Unconscious Decision Making and its Impact on Consumers’ Intention to Purchase Online

A Quantitative Study Investigating Consumers’ Mental Shortcuts

Authors:
Anna Quant
Ellen Rydberg
Sofie Göransson

Tutor: Dan Halvarsson
Examiner: Setayesh Sattari
Semester: Spring 2018
Level: Bachelor
Course Code: 2FE21E
Date: 2018-05-23
Acknowledgement

We would like to take the opportunity to show our gratitude to the people who have supported us while conducting this study with their expertise and engagement. Through their constructive comments and useful inputs, we were able to steer this study into the right direction throughout the writing process.

Firstly, we would like to thank our tutor Dan Halvarsson lecturer in the Department of Marketing at Linnaeus University that has always taken the time to support our study as well shared his knowledge regarding this topic.

Secondly, a big thank you to our examiner Setayesh Sattari senior lecturer in the Department of Marketing at Linnaeus University for helping us during the writing process by providing us with her knowledge on quantitative research as well supporting with inputs during the seminars.

Finally, we would also like to say a big thank you to all the participants that took their time responding to our questionnaire. Without them this bachelor thesis would never been able to reach a result.

Växjö, Sweden
23rd of May 2018

Anna Quant
Ellen Rydberg
Sofie Göransson
Abstract

Consumers often make decisions without being aware of it, also known as habitual decision making. A part of habitual decision making is mental shortcuts, which can push the consumers to unconsciously make decisions. This study will evaluate if the mental shortcuts anchoring, confirmation bias, loss aversion, paradox of choice and framing effect has an impact on consumers’ intention to purchase fashion online, aiming at finding a relationship between these. The researchers used a quantitative research with a descriptive nature, to gain a broader perspective. With the help of a survey in form of a questionnaire, the researchers collected 293 responses, whereas 274 were qualified. Furthermore, the data was put into SPSS in order to test the reliability, validity and the correlation between the variables. Out of the five hypotheses there were two hypotheses that were accepted, two rejected and one was not qualified to be further tested. The conclusion drawn from this study showed that previous experience on a retailing site decides how consumers’ unconsciously form expectations when purchasing a product on future retailing sites. Further, consumers feel stronger emotions when they feel that they have saved money compared to if they would have gained the same amount when making a purchase.

Keywords

Habitual decision making, Mental shortcuts, Anchoring, Loss aversion, Confirmation bias, Paradox of choice, Framing effect, Intention to purchase
# Table of Content

1. Introduction .............................................................................................................. 1
   1.1 Background .......................................................................................................... 1
   1.2 Problem Discussion ............................................................................................ 3
   1.3 Purpose ................................................................................................................. 4

2. Theoretical Framework .......................................................................................... 5
   2.1 Online Purchase Intention .................................................................................. 5
   2.2 Habitual Decision Making ................................................................................... 6
      2.2.1 Mental Shortcuts in Habitual Decision Making ............................................. 6
         2.2.1.1 Anchoring .............................................................................................. 7
         2.2.1.2 Confirmation bias ................................................................................... 8
         2.2.1.3 Loss Aversion ......................................................................................... 9
         2.2.1.4 The Paradox of Choice ......................................................................... 9
         2.2.1.5 Framing Effect ....................................................................................... 10
   2.3 Chapter Summary ............................................................................................... 11

3. Conceptual Framework ......................................................................................... 14
   3.1 Conceptual Model .............................................................................................. 16

4. Methodology .......................................................................................................... 17
   4.1 Research Approach ............................................................................................ 17
      4.1.1 Deductive Research ..................................................................................... 17
      4.1.2 Quantitative Research ................................................................................ 18
   4.2 Research Design ................................................................................................. 19
   4.3 Data Collection Method ..................................................................................... 20
   4.4 Data Collection Instrument ............................................................................... 21
      4.4.1 Operationationalization and Measurement of Variables ............................ 22
      4.4.2 Questionnaire Design .................................................................................. 24
      4.4.3 Pre-Testing .................................................................................................. 25
   4.5 Sampling ............................................................................................................. 25
      4.5.1 Sample Selection .......................................................................................... 27
   4.6 Data Analysis Method ....................................................................................... 28
      4.6.1 Data Coding .................................................................................................. 28
      4.6.2 Descriptive Statistics ................................................................................... 29
      4.6.3 Multiple Linear Regression Analysis .......................................................... 30
         4.6.3.1 Hypothesis testing ................................................................................ 31
   4.7 Quality Criteria .................................................................................................. 32
4.7.1 Content Validity ................................................................. 32
4.7.2 Construct Validity ............................................................. 33
4.7.3 Criterion Validity ............................................................. 33
4.7.4 Reliability ........................................................................... 34
4.8 Ethical Considerations ............................................................ 34
4.9 Chapter Summary ................................................................. 36

5. Results .................................................................................... 37
  5.1 Demographic ......................................................................... 37
  5.2 Reliability and Cronbach’s Alpha ........................................... 38
  5.3 Validity and Correlation Coefficient ....................................... 39
  5.4 Descriptive Statistics ............................................................. 40
  5.5 Hypothesis Testing ............................................................... 41

6. Discussion ................................................................................ 44
  6.1 Discussion on Anchoring ....................................................... 44
  6.2 Discussion on Confirmation Bias .......................................... 45
  6.3 Discussion on Loss Aversion ................................................. 46
  6.4 Discussion on Paradox of Choice .......................................... 47
  6.5 Discussion on Framing Effect ................................................ 47
  6.6 Conceptual Model ............................................................... 48

7. Conclusions ............................................................................. 49
  7.1 Managerial Implications ....................................................... 50
  7.2 Theoretical Implication ......................................................... 50

8. Limitations and Future Research .............................................. 52
  8.1 Limitations ............................................................................ 52
  8.2 Suggestions for Future Research ........................................... 52

Appendices ................................................................................. 62
  Appendix A - Questionnaire ...................................................... 62
  Appendix B - Reliability ............................................................ 68
1. Introduction

In the introduction chapter, a presentation of the background, problem discussion and purpose will follow together with the intended contributions of this study.

1.1 Background

The global increase of internet usage has had a large effect on the way businesses operate. It has led to the appearance of many online services, such as electronic commerce also known as E-commerce. E-commerce as a concept can be described as purchases and exchanges of services and products occurring online (Rayport & Jaworski, 2003). Through e-commerce, companies can reach a broader market since the distance is no direct obstacle as consumers can purchase the products wherever they are located (Falk & Hagsten, 2015). When purchasing products online, consumers are offered the ability to easily access pricing information and discover other similar products within just a few clicks (Tuten & Solomon, 2015). Kim, Ferrin and Rao (2008) state that due to some of the factors that characterize e-commerce, such as the tough competition and the absence of a personal seller, managing the market online in comparison to the traditional marketplace, is to some extent, more complicated.

Wei (2016) indicates that fashion retailing is one category under e-commerce that is closely related to the complexity online, since it is associated with the characteristic of being intangible. Wei (2016) further states that the reason for this is that consumers have an urge to try, as well as feel, touch and smell an item prior to the purchase. Making a purchase online is a risk-taking choice and brings a feeling of uncertainty meaning, a choice that involves danger or risk in order to achieve a goal (Wei, 2016). Even though purchasing fashion online can be perceived as a risk-taking choice, it is one of the most popular categories to purchase online and is rapidly increasing (McCormick, Cartwright, Perry, Barnes, Lynch & Ball, 2014; Nielsen, 2016; PostNord, 2018). Three of the largest retailing sites in Europe are websites such as: ASOS, Zalando and Amazon Europe (McCormick et al., 2014). Since the competition in fashion retailing is tough, helping consumers make the most beneficial decision is crucial, since satisfied customers are more likely to return to e-commerce sites (Kim, Ferrin & Rao, 2008).
Thompson (2013) states that researchers within the field of consumer behaviour have long claimed that consumers make rational choices and that more options increase the chance of consumers making favourable decisions. However, later research opposes this by stating that consumers make a lot of unconscious decisions that often lead to irrational choices (Thompson, 2013). Amos Tversky and the Nobel Prize psychologist Daniel Kahneman (1974) describes humans’ unconscious thinking as part of individuals’ habitual decision making, which is characterized by its fastness, being emotionally controlled and requires little effort. Solomon, Bamossy, Askegaard and Hogg (2016) further describe unconscious decision making as choices individuals make without even being aware of them, which are often based on routines. Since consumers are not often aware of their habitual choices, influencing these is rather difficult, especially on e-commerce sites where sales people are not present (Solomon et al., 2016).

Spievak and Hayes-Bohanan (2016) describe consumers’ decision making as “when humans are faced with making decisions in conditions of uncertainty, under time constraints, when their attentional resources are strained, or when their investment or efficacy is low, they tend to rely on habits born of past experience” (p. 24). Therefore, past experience within an e-commerce site sets a reference point for future shopping decisions (Kim, Ferrin & Rao, 2008). An analysis method that Wendel (2013) discuss and that has during the last decade, received a lot of attention from researchers that have been aiming at understanding individuals’ decision making, is behavioural economics. This method of analysis helps to understand how individuals act in their decision making and how previous experiences in everyday life influences decisions (Wendel, 2013). Yacubovich (2015) continues by stating that the interest for managing this has grown tremendously, especially on e-commerce sites where companies try to adapt the content on their site in accordance to every visitor’s needs and wants. The article further state that by learning behavioural economics, companies can learn how to predict consumers’ behaviour online by understanding how individuals sometimes make unconscious choices, so called mental shortcuts (Yacubovich, 2015).

Mental shortcuts influence many aspects of individuals’ decision making including the way people shop and proceed information online. Mental shortcuts are an essential part of individuals’ daily life since it minimizes the complexity of informative tasks however, it can affect individuals’ decision making negatively (Yacubovich, 2015). Moesgaard-Kjeldsen (2013) describes mental shortcuts as flaws in individuals’ decision making which are made without rational thinking. Clear (2018) states that there are all kinds of mental shortcuts but that
the most common ones arise when individuals rely too much on the first piece of information. Kane (2014) gives an example of this as when a consumer sees a product he/she desire for an amount of money. Later on, he/she find the same product on an online fashion retailing site with a cheaper price. The consumer will then see the product with the cheaper price as a great deal and is more likely to purchase the product online. This example refers to the anchoring effect which describes how individuals create reference points in which they use to evaluate the value of other products (Kane, 2014). The anchoring effect is one example of mental shortcuts which will later be investigated together with four other mental shortcuts. These are: Confirmation Bias, Loss Aversion, The Paradox of Choice and The Framing Effect (Yacubovich, 2015).

1.2 Problem Discussion

The digital age and the global use of internet have not only affected businesses’ way to operate but have also influenced many aspects concerning consumer behaviour such as the way consumers communicate and shop products and services (Darley, Blankson & Luethge, 2010). The online environment and the characteristics e-commerce hold, have made consumers’ way of acting within the online market different. However, the article by Darley, Blankson and Luethge (2010) claims that in order to fully grasp the context of this fairly new situation, the psychological factors behind this must be investigated (Darley, Blankson & Luethge, 2010).

Gao, Zhang, Wang and Ba (2012) support the interest of studying mental shortcuts in relation to e-commerce due to the many situations that often occur online, such as being exposed to many products at the same time. Along with the convenience that e-commerce sites bring to consumers, it can also be perceived as overwhelming since many individuals have a limited processing capacity. The limited processing capacity forces consumers to take mental shortcuts whenever the possibility is given (Gao et al., 2012). The article conducted by Chen, Shang and Kao (2009) further discuss the impact of information overload on consumers’ decision making. The result of their study showed that there was a correlation between too much information and consumers’ poor decision making. Furthermore, the study also revealed that consumers with more experience in online shopping proved to handle situations where they were exposed to a lot of information better than consumers with less experience (Chen, Shang & Kao, 2009). Nysveen and Pedersen (2004) define internet experience as “the consumer’s skill or ability obtained by visiting several web sites and using various value-added services offered on a broad
range of web sites, and not as experience with one particular web site” (p. 546). This ascertain
the fact that consumers’ processing capacity differs from each other, hence emphasize the
importance of that companies must understand how consumers utilize information online
(Chen, Shang & Kao, 2009).

Despite the negative association mental shortcuts have with decision making, companies can
use it to their advantage. By understanding consumers’ unconscious decision making,
companies can change their offerings in accordance to how individuals take these shortcuts.
Finding factors that trigger the human mind, such as presenting the price of a product as cheap,
can help companies increase their sales (Pitkänen, 2016). Few studies have evaluated the
relationship between mental shortcuts and decision making in an online environment however,
the result of their studies have shown to be inconsistent (Soto-Acosta, Jose Molina-Castillo,
Lopez-Nicolas, & Colomo-Palacios, 2014). Chen, Shang and Kao (2009) found a negative
relationship between information overload and consumers’ decision making while Huang, Zhu
and Zhou (2013) found a positive effect on consumers’ decision making when being exposed
to a lot of information. Furthermore, the researchers of this paper have not encountered a study
investigating the effect it has on consumers’ intention to purchase hence support the interest in
studying this.

1.3 Purpose

The purpose of this study is to evaluate the relationship between mental shortcuts and
consumers’ decision making when shopping fashion online.
2. Theoretical Framework

A presentation of the theoretical ground for this study will be found in this chapter which will work as a base for the hypothesis conducted in chapter 3.

2.1 Online Purchase Intention

Consumers’ purchase intention can be explained as the plan or willingness to purchase a specific product or service (Goldsmith, 2015). Furthermore, Spears and Singh (2012) describe purchase intention as “an individual’s conscious plan to make an effort to purchase a brand” (p. 56). According to Morwitz (2012) marketing managers should evaluate consumers’ purchase intention in order to use this information to predict future sales and demands for new products. Morwitz (2012) further discuss this by explaining that consumers usually set up a time span in which they intend to purchase something. However, due to unexpected factors, such as not being able to afford it, they may not be able to fulfil the purchase (Morwitz, 2012). Other factors that may influence consumers’ purchase intention are bad quality rankings or technological hindrances online, such as difficulties in navigating on the site or being exposed of too much information (Heijden, Verhagen & Creemers, 2003).

Heijden, Verhagen and Creemers (2003) further discuss that by looking at consumers’ purchase intention in an online environment compared to the offline market, the uncertainty level in e-commerce is much higher. Technology facilitate many aspects of e-commerce however, the backlash of its efficiency is that consumers are much more insecure in the purchase process since the transaction take place before the actual exchange (Heijden, Verhagen & Creemers, 2003). In order to manage this, companies should make the process as uncluttered as possible by diminishing all the possible hindrances which a consumer may face online in order to increase a consumer’s intention of fulfilling a purchase online (Thompson, 2013). By understanding how consumers’ habitual decision making function, companies can easier attain new customers, as well maintain their already existing ones (Solomon et al., 2016).
2.2 Habitual Decision Making

Habitual decision making is one of three types that describe how a decision is framed, which refers to choices made by individuals without or, little conscious effort (Solomon et al., 2016). The habitual decision making can be described as learned habits and instincts that includes unconscious actions but with a conscious goal (Bernacer, Balderas, Martinez-Valbuena, Pastor, & Ignacio Murillo, 2014; Solomon et al., 2016). Ji and Wood (2007) further state that, “The present research suggested that habits are a useful construct in understanding the mechanisms promoting repetition of consumer purchase and use. Habits are but one form of context-cued responding that can perpetuate consumer choices” (Ji & Wood, 2007, p.274). Meaning that habits are an important factor that make consumers repeatedly make a purchase (Ji & Wood, 2007). Continuously, Newell and Shanks (2014) discuss how unconscious and conscious decision making occur in people’s everyday life and how people sometimes tend to make decisions based on an unconscious feeling, rather than a rational choice (Newell & Shanks, 2014). Bernacer et al. (2014) further state that habitual decision making has a fundamental element of learning which can be considered as a base. Solomon et al. (2016) agree upon this and describes it as making decisions upon routines, rather than actively making a decision. Furthermore, Newell and Shanks (2014) presents an example of an unconscious decision by describing a situation when a ball is thrown towards someone and the individual needs to decide in the moment on how to act as the ball is getting closer. Previous experience from similar situations form cues that will push an individual to decide what action to take (Newell & Shanks, 2014). Moesgaard-Kjeldsen (2013) further explain that individuals’ former experience influences them in every decision they make by forming cues, in order to simplify a decision. These cues can be referred to as mental shortcuts and are often made unconsciously, which is a concept within habitual decision making (Solomon et al., 2016).

2.2.1 Mental Shortcuts in Habitual Decision Making

Mental shortcuts refer to decisions individuals make unconsciously which does not require mental effort to make (Gigerenzer & Gaissmaier, 2011). Gigerenzer and Gaissmaier (2011) describes when individuals take mental shortcuts, parts of the information in the decision is ignored. Even if mental shortcuts can simplify and reduce the complexity in a decision, errors do often occur. The reason for this is that when individuals take a shortcut, it is a decision made without rational thinking. Irrational decisions are usually made when individuals’ processing
capacity exceeds their thinking capacity, which forces individuals to take mental shortcuts (Gigerenzer & Gaissmaier, 2011).

Mental shortcuts are often influenced from previous experience or assumptions, which the human brain stores in order to simplify a decision (Ballou, 1989). When consumers make a decision, they often rely heavily on assumptions or biases in order to facilitate decision making. A classic example of a bias is that consumers who desire products with higher quality often choose products with higher prices. The reason for this is that many individuals associate high price with good quality (Ballou, 1989; Solomon et al., 2016). In order to understand how mental shortcuts function, a description of five common dimension will be presented below (Clear, 2018; Yacubovich, 2015).

2.2.1.1 Anchoring
The article by Wu, Cheng & Yen (2012) define the anchoring effect as “the situation in which an arbitrarily chosen reference point (anchor) significantly influences the decision makers’ value estimates, and the value estimated is insufficiently adjusted away from the reference point toward the true value of the target estimation” (p. 829). The article further discusses the anchoring effect by explaining that individuals need a reference point in order to decide on what value a product or service has. Individuals’ reference points are unique and differ depending on one's personal experience which is why the anchoring effect is perceived as such a challenging task to understand (Wu, Cheng & Yen, 2012). Furthermore, anchoring is described as one of the most essential mental shortcut since its effect on individuals’ decision making is vast, meaning that the consumer's decision relies heavily on this piece of information (Slovic & Lichtenstein 1971; Smith, 2012; Tversky & Kahneman, 1974). To explain this further, the price of the product, whether it is high or low, as well as the attributes of the product, will set the expectations for future products or services. Changing the consumer’s anchor could be rather difficult since this requires relearning in order to replace the old anchor with a new one (Smith, 2012).

The article by Wu and Cheng (2011) further explains the anchoring effect by stating that the higher the reference point or anchor the individual has, the higher will the final estimation be. Researchers believe that the anchoring effect is due to individuals’ uncertainty in making decisions. Meaning, that if individuals did not have anything to compare, for instance the quality or the price of a product, the value of it would be difficult to estimate (Wu & Cheng,
In relation to this, the anchoring effect in the online environment has become a common phenomenon since consumers can easily access a tremendous amount of information about pricing on different online sites and also recommendations from others (Wu, Cheng & Lin, 2008). Since anchoring is ruling consumers’ willingness to purchase a product or service, acquiring consumers’ attention in an early stage is important as companies can influence their decision making by staying in the consumers’ mind working as an anchor (Smith, 2012). Kamins, Drèze and Folkes (2004) further discuss how companies in the online market can take advantage of the anchoring effect by stating that “a high external reference price (a reserve price) specified by a seller in an online auction context will result in a higher final bid that when a low reference price (a minimum bid) was provided” (p. 830). This can further be described as a great amount of prices is presented with the highest price first in order to raise the reference price (Kamins, Drèze & Folkes, 2004).

2.2.1.2 Confirmation bias

Confirmation bias refers to the action of consumers who’s only looking for evidence that will strengthen their already existing knowledge. This behaviour is often related to individuals that want to find arguments for their cause but is also a common phenomenon on e-commerce sites when consumers have already decided on a product instead of viewing the products offered as a whole (Vozza, 2015). According to the article by Serva, Benamati and Fuller (2005) confirmation bias arise when there is a gap between individuals’ behaviour or attitude. In order to eliminate the dissonance, individuals try to change others’ behaviour or attitude, or sometimes adopt to an already existing belief about something. However, the dilemma of this phenomenon is that these beliefs might lack a reliable foundation (Serva, Benamati & Fuller, 2005). E-commerce is characterized by endless amount of information including product reviews and recommendations online, hence finding information that strengthen an already existing belief is easy to access (Senecal, Kalczynski, & Nantel, 2005). An article by Senecal, Kalczynski, and Nantel (2005) discuss the power of online information sources and through their study conducted the result revealed that all recommendations online are not equally influential. Depending on where the product recommendation is published, whether the website is commercially linked or non-related to companies or manufacturers, the recommendations’ persuasiveness differ (Senecal, Kalczynski & Nantel, 2005). The study further states that “more independent websites such as non-commercially linked third parties that facilitate consumers’ external search effort by decreasing search costs are assumed to be preferred by consumers”
(Senecal, Kalczynski, & Nantel 2005, p.160). However, even though independent consumers’ recommendations were proved to be the most influential, the study showed that these were perceived as less trustworthy in comparison to human expertise (Senecal, Kalczynski & Nantel, 2005).

2.2.1.3 Loss Aversion
Loss aversion is a theory presented by Kahneman and Tversky (1979) that explains how individuals weight losses more than gains in decision making. A loss can be presented in different ways. Smith (2012) argues that the main loss that consumers constantly feel is pricing. The reason for this is that the price itself is usually seen as a loss, which is especially true when a price is more than expected. The author continues by stating that missing benefits that the consumer expects from a product can as well be seen as a loss. Furthermore, depending on consumers’ previous expectation and their preferences, the price can be seen as a gain if it is lower than expected. However, even if consumers value the gains from a sale, the fear of missing out or paying too much still weight more (Smith, 2012). It is further stated that consumers are more risk-taking when they are afraid of missing out in order to not lose utility (Kahneman & Tversky, 1979; Yacubovich, 2015). Abdellaoui, Bleichrodt, and Paraschiv (2007) state that people experience losses twice as powerful in comparison to gains. Chiu, Wang, Fang and Huang (2014) explains this as individuals rather take the chance of winning a lower amount of money than to take the chance of winning a higher amount of money but facing a fifty percent risk of losing it too. Furthermore, an example of this is special offers occurring online, whereas the consumer has the fear of missing out since these kinds offer usually pertain during a limited time. The result of this is that it turns to a motivator for the consumers to make the purchase (Chiu et al., 2014).

2.2.1.4 The Paradox of Choice
The paradox of choice discusses the dilemma of whether too much information and options to choose from do harm or good to individuals’ decision ability. Variety is something that characterizes today’s society including individuals’ reluctance of giving up their freedom of choice. However, psychologists appoint this dilemma by claiming that humans do not benefit from this as the broad range of options available only lead to side effects such as anxiety and stress, which eventually lead individuals to bad decision making (Schwartz, 2004). The concept paradox of choice, was coined by the American psychologist Barry Schwartz (2004) who
discuss the backlashes of having too many alternatives to choose from in his book named the same as the concept, The Paradox of Choice (Schwartz, 2004). The article by Jones and Kelly (2018) discusses the problem of having too much information, so called information overload, in an online environment context. When online users are faced with too much information it often results in frustration and the user engagement decreases. Jones and Kelly (2018) further discuss strategies which companies can use in order to help online consumers overcome this dilemma and suggest that the best alternative to guide consumers through this is by applying information filtering. The goal of information filter is to weed out information that is seen as irrelevant for the single user and in that way, conduct a more personalized offering. However, the key of using filtering as a method is to find the balance between reducing unwanted information and maximize content that lays in the interest of the online consumer (Jones & Kelly, 2018).

2.2.1.5 Framing Effect

The framing effect is a theory which describes that individuals will make different choices depending on how the option is framed (Chen & Chang, 2016). Chen and Chang (2016) describe it as “positive framing of products emphasizes the benefits or gains, while negative framing emphasizes the risks or losses” (p.356) In the research made by Chen and Chang (2016) they discovered that positive messages increased consumers’ online purchase intention and that the framing effect had a significant effect if consumers were familiar with a brand. According to Yacubovich (2015) framing effect correlates to the concept loss aversion bias, which explains that individuals weight losses more than gains. Same theory can be adopted to the framing effect, since an option can be presented either as a loss or gain (Yacubovich, 2015). The different options often have a result with the same meaning even though one option is presented in a more favourable way to the consumers. Research have shown that consumers’ decision making when making a purchase is a complex study, since psychological factors has been proved to be influential (Li & Ling, 2015).

A classic example of the framing effect is Tversky and Kahneman’s (1981) hypothetical test which they conducted on a class with students from Stanford University and University of British Columbia. The hypothetical test presented the scenario where 600 people had been infected by an unknown deadly disease. The participants of this test were offered to choose between two different treatments with the aim of saving some of these people. However, what the participants did not pay attention to when taking this test was that the end result would still
mean that equal amount of people would die independently of which program they chose. First treatment stated that 200 people would survive if this treatment was chosen. The second treatment stated that 400 people would die if this treatment was chosen. The way of presenting the treatments had a decisive role in how the students answered as around 70% chose the treatment that was presented in a positive way which underlined how many that would survive (Tversky & Kahneman, 1981).

2.3 Chapter Summary

The dependent variable for this study is; consumers’ intention to purchase on fashion online retailing sites. The table 2.1 presents the items willingness, ability and uncertainty that have been identified from different authors (Goldsmith, 2015; Heijden, Verhagen & Creemers, 2003; Mortwitz, 2012; Spears & Singh, 2012; Thompson, 2013). For e-commerce sites, it is of great importance to understand consumers’ behaviour and what factors that impact their purchase intention, since that is the base for how to operate their market and sell products online (Heijden, Verhagen, & Creemers, 2003). Therefore, the independent variables will be tested on consumers’ purchase intention.

<table>
<thead>
<tr>
<th>Authors</th>
<th>Consumers’ Online Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spears &amp; Singh, (2012)</td>
<td></td>
</tr>
<tr>
<td>Mortwitz, (2012)</td>
<td>Ability</td>
</tr>
<tr>
<td>Thompson, (2013)</td>
<td></td>
</tr>
</tbody>
</table>

*Table 2.1, Presentation of the dependent variables together with identified items (Own)*

The independent variables for this study are anchoring, confirmation bias, loss aversion, paradox of choice and framing effect. These are categorized as mental shortcuts in individuals’ habitual decision making and will be evaluated in the relation towards the dependent variable (Moesgaard-Kjelsen, 2013; Solomon et al., 2016). Below in table 2.2 the five mental shortcuts included in this study, together with items and the associated sources are presented. Anchoring in this study focuses on how individuals’ reference point influence future purchases (Wu & Cheng, 2011; Wu, Cheng & Yen, 2012). Furthermore, anchoring also focuses on how consumers rely heavily on received information and recommendations from other (Slovic & Lichtenstein, 1971; Smith, 2012; Tversky & Kahneman, 1974; Wu, Cheng & Lin, 2008). The mental shortcut confirmation bias discusses how consumers search for evidence to strengthen
one's beliefs before making a purchase as well how recommendations from others influence a purchase (Senecal, Kalczynski & Nantel, 2005; Vozza, 2015).

When it comes to loss aversion, the fear of missing out works as a motivator for consumers and the way an offer is framed plays an essential role. It both concerns price and attributes on a product or service (Chiu, Wang, Fang & Huang, 2014; Smith, 2012; Tversky & Kahneman, 1974; Tversky & Kahneman, 1979; Yacubovich, 2015). Schwartz (2004) explain the paradox of choice as a mental shortcut that can affect the individuals’ decision ability both positively and negatively when consumers are exposed to a variety of options. Jones and Kelly (2018) further explain that the paradox of choice is due to information overload and that it affects consumers when making a purchase. Framing effect as a mental shortcut is dependent on how a choice is framed since that affect how consumers act. A choice can both be framed as a loss or a gain which affect individuals’ decision making (Chen & Chang, 2016; Li & Ling, 2015; Tversky & Kahneman, 1981; Yacubovich, 2015).

<table>
<thead>
<tr>
<th>Sources</th>
<th>Anchoring</th>
<th>Confirmation Bias</th>
<th>Loss Aversion</th>
<th>Paradox of Choice</th>
<th>Framing Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wu, Chen &amp; Yen (2012)</td>
<td>Reference point</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tversky &amp; Kahneman, (1974)</td>
<td>Rely heavily on received information</td>
<td>-</td>
<td>Fear of missing out</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Slovic &amp; Lichtenstein (1971)</td>
<td>Rely heavily on received information</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Smith, (2012)</td>
<td>Set expectations for future purchase</td>
<td>-</td>
<td>Pricing as a loss</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wu &amp; Cheng (2011)</td>
<td>Reference point</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Wu, Cheng &amp; Lin, (2008)</td>
<td>Information and recommendations from other</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vozza, (2015)</td>
<td>-</td>
<td>Evidence will strengthen beliefs</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Serva, Benamati &amp; Fuller (2005)</td>
<td>-</td>
<td>Strengthen already existing beliefs</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Senecal, Kalczynski &amp; Nantel, (2005)</td>
<td>-</td>
<td>Strengthen already existing beliefs</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Tversky &amp; Kahneman (1979)</td>
<td>-</td>
<td>-</td>
<td>Weight losses more than gains</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---</td>
<td>---</td>
<td>-------------------------------</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Abdellaoui, Bleichrodt, &amp; Paraschiv (2007)</td>
<td>-</td>
<td>-</td>
<td>Loss is powerful</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chiu, Wang, Fang &amp; Huang, (2014)</td>
<td>-</td>
<td>-</td>
<td>Fear of missing out</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Schwartz, (2004)</td>
<td>-</td>
<td>-</td>
<td>Variety of options</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Jones &amp; Kelly, (2018)</td>
<td>-</td>
<td>-</td>
<td>Information overload</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Chen &amp; Chang (2016)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Positive and negative framing</td>
</tr>
<tr>
<td>Yacubovich, (2015)</td>
<td>-</td>
<td>-</td>
<td>Fear of missing out</td>
<td>-</td>
<td>Framed as a loss or gain</td>
</tr>
<tr>
<td>Li &amp; Ling, (2015)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Positive and negative framing</td>
</tr>
<tr>
<td>Tversky &amp; Kahneman, (1981)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Positive and negative framing</td>
</tr>
</tbody>
</table>

*Table 2.2. Presentation of the independent variables together with identified items (Own)*
3. Conceptual Framework

In the conceptual framework chapter, a clarification of the formulated hypotheses conducted from the previous chapter is presented together with a research model to show the hypothetical correlation between the chosen variables.

In figure 3.1 the hypotheses for this study are presented together with the dependent variable, being individuals’ purchase intention. The hypotheses have been conducted from the independent variables presented in chapter 2, in order to help the researchers, evaluate if there is a correlation between each variable towards the dependent variable. The independent variables are created based on five mental shortcuts that can occur in a consumer's decision making which are anchoring, confirmation bias, loss aversion, paradox of choice and framing effect (Solomon et al., 2015; Yacubovich, 2015). Furthermore, the hypotheses were constructed with the intention to see if the theory behind each mental shortcut affects how consumers make their decisions on fashion retailing sites.

The theoretical framework about anchoring explains that consumers use price on other products as a reference point and that they rely heavily on the first piece of information received, see table 2.2. (Tversky & Kahneman, 1974; Smith, 2012; Wu, Cheng & Yen, 2012). Anchoring is a complex mental shortcut, since individuals’ reference points are unique and hence they difficult to determine (Wu, Cheng & Yen, 2012). In order to test these factors on the dependent variable, the researchers will investigate if consumers’ previous experience affect how they make decisions in the future, regarding both price and attributes (Smith, 2012). Therefore, the following hypothesis has been developed:

*Hypothesis 1: Previous experience on a retailing site decides how consumers unconsciously form expectations when purchasing a product on future retailing sites.*

The theoretical framework about confirmation bias demonstrate that individuals can find recommendations and information about a product easily online and thereby, strengthen ones’ already belief about a product. Since the uncertainty level is much higher on online sites in comparison to the offline market, consumers search for information and reviews in order to purchase with confidence. Furthermore, theory says that depending on where the review is
published, the influence on the consumer may differ (Senecal, Kalczynski & Nantel, 2005). Therefore, the following hypothesis has been developed:

*Hypothesis 2: Recommendations from others that actually confirm consumers’ choices positively influences their online purchase intention.*

Loss aversion presented by Kahneman and Tversky (1979) explains how individuals weight losses more than gains in decision making. This is something that companies take advantage of when trying to trigger the consumer to purchase (Mceachern, 2015). This can for example be done by offering sales during a time limit, which Smith (2012) explains as consumers’ fear of missing out or the fear of paying too much, which is stated to weigh heavier. This research aims to see if the mental shortcut loss aversion has an impact on consumers’ purchase intention. Therefore, the following hypothesis has been developed:

*Hypothesis 3: Consumers feel stronger emotions when they feel that they have saved money compared to if they would have gained the same amount.*

According to Schwartz (2004) the paradox of choice describes the situation of whether too much information affects consumers’ ability to make a decision. It has been proved that too much information online lead to faulty decisions. Investigating this shortcut is highly relevant, especially concerning fashion retailing sites, since the product information consumers can reach online is tremendous (Falk & Hagsten, 2015). Therefore, the following hypothesis has been developed:

*Hypothesis 4: Too much information make consumers leave the fashion retailing site before purchasing.*

The theory about the framing effect demonstrate that depending on how an offer is presented, the choice will differ, even though the offer means the same (Yacubovich, 2015). The classic framing effect example, demonstrated in chapter 2.2.1.5 made by Tversky and Kahneman (1981), explained how students’ choice differed depending on how the situation was presented. The interest in studying this is to see if similar behaviour can be identified in consumers’ decision making when shopping online. Therefore, the following hypothesis has been developed:

*Hypothesis 5: Consumers are more likely to purchase a product when the offer is presented in a positive way.*
3.1 Conceptual Model

Figure 3.1 presents how this study’s five mental shortcuts anchoring, confirmation bias, loss aversion, paradox of choice and framing effect is interpreted to have a relationship with this study’s dependent variable purchase intention when it comes to fashion retailing sites. The hypotheses are conducted from the theories presented in chapter 2, which have worked as a base when creating the conceptual model. The figure presents how the hypotheses are interpreted to have an independent relationship with individuals’ purchase intention therefore, the hypotheses are presented separately.

Figure 3.1, Mental shortcuts’ influence on purchase intention model (Own)
4. Methodology

In this chapter a presentation of the chosen methods and justification for why these methods are most suitable for this study is presented including an operationalization with the theories chosen. The operationalization worked as a guidance for the questionnaire in order to be able to test the hypotheses.

4.1 Research Approach

Bryman and Bell (2015) state that when doing a research there are factors that need to be decided in beforehand, in order for the researchers to have a clear view of the research process. Depending on the aim with the study, some approaches are more suitable than others (Bryman & Bell, 2015). If the researchers have a clear view of the research and the design of the study before the start, it can impact which approach that should be used, whether it should be inductive or deductive (Saunders, Lewis & Thornhill, 2016). The inductive approach can be described as data collected which will help the researchers to create and develop a new theory from the analysis made. In short, building a theory rather than testing the existing ones. While the deductive approach is based on already existing theory where hypotheses are conducted with the intention to test the theory. Researchers use the deductive approach when the aim is to investigate the relationship between theory and variables (Bryman & Bell, 2015; Saunders, Lewis & Thornhill, 2016).

The deductive approach is applied onto this study as the researchers aims to investigate an already existing theory, which is mental shortcuts, and its impact on consumers’ purchase intention. In order to test the impact mental shortcuts, have on consumers’ online purchase intention, theory in form of other researchers’ findings in the subject matter will work as the foundation of this study and the empirical data will be collected with the intention to test it.

4.1.1 Deductive Research

When using a deductive approach, the aim is as mentioned, to find a relationship between the chosen variables which can be achieved through hypothesis testing. By conducting hypotheses relevant to the theories, researchers can investigate whether there is a connection between them.
and the dependent variable (Bryman & Bell, 2015). Bryman and Bell (2015) describe hypothesis as an “informed speculation” (p. 92). Continuously a hypothesis can be described as a form of a research question developed through theoretical concepts, whereas the aim is to test it. This means that the researchers test the hypothesis by either accepting or rejecting it (Bryman & Bell, 2015; Saunders, Lewis & Thornhill, 2016). This is done when the result of the chosen data analysis method is received and analysed through the use of SPSS, which will be described later in this chapter. When constructing hypothesis, it is important that the hypothesis clearly reflect the theory it emerged from, so that the researchers will not get confused when analysing the result (Bryman & Bell, 2015).

The researchers of this study have conducted hypotheses in order to find relationships between the variables of mental shortcuts and consumers’ purchase intention. The deductive approach was evaluated to best suit the purpose of this study, as it allows the researchers to create hypotheses that will describe the relationship between mental shortcuts and consumers’ online purchase intention. Continuously, the researchers have decided to use a quantitative research which is most suitable when having a deductive approach (Bryman & Bell, 2015).

4.1.2 Quantitative Research

According to Bryman and Bell (2015), the most common research method to use when having a deductive approach is quantitative (Bryman & Bell, 2015). Since the deductive approach usually aims to grasp a large amount of data, having a quantitative approach is beneficial as it facilitates the collection of it. Using a quantitative research means that the researchers observe a phenomenon with the help of raw data, which is often gathered in statistical forms, graphs or tables (Saunders, Lewis & Thornhill, 2016). Bryman and Bell (2015) state that researchers who uses a quantitative approach strives to get a broad perspective. Even though the quantitative research method helps researchers to grasp a lot of data, it is hard or almost impossible, to reach out to a whole population. Therefore, researchers use generalization in order to present the result as if the whole population was a part of the sample. However, even though researchers use large sample sizes, one must know that the result still do not completely reflect the whole population (Bryman & Bell, 2015).

The researchers have evaluated the pros and cons with using the quantitative method and came to the conclusion that the strengths outshadow the weaknesses in relation to the purpose of this study. Mainly, because the quantitative method enables the process of finding a correlation
between the theoretical concepts chosen, which are the different mental shortcuts, and consumers’ online purchase intention. Furthermore, the quantitative method is appropriate since the researchers aims a finding a generalizable result.

4.2 Research Design

Given that this study aims at finding a relationship between mental shortcuts and consumers’ purchase intention, makes the purpose of this study descriptive. Since a research of a descriptive purpose aims at finding an association between the independent and the dependent variable through hypothesis testing. Choosing a research strategy can be seen as a difficult decision however, it is crucial to remember that the primary purpose of the strategy is that the study should be able to reach the aim. This, independently whether the study has an explanatory, descriptive or exploratory purpose. In order to have a descriptive purpose the amount of information available matter, since this strategy require a more extensive amount compared to the other strategies (Saunders, Lewis & Thornhill, 2016).

Bryman and Bell (2015) state that in order to find a generalizable result, many cases should be examined. A research design that allows the researchers to do this is the cross-sectional. (Bryman & Bell, 2015). “A cross-sectional design entails the collection of data on more than one case (usually quite a lot more than one) and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables (usually many more than two), which are then examined to detect patterns of association” (Bryman & Bell, 2015, p. 62). To develop it further, the cross-sectional design allows researchers to investigate more than one case, which will lead to a variation when it comes to the variables chosen.

This study will examine the different dimensions of mental shortcuts and their impact on consumers’ online purchase intention, hence many variables are included. The purpose of this study is to evaluate the relationship between these, thereof the choice of using the cross-sectional design. Furthermore, as prior research in the subject matter differ from each other, the cross-sectional design is advantageous as many cases can be studied at the same time. By using the cross-sectional design, the researchers of this study will be able to investigate the relationship between the independent variables which are the different mental shortcuts, and the dependent variable consumers’ purchase intention.
Saunders, Lewis and Thornhill (2016) and Bryman and Bell (2015) both discuss the advantages of using a cross-sectional design and state that when conducting a cross-sectional design, the participants in the study are not required to return to any further studies. Meaning that even if the questionnaire itself might take time for the participants to complete at that time, they are not obligated to return to continuous contact (Saunders, Lewis & Thornhill, 2016; Bryman & Bell, 2015). This was something that the researchers of this study took into account when deciding upon the research design, as the data collection method will be a survey in form of a questionnaire.

4.3 Data Collection Method

This study will focus on primary data, which refers to data collected and analysed directly by the researchers (Bryman & Bell, 2015). The reason of choosing primary data is due to that the researchers have not encountered a study investigating the impact mental shortcuts have on consumers’ decision making online, hence finding secondary data that explains this is difficult. Furthermore, this study will count on information from a questionnaire which will collect information directly from the consumers. Furthermore, Bryman and Bell (2015) state that the primary data collected should be relevant and impartial in order to fulfil its purpose. In order to ensure a collection of only relevant information, the data collection instrument must be carefully decided upon, which we be described more in chapter 4.4.

“Knowing which data-gathering methods or combination of methods to use depends on a number of factors, such as organizational culture, environment, policies, and the effects or causality that drove the project” (McClelland, 1995, p. 90 in Martin, 2000, p. 341). Meaning, choosing the method that enables the researchers to gather primary data is of importance in order to reach the aim (Martin, 2000). Saunders, Lewis and Thornhill (2016) further argue that when conducting a deductive research, using a survey is common. The reason for this is that it can help the researchers when trying to reach a broader sample size (Saunders, Lewis & Thornhill, 2016). “The survey strategy allows you to collect quantitative data which you can analyse quantitatively using descriptive and inferential statistics” (Saunders, Lewis & Thornhill, 2016, p. 144). However, Saunders, Lewis and Thornhill (2016) continue to explain that even if survey as a method is convenient, the researchers need to be aware of the amount of time that it takes to ensure the reliability and validity of a quantitative research, see chapter...
4.7. These considerations were laid as a ground when choosing survey as a data collection method. Below the instrument of collection will be discussed.

4.4 Data Collection Instrument

There are different methods on how to provide the survey to the respondents, but for this study a survey in form of a questionnaire was conducted via google form, due to its convenience to reach a broader audience from different area codes. As mentioned above, a survey in form of a questionnaire will be used and it can be described as the same set of questions conducted by the researchers, often close-ended which are answered by the respondents themselves (Bryman & Bell, 2015; Saunders, Lewis & Thornhill, 2016). Choosing survey in form of a questionnaire as a method has its advantages, for example its efficiency of collecting a large number of responses (Martin, 2000; Saunders, Lewis & Thornhill, 2016). Bryman and Bell (2015) further discuss the advantages with using questionnaire such as the convenience for the respondents, since they can decide the amount of time to spend on the questionnaire, without stress. Furthermore, the absence of the researchers can also be seen as an advantage, since the researchers cannot impact the participants response. There are disadvantages of choosing questionnaires as well, which needs to be considered. One example of this is that it can be difficult to conduct the questionnaire itself, since the questions needs to be precise in order to reach the result wanted (Saunders, Lewis & Thornhill, 2016). Another disadvantage is that the researchers do not have the ability to ask supplementary questions which can be seen as a loss of valuable data. However, if the questions asked are precise and hard to misunderstand, it can minimize the chances of gathering inaccurate data (Bryman & Bell, 2015).

Since this research uses a deductive approach and has a descriptive purpose, a questionnaire can help find relationships between the dependent and independent variables (Saunders, Lewis & Thornhill, 2016). A dependent variable can be described as “changes in response to changes in other variables” (Saunders, Lewis & Thornhill, 2016, p. 444). Independent variable on the other hand, is what motivates and causes the shift of the dependent variable (Saunders, Lewis & Thornhill, 2016). Using questionnaire as the data collection method was perceived as being the most suitable in relation to the purpose of this study, since the researchers did not want to affect the outcome with their personal appearance.
### 4.4.1 Operationalization and Measurement of Variables

According to Bryman and Bell (2015) the likert scale is when the participants are offered to respond to a question using a scale from for example 1-5. This study adapted the likert scale by using 1 = Completely Disagree and 5 = Completely Agree. Furthermore, the numbers in between were decided to stand for 2 = Disagree, 3 = Neutral and 4 = Agree. This is advantageous for the researchers when transferring the data into SPSS, since the coding is done along with the responses (Bryman & Bell, 2015). However, the questionnaire conducted for this study used three questions that did not have a likert scale. For the question regarding the participant’s gender, three options were available to choose from; female, male and other. The question regarding age is categorized as ordinal, since the intervals between the alternatives are not consistent, see appendix A. Furthermore, the last question that did not use a likert scale is the control question, which uses a nominal measurement, consisting of Yes, No and I don’t know as alternatives.

Presented below is the operationalization table, which has worked as a guidance when conducting the questionnaire. The operationalization shows which questions that belongs to the hypothesis, together with the theoretical definition from the theories collected that leads to the measurement of the questionnaire as well as the codes for the data program SPSS. The first column presents the dependent variable purchase intention, which does not have a hypothesis.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Codes</th>
<th>Theoretical Definition</th>
<th>Hypothesis</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase Intention</td>
<td>INT_1</td>
<td>The plan or willingness to purchase a specific product or service (Goldsmith, 2013)</td>
<td>-</td>
<td>INT_1: I frequently shop fashion online</td>
</tr>
<tr>
<td></td>
<td>INT_2</td>
<td></td>
<td></td>
<td>INT_2: I prefer to shop fashion online compared to a physical store</td>
</tr>
<tr>
<td></td>
<td>INT_3</td>
<td></td>
<td></td>
<td>INT_3: I will continue shopping fashion online in the future</td>
</tr>
<tr>
<td>Anchoring</td>
<td>ANC_1</td>
<td>The first information found about a product works as a reference point or anchor for future information that a consumer will receive (Tversky &amp; Kahneman, 1974)</td>
<td>Previous experience on a retailing site decides how consumers unconsciously form expectations when purchasing a product on future retailing sites.</td>
<td>ANC_1: I get triggered to buy the product when seeing this on a fashion retailing site</td>
</tr>
<tr>
<td></td>
<td>ANC_2</td>
<td></td>
<td></td>
<td>ANC_2: Last time I bought a product online it had free shipping. Therefore, I will not buy products from a site that has a shipping cost</td>
</tr>
<tr>
<td>Confirmation Bias</td>
<td>CON_1: Before I buy a product, I want confirmation from others. CON_2: I prefer products that have many recommendations online. CON_3: Recommendations on independent websites (e.g. flashback) influence me more than recommendations on companies’ websites.</td>
<td>The action of consumers who’s only looking for evidence that will strengthen their already existing knowledge (Vozza, 2015). Recommendation from others that actually confirm consumers’ choices positively influences the intention to purchase.</td>
<td>ANC_3: I bought a product online that did not fulfil my expectation. Therefore, next time I will buy from another site.</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Loss Aversion</td>
<td>LOS_1: I prefer voucher A over voucher B. LOS_2: If a site has 25% discount for only 24 hours I feel triggered to buy. LOS_3: Only a few items left of a product (low in stock) triggers me to buy the product.</td>
<td>Explains how individuals weight loss more than gains in decision making (Kahneman &amp; Tversky, 1979). Consumers feel stronger emotions when they feel that they have saved money compared to if they would have gained the same amount.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Paradox of Choice</td>
<td>POC_1: For me it is important that the fashion retailing site that I am visiting is structured and well categorized. POC_2: When I think a site has too much information I feel stressed and leave the site. POC_3: Using filters (for example, brand, size, colour) on sites increase the chance of me buying a product.</td>
<td>Whether too much information and options to choose from do harm or good to individuals decision ability (Schwartz, 2004). Too much information makes consumers leave the fashion retailing site before purchasing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The Framing Effect</td>
<td>FRA_1: I would rather choose picture A than B. FRA_2: A pair of jeans made of 90% organic cotton is better than pair of jeans made of 10%.</td>
<td>Describes that individuals will make different choices depending on how the options are framed (Yacubovich, 2015). Consumers are more likely to purchase a product when the offer is presented in a positive way.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.4.2 Questionnaire Design

Saunders, Lewis and Thornhill (2016) state five factors that are important to consider during the creation process to reach a maximized result. To begin with, the researchers need to carefully consider the design of the questions. If the design of the questions is simple and easy to understand, it will help the participants in answering the questions and the result will end up being more reliable (Saunders, Lewis & Thornhill, 2016). Bryman and Bell (2015) describe different types of questions that can be used in a questionnaire, which are open or close-ended questions. Open-ended questions are common during interviews and focus groups, since it allows the participants to answer freely (Bryman & Bell, 2015). However, Bryman and Bell (2015) state that when conducting a questionnaire, close-ended questions is the optimal solution together with a likert scale, since this will help the researchers transferring the data to SPSS. This was adapted to the study which can be seen in Appendix A.

The second factor that Saunders, Lewis and Thornhill (2016) discuss is that the layout itself needs to be designed in a simplicit way, since a clear design makes it easier for the respondent to answer the actual question and prevent distractions. It is also crucial for the respondents to know why they should respond to the questionnaire from the beginning. A way to explain this is to describe the study’s purpose, which is the third factor (Saunders, Lewis & and Thornhill, 2016). The fourth factor that Saunders, Lewis and Thornhill (2016) discuss is to pre-test the questionnaire, which will be described later in this chapter. Last of, they discuss the importance of administering the finished questionnaire, which means that the researchers need to consider the ethical consideration (Saunders, Lewis & Thornhill, 2016). All of these steps mentioned have been adapted to this study and the reason for this is that Saunders, Lewis and Thornhill (2016) state that the design of the questionnaire can also help to reach a valid and reliable result, which is something that this study strives to reach.
When the researchers conducted the questionnaire for this study, they noticed that writing questions that would describe how individuals make unconscious decisions was difficult. In order to overcome this, some questions were written such as the respondent was experiencing a scenario and others were visualized in form of pictures. The aim of constructing the questions in that way was to prevent giving away too much information to the participants and hinder biased responses, but still making sure that the questions were easy to understand.

4.4.3 Pre-Testing

Martin (2000) states that the questionnaire needs to be acknowledged by others than the researchers themselves, called pre-testing. The reason for this is to make sure that the information within the questionnaire is valid and on topic (Martin, 2000). Martin (2000) further suggests that the people who validates the pre-test should be experts within the area or have knowledge about the creation of a questionnaire and research design in particular. Only after pre-testing, the questionnaire can be sent out to the aimed group of people (Martin 2000). Furthermore, “it may be necessary to redistribute the questionnaire to non-respondents in order to get the most accurate information possible” (Martin, 2000, p. 342). Bryman and Bell (2015) points out that pre-testing is especially important when it comes to questionnaires, since the researchers are not present and can therefore not clear up any bewilderment. This was considered when this study’s questionnaire was conducted and two experts within the subject went through the questionnaire beforehand. However, the researchers also decided to ask a small sample group of ten people, before sending out the questionnaire in order to receive more comments on the questionnaire (Bryman & Bell, 2015).

4.5 Sampling

Sampling refers to the collection of data from a specific group of people or from a specific case. The aim with sampling is to receive a result which can be applied onto a whole population, but since that would require an enormous effort and presumably not implementable, researchers study a selected group. The units or members that are included in a selected group, are part of the so called study population (Bryman & Bell, 2015). If the researchers in a study decide to not use sampling as a method, the researchers can use census, which means that the researchers do not use any specific case or members in a study. Census require a lot of time, money and access to every data, since it must have answers from every possible case or group members. Therefore, sampling is preferable when the research question and objective aim to receive a
result that can be applied towards the chosen sampling group and when the budget and time is limited. Even though census often grasp a larger group of people, it is not always perceived better since the answers can be irrelevant in relation to the topic studied (Saunders, Lewis & Thornhill, 2016).

In this study the hypotheses concerns consumers that shop fashion online on retailing sites and will therefore be the sampling population. The first question worked as a control question in the questionnaire, as it asked the participants if they have made a purchase on an online fashion retailing site. If the participant had not purchased anything on an online fashion retailing site, they were not able to further answer the questions in the questionnaire. This helped the researchers of this study, to sort out the irrelevant answers and focus on the data collected from the participants that had an experience in e-commerce.

Furthermore, there are two different techniques of how to sample, probability and non-probability sampling. Probability sampling means that the participants are selected through a random selection and that each has a known chance of being selected (Saunders, Lewis & Thornhill, 2016). Unlike probability sampling, non-probability sampling does not select a sample based on a complete random selection. In a non-probability sampling, individuals in the population do not have an equal chance of being selected but are so because of the subjective judgement of the researchers. The subjective judgement of the researchers is based on their opinion of whom they believe suits best in their research (Bryman & Bell, 2015) and is in this study individuals that have made a purchase on an online fashion retailing site. Non-probability sampling was therefore the best technique for this study.

Bryman and Bell (2015) further describe non-probability sampling by categorizing it into two different types: convenience sampling and quota sampling. Convenience sampling refers to the collection of participants which is based on those available to the researchers. This technique is often used because it is fast to use and unlike many other sampling methods, inexpensive. Bryman and Bell (2015) further state that it would obviously be better to include a whole population in the sample, but since the population often is too large, that would be impossible. Since convenience sampling do not include the whole population, it does not completely reflect the behaviour or attitude of the rest of the population therefore, the result cannot be completely generalized. The other non-probability sampling method is quota sampling, which requires more time collecting as it aims to find people representing categories in the population (Bryman
& Bell, 2015). According to Bryman and Bell (2015) these categories of people can be “gender, ethnicity, age groups, socioeconomic groups, and region of residence, and in combinations of these categories” (p. 202). Quota sampling does not use random sampling as the researchers of the study must find participants that fulfil each subgroup. Since quota sampling is not random, as the researchers chose the participants to include, it can lead to a potential selection bias. This situation can occur when for example, the researcher gets different content rich answers depending on the chemistry between the interviewer and participant (Bryman & Bell, 2015).

Bryman and Bell (2015) further discuss the use of convenience sampling and states that it has almost become the norm to use when investigating consumer behaviour. Convenience sampling was applied onto this study as the researchers wanted to investigate consumers’ decision making when shopping online. Furthermore, this sampling method was used since the researchers of this study desired a randomized selection of participants but with one requirement, which was to have experience within fashion online shopping. This requirement was set since the participants would not have been able to answer the questions in the questionnaire if they did not have an experience in online shopping.

4.5.1 Sample Selection

A sample frame includes a list of every participant from the chosen group of population that will be the frame for the sampling (Saunders, Lewis & Thornhill, 2016). After the pre-test was carried out, the researchers sent out the questionnaire on their social media channels such as Facebook and LinkedIn. The participants’ networking sites contains people with different age and gender. Therefore, the result from the convenience sampling, collected participants from the researchers’ friend lists and contact lists on Facebook and LinkedIn. However, when using convenience sampling as a sampling technique, the researchers do not have to decide upon a sample frame to follow nor a number of participants to reach (Saunders, Lewis & Thornhill, 2016).

Even though a sample size is not required for a study that use convenience sampling, one can still use guidelines while conducting the research. According to Carmen, Wilson Van and Betsy (2007) there is a formula that researchers can use in order to know ones’ sample size. The formula follows; 50 respondents + 8 * number of independent variables. Meaning that through following this formula, 90 answers was required, (50+(8*5)=90). After 5 days the researchers had received 293 answers and out of those, 274 were valid since they passed the control
question. Having in mind, that the larger sample size the more reliable and generalizable result, the researcher aimed at getting at least 200 answers in the questionnaire for this study. If the sample size is not large enough, the possibilities for sample errors to occur are more likely to appear. The importance of a high response rate is to make a research as representative as possible (Saunders, Lewis & Thornhill, 2016).

4.6 Data Analysis Method

Disman, Ali and Syaom Barliana (2017) state that “the statistical method is chosen for understanding the research data that leads to a proper conclusion” (p. 51). This can be seen as an indication of the importance of choosing the right method when analysing the statistical data gathered. It is further stated that this choice should be considered during the whole process of deciding which method to use (Disman, Ali & Syaom Barliana, 2017). Bryman and Bell (2015) continue by arguing for the data program SPSS, which enables the researchers to analyse the quantitative data gathered from the questionnaire. They continue by stating that SPSS software is the mostly common data analysis programme used (Bryman & Bell, 2015). Due to that this research strives to collect a large sample size, collecting the data in a statistical form is efficient, therefore SPSS will be used when analysing the material from the questionnaire.

4.6.1 Data Coding

When using SPSS as a tool for analysing the data collected, Bryman and Bell (2015) suggest that the researchers should use codes and coding since it can help the researchers when analysing the data gathered. Bryman and Bell (2015) suggest that the researchers should start coding their variables before even sending out the questionnaire, since it can both save time and makes it easier when transferring the data into SPSS. Saunders, Lewis and Thornhill, (2016) state that one common way to code is to use numerical codes. They imply that this method of coding limits errors, which can occur when re-coding the responses (Saunders, Lewis & Thornhill, 2016).

In this study, almost all the questions in the questionnaire had a likert scale numbered 1-5, which resulted in that the responses were already coded. This helped the researchers when transferring the data into SPSS. Furthermore, the variables were named after what hypothesis it belonged to, example ANC_1, which was the first question for the hypothesis about anchoring. The codes used for all the variables can be found in the operationalization in figure
4.1. However, three questions; gender, age and the control question did not use a likert scale, which the researcher had to transform to numerical coding. This was done by coding the variable to female (1), male (2) and other (3) in the question about gender. Furthermore, this was as well done for the question regarding age whereas - 18 (1), 18-24 (2), 25-34 (3), 35-44 (4), 45-54 (5) and 55 and over (6). Continuously, the control question in the questionnaire which was if the participants had ever purchased fashion online, was transformed as follow; Yes (1), No (2), and I don’t know (3). In total, the questionnaire received 293 responses, whereas 19 people (6.5%) did not pass the control question. Meaning, 274 responses were considered valuable for the researchers.

4.6.2 Descriptive Statistics

Punch (2013) explains descriptive statistics as a way to summarize the data collected and describe it. Saunders, Lewis and Thornhill (2016) agree upon this and further state that using descriptive statistics can help the researchers when comparing the variables. “Descriptive statistics aim to describe the midpoint of a spread of scores, usually referred to as the measure of central tendency, and the spread of scores known as the dispersion or variance” (Fisher & Marshall, 2009, p. 93). When describing the central tendency there are three measurements called mode, median and mean that needs to be understood (Saunders, Lewis & Thornhill, 2016). First, mode measures and defines which value that occurs in the data most frequently. Mode is usually used when it comes to gender, for example to see which gender occurs more frequently in the data. Second, median or also called the middle, stands for the middle of all the data presented in a numerical order (Fisher & Marshall, 2009). Saunders, Lewis and Thornhill (2016) state that median has its advantageous when it comes to not being affected if there for example is an extreme variable among the data. Last, the mean which can be described as the average of all values. This is calculated by taking all the values together and then dividing it with the number of items. When doing central tendency, the researchers should strive to reach a normal result, meaning that the value of mode, median and mean are more or less the same (Fisher & Marshall, 2009).

The other measurement within descriptive statistics, dispersion or variance, focus on describing the result from the central tendency (Saunders, Lewis & Thornhill, 2016). Saunders, Lewis and Thornhill (2016) mention that a common way of determining the result of the central tendency, is standard deviation. The value of the standard deviation can be explained as “the narrower the standard deviation, the closer the majority will be to the mean” (Fisher & Marshall, 2009, p.
As stated before, the researchers should strive to have, more or less, the same value when it comes to mode, median and mean however, if the values of the mode, median and the mean differs, it is said to be skewed (Fisher & Marshall, 2009). Skewness and kurtosis are two concepts used that Ho and Yu (2015) describe as “skewness and kurtosis as rough indicators of the degree of normality of distributions or the lack thereof” (p. 370). Meaning, if the frequency is shifted to the right or the left. If a distribution is shifted to much in one direction, it means that there are outliers that affect the frequency distribution overall. Depending on the value, the skewness can both be seen as positive or negative. The optimal value for skewness should lie between ±1, which means that the distribution is normal and the distribution for the kurtosis should lie between ±3 (Ho & Yu, 2015). However, if a questionnaire has a sample size over 200 responses, the sampling error decreases, which means that skewness can lie to some extent outside ±1 (Hair, Black, Babin & Anderson, 2010).

4.6.3 Multiple Linear Regression Analysis

Multiple linear regression analysis is an analysis method that enables the researchers to include more than two independent variables when aiming to find a correlation between at least one dependent variable (Eggeby & Söderberg, 1999; Pandis, 2016). Pandis (2016) further states that multiple linear regression analysis also allows the researchers to analyse more variables at the same time to discover if they have an effect on the dependent variable independently. This can be seen as advantageous for this study, considering that there are numbers of variables that need to be analysed together. However, Eggeby and Söderberg (1999) state that doing a multiple linear regression analysis can be both complex and time-consuming, but the end result will enable the researchers to explain the correlation between the variables, if there are one. Furthermore, they urge researchers to examine the correlation coefficient between all the variables, as it will provide a more valuable result (Eggeby & Söderberg, 1999).

When using the multiple linear regression analysis, the coefficient can show how strong the regression coefficient ($R^2$) is between the independent variable(s) and the dependent variable (Eggeby & Söderberg, 1999; Punch, 2013). Aaker, Kumar, Day and Leone (2010) explain the result of multiple linear regression analysis as “the more variance we can account for, the more accurate the prediction we can make” (p. 264). Meaning, that it can help the researchers account the accuracy of the regression model as well as the efficiency. The result is presented in a scale between 0 to 1, whereas $R^2 = 0$ means that there is no correlation between the variables, and $R^2 = 1$ means that there is a correlation between all variables (Eggeby & Söderberg, 1999; Punch,
2013; Saunders, Lewis & Thornhill, 2016). By multiplying the coefficient \( R^2 \) with 100 the result would be in percentage, in order to easier understand how strong, the coefficient is (Moore, McCabe & Craig, 2017). When multiplying the coefficient \( R^2 \) it is stated that “the coefficient of multiple determination can be interpreted as the percentage of variation in the dependent variable that can be explained by the estimated regression equation” (Saunders, Lewis & Thornhill, 2016, p. 463). Researchers often strive to get a high \( R \) over 50% in order to prove the correlation between the variables (McCormick, Salcedo & Poh, 2015). However, McCormick, Salcedo & Poh (2015) further state that when studying human behaviour, correlations can be lower than the range of 0.3 or 0.5 which can be considered as high since, human behaviour is hard to predict. Furthermore, Saunders, Lewis and Thornhill (2016) state that when having more than one independent variable adjusted \( R^2 \) can help the researchers avoid overestimation, since it prevents impact that one extra independent variable can have on the regression.

4.6.3.1 Hypothesis testing

The purpose of creating hypotheses in a quantitative research is to later on test them, so called hypothesis testing. After summing up the data from the appropriate sample group in statistics, the researchers must test how valuable the result is and how correct it turned out to be. This should be done in an early stage in order to not proceed with irrelevant empirical data (Aaker et al., 2010). Aaker et al. (2010) state that “the purpose of hypothesis testing is not to question the computed value of the sample statistic but to make a judgement about the difference between two sample statistics or the sample statistic and a hypothesized population parameter” (p. 401).

When conducting a multiple linear regression analysis, researchers should evaluate the statistical significance, which is the value that presents if the hypothesis could be accepted or rejected (Miller, Acton, Fullerton & Maltby, 2002). Miller et al. (2002) describe that the significance level is presented in a measurement called p-value and before analysing the data the significance value that the researchers should strive for has to be decided. Furthermore, they state that the significance also can be seen as a risk measurement of two errors that needs to be avoided. To clarify, accepting a hypothesis that should not have been accepted is referred to as error 1. While error 2 means that the researchers reject a hypothesis that should have been accepted. The significance level can help the researchers on the chance of accepting the hypothesis that should be accepted (Miller et al., 2002). A significance level that is above 0.05 has a higher chance of making an error 1, which is the maximum level of risk that is accepted.
Therefore, \( p<0.05 \) was the maximum level of significance that the researchers for this study accepted. It is further stated that \( p<0.01 \) is more preferable, since it indicates a stronger significance level. This can be explained as the lower \( p \)-value the stronger the significance level is. This is preferable since it decreases the chances of a falsely accepted hypothesis (error 1) and a higher chance of a legitimate hypothesis (Moore, McCabe & Craig, 2017; Miller et al., 2002).

4.7 Quality Criteria

Saunders, Lewis and Thornhill (2016) state that “reducing the possibility of getting the answer wrong means that attention has to be paid to two particular emphasis on research design: reliability and validity” (p.156). Meaning, that when conducting a study, researchers should strive for validity and reliability (Bryman & Bell, 2015; Saunders, Lewis & Thornhill, 2016). Bryman and Bell (2015) state that “Validity is concerned with the integrity of the conclusions that are generated from a piece of research” (p.50). In other words, the measurement needs to be on point, and when the researchers reach a result, the measure of this needs to be as the researchers intended too in the first place (Aaker et al., 2010; Bryman & Bell, 2015). There are three types of validity; content, construct and criterion, which all will be examined in the following chapter (Bryman & Bell, 2015). Bryman and Bell (2015) further state that “reliability is concerned with the question of whether the results of a study are repeatable” (p. 49). Meaning, if the research is done again would the result end up the same or be inconsistent (Aaker et al., 2010; Bryman & Bell, 2015).

4.7.1 Content Validity

Content validity, also known as face validity can be explained as “the measure apparently reflects the content of the concept in question” (Bryman & Bell, 2015, p. 170). Bryman and Bell (2015) state how this can be done with for example pre-testing, which is mentioned earlier in this chapter. Meaning, getting others to review the questionnaire before sending it out, usually by asking professors or other people who are experts within the area. When doing this the study can reach content validity (Bryman & Bell, 2015). In order to reach content validity, the researchers asked two people who are experts within the field, to review the questionnaire. After the comment and suggestions were corrected and the questionnaire was rearranged, the researchers decided to send out the questionnaire to a sample group consisting of ten people.
which belonged to the target group for the questionnaire. Their comments were as well considered, before the final questionnaire was sent out.

4.7.2 Construct Validity

Construct validity, also known as measurement validity “refers to the extent to which your measurement questions actually measure the presence of those constructs you intended them to measure” (Saunders, Lewis & Thornhill, 2016, p.373). In order to find a relationship between the variables chosen and gain construct validity, a correlation analysis needs to be done (Saunders, Lewis & Thornhill, 2016). Saunders, Lewis and Thornhill (2016) further state that researchers can measure the correlation coefficient with the help of Pearson’s r. Correlation coefficient can be defined as “a correlation coefficient enables you to quantify the strength of the linear relationship between two ranked or numerical variables” (p. 459). Bryman and Bell (2015) continue by stating that in order to see if a relationship between two variables are strong or non-existing, the values between -1 and +1 are used. The closer the value are to 0 the weaker the relationship is, compared to if the value is ±1 which indicates a strong relationship (Bryman & Bell, 2015; Miller et al., 2002). Miller et al. (2002) further states that correlation coefficient can help researchers to see whether the questions answered are statistically significant or not. When the researchers for this study used SPSS, the program calculated the correlation. When evaluating the result, the researchers decided to use Bryman and Bell (2015) and Miller et al.’s (2002) scale of measurement on whether the correlation was acceptable or not. They stated that the correlation that researchers should strive for should be below 0.8 ($r<0.8$) and the reason for this is that values that are higher than 0.8 ($r>0.8$) indicates that the variables measured are the same (Bryman & Bell, 2015; Miller et al., 2002).

4.7.3 Criterion Validity

When striving for criterion validity it means that the researchers wants to ensure that the result will be valid by reviewing similar research and its items. This should be done if the researchers predict that the responses will differ, hence actions to prevent this needs to be prepared. By reviewing previous studies, researchers can both prevent different responses as well adopt previous studies’ measurement and structure, in order to ensure validity (Saunders, Lewis & Thornhill, 2016). In order to ensure criterion validity, this study used previous research of similar nature as a base when problematizing and describing the theories as well as conducting the hypotheses when aiming at finding a correlation between the variables. The reason for why
criterion validity should be adopted is that it will increase the validity of the study as a whole (Bryman & Bell, 2015).

4.7.4 Reliability

As stated earlier, reliability revolves around whether the measurement is consistent and if the result would end up the same if it was done again, which would mean that the study is reliable. In order to see whether a study is reliable or not, there are three different meanings of reliability that needs to be discussed (Bryman & Bell, 2015). Bryman and Bell (2015) explain stability, internal reliability and inter-rater reliability, which works as a guideline and was adapted on this study. Stability focuses on the study over time, in other words if the study is stable and receives the same result after testing it more than once. However, if the result from the first and second time would differ it would mean that the study is unstable (Bryman & Bell, 2015).

Internal reliability described by Bryman and Bell (2015) focus on if the questions that are connected to each other when it comes to one variable, gets the same or similar score on the scale. One common way to measure this is by using Cronbach’s Alpha (Saunders, Lewis & Thornhill, 2016; Tavakol & Dennick, 2011). Tavakol and Dennick (2011) explains Cronbach’s Alpha as a way “to provide a measure of the internal consistency of a test or scale; it is expressed as a number between 0 and 1” (p. 53). When using a Cronbach’s Alpha, researchers receive a calculation in form of a figure called coefficient, which present the correlation between consistency (Bryman & Bell, 2015). Whereas, 0 according to Bryman and Bell (2015) is equal to internal reliability and 1 perfect internal reliability. In order to accept the internal reliability, the value of Cronbach’s Alpha needs to lie between 0.6 to 0.9, but preferably the value should be 0.8. If the coefficient is below 0.6 the researchers need to decide if the question should be revised or be rejected completely (Malhotra & Birks, 2003). With the help of SPSS, the researchers found that 4 variables had a correlation above 0.6, which indicated that the variables could be seen as valid.

4.8 Ethical Considerations

Bryman and Bell (2015) state that when using primary data gathered from participants, there are some ethical principles that needs to be considered. The first factor that Bryman and Bell (2015) state is that the researchers need to ensure is that there will be no harm to the participants. One example of how to avoid this is to use anonymity for the respondents, in order to make
sure that their private information will stay private. Anonymity ensures that the respondents’ answer cannot be tracked or connected back to the participant (Bryman & Bell, 2015). Another factor that will be considered in this study when following Bryman and Bell’s (2015) list of ethical issues is the agreement of participation. Describing this further, the participants that respond to the questionnaire needs to agree upon their participation, which means that it has to be voluntarily and not under pressure (Bryman & Bell, 2015). Bryman and Bell (2015) further state that the researchers need to make sure that it is stated clearly what the aim of the study and the questionnaire is. Meaning, when the participants agrees upon participating it should be clear for why, what and how their participation will be used to (Bryman & Bell, 2015).

All of these factors have been considered and applied to this study, in order to make this study an ethical correct research. To begin with, the topic investigated in this study is considered to not touch any personal elements nor allude to situations that could possibly hurt the participants’ feelings. Furthermore, the data collected from the questionnaire was not used in any other purpose than for this study, which the researchers informed the participants about. The responses were completely anonymous and the researchers could not have been able to track any of the participants. Participating in the questionnaire for this study was voluntarily and the researchers did not pressure the respondent nor exposed them of mental stress. Even though Bryman and Bell (2015) state that the purpose should be fully exposed, the researchers were careful in not giving too much information away in order to prevent biased responses. For a more detailed description of the presentation of the questionnaire, see appendix A.
4.9 Chapter Summary

In order to fully understand what exactly has been done and which concepts are used in this study, the researchers have conducted a table that explains each concept applied.

<table>
<thead>
<tr>
<th>Methodology Concepts</th>
<th>Concepts applied in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Approach</td>
<td>- Deductive</td>
</tr>
<tr>
<td></td>
<td>- Quantitative</td>
</tr>
<tr>
<td>Research Design</td>
<td>- Descriptive</td>
</tr>
<tr>
<td></td>
<td>- Cross-Sectional</td>
</tr>
<tr>
<td>Data Sources</td>
<td>- Primary Data</td>
</tr>
<tr>
<td>Data Collection Method</td>
<td>- Survey</td>
</tr>
<tr>
<td>Data Collection Instrument</td>
<td>- Questionnaire</td>
</tr>
<tr>
<td>Sampling</td>
<td>- Non-Probability</td>
</tr>
<tr>
<td></td>
<td>- Convenience Sampling</td>
</tr>
<tr>
<td>Data Analysis Method</td>
<td>SPSS</td>
</tr>
<tr>
<td></td>
<td>- Data Coding</td>
</tr>
<tr>
<td></td>
<td>- Descriptive Statistics</td>
</tr>
<tr>
<td></td>
<td>- Multiple-Linear Regression Analysis</td>
</tr>
<tr>
<td>Quality Criteria</td>
<td>- Content validity</td>
</tr>
<tr>
<td></td>
<td>- Construct validity</td>
</tr>
<tr>
<td></td>
<td>- Criterion validity</td>
</tr>
<tr>
<td></td>
<td>- Reliability</td>
</tr>
<tr>
<td>Ethical Consideration</td>
<td>- No harm to the participants</td>
</tr>
<tr>
<td></td>
<td>- Agreement of participation</td>
</tr>
<tr>
<td></td>
<td>- Clearly stated aim</td>
</tr>
</tbody>
</table>

Table 4.2, Summary of the methodological chapter (Own)
5. Results

In this chapter the data gathered from the questionnaire will be presented together with the result from the data collection via SPSS will be explained.

5.1 Demographic

293 people participated in the questionnaire, whereof 274 were included in the sample frame since they passed the control question, which was if they had ever purchased something on an online fashion retailing site. The majority of the participants were women with 54.3%, while 45.3% were men and 0.4% of the participants identified themselves as other. In regards to the age distribution in table 5.2, the result shows that it is a clear majority of participants between the age 18-24 with 49.6%, followed by the second largest group of 24.8% which were between the age 25-34. The result further shows an almost even distribution between the age groups 35-44 (8.6%) and 45-54 (9.4%). The participants that were under 18 years old was 3.2% and participants older than 55 years old was 4.3%.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>151</td>
<td>54.3%</td>
</tr>
<tr>
<td>Male</td>
<td>126</td>
<td>45.3%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

*Table 5.1, Gender distribution for the sample frame (Own)*

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>9</td>
<td>3.2%</td>
</tr>
<tr>
<td>18-24</td>
<td>138</td>
<td>49.6%</td>
</tr>
<tr>
<td>25-34</td>
<td>69</td>
<td>24.8%</td>
</tr>
<tr>
<td>35-44</td>
<td>24</td>
<td>8.6%</td>
</tr>
<tr>
<td>45-54</td>
<td>26</td>
<td>9.4%</td>
</tr>
<tr>
<td>55+</td>
<td>12</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

*Table 5.2, Age distribution for the sample frame (Own)*
5.2 Reliability and Cronbach’s Alpha

In table 5.3 an internal reliability test in form of Cronbach’s Alpha was conducted on the data gathered. The test helped the researchers evaluate if the questions asked and the variables were reliable or not (Bryman & Bell, 2015). Furthermore, the researchers used Malhotra and Birks (2003) measurement on where to draw the line on whether questions or variables should be taken out, which was the case in this study. They stated that the value should lie between 0.6 and 0.9, and the questions or variables below or above should be rejected or revised (Malhotra & Birks, 2003). In Table 5.3 Cronbach’s Alpha for each variable is presented together with number of questions (N of items) used.

<table>
<thead>
<tr>
<th></th>
<th>INT</th>
<th>ANC</th>
<th>CON</th>
<th>LOS</th>
<th>POC</th>
<th>FRA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach's Alpha</td>
<td>0.820</td>
<td>0.604</td>
<td>0.737</td>
<td>0.801</td>
<td>0.440</td>
<td>0.674</td>
</tr>
<tr>
<td>N of items</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 5.3, Cronbach’s Alpha (Own)

When interpreting the result from the variables’ Cronbach’s Alpha separately (see Appendix B) some of the variables such as ANC, LOS, POC and FRA needs to be explained further. All the questions related to anchoring were valid, with an average Cronbach's Alpha of 0.604, which is high enough to indicate that the hypothesis is reliable. All the questions on anchoring did relate to different parts within the theory in order to grasp a result broad enough to cover the whole theory of anchoring. However, looking at Cronbach’s Alpha for each question separately, none of the question had a result higher than the criteria of 0.6 (Malhotra & Birks, 2003). This result indicates that the questions do not reflect the theory on their own but when measured together they are shown to be reliable.

Furthermore, when looking at the variable loss aversion in Appendix B, the researchers decided to eliminate LOS_1. The reason for this is that the question decreased the reliability level for the variable as a whole to a large extent, and therefore a decision was made by the researchers to exclude the question. By excluding LOS_1 the Cronbach’s Alpha increased from 0.664 to 0.801. Continuously, the variable Paradox of Choice was completely rejected, since the Cronbach’s Alpha showed a result of 0.440. The last variable tested was framing effect framing
effect which resulted in that one question was eliminated, FRA_1, the reason for this was the same as for LOS_1, that the reliability level decreased because of that question. However, the reliability value for all the questions within framing effect were accepted before the elimination of FRA_1 with a value of 0.622, but the researchers strived for a higher reliability result and therefore this decision was made.

5.3 Validity and Correlation Coefficient

Cronbach’s Alpha was used as a limit for determining the questions and variables that could be further addressed, when calculating the average after eliminating the questions and variable that was rejected for this study. The correlation coefficient was calculated through Pearson’s r using the average of each variable, e.g. AVE_ANC, which stands for average result of anchoring, see table 5.4. Furthermore, the only variables that were calculated within Pearson’s r were the independent variables chosen, except for Paradox of Choice that was eliminated. Calculating the correlation coefficient with the help of Pearson’s r was carried out in order to make sure that the variables held a valid result towards each other (Saunders, Lewis & Thornhill, 2016). When evaluating the correlation coefficient, the researchers followed Miller et al., (2002) and Bryman and Bell’s (2015) measurement scale ($r<0.8$) on where the validity value should be at.
### Table 5.4, Correlations coefficient via Pearson’s r (Own)

<table>
<thead>
<tr>
<th></th>
<th>AVE_ANC</th>
<th>AVE_CON</th>
<th>AVE_LOS</th>
<th>AVE_FRA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AVE_ANC</strong></td>
<td>Correlation Coefficient</td>
<td>1</td>
<td>0.483**</td>
<td>0.554**</td>
</tr>
<tr>
<td><strong>AVE_CON</strong></td>
<td>Correlation Coefficient</td>
<td>0.483**</td>
<td>1</td>
<td>0.454**</td>
</tr>
<tr>
<td><strong>AVE_LOS</strong></td>
<td>Correlation Coefficient</td>
<td>0.554**</td>
<td>0.454**</td>
<td>1</td>
</tr>
<tr>
<td><strong>AVE_FRA</strong></td>
<td>Correlation Coefficient</td>
<td>0.415**</td>
<td>0.343**</td>
<td>0.296**</td>
</tr>
<tr>
<td><strong>Sig. (2-tailed)</strong></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td>274</td>
<td>274</td>
<td>274</td>
<td>274</td>
</tr>
</tbody>
</table>

**Correlation is significant at the level 0.01 (2-tailed)**

Explaining the results from the Pearson’s r in table 5.4, all of the variables had a positive correlation with each other, but on different levels. The two variables that had the strongest correlation were anchoring and loss aversion, with a correlation coefficient value of 0.554. Furthermore, the two variables that had the lowest correlation with each other were loss aversion and framing effect, with a value of 0.296. Even if the correlation coefficient differed between the different variables all of which reached a significant result, meaning a valid result.

### 5.4 Descriptive Statistics

Table 5.5 presents the data collected from the descriptive statistics test categorized in minimum, maximum, mean, standard deviation, skewness and kurtosis of each variable. In the table the mean value was between 3.13 and 4.24 which indicates that the answers received had a neutral
result in average between the minimum and maximum. The minimum and maximum represent the likert scale of 1- Completely disagree and 5- Completely agree from the questionnaire. Even though none of the questions had a lower mean than 3 it still did not have a high result.

According to Ho and Yo (2015) the skewness should lie between ±1 however, in this study there are one outlier, INT_3 that has a higher skewness on 1.497. However, Hair et al. (2010) state that when a study has more than 200 participants in a research the skewness can be more than ± 1. When it comes to kurtosis the value should be between ±3 which in this study all the variables are. The kurtosis lies between -1.205 and 1.722.

<table>
<thead>
<tr>
<th>INT_1</th>
<th>INT_2</th>
<th>INT_3</th>
<th>ANC_1</th>
<th>ANC_2</th>
<th>ANC_3</th>
<th>CON_1</th>
<th>CON_2</th>
<th>CON_3</th>
<th>LOS_2</th>
<th>LOS_3</th>
<th>FRA_2</th>
<th>FRA_3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Max</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Mean</td>
<td>3.34</td>
<td>3.16</td>
<td>4.24</td>
<td>3.69</td>
<td>3.38</td>
<td>3.36</td>
<td>3.13</td>
<td>3.70</td>
<td>3.21</td>
<td>3.61</td>
<td>3.23</td>
<td>3.60</td>
</tr>
<tr>
<td>Median</td>
<td>4.00</td>
<td>3.00</td>
<td>5.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>3.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Mode</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.297</td>
<td>1.354</td>
<td>1.034</td>
<td>1.140</td>
<td>1.338</td>
<td>1.271</td>
<td>1.291</td>
<td>1.122</td>
<td>1.467</td>
<td>1.274</td>
<td>1.374</td>
<td>1.303</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.317</td>
<td>-0.101</td>
<td>-1.497</td>
<td>-0.779</td>
<td>-0.397</td>
<td>-0.341</td>
<td>-0.154</td>
<td>-0.712</td>
<td>-0.260</td>
<td>-0.715</td>
<td>-0.342</td>
<td>-0.523</td>
</tr>
<tr>
<td>Std. error of skewness</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
<td>0.147</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-1.028</td>
<td>-1.205</td>
<td>1.722</td>
<td>-1.011</td>
<td>-1.070</td>
<td>-0.954</td>
<td>-1.105</td>
<td>-0.138</td>
<td>-1.328</td>
<td>-0.516</td>
<td>-1.155</td>
<td>-0.692</td>
</tr>
<tr>
<td>Std. error of kurtosis</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
<td>0.293</td>
</tr>
</tbody>
</table>

*Table 5.5, Descriptive statistics of all items (Own)*

### 5.5 Hypothesis Testing

The last step in SPSS was to test the hypotheses for this study which was done through constructing a multiple linear regression analysis. The dependent variable AVE_INT was applied to the model together with one constant variable and two control variables which were gender and age. Gender and age worked as control questions so that the researchers would know if it impacted the result of the study. Explaining the multiple linear regression analysis (table 5.6) further, it presents the control variables, the constant variable and how the different
hypotheses correlate with the dependent variable separately as well as together. This was done in order to test which of the hypotheses that can be accepted or rejected. However, before this was decided the significance level had to be examined regarding the constant variable, since it is crucial that it is significance throughout the models.

Table 5.6, Multiple linear regression analysis model (Own)

Table 5.6 first presents Exp. Sign, which is the researchers own prediction on the result before the hypotheses testing was done. Whereas + stands for a prediction that the independent variable will have a correlation with the dependent variable and - stands for the prediction that no correlation will be found. Due to that this study focuses on how mental shortcuts impact consumers’ online purchase intention, all of the Exp. Sign were predicted to have a positive outcome. Furthermore, model 1 was constructed to see the correlation between the constant and control variables. The result showed that model 1 was significant as a whole, but also that the constant variable together with age as well had a significant result. The significance for these variables continued throughout the regression model. However, gender did not turn out to have
a significant result throughout the regression analysis, which can be explained as the majority of the participants were women (see table 5.1). Even if this was the case for this study it does not necessary mean that the significance level overall is lower, just that the questionnaire itself were more suitable for women than men. Furthermore, the result for all the models as a whole were significant when examining the F-value, which strengthen that the regression analysis did measure the analysis correctly.

Explaining model 2, 3, 4 and 5 it presented the correlation between the constant variable, the control variables and the independent variables separately. Whereas, both anchoring (ANC) and loss aversion (LOS) were significant separately and the other two variables confirmation bias (CON) and framing effect (FRA) did not turn out to be significant separately. Furthermore, model 6 represents all the hypotheses together, which gave the researchers the result of the significance level that was used when testing the hypotheses. To explain the result of the hypothesis testing ANC and LOS were accepted. The reason for this is that the significance level in model 6 were \( p<0.01 \) for both of the variables, which means a stronger significance. CON and FRA on the other hand had significance level \( p>0.05 \), which is above the maximum level accepted for hypothesis testing (Moore, McCabe & Craig, 2017; Miller et al., 2002).
6. Discussion

In this chapter the results of the questionnaire and the data from SPSS will be discussed, in order to explain why the hypotheses were accepted or rejected. In the end of this chapter a new conceptual model will be presented, to understand the outcome for each hypothesis.

The main findings from the data analysis is that two out of five hypotheses were accepted, anchoring and loss aversion, while confirmation bias and framing effect were rejected. The paradox of choice was not qualified for this study, since none of the questions were reliable enough to be a part of further testing and was therefore eliminated after the reliability test.

Even though the $R^2$ can be interpreted as low for each model, the researchers of this study decided to explain this by referring to McCormick, Salcedo and Poh’s (2015) theory of that the human behaviour is hard to predict. Therefore, the $R^2$ for model 6 in table 5.6 that has a value of 0.293 (29.3 %), indicates that the correlation is strong in relation to that human behaviour is measured. Furthermore, the adjusted $R^2$ for model 6 showed that all of the variables had a value of 0.277, which mean that the model had 27.7% variation. Explaining this further, the variation shows that the variables had a relatively low impact on the regression.

6.1 Discussion on Anchoring

Previous studies have discovered that anchoring has an effect on consumers’ decision making as well impact how consumers interpret and estimate the value of a product or service (Wu, Chen & Yen, 2012). The findings presented in the result chapter shows that anchoring has an effect on consumers’ online purchase intention which strengthen the first hypothesis of that previous experience on a fashion retailing site decides how consumers unconsciously form expectations for future retailing sites. In the multiple linear regression table (table 5.6), one can see that anchoring had a relation towards purchase intention as 22.6% were connected towards this study’s dependent variable. As stated before, the $R^2$ can be perceived as relatively low however, when measuring human behaviour, the requirements for the $R^2$ value are much lower (McCormick, Salcedo & Poh, 2015). Analysing this apart from what McCormick, Salcedo and Poh’s (2015) theory says, this can also be explained by Wu, Chen and Yen’s (2012) theory of that individuals’ reference point are unique and based on personal experiences. Hence, grasping each individual's understanding about anchoring can be complex. When evaluating the beta ($\beta$)
value for this variable it was shown to have the strongest beta of 0.437 when it was measured by itself compared the other variables (see model 2 in Table 5.3). The beta value for anchoring in model 6 showed a value of 0.258, which indicates that anchoring still had a strong effect on the dependent variable.

The data from the first question on anchoring ANC_1, which was formulated with the intention to trigger the anchoring effect, can be explained by Smith’s (2012) explanation of that consumers use price as a reference point in order to determine the value of a product. The mean value for this question was 3.69, which meant that most of the participants did agree upon this, to some extent. Continuously, the second question ANC_2, referred to consumers’ expectation created from previous experiences, which Smith (2012) discuss. The result showed that the mean was lower for this compared to the first question but also above 3. Meaning, that less people agreed upon this statement, even if the majority still did. Furthermore, the data received on the last question on anchoring, which was if experiences online would impact future ones, stresses the importance of Smith’s (2012) argument of that companies must acquire consumers’ attention in an early stage. If companies succeed in this, they will be able to influence consumers’ decision making from an early stage (Smith, 2012). Furthermore, ANC_3 had a mean value of 3.36 which strengthen that the majority of participants agreed upon that former experiences online decides for future actions.

6.2 Discussion on Confirmation Bias

When consumers search for recommendations and confirmation, it is often with the intention to increase the already existing knowledge about a product or service and strengthen one’s beliefs (Vozza, 2015). When testing the reliability for confirmation bias it was shown to have a strong reliability level with a Cronbach’s Alpha of 0.737. This indicates that the confirmation bias itself is reliable and the theory appeared clear in the questions. However, when testing the variable with the dependent variable of purchase intention (see table 5.6) the result showed a significance level of greater than p>0.05, hence, the variable was rejected.

Looking at the mean and standard deviation in table 5.5, one can tell that the spread of responses was wide. This explains a fairly weak connection between CON_1 and consumers’ online purchase intention as the result could not strengthen the question of that consumers want confirmation from others before they purchase online. Furthermore, this means that individuals
rely differently on others recommendation since the question received such a wide range of responses. Therefore, Serva, Benamati and Fuller’s (2005) theory of that individuals search for confirmation when there is a gap between individuals’ behaviour or attitude, cannot be strengthen in this study. The second question on confirmation bias CON_2, had a mean of 3.70, which was among the highest means (see table 5.5). This indicates that the participant does search for recommendations online before purchasing. However, to what extent is hard to determine, which means that this part of confirmation bias needs to be examined more in future studies. Furthermore, the third question on confirmation bias CON_3, was aimed to reflect the theory of Senecal, Kalczynski and Nantel (2005) which state that recommendations on independent websites are more influential than recommendations on commercially linked sites. The result from this question, which had an average mean on 3.21 and a standard deviation on 1.467, indicates a wide result and the connection to the theory is thereof weak.

However, even if this study did not find a correlation between confirmation bias and purchase intention, one cannot be certain that this is always the case. Meaning, if other factors from the theory would have been included, the result might have turned out differently. Another explanation for why the hypothesis was rejected could have been that the questions asked were perceived as confusing, which made the participants misinterpret the questions (Bryman & Bell, 2015).

6.3 Discussion on Loss Aversion

The result from the hypothesis testing on loss aversion shows that the variable was accepted after being tested it in the multiple linear regression analysis. Loss aversion had a significant relationship with consumers’ online purchase intention as p<0.01. This means that the result from loss aversion support previous research on loss aversion that explains that people weight losses more than gains (Kahneman and Tversky, 1979). The beta (β) value for loss aversion when measured by itself had a value of 0.308 (see model 4 in Table 5.3), which indicates that the variable had a strong effect on the dependent variable. Furthermore, loss aversion in model 6 showed a beta value of 0.306, which indicates that the variable both separately and together were consistent and had a strong effect on the dependent variable.

Furthermore, even though no previous research has investigated the impact that loss aversion has on consumers’ online purchase intention, this study proves that loss aversion has a positive
relation to the dependent variable, hence impact purchase intention. The $R^2$ for loss aversion was 29.2% and was therefore one of the variables that had the highest value when testing it separately in correlation to the dependent variable. Even if 70.8% implies that other factors affected the mental shortcut loss aversion in relation to purchase intention. The questions on loss aversion in the questionnaire were all conducted with the intention to see how the fear of missing out motivated the participants to purchase. When testing the reliability for each question on loss aversion, the researcher eliminated LOS_1 (see table 5.3) since the Cronbach’s Alpha increased from 0.664 to 0.801, therefore the researchers decided to continue with only two questions. Even though all questions on loss aversion were reliable, the researchers strived to get the highest result possible when conducting the reliability test Looking at table 5.5, the mean value for LOS_2 and LOS_3 was higher than 3 as well had a negative skew, which indicate that most of the participants agreed upon the questions. This support Abdellaoui, Bleichrodt, and Paraschiv’s (2007) theory about that people experience losses twice as powerful in comparison to gains.

6.4 Discussion on Paradox of Choice

The fourth hypothesis paradox of choice was not reliable and was therefore not included in any further analysis. A possible explanation to this could be that errors occurred during the process of collecting data, such as that the participants misinterpreted the questions in the questionnaire (Bryman & Bell, 2015). Moreover, the result could also depend on how the questions were formulated as it did not reflect the theory correctly (Saunders, Lewis & Thornhill, 2016).

6.5 Discussion on Framing Effect

The fifth hypothesis framing effect, states that consumers are more likely to purchase a product when the offer is presented in a positive way. Looking at the result regarding this hypothesis, it did not support the relationship towards the dependent variable and was therefore rejected. The reason for this was that the significance level exceeded the maximum level as it had a P value greater than 0.05. However, even though this study’s result did not find a positive relationship between framing effect and the dependent variable, discussing the hypothesis is still relevant. After taking away the first question on framing FRA_1, the Cronbach’s Alpha value was calculated to be 0.674, which is a value high enough to indicate a strong reliability. Same as all the questions conducted in the questionnaire for this study, they aimed at together, cover the
whole theory behind every hypothesis. Even if FRA_1 would have been included, the Cronbach’s Alpha would have had a value above 0.6, but since the researchers did strive for the highest reliability result, the question was eliminated. This indicates that all questions on framing effect strengthen the theory of that individuals’ make decisions depending on how an offer is framed (Yacubovich, 2015). Even though the questions were reliable, the result from this study find no association between the framing effect and consumers’ online purchase intention. Explaining this further, theories that were used as a base when conducting the questions on the framing effect, might not have had a relation with the dependent variable in this study. However, if other factors of the framing effect would have been tested the result could have turned out differently. Meaning, that further studies are necessary in order to see if there is a correlation between the framing effect and consumers’ online purchase intention.

6.6 Conceptual Model

Figure 6.1 is a developed figure of the one presented in chapter 3 (figure 3.1). The figure represents the result of the hypothesis testing. As the figure presents, two of the variables got rejected, CON and FRA, due to a low significance level in the multiple linear regression analysis presented in table 5.6. The figure also presents the two hypotheses ANC and LOS that got accepted in this study, since both were shown to have an impact on consumers’ purchase intention. The hypothesis paradox of choice was not reliable enough to be tested on the dependent variable and therefore, the line between these two is eliminated.

![Figure 6.1](image.png)

*Figure 6.1, A new research model on mental shortcuts’ influence on purchase intention model (Own)*

48
7. Conclusions

In this chapter the conclusion drawn from this study will be presented together with the managerial and theoretical implication.

This study aimed at evaluating the relationship between five different mental shortcuts and consumers’ online purchase intention. The results showed that previous experience on a fashion retailing site do decide how consumers’ unconscious form expectations for future purchases on retailing sites. This was shown through the hypothesis about anchoring, since it was accepted in this study. Furthermore, this study also showed that consumers feel stronger emotions when they feel that they have saved money compared to if they would have gained the same amount, which means that the hypothesis about loss aversion was accepted. Both of these hypotheses showed a result of having a significance level that was accepted in accordance to this study’s requirements, which means that the two mental shortcuts had an effect on individuals’ online purchase intention.

Furthermore, the result of this study demonstrated that confirmation bias and framing effect did not have a correlation with purchase intention. The reason for this was that the significance level was too high and did therefore not fulfil the requirements of being accepted. The result indicated that recommendations from others that actually confirm consumers’ choices positively did not influence consumers’ online purchase intention and was therefore rejected. However, one may need to have in mind that the reason of why this hypothesis was rejected was due to that the statistical result this study reached did not fulfil the criterias. Furthermore, the result led to that two hypotheses were rejected, CON and FRA, which can depend on other factors such as that the researchers formulated questions that did not have a correlation to consumers’ online purchase intention. This can likewise be the case of the questions regarding the framing effect, where consumers are not more likely to purchase a product on a fashion retailing site when the offer is presented in a positive way.

One mental shortcut that was not tested was paradox of choice. The reason for this was that it did not qualify to be further tested since the researchers for this study did not accept the reliability level after conducting the reliability test measuring Cronbach’s Alpha.
7.1 Managerial Implications
Since the hypotheses anchoring and loss aversion were accepted, this study has contributed with strong argumentation on why fashion retailing sites should consider this when planning their marketing strategy. By acquiring consumers in an early stage, companies can work as an anchor in the consumers’ mind and influence their decision making. Furthermore, the result on anchoring reached in this study appoint the importance of making a good first impression. Satisfied customers are more likely to return to the fashion retailing site and the same applies to the opposite, that dissatisfied customers are not likely to return to a site where they got dissatisfied therefore, anchoring plays a crucial role. Furthermore, the hypothesis loss aversion indicated that consumers feel stronger emotions when they feel that they have saved money compared to if they would have gained the same amount. This means that depending on how companies frame their prices or attributes on their products or services, consumers’ purchase intention will be affected. By adopting the knowledge of loss aversion, companies can increase their sales.

Even though the two hypotheses confirmation bias and framing effect were rejected in this study, the result still sheds lights on the effect mental shortcuts have on individuals’ decision making. Even though this study could not support the relationship between confirmation bias and framing effect with consumers’ online purchase intention, the result can still be a contributing factor to companies whose aim is to understand consumers’ unconscious decision making.

7.2 Theoretical Implication
Looking at the theoretical implication, this study contributes in filling the literature gap relating to the effect mental shortcuts have on consumers’ online purchase intention. Previous research has discussed mental shortcuts and its effect on consumers’ decision making however, neither have drawn the connection done in this study.

The two hypotheses that were accepted in this study were anchoring and loss aversion. This means that this study can ensure that anchoring and loss aversion both impact consumers’ online purchase intention. Furthermore, even though the hypotheses confirmation bias and framing effect were rejected in this study, the result does still provide the literature field with supporting data of that they impact individuals’ decision making. The result from the questionnaire that
related to the hypotheses on confirmation bias and framing effect, still proved that they do impact individuals’ decision making even though they failed in supporting a connection to consumers’ online purchase intention. The hypothesis paradox of choice was not tested against the dependent variable therefore, this study does not contribute with any information on how the paradox of choice impact consumers’ intention to purchase online. Furthermore, this study has paved the way for future potential research within this topic and the result can work as a foundation when further investigating how mental shortcuts impact consumers’ online purchase intention.
8. Limitations and Future Research

The researchers for this study will in this chapter explain the limitations that occurred during the research process and also suggest where further studies might be needed.

8.1 Limitations

When conducting this study there were some limitations that the researchers faced which have to be mentioned. Putting the numbers of participants in this study’s questionnaire in relation to the wide range of individuals that can be reached online, the researcher came off with a relatively low number of participants. Even though this study reached its goals, one can question the number of responses. The reason for the low participation could have been affected by language barriers since the questionnaire was held in English and the majority of the researchers’ contacts on Facebook and LinkedIn are Swedish native speakers. Furthermore, when sending out a survey in form of a questionnaire online there is a lack of control since the researchers do not have the possibility to answer questions from the participants nor read how they reacted on the questions. Another limitation of this research is that it shows mental shortcuts’ impact on consumers’ intention to purchase online only on fashion retailing sites, which possibly means that these results do only apply to the fashion retailing industry.

8.2 Suggestions for Future Research

In this study there were five mental shortcuts chosen to investigate in relation towards purchase intention. Although these mental shortcuts are five of the most important ones in habitual decision making there are several mental shortcuts that consumers’ can make and can therefore be further investigated towards purchase intention.

This study has provided in-depth theory about purchase intention, anchoring, confirmation bias, loss aversion, paradox of choice and framing effect however, there are several theoretical aspects that can be investigated in future research. As paradox of choice was rejected as a variable and was therefore not tested, indicates that further research regarding the variable’s relation towards the purchase intention is necessary. Furthermore, both confirmation bias and framing effect were rejected, since these variables did not reach a significance level qualified for this study. Therefore, a suggestion for further studies would be to test different aspects of
the theories to ensure that no connection towards the purchase intention can be found or the opposite. Anchoring as well as loss aversion were accepted however, the researchers for this study suggest that new studies ensuring this result as well as explaining different aspects of the theories could be needed.
Reference List


Kane, L. (2014). This Psychological Trick Tempts You To Spend More Money, *Business Insider*, 20 June


https://blog.smile.io/ecommerce-psychology.


http://pages.postnord.com/rs/184-XFT-949/images/ehandeln-i-norden-2018.pdf?mkt_tok=eyJpIjoiTmpSbU56bG1OREJpWmpFNCIsInQiOiJXcEFLU25GZUhHcXVhaW5tT1jEY1wvciBZNmtLWndLMWhOd1YrTkZ5cDVJbVlsalhzeFpJK0hHYlUwcTN1TElqMT11aUV2RlwYmVam1zcEJqdDNTYWRqaFNFQm9XN1wvSTdNcGF1VHhuTU5pVktjcVRyK3FoWUpSaVFnV29ZeVNoYiJ9


Thompson, D. (2013). *The irrational consumer: why economics is dead wrong about how we make choices*,


https://www.business2community.com/consumer-marketing/irrational-shoppers-help-shoppers-make-decisions-01144905
[2018-04-10]
Appendices

Appendix A - Questionnaire

Consumers Decision Making When Shopping

Hi,
We are three students that are studying our last semester at the Marketing programme at Linnaeus university in Växjö and are currently writing our bachelor thesis. We would really appreciate if you took three minutes of your time answering this questionnaire. Your answer will be treated anonymously.

Our bachelor thesis is about consumers decision making when shopping on online fashion retailing sites. A fashion retailing site is a type of retailing that includes selling clothing, apparel and accessories. In order for our study to be as credible as possible we would appreciate if your answer will be your spontaneous response.

If you have any questions regarding the questionnaire or if you would like to see how our study turned out, do not hesitate to contact us at:
Anna Quant - aq222as@student.lnu.se
Ellen Rydberg - er222js@student.lnu.se
Sofie Göransson - sg222pq@student.lnu.se

Thank you for your participation!
Anna, Ellen and Sofie

Gender

☐ Female

☐ Male

☐ Other
Age
- 18
- 18-24
- 25-34
- 35-44
- 45-54
- 55 and over

Have you ever purchased something on a fashion retailing site? Examples of fashion retailing sites: Nelly.com, Zalando.com, Boozt.com, Asos.com and Amazon.com
- Yes
- No
- I don't know

I frequently shop fashion online

| 1 | 2 | 3 | 4 | 5 | Completely Agree
|---|---|---|---|---|-------------------
| ☐ | ☐ | ☐ | ☐ | ☐ |                  |

I prefer to shop fashion online compared to a physical store

| 1 | 2 | 3 | 4 | 5 | Completely Agree
|---|---|---|---|---|-------------------
| ☐ | ☐ | ☐ | ☐ | ☐ |                  |

I will continue shopping fashion online in the future

| 1 | 2 | 3 | 4 | 5 | Completely Agree
|---|---|---|---|---|-------------------
| ☐ | ☐ | ☐ | ☐ | ☐ |                  |
I get triggered to buy the product when seeing this on a fashion retailing site

J Lindeberg
659 kr 1,099 kr 40%

Polo Ralph Lauren
979 kr 1,399 kr 30%

Last time I bought a product online it had free shipping. Therefore, I will not buy products from a site that has a shipping cost

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I bought a product online that did not fulfill my expectation. Therefore, next time I will buy from another site

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Before I buy a product I want confirmation from others

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I prefer products that have many recommendations online

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recommendations on independent websites (e.g. flashback) influence me more than recommendations on companies’ websites

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I prefer voucher A over voucher B

If a site has 25% discount for only 24 hours I feel triggered to buy

Only a few items left of a product (low in stock) triggers me to buy the product

SIZE:

- Size guide
  - UK 6

- Low in stock

- We recommend size UK 6 for you. Make your recommendation more accurate

- Add to bag
For me it is important that the fashion retailing site that I am visiting is structured and well categorized

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When I think a site has too much information I feel stressed and leave the site

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Using filters (for example, brand, size, color) on sites increase the chance of me buying a product

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Completely Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completely Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
I would rather choose picture A than B

A pair of jeans made of 90% organic cotton is better than a pair of jeans made of 10% regular cotton and the rest organic cotton

A pair of jeans that last for two years are better than a pair of jeans that worn out after two years
### Appendix B - Reliability

<table>
<thead>
<tr>
<th></th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Cronbach’s Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INT_1</strong></td>
<td>7.40</td>
<td>4.409</td>
<td>0.740</td>
<td>0.683</td>
</tr>
<tr>
<td><strong>INT_2</strong></td>
<td>7.58</td>
<td>4.303</td>
<td>0.710</td>
<td>0.720</td>
</tr>
<tr>
<td><strong>INT_3</strong></td>
<td>6.50</td>
<td>5.994</td>
<td>0.603</td>
<td>0.827</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>INT</strong></td>
<td></td>
<td></td>
<td><strong>Cronbach’s Alpha</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.820</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Cronbach’s Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ANC_1</strong></td>
<td>6.74</td>
<td>4.524</td>
<td>0.423</td>
<td>0.495</td>
</tr>
<tr>
<td><strong>ANC_2</strong></td>
<td>7.04</td>
<td>3.852</td>
<td>0.426</td>
<td>0.486</td>
</tr>
<tr>
<td><strong>ANC_3</strong></td>
<td>7.07</td>
<td>4.208</td>
<td>0.394</td>
<td>0.531</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>ANC</strong></td>
<td></td>
<td></td>
<td><strong>Cronbach’s Alpha</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.604</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Cronbach’s Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CON_1</strong></td>
<td>6.91</td>
<td>5.031</td>
<td>0.567</td>
<td>0.644</td>
</tr>
<tr>
<td><strong>CON_2</strong></td>
<td>6.34</td>
<td>5.405</td>
<td>0.636</td>
<td>0.587</td>
</tr>
<tr>
<td><strong>CON_3</strong></td>
<td>6.83</td>
<td>4.626</td>
<td>0.508</td>
<td>0.734</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>CON</strong></td>
<td></td>
<td></td>
<td><strong>Cronbach’s Alpha</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.737</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Scale mean if item deleted</th>
<th>Scale variance if item deleted</th>
<th>Corrected item-total correlation</th>
<th>Cronbach’s Alpha if item deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LOS_1</strong></td>
<td>6.84</td>
<td>5.857</td>
<td>0.264</td>
<td>0.801</td>
</tr>
<tr>
<td><strong>LOS_2</strong></td>
<td>7.41</td>
<td>3.861</td>
<td>0.607</td>
<td>0.380</td>
</tr>
<tr>
<td><strong>LOS_3</strong></td>
<td>7.78</td>
<td>3.558</td>
<td>0.594</td>
<td>0.389</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>LOS</strong></td>
<td></td>
<td></td>
<td><strong>Cronbach’s Alpha</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.664</strong></td>
</tr>
</tbody>
</table>
## Scale Mean if Item Deleted

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>POC_1</td>
<td>8.04</td>
<td>2.650</td>
<td>0.272</td>
<td>0.372</td>
</tr>
<tr>
<td>POC_2</td>
<td>8.91</td>
<td>1.537</td>
<td>0.252</td>
<td>0.441</td>
</tr>
<tr>
<td>POC_3</td>
<td>8.37</td>
<td>2.073</td>
<td>0.331</td>
<td>0.235</td>
</tr>
</tbody>
</table>

**Average Cronbach’s Alpha**

0.440

## Scale Mean if Item Deleted

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-total Correlation</th>
<th>Cronbach's Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRA_1</td>
<td>7.50</td>
<td>4.815</td>
<td>0.310</td>
<td>0.674</td>
</tr>
<tr>
<td>FRA_2</td>
<td>7.88</td>
<td>3.366</td>
<td>0.514</td>
<td>0.393</td>
</tr>
<tr>
<td>FRA_3</td>
<td>7.57</td>
<td>3.747</td>
<td>0.483</td>
<td>0.446</td>
</tr>
</tbody>
</table>

**Average Cronbach’s Alpha**

0.622