) = .025, p = .842$).

Table 7: Mean purchase intention of the claim advertisements

	Deceptive	Non-deceptive
Cola	2.586	2.945
Frozen fruit	2.610	2.779

The first moderator effect of self-confidence was the information acquisition (IA). The expected effect was that consumers with a high IA have a lower purchase intention after seeing deceptive advertisements than consumers with a low IA. IA showed a significant effect of $F(1, 201) = 7.256$, $p = .008$ between the subjects. The parameter estimates showed that this effect was negative in comparison with the deceptive advertisements (appendix H). This means that consumers with a high IA have a lower purchase intention on deceptive advertisements than consumers with a low IA. This effect was only visible for the lamb advertisement and the cola advertisement. For the wine and frozen fruit advertisement this effect was not significant. H3 predicted that consumers with a high IA would have a lower purchase intention after seeing deceptive advertisements than consumers with a low IA. Therefore, H3 was supported.

Next, the moderator effect of consideration set formation (CSF) on deceptive and non-deceptive advertisements was investigated which resulted in a non-significant effect ($F(1,201) = 1.952$, $p = .164$). Therefore, H4 was not supported.

The last hypothesis of consumer self-confidence was the persuasion knowledge (PK). No significant difference was found between consumers with a high persuasion knowledge and the purchase intention after seeing deceptive and non-deceptive advertisements. The effect of PK was $F(1, 201) = .149$, $p = .700$ (Appendix G). This means that H5 was not supported.

Furthermore, a significant effect was found when the three variables of consumer self-confidence were combined ($F(1, 203) = 3.956$, $p = .048$). This effect was, as expected, negative (Appendix H). This means that consumers with a high consumer self-confidence have a lower purchase intention than consumers with a low consumer self-confidence. The effect of consumer self-confidence was greatest for monetary advertisements. This effect was not found for the claim advertisements ($F(1, 203) = .038$, $p = .845$).

Next, the moderator effect of overconfidence was tested in both groups. 19.9% (N=41) of the 206 respondents could be described as overconfident. First H6a was tested which states that consumers who see deceptive advertisements and are overconfident have a higher purchase intention than consumers with no overconfidence. Overconfidence had no significant effect on

the purchase intention and the deceptive advertisement. The effect was $F(1, 102) = 1.621, p = .206$. Therefore H6a was not supported.

Lastly, hypothesis 6b, consumers with overconfidence have a higher purchase intention than consumers without overconfidence after seeing non-deceptive advertisements, was tested. This effect was not significant $F(1,100) = .106, p = .745$. Therefore hypothesis H6b was not supported. However, a significant effect was found for the claim advertisements ($F(1,100) = 3.990, p = .048$). This means that consumers with overconfidence have a higher purchase intention for the puffery advertisements (cola) than consumer without overconfidence. For the semantic confusion advertisements (frozen fruit), the consumers with overconfidence have a lower purchase intention than consumers without overconfidence (Table 8). No significant effect was found for the monetary advertisements ($F(1, 100) = .317, p = .574$).

Table 8: Mean purchase intention of the claim advertisements moderated with overconfidence.

	Claim	Mean
Overconfident	Cola	2.789
	Wine	2.609
Not overconfident	Cola	2.618
	Wine	2.901

To see if the control variables had any influence on the outcomes of purchase intention, the main experimental effects were tested with the demographic variables. A significant effect of gender was found on the claim advertisements. Women had higher purchase intentions towards claim advertisements than men. The significant effect was $F(1, 199) = 1.363, p = .001$. This effect was, with a p-value of .05, not visible for the monetary advertisements $F(1, 199) = 3.435, p = .065$. This effect is marginally significant with a p-value of .10. When the effect of gender was seen on claim and monetary advertisements together, a significant effect was found $F(1, 199) = 4.540, p = .034$. The deviation in purchase intention between men and women on claim and monetary advertisements are shown in Table 9.

Table 9: Mean purchase intention per gender per advertisement

	Claim		Monetary	
	Cola	Frozen fruit	Lamb	Wine
Men	2.471	2.257	2.500	2.572
Women	2.955	3.030	2.534	2.775

Moreover, the effect of gender on purchase intention did not differ for deceptive or non-deceptive advertisements. In general women have, for both kinds of advertisements, a higher purchase intention than men. The effect of women on the purchase intention on both deceptive and non-deceptive advertisements can be found in Table 10. The numbers in the table represent the increase of the mean purchase intention for women in comparison with men.

Table 10: Increase in purchase intention affected by gender

	Cola	Frozen fruit	Lamb	Wine
Women	.287	.357	.136	.170

4.4 Conclusion

The main effect of this research was the effect of deceptive advertisement and non-deceptive advertisement on purchase intention. The deceptive and non-deceptive advertisements were divided into advertisements based on monetary aspects and advertisements based on claim aspects. The two groups (deceptive and non-deceptive) were compared to see if there were differences between the two groups. Based on the analyses of the dataset of the survey, a marginally difference between the control group (non-deceptive) and the experimental group (deceptive) was found. Although the expected outcome was that consumers have a higher purchase intention after seeing deceptive advertisements than seeing non-deceptive advertisements, the outcomes of this research showed otherwise. Only on the advertisements with the monetary aspects a marginally significant effect was shown for the respondents who saw non-deceptive advertisements. They showed a higher purchase intention than consumers with the deceptive advertisements. The advertisements with the claim aspects did not show such an effect. Therefore, it seems that advertisements with monetary aspects are more effective when they are non-deceptive. When looking at the claim advertisements, although there was no significant difference, the purchase intention was higher for the deceptive

advertisements than for the non-deceptive advertisements (Appendix G). The differences in purchase intention towards monetary and claim advertisements in the form of deception and non-deception could be a sign that the type of advertisement (monetary or claim) is of influence on the purchase intention in combination with a deceptive or non-deceptive advertisement. Besides, an effect on purchase intention within the claim advertisements (puffery and semantic confusion) was found. This also indicates that the purchase intention differs from the different kinds of claim advertisements. Before something can be said about those effects more research should be done.

The problem statement made in Chapter 1 was:

‘To what extent does the level of consumer self-confidence moderate the effect of deceptive advertisement on the customer's purchase intention?’

This research showed that the consumer self-confidence had a moderating effect on the purchase intention of respondents after seeing deceptive advertisements. The consumer self-confidence theory was split into multiple aspects. Three of these aspects, IA, CSF and PK were in specific interesting to take into account in this research. Nevertheless, only IA showed a moderating effect on the relation between deceptive advertisements and purchase intention. Consumers with a high IA had a lower purchase intention after seeing deceptive advertisements. The other two consumer self-confidence aspects, CSF and PK, showed no moderating effect on purchase intention after seeing deceptive advertisements. Additionally, the three consumer self-confidence aspects combined did result in a significant effect on the purchase intention after seeing deceptive advertisements. In general, consumers with a high consumer self-confidence had a lower purchase intention after seeing deceptive advertisements than consumers with a low consumer self-confidence.

An interesting theory by, among others, Alba and Hutchinson (2000) was that consumers with overconfidence have a higher purchase intention after seeing deceptive or non-deceptive advertisements than consumers without overconfidence. Consumers who are overconfident misweigh the different dimensions of the advertisement. However, this expected effect was not visible in this research. Consumers with and without overconfidence did not differ in their purchase intention after seeing the advertisements. Only within the different claim advertisements a marginally significant difference in purchase intention of consumers with overconfidence was visible. Consumers with overconfidence have in general a higher purchase intention after seeing puffery advertisements than after seeing semantic confusion

advertisements. This also contributes to the previous mentioned possible difference between monetary advertisements and claim advertisements and within the claim advertisements.

Besides the differences in advertisements, gender can influence the purchase intention as well. Women had for both deceptive and non-deceptive and claim and monetary advertisements a higher purchase intention than men.

5. Discussion

This chapter includes a discussion of the results. Next, the implications will be considered. Finally, the limitations and opportunities for further research will be described.

5.1 Discussion of the results

During the analyses of the survey, a difference in reaction towards monetary and claim advertisements and within claim advertisements was observed. Non-deceptive monetary advertisements created higher purchase intentions than deceptive monetary advertisements. This effect was not visible for the claim advertisements, which shows that consumers react differently towards monetary and claim advertisements. Besides, within the claim advertisement a significant effect was found between the two claim advertisements (puffery and semantic confusion). Furthermore, claim advertisements and monetary advertisements provoked a difference in purchase intention on the deceptive advertisements. This could be an interesting point for supermarkets who use deceptive advertisements. If deceptive monetary advertisements indeed have less effect on purchase intention than claim advertisements, companies can use this knowledge in their promotion. This research only shows significant differences in the monetary advertisements. The type of advertisement has an important role in the purchase intention of the consumer. When using different type of advertisements, the outcome of the effect that this research found could differ. It is important to realize that the outcomes are not directly generalizable for every advertisement before implementing the outcomes of this research. The reliability of the outcomes will increase when the same effect is visible with other advertisements.

As mentioned earlier, only one significant effect was found with the three items of consumer self-confidence as a moderator of the relation between purchase intention and deceptive advertisements. From all the respondents on all three items of consumer self-confidence only five respondents (1 CSF, 4 PK) scored a four or lower on the consumer self-confidence scale. This means only five respondents had a low consumer self-confidence. All others had a moderate consumer self-confidence (23.6%) or a high consumer self-confidence (74.9%). Hence, the comparison between respondents with a high consumer self-confidence and consumers with a low consumer self-confidence was difficult to make. How did almost all of the respondents score high on the consumer self-confidence scale? One reason could be that Dutch consumers generally score high on the consumer self-confidence scale. According to Chelminski and Coulter (2007), there is a positive relation between general self-confidence and

consumer self-confidence. They also found a positive relation between individualism and general self-confidence and state that consumers who are individualistic have a high consumer self-confidence. Based on Hofstede's cultural dimension theory the Netherlands scores high on the individualistic scale (80 out of 100). When compared to the neighbouring countries Belgium and Germany (they both score high on the individualistic scale as well with respectively 75 and 67), the people in the Netherlands score higher (Hofstede insights, n.d.). This could be a reason that consumers in the Netherlands score high on the consumer self-confidence scale. Despite the significant effect of the overall consumer self-confidence and the IA, the high score on individualism could be a reason that no significant effect was found on CSF and PK. If the CSF and PK would be significant when there is more diversity in high or low scores on the consumer self-confidence, IA is expected to have a bigger significant effect since this was already visible without consumers with low purchase intention. The effect of the combination of individualism and high consumer self-confidence is only investigated indirectly and in other countries (United States and South Korea (Chelminski & Coulter, 2007)). To support this allegation a research on the consumer self-confidence of Dutch consumers is recommended.

Another explanation for the high consumer self-confidence can be led back to the language of the questions. The measure scale of consumer self-confidence is in English while the survey was held in Dutch. Therefore the translation could make some differences in interpretation of the different items. According to Larson (1986) the cultural context is important with translation. The cultural context can change the meaning of the translation even when the translation on word level is done properly. The factor analyses showed differences from the theory of Bearden et al. (2001). This means that the items did not load on the same factor as the scale that Bearden et al. (2001) had created. Therefore the scale could create problems with the content validity. The reliability, checked with the Cronbach's alpha, of the three factors was high enough. However, the factor analyses showed that two different items did not load on the expected factor. Those items were deleted. The reliability of the factors increased with the deletion of the items, which would improve the construct reliability. Based on the Cronbach's alpha and the factor analyses the reliability of the used statements was confirmed. On the other hand, the content validity concerns the question whether the scale measured what it needed to measure. By deleting the two items, the content validity of the scale might have been changed. To make sure the translation error did not influence the scale of consumer self-confidence, the research of Bearden et al. (2001) should be repeated across multiple countries in multiple languages.

Another expected outcome was that consumers with overconfidence would have a higher purchase intention after seeing deceptive or non-deceptive advertisements. This effect was not found in this research. Only roughly 20% of the respondents were overconfident. In comparison with a famous overconfidence effect with driving a car, almost everyone (99%) is overconfident (Team vier, 2018). This relatively small number of overconfidence on advertisements could be a reason why no significant effect on the moderating role of overconfidence was found. When more respondents were overconfident, it is more likely to see a significant difference in purchase intention than when only one out of five respondents is overconfident. According to traffic psychologist Gerard Tertoolen, the overconfidence in traffic is due to the fact that driving a car happens automatically. Something that happens on the automatic pilot is almost always higher rated than average by the people (Team vier, 2018). This could mean that judging an advertisement on deception or not, is not something that consumers do automatically. They think about it. The question in the survey could also trigger the respondents to think about it. Therefore, the answer could be a thought through answer instead of their first feeling.

5.2 Implications

This section first discusses the contribution to academic knowledge. Secondly, the managerial implications of the findings of this research will be discussed.

Contribution to academic knowledge

Although most of the hypotheses were not supported, this research can suggest new research areas. The contribution of this research to knowledge has multiple aspects. First, this is the first research that looks at the moderating role of consumer self-confidence. Although not all aspects of consumer self-confidence had a significant effect, it created more areas which could be interesting to do research on. The possibility that consumers in the Netherlands are mainly high in consumer self-confidence is an interesting topic. This could not only be important for the supermarkets and the sales and marketing departments, but this could also be of interest in many other fields outside the fast moving consumer goods (FMCG). Besides this, this research showed differences in advertisements on both monetary level and claim level. The difference between advertisements is a subject that is already researched over decades. Most research is about the effect of one single advertisement, but not compared to other kinds of advertisements. The difference between the effect on deceptive advertisements and the differences in monetary and claim advertisements had not been investigated yet. Besides, the differences within the different kinds of claim advertisements also gave new insights. Therefore this research contributes to the long list of advertising research with a found difference in the effect between puffery advertisements and semantic confusion advertisements.

Managerial implications

Although almost none of the hypotheses are supported, this research could still have implications for marketing practice. However, those implications concern very specific situations.

An important aspect of the marketing goals of supermarkets is to target the right advertisement to the right customer. Furthermore, advertising is a huge part of the expenses of supermarkets. In the Netherlands the three biggest supermarkets combined spent on average 17.2% of their spending's on advertising (AGF, 2016). As this is a large amount of their spending's, it is important that these investments pay off. The ROI (return on investment) is higher for advertisements that are targeted to the right customer. This research contributes to that point. The finding that monetary advertisements lead to higher purchase intention of non-deceptive advertisements, can be interesting for marketing departments. It is wise to not use

this combination in supermarket advertisements. Although previous research showed that deception could lead to higher purchase intention (Traa, 2019), the findings in this research suggests that this is not the case when an advertisement uses monetary aspects. It is possible that when using non-deceptive monetary advertisements this could result in a higher ROI of the advertisement.

When the previous aspect will only focus on the combination between type of advertisement and deception, it is the type of consumer that is also important to take into account when creating an advertisement. When making an advertisement all characteristics of the target group need to be clear to make the most effective advertisement. According to this research, there is a moderating relationship between consumer self-confidence and deceptive advertisements. This effect is only for the consumers who score high on IA. Therefore if the target group has a high IA, the purchase intention of deceptive advertisements will be lower. For the targeting of the advertisement, it is good to know if the customers score high in IA. If that is the case the advertisement should not be deceptive. For the other two aspects of consumer self-confidence (CSF and PK) no effect was found. Therefore those two aspects are not one of the most important characteristics of the consumer to focus on. Until new research shows that there is a relationship between the consumer's self-confidence on the levels of CSF and PK and the purchase intention after seeing deceptive advertisements, marketers should not focus on those aspects when making deceptive advertisements. With this information the targeting of the advertisement is a little bit more relaxed, because CSF and PK should not be taken into account.

The main result of this research showed that there were no differences in purchase intention between deceptive and non-deceptive advertisements (H1 and H2). This means that regardless of the use of deceptive or non-deceptive advertisement, the purchase intention of the consumer should be the same. Although the type of advertisements used in this research are generally seen as acceptable to society, consumers do not like it if they know they are deceived. Not every advertisement is clearly detectable as deceptive, but when consumers find out, the image of the advertisement's owner could be negatively affected (Foodwatch, 2020). The Dutch Advertising Code Committee (RCC) is constantly investigating advertisements whether they are deceptive or not and when they detect deception this will be broadly brought to light (Stichting reclame code, 2020). Based on those findings, it is best to avoid deceptive advertisements. According to this research the benefits of using deceptive advertisements will not outweigh the disadvantages of using deceptive advertisements.

5.3. Limitations and opportunities for further research

The findings of this research have to be seen in light of some limitations. These limitations should also be taken into account in further research. This section will first explain the limitations of the research and their influence on the findings of the research. Next, the opportunities for further research will be addressed.

Limitations

The survey was conducted online, but the implications for the research are in real life. Therefore the findings of the research may not represent how the consumer will be exposed to real advertisements. An advantage of this is that no environmental factors could influence the outcomes of the survey. A disadvantage is that those environmental factors could be of high influence on how consumers react to the different advertisements. Therefore the implications of the findings of this survey could be limited.

Another limitation of the research was the sample bias. The sample of the survey does not represent the population of the research. A non-probability sample is used to generate respondents. Therefore the snowball-sampling, voluntary response sampling and one probability sample, cluster sampling (publication in the paper the Gelderlander), has been used. Although the start of the snowball sampling were respondents with different characteristics of the population and the cluster sampling, the sample deviates from the population. The fact that there is a sample bias, and thus the research does not represent the population, does not mean that the findings of the research can be neglected. A sample of 206 respondents still can show significant differences. Important is that the findings of the survey may not be generalizable to the total population. The main demographic variable that deviates from the population was the living area of the respondents. The province Flevoland and Gelderland were highly represented. Therefore it is more likely that the findings of the research are most valid for those two provinces.

During the execution of this research the COVID-19 pandemic was happening. This created problems distributing the survey. Normally, it was possible to stay at a supermarket to ask consumers to fill in the survey. Due to COVID-19 consumers had to stay 1.5 meter apart from each other and the government advised everyone to stay home when possible. Therefore asking consumers at a supermarket to fill in the survey would not be ethically responsible. This was also a limitation on the execution of the research. Due to the COVID-19 it was not possible to do an experiment in real life. As mentioned in the first point, an experiment would have some advantage for the findings of the research.

Lastly, the variety of advertisements used in the survey was limited. The monetary advertisements comprised a bargain offer (wine) and a price comparison (lamb). The claim advertisements comprised puffery (Coca-Cola) and semantic confusion (frozen fruit). The real advertisements contained deceptive features, these features were slightly altered to make them non-deceptive for the control conditions. The deceptive advertisements were real-life advertisements. On the internet many could be found, but they had to be clearly deceptive and according to the deception definition used in this research. The two (non-deceptive and deceptive) advertisements were shown to six people before adding it to the survey. They were asked which advertisement was deceptive and which one was not. This was done to make sure that the respondents could see that the advertisements were deceptive. It is important to note that the choice of advertisement might influence the outcome of the survey. For example, consumers who drink cola might have a high preference for a specific brand. If the brand they preferred was Coca-Cola they would have a high purchase intention, but when they preferred Pepsi cola their purchase intention could be lower. The same holds with the other advertisements. Eating vegetarian is also a trend nowadays. The meat advertisement (lamb) could therefore produce less purchase intention. In order to prevent this possible influence two different advertisements for both claim and monetary advertisements were shown. Besides, every advertisement was a product with a different category and brand. Although the effect from a solo advertisement itself was reduced by including several advertisements, it is possible that they could influence the outcome. A way to obtain the advertisements which would affect the outcomes less, was to let them be made personally. Due to the lack of time and not having the connections with people who can do that professionally, this was not an option for this research. When this research is replicated or used as a foundation, personalized advertisements could help finding more significant results. Therefore, to make sure the outcome is reliable, the exact same survey should be held again, but with other advertisements (still two monetary and two claim advertisements).

Opportunities for further research

As already mentioned earlier, two major aspects may be included as subjects for further research. Those were the consumer self-confidence in the Netherlands and the influence on the differences between monetary advertisements and claim advertisements.

As a finding of this research the respondents were almost all high in consumer self-confidence. Therefore it would be interesting to see if this is something that occurs for the whole population of the Netherlands. Are Dutch consumers in general high in consumer self-

confidence? It would be interesting for all kinds of retailers to know if the consumer has high self-confidence. Their sales strategy could be influenced by the fact that consumers are high or low in consumer self-confidence. Besides, for international companies it would be interesting to know the level of self-confidence for each country they are doing business in. If a company is aware of the consumer self-confidence of their consumers, they can even target the customer better with their sales strategy. The strategy would have a higher effect than when it is less precisely targeted. This will not only offer an opportunity for further research on advertisements, but also on how consumers are different between countries. It will contribute to scientific research on both cultural differences and consumer behavior. Besides the differences in consumer self-confidence per country the moderating effect of consumer self-confidence could also still be investigated. If a country has both consumers with high and low consumer self-confidence, this research could be held in that country to see if consumer self-confidence is a moderator of the effect between deceptive advertising and the purchase intention.

Another aspect for further research can be the differences in monetary and claim advertisements on the consumer's purchase intention. Based on the findings of this research differences were seen in the effect of those two advertisements. The effect on deceptive advertisements and non-deceptive advertisements were different from monetary advertisements and claim advertisements. The findings showed that the monetary advertisements were less effective with deception than claim advertisements. This showed that the different types of the advertisements convey different reactions from the consumer. For supermarkets, but also other retailers, it would be interesting to know which advertisements are most effective. Therefore their advertisements would have a better effect, than when the effect of the difference is not known. This is an opportunity for further research on both practical implications for retailers as it contributes to the many researches about advertisements.

To be sure that claim and monetary advertisements provoke different purchase intentions further research should be conducted. According to Figure 2 of Chapter 2, there were three types of claim advertisements. Besides puffery and semantic confusion, claim advertisements could also occur in the form of attribute misleading. To make the survey easy for the respondents and to have a balance between the two types of advertisements only two out of the three claim advertisement types were placed in the survey. Although no differences between those types of claim advertisements are expected, it is possible that in combination with deception the third claim advertisement (attribute misleading) would have a different

effect on the purchase intention. Future research should take into account the differences between all three claim advertisements.

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Appendix

A: Items purchase intention (Kozup et al., 2003)

- I intend to buy the product
- How likely would you be to purchase the product, given the information shown?
- Assuming you were interested in buying a soda, would you be more or likely or less likely to purchase the product, given the information shown?
- Given the information shown, how probable is it that you would consider the purchase of the product, if you were interested in buying a soda?

B: Survey advertisements

I Claim deceptive advertisement (Puffery)



II Claim deceptive advertisement (Semantic confusion)



III Claim non-deceptive advertisement



IV Claim non-deceptive advertisement



V Monetary deceptive advertisement (Bargain offer)



VI Monetary deceptive advertisement (Price comparison)



VII Monetary non-deceptive advertisement



VIII Monetary non-deceptive advertisement



C: Consumer self-confidence scale (Bearden et al., 2001)

Information Acquisition (IA)

- I know where to find the information I need prior to making a purchase.
- I know where to look to find the product information I need.
- I am confident in my ability to research important purchases.
- I know the right questions to ask when shopping.
- I have the skills required to obtain needed information before making important purchases.

Consideration-Set Formation (CSF)

- I am confident in my ability to recognize a brand worth considering.
- I can tell which brands meet my expectations.
- I trust my own judgment when deciding which brands to consider.
- I know which stores to shop.
- I can focus easily on a few good brands when making a decision.

Persuasion Knowledge (PK)

- I know when an offer is “too good to be true.”
- I can tell when an offer has strings attached.
- I have no trouble understanding the bargaining tactics used by salespersons.
- I know when a marketer is pressuring me to buy.
- I can see through sales gimmicks used to get consumers to buy.
- I can separate fact from fantasy in advertising.

D: Cronbach's alpha purchase intention

Coca Cola non deceptive:

Reliability Statistics	
Cronbach's Alpha	N of Items
,879	4

Lamb non deceptive:

Reliability Statistics	
Cronbach's Alpha	N of Items
,917	4

Frozen fruit non deceptive:

Reliability Statistics	
Cronbach's Alpha	N of Items
,925	4

Wine non deceptive:

Reliability Statistics	
Cronbach's Alpha	N of Items
,917	4

Coca Cola deceptive:

Reliability Statistics	
Cronbach's Alpha	N of Items
,909	4

Lamb deceptive:

Reliability Statistics	
Cronbach's Alpha	N of Items
,896	4

Frozen Fruit deceptive:

Reliability Statistics	
Cronbach's Alpha	N of Items
,914	4

Wine deceptive:

Reliability Statistics	
Cronbach's Alpha	N of Items
,894	4

E: Eigenvalue factor analysis

Total Variance Explained					
Component	Total	Initial Eigenvalues		Extraction Sums of Squared ..	
		% of Variance	Cumulative %	Total	% of Variance
1	5,992	37,453	37,453	5,992	37,453
2	1,567	9,795	47,247	1,567	9,795
3	1,130	7,062	54,310	1,130	7,062
4	1,007	6,294	60,604	1,007	6,294
5	,825	5,157	65,761		
6	,780	4,874	70,635		
7	,690	4,314	74,949		
8	,640	4,001	78,950		
9	,580	3,624	82,575		
10	,565	3,530	86,105		
11	,490	3,063	89,167		
12	,424	2,652	91,820		
13	,394	2,464	94,284		
14	,345	2,158	96,442		
15	,302	1,889	98,331		
16	,267	1,669	100,000		

F: Cronbach's alpha consumer self-confidence scale

Before removing items:

Factor 1 (PK):

Reliability Statistics	
Cronbach's Alpha	N of Items
,846	7

Factor 2 (IA):

Reliability Statistics	
Cronbach's Alpha	N of Items
,753	5

Factor 3 (CSF):

Reliability Statistics	
Cronbach's Alpha	N of Items
,653	4

After removing Q1_2:

Factor 1 (PK):

Reliability Statistics

Cronbach's Alpha	N of Items
,835	6

Factor 2 (IA)*:

Reliability Statistics

Cronbach's Alpha	N of Items
,753	5

Factor 3 (CSF):

Reliability Statistics

Cronbach's Alpha	N of Items
,705	4

Consumer self-confidence:

Reliability Statistics

Cronbach's Alpha	N of Items
,883	14

* Factor 2 Cronbach's alpha if item deleted:

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Kunt u aangeven in welke mate u de volgende stellingen bij u zelf vindt passen? - Voordat ik een belangrijke aankoop ga doen, weet ik waar ik de informatie kan vinden.	8,07	4,854	,486	,722
Kunt u aangeven in welke mate u de volgende stellingen bij u zelf vindt passen? - Ik heb vertrouwen in mijn eigen vermogen om onderzoek te doen voor belangrijke aankopen.	8,17	5,013	,520	,710
Kunt u aangeven in welke mate u de volgende stellingen bij u zelf vindt passen? - Ik weet de juiste vragen te stellen tijdens het winkelen.	7,83	4,691	,530	,705
Kunt u aangeven in welke mate u de volgende stellingen bij u zelf vindt passen? - Ik heb de vaardigheden om belangrijke informatie te verzamelen voordat ik een aankoop ga doen.	8,18	4,600	,705	,648
Kunt u aangeven in welke mate u de volgende stellingen bij u zelf vindt passen? - Ik kan mij gemakkelijk beperken tot maar een paar merken wanneer ik een aankoop beslissing neem.	8,04	5,003	,394	,758

G: Repeated Measures ANOVA output

I: Test of Within-Subjects Contrasts

Source	Mon	Claim	Type III Sum of Squares	df	Mean Square	F	Sig.
Mon	Linear		,025	1	,025	,040	,842
Mon * Group	Linear		2,239	1	2,239	3,500	,063
Error(mon)	Linear		130,512	204	,640		
Claim		Linear	11,984	1	11,984	14,969	,000
Claim * Group		Linear	,191	1	,191	,246	,626
Error(claim)		Linear	163,326	204	,801		

II: Test of Within-Subjects Contrasts with consumer self-confidence

Source	Mon	Claim	Type III Sum of Squares	df	Mean Square	F	Sig.
Mon * Ia	Linear		0.004	1	.004	.007	.935
Mon * CSF	Linear		1.040	1	1.040	1.622	.204
Mon * PK	Linear		.012	1	.012	.019	.891
Error(mon)	Linear		128.815	201	.641		
Claim * IA		Linear	2.646	1	2.646	3.331	0.69
Claim * CSF		Linear	.001	1	.001	.001	.972
Claim * PK		Linear	2.405	1	2.405	3.029	.083
Error(claim)		Linear	159.633	201	.794		
Mon * Self_Confidence	Linear		1.094	1	1.094	1.716	.192
Claim * Self-confidence		Linear	.031	1	.031	.038	.845

IV: Test of Between-Subjects effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Group	,365	1	,365	,208	,648
Overconfident	,196	1	,196	,106	,745
Gender	12.545	1	12.545	7.453	,007

H: Parameter estimates (output SPSS)

I Deceptive and non-deceptive advertisements

Parameter Estimates							
Dependent Variable	Parameter	B	Std. Error	t	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Lam	Intercept	3,442	,096	35,705	,000	3,252	3,632
	[VAR00001=1]	-,121	,137	-,885	,377	-,391	,149
	[VAR00001=2]	0 ^a	.	.	.	.	.
Wijn	Intercept	3,257	,097	33,559	,000	3,066	3,449
	[VAR00001=1]	-,171	,138	-1,243	,215	-,443	,101
	[VAR00001=2]	0 ^a	.	.	.	.	.
Cola	Intercept	3,413	,096	35,670	,000	3,225	3,602
	[VAR00001=1]	-,024	,136	-,175	,862	-,292	,244
	[VAR00001=2]	0 ^a	.	.	.	.	.
Fruit	Intercept	3,055	,103	29,745	,000	2,853	3,258
	[VAR00001=1]	,148	,146	1,015	,311	-,140	,436
	[VAR00001=2]	0 ^a	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

II Consumer self-confidence split into IA, CSF and PK

Parameter Estimates								
Dependent Variable	Parameter	B	Std. Error	t	Sig.	95% Confidence Interval		Partial Eta Squared
						Lower Bound	Upper Bound	
Lam	Intercept	4,113	,326	12,611	,000	3,470	4,756	,442
	IA_new	-,357	,162	-2,206	,028	-,676	-,038	,024
	CSF_New	,015	,177	,086	,931	-,334	,364	,000
	PK_New	,006	,149	,040	,968	-,288	,300	,000
	[VAR00001=1]	-,119	,137	-,867	,387	-,389	,151	,004
	[VAR00001=2]	0 ^a	.	.	.	.	.	.
Wijn	Intercept	3,609	,332	10,869	,000	2,954	4,264	,370
	IA_new	-,238	,165	-1,443	,151	-,563	,087	,010
	CSF_New	,130	,180	,721	,471	-,225	,485	,003
	PK_New	-,066	,152	-,436	,664	-,366	,233	,001
	[VAR00001=1]	-,160	,139	-1,149	,252	-,435	,115	,007
	[VAR00001=2]	0 ^a	.	.	.	.	.	.
Cola	Intercept	3,423	,322	10,623	,000	2,787	4,058	,360
	IA_new	-,498	,160	-3,114	,002	-,813	-,183	,046
	CSF_New	,310	,175	1,773	,078	-,035	,655	,015
	PK_New	,155	,147	1,053	,294	-,135	,446	,005
	[VAR00001=1]	-,045	,135	-,333	,740	-,312	,222	,001
	[VAR00001=2]	0 ^a	.	.	.	.	.	.
Fruit	Intercept	3,325	,351	9,465	,000	2,632	4,017	,308
	IA_new	-,075	,174	-,430	,667	-,419	,269	,001
	CSF_New	,207	,191	1,086	,279	-,169	,583	,006
	PK_New	-,249	,161	-1,551	,122	-,566	,068	,012
	[VAR00001=1]	,185	,148	1,252	,212	-,106	,476	,008
	[VAR00001=2]	0 ^a	.	.	.	.	.	.

a. This parameter is set to zero because it is redundant.

II Total consumer self-confidence

Parameter Estimates

Dependent Variable	Parameter	B	Std. Error	t	Sig.	95% Confidence Interval		Partial Eta Squared
						Lower Bound	Upper Bound	
Lam	Intercept	4,173	,321	12,983	,000	3,540	4,807	,454
	Self_confidence	-,348	,146	-2,381	,018	-,637	-,060	,027
	[VAR00001=1]	-,101	,136	-,748	,455	-,369	,166	,003
	[VAR00001=2]	0 ^a	.	.	.	.	.	.
Wijn	Intercept	3,681	,327	11,271	,000	3,037	4,325	,385
	Self_confidence	-,202	,149	-1,359	,176	-,495	,091	,009
	[VAR00001=1]	-,160	,138	-1,160	,247	-,432	,112	,007
	[VAR00001=2]	0 ^a	.	.	.	.	.	.
Cola	Intercept	3,563	,323	11,020	,000	2,925	4,200	,374
	Self_confidence	-,071	,147	-,483	,629	-,361	,219	,001
	[VAR00001=1]	-,020	,137	-,145	,885	-,289	,249	,000
	[VAR00001=2]	0 ^a	.	.	.	.	.	.
Fruit	Intercept	3,401	,346	9,820	,000	2,718	4,083	,322
	Self_confidence	-,164	,158	-1,044	,298	-,475	,146	,005
	[VAR00001=1]	,157	,146	1,077	,283	-,131	,446	,006
	[VAR00001=2]	0 ^a	.	.	.	.	.	.

a. This parameter is set to zero because it is redundant.