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The Mechanisms Behind Organic Consumers' Information Seeking Behaviour

A case study of highly educated, heavy organic consumers

By

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Abstract

This dissertation aims to provide novel insight into the mechanisms behind highly educated, heavy organic consumers' information seeking behaviour. Drawing from theoretical insights in the information behaviour literature, these mechanisms are unveiled in terms of information needs, motives, and barriers. The aim of this dissertation is to provide new insight into information seeking behaviour of organic consumers, to contribute to the academic documentation, and to understand organic consumer behaviour. The study is based on primary data collected from 13 in-depth interviews conducted in the Netherlands. The main conclusion is that two types of highly educated, heavy organic consumers emerge. Although all consumers were driven by physiological motives, a dichotomy exists between those who are mainly driven by cognitive motives and those mainly driven by affective motives. Both experience having extensive knowledge of organic foods. The consumers with strong affective motives rely on this knowledge, which prevents them from forming information needs. This reliance on one's own knowledge therefore simultaneously forms this group's main barrier. In contrast, consumers driven by strong cognitive motives have a great desire for knowledge, resulting in strong information needs. These individuals' intrinsic need for information leads them to prioritise information seeking, and experience few barriers in their behaviour.

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1. Introduction

For environmentally friendly products to have an impact, it is important that they be chosen over other, less environmentally friendly alternatives (Vindigni, Janssen, & Jager 2002). A food production system such as organic agriculture is an environmentally friendlier alternative. The first initiatives for production that would now be called 'organic' started in the 1940s and 1950s. Then, with much environmental activism against the man-made changes to the environment, organic movements developed further in the 1960s and 1970s. However, it was not until the 1990s that organic food received acknowledgement from many national governments (Pearson, Henryks & Jones, 2010).

In Europe, although numbers differ among EU member states in quality and quantity of production, the organic market has been growing, and it is believed that it will continue to do so in the upcoming years (Thøgersen, 2012). The EU-28 organic food market was valued at €24 billion in 2014. Globally, European countries have the highest share of organic retail sales, with an average of 2.3%. The Netherlands has the seventh-largest share in Europe with 3.0%. Although higher than the European average, the Netherlands is lagging behind countries such as Denmark (7.6%), Switzerland (7.1%), Sweden (6.0%), and Germany (4.4%) (IFOAM, 2016). To steer society towards more organic consumption and reduce environmental degradation, a solid understanding of organic consumer behaviour is vital.

Since gaining a place in the mainstream food industry, organic food has garnered attention in the academic world, and academic research on the organic sector has developed. Nowadays, there is a large body of academic research on organic farming, food, and consumers. Despite the growing body of literature, however, the underlying causes of organic consumer behaviour are still not exactly understood (Onel, 2016). Yet, understanding this human behaviour is vital to reduce environmental degradation. All environmental problems are caused by humans; hence, understanding human behaviour can provide means of changing it. To this end, a great deal of research has been conducted regarding why people purchase organic food (or not) (e.g. Zanolli & Naspetti, 2002; Padel & Foster, 2005; Hughner, McDonagh, Prothero, Schultz & Stanton, 2007; Pearson et al., 2010).

These studies often rely on theories on pro-environmental behaviour, since organic consumption is one form of such behaviour. The focus then lies on the extent to which people's behaviour is influenced by their pro-environmental attitude. It is frequently assumed that more knowledge on environmental problems strengthens people's pro-environmental attitudes, and these attitudes, in turn, stimulate pro-environmental behaviour. Providing information has therefore been at the centre of attempts to prompt people to engage in this behaviour. Many governments and NGOs base their information provision campaigns on this assumption (Kollmuss & Agyeman, 2002). The effects of such campaigns and advertisements have been widely researched, mainly from a marketing perspective (e.g. Aertsens, Verbeke, Mondelaers & van Huylenbroeck, 2009). This focus on providing information

to change human behaviour is based on the assumption that information provision positively changes one's pro environmental attitude (Kollmus & Agyeman, 2002).

However, numerous studies have pointed out an inconsistency between consumers' favourable attitude towards organic food and their purchasing behaviour. Many studies have attempted to identify the reason for this attitude-behaviour gap (e.g. Kollmuss & Agyeman, 2002; Padel & Foster, 2005; Hughner et al., 2007; Terlau & Hirsch, 2015). In studying the predictability of attitudes over behaviour, information has long been regarded as simply somehow finding its way to the organic consumer; this can be attributed to the focus on the effects of campaigns and advertising. These studies do not account for the consumers' own information seeking behaviour. There are, however, indications in the literature that people's own information seeking behaviour influences their attitudes, and thus their behaviours (Bamberg, 2003; Zepeda and Deal, 2009). Understanding organic consumers' information seeking behaviour might provide a part of the puzzle in understanding the complexity of organic consumer behaviour overall.

Because previous studies have only postulated the role of information seeking behaviour in organic consumers, what this information seeking behaviour looks like exactly is currently unknown. To begin to address this, it is desirable to understand the mechanisms behind organic consumers' information seeking behaviour. Information behaviour literature provides three main concepts central to information seeking behaviour: it is preceded by a need for information, is driven by motives, and can be hindered by barriers. The occurrence and form of these concepts lie at the heart of the present study. Its aim is therefore to define the of information needs of organic consumers and unveil mechanisms behind information seeking behaviour in terms of motives and barriers. This is done to provide novel insight into organic consumers' information seeking behaviour, to contribute to the academic documentation, and to understand organic consumer behaviour. On a practical level, insight into organic consumers' information seeking behaviour may be valuable in informing strategies aimed at increasing organic consumption. The novelty of this study lies in the fact that, to the best of the author's knowledge, information seeking behaviour theory has not been applied to organic consumers before, and their information seeking behaviour thus remains unknown.

This chapter proceeds by presenting a review of the literature on organic consumer and information seeking behaviours, followed by the research aim and research question. It furthermore discusses the motivation for the research in terms of its scientific and societal relevance. Chapter 2 presents the theoretical framework to guide this research, and Chapter 3 then specifies the research approach. Chapter 4 presents the analysis, and Chapter 5 consists of the conclusions and recommendations for further research. A more detailed overview of the rest of the dissertation is provided at the end of the present chapter.

1.1 Literature Review

Based on existing literature, this chapter provides an overview of current understandings of organic consumer behaviour and specifically discusses insights into organic consumers' information seeking behaviour. First, a literature review presents information on behavioural research with a focus on information seeking. Then, insights from existing literature on organic consumers' information behaviours are discussed. This section analyses how knowledge and education are related to information seeking behaviours and what is known about these factors for organic consumers. Then, insights into the characteristics of organic consumers relevant to this research are discussed. The theoretical concepts that will be used to conduct this research will be discussed in further detail in chapter 2, which presents the theoretical framework.

1.1.1 Information behaviour research

People have the tendency, once their primary necessities are fulfilled, to attempt to make sense of the world around them (Marchionini, 2006; Niedźwiedzka, 2003). Research in human information behaviour has a long history, finding its origins in the work on library users. Research into information behaviour is well documented in the literature. Originating from librarianship and information science, initial focus primarily examined individual's use of information systems and sources. Information and library sciences itself is not the only field that is concerned with human information behaviour. Information behaviour research has become a topic of interest for researchers and practitioners from a variety of fields, such as psychology, consumer behaviour, marketing specialists, and healthcare professionals (Wilson, 2000; Case & Given, 2016). Research in the last decade reflects the rise of the internet, focussing on digital information seeking and online purchases (e.g., Nicholas, Dobrowolski, Withey, Russell, Huntington & Williams, 2003; Nicholas & Rowlands, 2008), as the internet has drastically changed the availability and amount of information. Given the abundance of information, people desire to decipher all the information at their disposal (Marchionini, 2006).

The totality of human behaviour involving searching for and using information—including channels and sources—is called *information behaviour*. Information behaviour is defined as “those activities a person may engage in when identifying his or her own needs for information, searching for such information in any way, and using or transferring that information” (Wilson, 1999, p. 249). Since Wilson's (1981) introduction of the concept of information behaviour, it has been further defined by many scholars, including Kuhlthau (1991), Vakkari (1998), Case (2002) and Kari and Savolainen (2003). These definitions agree that information behaviour concerns humans (un-)intentionally engaging in specific behaviours that alter their knowledge.

The term information behaviour encompasses people's active and passive information behaviour. *Active* information behaviour denotes searching for information with the intention of acting on it, for example, reading books or articles, or talking to peers about a subject. *Passive* information

behaviour involves receiving information without the intention to act on it. Examples of passive information behaviour include seeing advertisements, browsing a magazine, or reading a text that was not actively sought after (Wilson, 2000). Research into people's active information behaviour is referred to as information seeking behaviour research. The term *information seeking behaviour* is thus used to refer to people's purposeful search for information to satisfy a specific need or goal (Ibid.).

Wilson (1997) observes that all models explaining human information seeking behaviour implicitly or explicitly pay attention to the following concepts: information needs, barriers to the information seeking process (sometimes referred to as intervening variables), and information acquisition. These concepts will be elaborated upon in detail in the theoretical framework, in chapter 2.

1.1.2 Information seeking behaviour in organic consumers

As discussed, people's information behaviour has been incorporated into other fields, for example to study consumer behaviour. Research into consumers' information behaviour is often carried out for marketing purposes. This research is characterised by its focus on consumers' passive information behaviour, the effects of marketing campaigns for example. Trying to understand organic consumers has also been carried out from such a perspective (e.g. Aertsens et al., 2009). To the best of the author's knowledge, the active information behaviour of organic consumers, their *information seeking behaviour*, has not been thoroughly researched yet. Due to this lack of existing studies to draw from, studies examining information seeking in relation to pro-environmental behaviours in general are also discussed. Given that organic consumer behaviour is one form of pro-environmental behaviour, these may provide valuable insight.

One study explicitly discussing information seeking in relation to organic consumers is a qualitative study by Zepeda and Deal (2009). They conducted semi-structured interviews with organic consumers to understand why they would purchase organic foods. They distinguished between heavy organic consumers and medium organic consumers. To understand the role they attributed to information seeking, we need to take a look at the ongoing discussion in organic consumer research concerning the explanatory power of demographic variables.

While widely used in organic consumer research, demographics alone have not been able to explain differences in organic consumer behaviour (Lockie, Lyons, Lawrence & Mummery, 2002). However, there appear to be two consistent demographic factors: organic consumers are often female and have children living in the household (Davies, Titterington & Cochrane, 1995; Thompson & Kidwell, 1998). In addition to this discussion on demographic variables, education has led to both positive and negative results in predicting organic food consumption. While many studies find that organic consumers are likely to be more highly educated (Magnusson, Arvola, Hursti, Aberg & Sjoden, 2001; Cicia, Del Giudice & Scarpa, 2002; Fotopoulos & Krystallis, 2002; Denver & Christensen, 2007, Zepeda & Li, 2007), the results of Beckmann (2001) and Thompson and Kidwell (1998) contradict this

claim. Zepeda and Deal (2009) wonder why education leads to these conflicting results. They argue that it might be a result of the fact that it is not clear what 'education' as a variable is exactly measuring in many studies aiming to explain organic consumer behaviour. They propose that education as a variable measures one's knowledge and information seeking. They therefore argue that people's information seeking behaviour should be taken into account in organic consumer behaviour research instead. They base this proposition on the findings of their research. Their findings showed that people search for information as a result of a their attitude (in this case towards organic food), and this information, in turn, influences their attitude. What they observed was that people's information search shapes reinforces their positive attitude towards organic food (Zepeda and Deal, 2009). Based on these findings in their empirical research, they present a model combining several existing theoretical frameworks on pro-environmental behaviour, in which they include information seeking behaviour as a factor influencing people's attitudes.

They found that the heavy organic consumers among their respondents often saw themselves as 'information junkies'. These were people that felt a strong urge for information, and always wanted to expand their knowledge on organic foods. Their findings therefore suggest that heavy organic consumers are likely to feel a need to search for information. The reinforcing effect of information seeking on attitudes, and the fact that a positive pro environmental attitude enhances the likeliness one searches for information has been observed by Bamberg (2003) too. He found, in his study on information seeking behaviours of students in relation to green electricity that students with higher environmental concerns were far more likely to obtain information on the topic.

Bamberg and Zepeda and Deal's studies suggest that information seeking may play a more important role in pro-environmental behaviour than previously assumed. Given that these studies only postulate the role of information seeking behaviour, the mechanisms behind organic consumers' information seeking behaviours are unknown.

The previous section zoomed in Zepeda and Deal (2009) and Bamberg (2003) postulating a role for information seeking behaviour. Both their studies came forward from a broader discussion in the organic consumer literature, namely inconsistencies between individual's pro-environmental attitudes and their actual behaviours. People with strong, pro-environmental attitudes do not, per se, exhibit pro-environmental behaviours. This disparity is called the attitude-behaviour gap. Many attempts have been made to explain this discrepancy, but none of the suggestions has complete explanatory power (e.g., Padel & Foster, 2005; Kollmuss & Agyeman, 2002; Hughner et al., 2007; Terlau & Hirsch, 2015). More recently a focus on consumers' knowledge to explain the attitude-behaviour gap comes forward in the literature. Taking a look at the role of knowledge in organic consumer behaviour might give some clues about their information seeking behaviour too. After all, knowledge is the result of information seeking.

The assumption that more knowledge on organic foods leads to a more positive attitude and thus to a higher likeliness to purchase organic foods is strongly supported in the literature. Hidalgo-Baz, Martos-Partal, and González-Benito's (2017), for example, researched the role of knowledge in the transformation of attitudes to behaviours. They found a statistically significant relationship between knowledge and actual purchasing behaviour. They found that greater knowledge of organic products increased consumers' attitudes, and these strengthened attitudes had a stronger effect on their actual purchasing behaviour. Many others report that knowledge may function as a transmitter, influencing a consumer's attitude, and in turn influencing his or her behaviour (e.g., Aertsens et al., 2009; Thøgersen, 2012; Hidalgo-Baz et al., 2016; Onel, 2016). Unsurprisingly, lack of knowledge often arises in research examining why consumers do *not* purchase organic foods (e.g., Fotopoulos & Krystallis, 2002; Hughner et al., 2007; Jensen, Denver & Zanoli., 2011). Aertsens et al. (2009) explain that lack of knowledge is a form of uncertainty in consumers. Increasing knowledge can help to decrease uncertainty. Some researchers see consumers' lack of knowledge and trust as something beyond the individual, unrelated to the consumer (Andersen, 2011). They attribute feelings of uncertainty not to individual's personal knowledge, but to the broader complexity and uncertainty that are often paired with organic products (Klintman, 2006). One example is the complexities surrounding labelling, different labelling schemes combined with distrust in labelling processes enhances this complexity (Abrams, Meyers & Irani., 2010). The feeling of uncertainty that comes with the complexities surrounding organic food is, however, might be a trigger to wanting to understand these complexities. As stated before, people search for information to make sense of the world around them (Marchionini, 2006). Overall, it is important that consumers have access to clear and reliable information in their decision-making process (Vermeir & Verbeke, 2006; Pieniak, Aertsens & Verbeke, 2010). But how this knowledge is obtained by consumers is left underexposed in the literature. Except from studies with a marketing perspective, many studies on organic consumer do not specify the origin of the consumer's knowledge. Is this obtained passively, through advertisements and information campaigns? Or did the consumer search for (additional) information him/herself? The lack of studies in specifying the origin of the knowledge is interesting in itself as it shows how acquiring information is not (yet) central to organic consumer research. Hughner et al. (2007), in their review of the literature on determinants of organic food consumption also recognize this aspect. They observed that little is known about the sources that impact organic consumers' knowledge.

Back to the discussion on the explanatory power of demographic variables. Zepeda and Deal (2009) wondered in their study of why consumers purchase organic food why education as a variable leads to inconsistent results. They proposed that education as a variable measures one's *information seeking*. However, when looking at the literature, the inconsistencies in the results when using education seem to be a result of the way education is measured (Thompson, 1998). Considering the existing empirical research, education is both measured as the number of years of schooling, as well through categorical

variables divided by level of education (e.g., Jolly, 1991; Magnusson et al., 2001). These categorical groupings vary widely. Some studies distinguish between level of education, such as high school, college, a bachelor's degree and a master's degree (e.g. Batte, Hooker, Habb & Beaverson, 2007). Other studies make a distinction between types of education, for example distinguishing between a degree in science education or general education (Lockie et al., 2002). Zepeda and Deal might be thinking in the right direction, proposing that education as a variable measures one's information seeking. Looking at the literature indeed shows that an individual's education *level* is strongly correlated to one's overall ability to handle information (Vindigni et al., 2002). Studies using *level* of education to measure education found a correlation, but studies using years of schooling did not (e.g., Lockie et al., 2002). This might be caused by the fact that years of schooling do not provide any information about one's level of education, and thus one's ability to handle information. Level of education thus is defining for one's ability to handle information. As a consequence, the decision of what measurement of education is included in the research should be well thought-out and reasoned.

1.1.3 Insight into organic food consumption

The study now turns briefly to examining why people purchase organic food. Viewing issues important to organic consumers provides valuable insight into the group under research, for example, revealing factors that should be considered in the participant selection. Additionally, gaining insight into the motivations of organic consumers may give some first ideas of the reasons behind their information seeking behaviours.

There is an extensive body of literature on the reasons people purchase organic food. Better taste and quality are often provided as reasons consumers purchase organic food (Hughner et al., 2007). However, one reason stands out in the literature, namely that people believe organic foods are healthier than regularly produced foods (Schifferstein & Oude Ophuis, 1998; Zanolli & Naspetti, 2002; Yiridoe, Bonti-Ankomah & Martin, 2005; Hughner et al., 2007). This in itself is an interesting observation since there is no hard scientific proof that organic food is healthier than regular foods (Williams & Hammit, 2002). However, people believe it is healthier because they believe it is more nutritious, or brings fewer risks than conventional foods (Hughner et al., 2007). These risks concern the use of fertilizers, chemical sprays, preservatives, and additives. Williams and Hammit (2000) found that in the USA, food scandals and individual's subsequent food safety concerns have strongly increased demands for organic products. A British survey reports that safety perception is an even better predictor of organic purchases than health concerns (Michaelidou & Hassan, 2008). This risk perception of regularly produced foods can also be seen in a broader context. It indicates that people's choice of organic food is part of a response to larger concerns about risks to society as a whole and the globalisation of food systems (Andersen, 2011). Having said this, researching organic consumer's purchase motivations requires the

recognition of motivations that exceed personal motivations like these (Harper & Makatouni, 2002). Besides concerns for the environment (e.g., Hughner et al., 2007; Magistris & Gracia, 2008), animal welfare is a primary concern (e.g., Harper & Makatouni, 2002).

1.2 Scientific and Societal Relevance

Scientific relevance

Existing literature shows a number of key issues that have increased the understanding of organic consumers over the past years. Simultaneously, however, it points to gaps in our understanding of their behaviour. All studies attempting to explain or predict this behaviour have some validity in certain circumstances, but none have proved to have complete explanatory power (Kollmuss & Agyeman, 2002). As Onel notes, despite a growing body of academic research into organic consumer behaviour, “the underlying causes of these types of behaviours have not been understood exactly” (2016, p.2). In their compilation of studies regarding why people purchase organic foods, Hughner et al. (2007) note that little is known about how organic consumers gain their knowledge. As mentioned, these consumers’ passive information behaviour has been investigated, but mainly from a marketing perspective (e.g. Aertsens et al., 2009). In contrast, studies on organic consumers’ active information seeking behaviour remain absent. This is despite the fact that, as demonstrated, there are indications that people’s own information seeking behaviour influences their attitudes, and thus their behaviour (Bamberg, 2003; Zepeda and Deal, 2009). Understanding organic consumers’ information seeking behaviour might provide a part of the puzzle in understanding the complexity of organic consumer behaviour. The novelty of this study lies in the fact that, to the best of the author’s knowledge, information seeking behaviour theory has not been applied to organic consumers before, and thus, these consumers’ information seeking behaviour remains unknown. Lastly, there lies great potential for social sciences to steer society towards a more sustainable future. All environmental problems are caused by humans, and social sciences have expertise in changing human behaviour (Urban, 2012).

Societal relevance

There are both environmental and ethical reasons to increase organic food consumption. Firstly, it is important that measures be taken to reduce environmental degradation. Moving to more organic consumption—instead of regular food—is seen as one of the most far-reaching among these measures (Vindigni et al., 2002). Establishing a stable market for organic products, however, relies heavily on consumer demand (Yiridoe et al., 2005). In addition, the increasing number of crises related to the dominant agricultural food system (mad cow disease, foot and mouth outbreak) call for the downscaling of agricultural systems to reduce the impact of such events (Vindigni, et al., 2002). To this end, more environmentally friendly products need to be chosen over other, less environmentally friendly

alternatives (Ibid.). In this vein, a solid understanding of organic consumer behaviour can contribute to stopping environmental degradation (Urban, 2012). Hence, this dissertation provides insight into an underexposed aspect of organic consumer behaviour.

Even though this study does not focus on organic consumers' passive information behaviour, insights into the mechanisms behind their information seeking behaviour could serve as input for information campaigns. After all, why would NGOs and governments not be responsive to the information needs of organic consumers? They could use the insights into these needs, and into the motives and barriers that these consumers encounter in their information seeking behaviour to inform their policies to steer society towards more organic consumption.

1.3 Research Aim

As demonstrated in the literature review, there is no previous research into organic consumers' information seeking behaviour. To understand organic consumers' information seeking behaviour, an investigation of information needs and other underlying mechanisms—in terms of motives and barriers—is necessary. The research aim can be formulated as follows:

Aim: *“To define the information needs of organic consumers and unveil the mechanisms behind this information seeking behaviour in terms of motives and barriers. This in order to provide novel insight into the information seeking behaviour of organic consumers, contributing to the academic documentation, and understandings of organic consumer behaviour; thereby providing valuable insights to inform strategies aimed at increasing organic consumption”*

The main research question will guide the next chapter in dismantling the components in information seeking behaviour to determine which concepts will be used to accomplish the research aim. The main research question is formulated as follows:

RQ: *“What information needs can be identified in organic consumers and what motives and barriers influence them to engage (or not to engage) in information seeking?”*

This research question outlines three themes that will be focussed upon: first, the identification of information needs in organic consumers; second, the motives from which these needs arise, and the role of these motives in influencing the consumer to engage in information seeking; and third, possible barriers in this process. The theoretical framework, in chapter two, focuses on theoretical insights to develop an initial framework to investigate these needs, motivations, and barriers. Based on these theoretical insights, a more theoretically informed research question will be presented at the end of

chapter 2, in section 2.3. This research question will subsequently be broken down into three sub-questions which will guide the empirical research.

1.4 Thesis Overview

The theoretical framework is built in the following chapter. First, the main concepts that determine one's information seeking behaviour are discussed (2.1). Based on this discussion, the three concepts central to this research will be introduced. Section 2.1.1 discusses information needs, section 2.1.2 motives and section 2.1.3 barriers in information seeking. To best explain the mutual relationships between the introduced concepts, section 2.2 develops a conceptual model around these concepts.

Based on the theoretical insights from the theoretical framework, a set of more specific, theory-informed research questions will be introduced in section 2.3.

Chapter 3 then presents the methodology for this dissertation. After justifying the choice for a qualitative case study (3.1), the methodological position will be explained in section 3.1. Section 3.3 presents the choices made in the participant selection, followed by an explanation of the data collection method in section 3.4. The data processing and analysis procedures are discussed in section 3.5. Lastly, section 3.6 discusses the limitations to the study and presents how the validity of the study is ensured.

Chapter 4 presents the analysis. This analysis is arranged by discussing the findings on each main concept. Section 4.1 discusses the information needs, section 4.2 the motives, and section 4.3 the barriers. Section 4.4 then combines these insights and presents the key findings from the analysis, answering the three research questions.

Chapter 5 presents the conclusion of this dissertation. In section 5.2, recommendations are given for further research in section. The chapter ends with a reflection of the process of writing this dissertation (5.3).

2. Theoretical Framework: Information Seeking Behaviour

This dismantles the components of information seeking behaviour. Based on this discussion, it specifies which concepts and interrelations are used in the data collection and analysis to build a theoretical foundation to answer the research question.

2.1 Concepts in Information Seeking Behaviour

Information seeking is, in this research, understood as “the purposive seeking for information as a consequence of a need to satisfy some goal” (Wilson, 2000, p.1). Since it is the aim of this research to unveil the mechanisms behind information seeking, it is desirable to see what mechanisms have been identified in the literature. Previous research on information seeking behaviour shows that the majority of models for information seeking behaviour implicitly or explicitly attend to the following concepts: information needs, barriers in information seeking behaviour, information acquisition, information processing and using the acquired information (Wilson, 1997). The concepts of information needs and barriers are particularly interesting for this research, since these lie at the heart of information seeking behaviour. These concepts can tell us a lot about the origin of information behaviour (needs) and what factors influence this (barriers). These concepts will therefore be elaborated upon in further detail in sections 2.1.1 (needs) and 2.1.3 (barriers). The result of information seeking, in terms of how the information is processed and used is, however, not the focus of this research. Niedźwiedzka (2003), points out that the available information sources, and the background and motivation of the person of interest should be taken into account when studying information behaviour. Since this research is concerned with organic consumers information behaviour, investigating the (range of) information sources available is redundant since this puts the focus outside of the individual. However, this study should take into account the effect that the availability of information sources has on the consumer’s information behaviour. The availability of information will be discussed in the section on barriers (2.1.3). The other factor that Niedźwiedzka pointed out is the motivation of the person of interest. Wilson (1997) notes that a motivation to engage in information seeking must be present to act on an information need. Motives will therefore be the third concept to be discussed (2.1.2).

2.1.1 Information needs

Within information sciences, the conceptualisation of *information needs* is a constant subject of discussion. Partially, the ongoing discussion could be attributed to the fact that the traditional paradigm for information needs research is positivist and objectivist in nature (Itoga, 1992). While this approach provides insight into basic information needs and uses, they appear unable to determine a universal

conceptualisation of the concept (Ibid.). Given the complexity of human behaviour, a more subjective approach may help in better understanding which information needs exist and provide a better understanding of users (Wilson, in Itoga, 1992). Information behaviour researchers' recognition of this is visible in the shift from quantitative to more qualitative approaches in researching information needs (Wilson, 2000). On the other hand, the confusion within academic literature on the definition of *information needs* can be attributed to studies that do not clearly define what they understand as *information needs* (Case & Given, 2016). Therefore, different studies have attribute different meaning, and thus different expectations to the concept of *information needs*.

Taken the above into account, the issues surrounding defining *information needs* therefore may not lie with presenting a single definition, but with defining *needs* as appropriate for the level and aim of the study (Wilson, 1981). Admittedly, *need* is a difficult concept in the sense that it is subjective in nature, existing only in the mind of a person in need (Wilson, 1997). It can, however, be understood by a researcher by presenting a clear definition and observed through observations. It is therefore vital to develop a clear definition of *information needs* in the context of this study and arrive at a framework through which these needs can be studied.

In terms of defining information needs, Kuhlthau (1993) draws from psychology and argues that a feeling of 'uncertainty' is the starting point for information seeking behaviour. Wilson also draws from psychology and adds that stress-coping theory can explain this feeling of uncertainty. He argues that information seeking behaviour is a result of feeling a need to search information to reduce "the threat to well-being, and consequent stress" (1997, p. 554). Talja similarly argues that information needs arise when "an individual finds himself in a problem situation, when he or she no longer can manage with the knowledge that he or she already possesses" (1997, p.4).

Devadason and Lingam argue that information needs arise from "gaps in the current knowledge of the user" (1997, 41). A gap in one's knowledge, however, does not indicate whether an individual actually feels he or she needs this information. A knowledge gap only becomes a *need* when someone has a *reason* for wanting to have this knowledge, referred to as *motives* in this research. The upcoming section (2.1.2) elaborates on the role of these motives, and its relationship to information needs. Acknowledging the role of motives, an information need is in this research therefore defined as: *the wish to gain certain information following the realisation that one's knowledge is inadequate*.

In considering information needs, one quickly realizes that they are innumerable. As such, they require a clear categorisation. Because there is no previous research into the information needs of organic consumers, there is no readily available framework to investigate their information needs. This research therefore draws on a framework proposed by Weigts, Widdershoven, Kok and Tomlow (1993) which presents a clear, but open-ended categorisation of information needs. The framework allows for a wide variety of needs to be captured in the data collection. In line with an interpretative stance (as discussed in detail in section 3.2.1), a broad framework of information needs allows for flexibility in light of the

collected data. The framework of information needs that Weights et al. (1993) propose, distinguishes between searching for new information, (in)validating information, and elucidating information. The first category, searching for new information, entails the need to search for completely new information on a topic. This can be based on hypothetical knowledge, but is not to be confused with (in)validation. (In)validating information is the need to establish the legitimacy of information (Wilson, 1997). Information needs may occur, for example, when an individual is confronted with conflicting claims, or with information that contradicts his/her current knowledge. Also, when encountering information that seems inaccurate, a need to (in)validate can occur. The third category, elucidating information, is the need to clarify something. Think, for example, of someone who is confused about the different kinds of organic labels, and wants to know what the reciprocal differences are.

These needs can occur separately, simultaneously, or cause each other to emerge. When searching for new information, or elucidating information, it is possible to encounter information that, for example, generate an (in)validation need. To take it one step further, searching for information to (in)validate this claim could even lead to the realisation that the searcher wants to know more about a topic, resulting in a new information need. Needs can emerge from passively obtained information (something heard on television, or read while browsing through a magazine, for example), or can arise from actively obtained information, as explained.

Due to studies pointing towards the higher probability of people with strong pro environmental attitudes to obtain information (Bamberg, 2003; Zepeda & Deal, 2009) it is expected that heavy organic consumers are likely to show strong needs for new information and elucidation. Also, the literature reveals that consumers' main reason not to purchase organic food is a lack of trust in the labelling schemes (Padel & Foster, 2005; Hughner et al., 2007; Wier, Jensen, Andersen & Millock, 2008). For people that do purchase organic foods, this is not a barrier that prevents them from purchasing organic food. However, even though they purchase organic foods, it is likely they are confronted with other people's lack of trust. This would mean that people are confronted with claims contradicting their own knowledge, which, in theory would lead to a need for (in)validation.

2.1.2 Motives for information seeking

Information needs have long been regarded as a primary life necessity within information sciences (Wilson, 1981). Morgan and King, however, propose that needs are secondary life necessities, emerging from motives, which are the ones representing primary life necessities (in Wilson, 1981, p.553). They refer to three kinds of motives, namely physiological, unlearned, and social motives, from which information needs can emerge. Wilson builds on this assumption and, drawing on psychology, proposes that information needs arise from three motives: physiological, cognitive, or affective. These two categorisations have in common that, even though using different terminology, they are based on the pyramid of primary life necessities, as developed by Maslow (1943). As Maslow's hierarchical theory

on life necessities describes, human first need to fulfil their basic physiological necessities. This coincides with Wilson's physiological motives. Subsequently, argues Maslow, humans want to fulfil psychological and social necessities, coinciding with respectively, the cognitive and affective motives that Wilson proposes in information seeking behaviour.

Motives for information seeking thus coincide with humans' primary life necessities: they cause information needs to emerge. People can experience information needs in order to get food or feel safe (physiological), to understand the world around them (cognitive) or to want to belong somewhere (affective) (Marchionini, 2006). However, besides motives instigating information needs, Wilson (1997) argues that it also can be the other way around: When someone experiences an information need, there must also be a reason to engage in information seeking. For example, when someone hears a claim that appears inaccurate, this does not result in a need to (in)validate per se. There must be a motive, for example, a cognitive motive such as curiosity, that makes this person act on the information need, and thus resulting in information seeking. Derr concisely captures how motives can make a person engage in information seeking. He states that it is the "presence of a purpose for the use of the information that leads us to conclude that it is needed" (1983, p. 274). It will quickly be recognized that these motives are interrelated and can trigger each other to emerge (Wilson, 2006). Physiological motives, for example, can trigger both affective or cognitive motives. Think about someone who wants to know more about pesticides (cognitive) because he is scared that his food is not safe to eat (physiological), for example. Note that motives are both able to cause an information need, as well as being a driver to make someone act on an information need. Based on the preceding discussion, in this research, motives are defined as "*a state that causes an information need, or causes someone to act on an information need*".

Several motives to *eat* and *purchase* organic foods have been discussed in the literature review. Although it is not argued that these are not directly translatable into motives for information seeking, they present initial thoughts on what drives organic consumers. Individuals' considerations in deciding to eat or purchase organic food are likely to be reflected in their information seeking behaviour concerning organic foods. Therefore, there may be overlaps between motives to *eat* and *purchase* organic foods, and motives for information seeking regarding organic food.

Physiological motives

The first category, physiological motives, incorporates motives stemming from human needs such as food, water, shelter, and a feeling of security (e.g. Michaelidou & Hassan, 2008). At first glance, these may seem irrelevant to organic consumer behaviour. Being concerned with organic food suggests that having food on the table in the first place is not a concern. Indeed, organic consumer behaviour may be unrelated to primary life necessities in terms of hunger and thirst, and thus 'a need for food'. However, considering food security, concern with organic food may be a primary life necessity. As discussed in the literature review, a frequently mentioned reason for people to eat organic food is a fear of food-

related scandals and chemical residues in their food. It is sensible that individual's information seeking behaviour may be driven by a search for food security.

Likewise, health is a primary life necessity reflected in physiological motives. Health is a main reason for consumers to purchase organic food (Schifferstein & Oude Ophuis, 1998; Zanolli & Naspetti, 2002; Yiridoe et al., 2005; Hughner et al., 2007). It is likely that people who want to eat organic food for health reasons are also likely to search for health-related information on organic foods.

Affective motives

The second category, affective motives, is sometimes referred to as emotional, social, or psychological motives (Wilson, 2006). As these names indicate, these motives are related to one's emotions. Emotions play a large role in information seeking behaviour (Kuhlthau, 1993). Simply feeling good or happy can be affective motives that can result in information seeking on organic foods. This may be in combination with -or as a result of- cognitive motives. Someone who is driven by a cognitive motive such as curiosity, for example, can experience positive feelings when searching for or finding information. Also, wanting to help, and care for others are affective motives that could instigate information seeking. Someone searching for information to help someone else, is an example of such an affective motive driving information seeking behaviour. Also, affective motives in terms of a sense of belonging may appear, for example in wanting to belong to a certain group (Marchionini, 2006). In addition, a sense of belonging can also be interpreted as being a part of something bigger, in a more spiritual sense.

Steg, Vlek and Slotegraaf (2001) have argued that self-expression, status, a feeling of sensation, power or superiority are symbolic-affective motives that can drive pro environmental behaviour. Because organic foods are often more expensive, one could indeed argue that association with these foods allows for a certain status. However, it can be debated to what extent that also applies to having knowledge on organic foods. Perhaps having extensive knowledge on a subject can give someone a feeling of superiority or a feeling of sensation. Wilson (2006) indeed found that seeking approval and recognition, self-expression, and seeking achievement, are affective motives that could instigate information seeking behaviour.

Cognitive motives

Cognitive motives arise as an attempt to understand the world and from the need to explain phenomena (Niedźwiedzka, 2003). As Wilson (1997) notes, people have a "need for cognition", a need to understand the world and to find meaning in one's environment. These motives are, for example, curiosity, a desire to know the truth, and wanting to understand a situation. Besides this need to understand things thoroughly cognitive motives can also cause someone to want to gain knowledge on a new topic, for example (Weigts, 1993). These cognitive motives are likely to result in strong

information needs. Someone who has strong cognitive motives is likely to search for information, and thus likely to have strong needs for new information and for elucidation. Additionally, someone who has a strong desire to get to the truth is likely to have strong (in)validation needs.

2.1.3 Barriers to information seeking

Even if an information need and motive are present, engaging in information seeking behaviour is not necessarily the result. Barriers may influence information seeking behaviour. This could occur at several points between the process of the recognition of a need and the search for information. Barriers can completely halt an information search, but can also make it take longer, make the search effort less extensive, or make someone postpone the search. Barriers can be categorised in terms of when they influence the information seeking process, or by their origin. Because there is little available knowledge on barriers in organic consumers' information seeking behaviour, it is hard to determine when barriers will occur in the process beforehand. This section therefore discusses the barriers based on their origin, namely whether they are personal or environmental. *Personal* barriers are barriers that occur from within an individual, while external influences are captured under the term *environmental barriers*. The moment(s) they could influence the information seeking process will be discussed additionally.

Personal barriers

Stress-coping theory, as discussed before, argues that information seeking depends on the perceived risk of giving up information seeking (Wilson, 1997). People may cope by ignoring the stress they encounter. In relation to information seeking behaviour, not recognizing an information need prevents individuals from engaging in information seeking.

Nevertheless, when a need for information is recognised, there may be additional personal barriers that hinder the information seeking process. The cognitive characteristics of the person searching for information can influence the information seeking process. One example is the ability to handle complex information. It is argued that people with a higher education level can more confidently handle information and negotiate conflicting claims (Vindigni et al., 2002). It is therefore vital to take level of education into account when researching individual's information seeking behaviour. This research incorporates respondents with the same level of education to reduce the change that differences in level of education influence the results. The argumentation for the choice of highly educated consumers is given in section 3.3. The implications of the choice for highly educated are discussed in section 3.6.

Moreover, individual priorities can have a severe effect on information seeking behaviour. For example the amount of time an individual has. An individual with substantial spare time is likely to have more time for information seeking than someone with little spare time. Also, the priorities of different people, in terms of wanting to make time, to search for information can have a severe effect.

Prioritizing other activities over information seeking, can prevent someone from information seeking, or may result in a less extensive search.

Environmental barriers

The category of environmental barriers incorporates external barriers, that is, barriers outside of the individual. A fundamental requirement for information seeking is access to information (Niedźwiedzka, 2003). When sought after information is not available or difficult to find, an individual may stop searching, or encounter a time barrier in having to search somewhere else. The availability of information, as well as access to it, are currently largely determined by internet access. As explained, the rise of the internet has greatly changed the availability of information, creating a gap wherein those without internet access are disadvantaged. Therefore, access to the internet should be taken into account when researching human information seeking behaviour. The considerations relating to internet access for the participant selection of this research are discussed in section 3.3.

Another related barrier is *information overload*. The human mind is believed to have a certain capacity to process information. When information input is higher than the capacity to process it, all information beyond the capacity affects the processing performance (Manheim, 2014). The concept of information overload has long been a concern in information behaviour research, though it has gained new meaning in the internet-era, positioning the “internet as a catalyst for information overload” (Ibid., Analysis, “value of information”).

Another barrier can be formed by the channel of information. Trust of sources is especially relevant when speaking about consumers because advertisers attempt to persuade consumers to purchase products. Consumers may not trust certain sources, resulting in their deviation to other sources and prolonging their search. Someone searching for information may also value different various information channels differently. One could, for example, mistrust information provided by the manufacturer of a product, but trust the same information provided by someone they regard an expert or in their social environment. In information behaviour literature, a consensus arises over the notion that people tend to trust interpersonal sources over other sources (Wilson, 1997).

2.2 Conceptual Model

The previous sections present theoretical concepts that form the foundation for this research. Due to the number of concepts and their connections, it is desirable to present them in an orderly manner. A schematic representation of the theoretical concepts is therefore presented as a conceptual model (Fig. 1). The dotted boxes and lines represent concepts and relationships which are not central to the research but are part a larger understanding of organic consumer behaviour. These are depicted to show how information seeking behaviour plays a role in organic consumer behaviour as a whole.

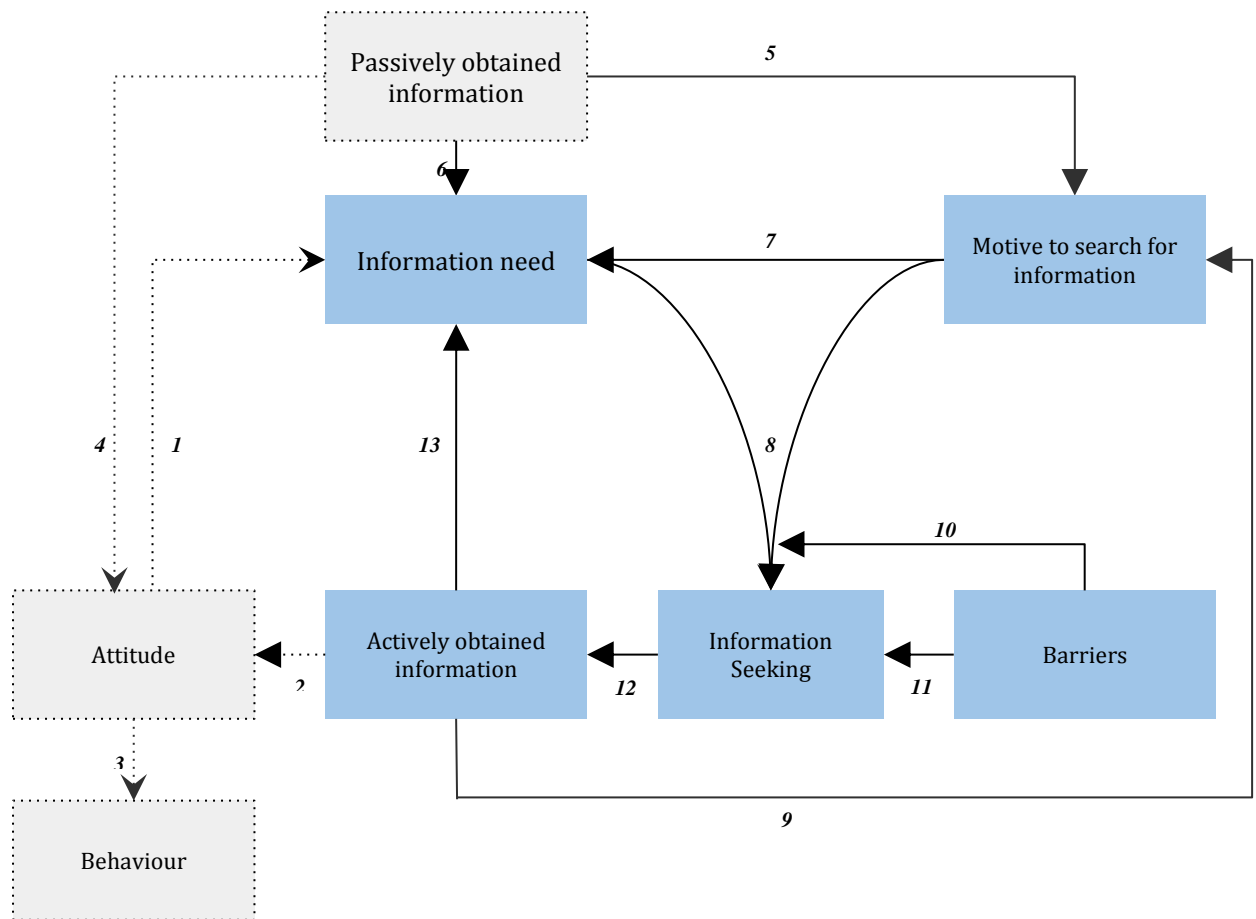


Fig. 1: Conceptual model of information seeking behaviour

Information seeking behaviour is researched in the context of organic consumer behaviour. As discussed in the literature review, this research builds on the assumption that information seeking behaviour can have a reinforcing effect on attitudes, meaning that attitudes can cause information seeking behaviour (1), and this information seeking can in turn result in strengthened attitudes (2). Through this reinforcing effect on attitudes, information behaviour can influence consumer behaviour (3). Attitude and behaviour are included in this model to place information seeking behaviour within the context of organic consumer behaviour. This mechanism is not the focus of this research. ‘Behaviour’, and ‘attitudes’, and their relationships with other concepts are therefore depicted in dotted lines.

This is also true for ‘passively obtained information’, and how it can influence attitudes (4). This research does not focus on passive information behaviour, or how it influences consumer attitude. It is, however, depicted in the conceptual model because it can influence or provide a motive for information seeking (5). Moreover, passively obtained information may provide input for information needs (6), for example, if an individual wants to validate something seen in an advertisement or on

television. As explained, an information need precedes information seeking behaviour. These needs can emerge in different ways. An attitude (1), passively obtained information (6), motives (such as a cognitive motive) (7), and the result of information seeking itself—actively obtained information (13)—can cause information needs.

Besides motives causing information needs, motives are also a prerequisite for transforming an information need into information seeking. This precondition of the co-existence of a motive and a need is depicted by the curved lines from information need and motive to information seeking (8). Both a need and a motive must be present for information seeking to take place.

The motives for information seeking can be influenced by both passively (5) and actively (9) obtained information, as depicted. This means that information obtained with or without the *intention* to act on it may cause someone to develop a motive to act in terms of information seeking.

The combination of a need and a motive (8) does not necessarily lead to information seeking. As discussed, people can deny an information need, which may prevent, even though a need and a motive are present, information seeking. The effect of barriers at this stage of the process is depicted in the figure (10). Second, barriers may occur during the process of information seeking (11). As explained, these barriers may hinder, prolong, postpone, or stop the information seeking process. Carrying out information seeking behaviour leads to actively obtained information (12). This actively obtained information is, however, not necessarily information initially sought after. This information suggests that the search did not reveal the proper answers. Whatever the actively obtained information is, the search may end or lead to a new information need (13). Finally, as explained, the information seeking process may influence an individual's attitude toward organic food (2).

2.3 Research Questions

The overall research question guiding this dissertation is: “*What information needs can be identified in organic consumers and what motives and barriers influence them to engage (or not to engage) in information seeking?*”.

With the insights from the theoretical discussions in the previous chapter, three theoretically informed sub-questions are presented here. These three questions will be addressed throughout this dissertation. Before presenting these sub-questions, however, the choice for the target population requires a short introduction. The choices regarding the target population are discussed in more detail later in chapter 3, but a first introduction is given here to give the reader to clear understanding of the terminology in the research questions. Considering time and resources, it is unfortunately not possible to conduct research that covers the entire range of organic consumers. In this study, a smaller, homogenous sample within the large variety of organic consumers is chosen. The two factors that come forward in the literature as most strongly influencing organic consumers' information seeking behaviour are their organic budget share and their level of education. Based on the literature, it is expected that

heavy consumers, with a high organic budget share (as opposed to medium or light consumers) are the most likely to display information seeking behaviour. Additionally, this research focusses on respondents with the same level of education to reduce the change that differences in level of education influence the results. The target population thus consists of highly educated, heavy organic consumers. The choice for highly educated consumers is explained in section 3.3.

The aim of this dissertation is to indicate the information needs of highly-educated, heavy organic consumers. Based on the categorisation of information needs (new, elucidating, and (in)validating), the information occurring in highly-educated, heavy organic consumers is analysed, as expressed by the following sub-question: **SQ1:** “*What types of information needs concerning organic foods can be identified in highly-educated, heavy organic consumers?*”.

As explained, a need must be accompanied by a motive to proceed to actual searching behaviour, while at the same time needs can stem from certain motives. The second sub-question aims to unveil the these roles of motives in information seeking: **SQ2:** “*What motives influence highly-educated, heavy organic consumers’ information needs and what motives make them engage in information seeking?*”.

The final sub-question aims to investigate the role of barriers in the information seeking process. The theory notes two moments in the information seeking process wherein barriers can occur, namely, before and during the information seeking process. As such, it is necessary to determine which barriers occur and when. The final sub-question seeks to answer these questions: **SQ3:** “*When do barriers occur in information seeking and what kinds of barriers can be identified in highly-educated, heavy organic consumers’ information seeking?*”.

3. Methodology

This chapter describes the choices made regarding the philosophical framework for this research and the methods used to conduct the research. First, the choice for an interpretivist qualitative case study is explained in sections 3.1 and 3.2. Then, section 3.3 discusses the participant selection in terms of selection criteria, sampling technique, and number of participants. The data collection strategy is explained in section 3.4, followed by an explanation of the methods applied in the data processing and analysis in section 3.5. Section 3.6 discusses the validity of the research.

3.1 Qualitative Case Study

A qualitative approach can aid in gaining insight into the underlying complexities of a phenomenon such as, in this case, unveiling the mechanisms behind organic consumers' information seeking behaviour (Ponelis, 2015). Additionally, qualitative case study research allows a researcher to gain a holistic understanding of phenomena (Creswell, 2003).

Definitions of case study research vary widely. This can partially be attributed to the fact that some researchers see it as a method, dictating the design of the research, whereas others view it not as a method, but as what is studied, by whatever methods (Starman, 2013). Simons states that a case study should not be viewed as a method in of itself, but as a design frame in which a number of methods can be incorporated (Simons in Starman, 2013). A general definition of case study research is provided by Sturman, who notes a "case study is a general term for the exploration of an individual, group or phenomenon" (1997, p.61). A more specific definition by Stake considers the context in which a phenomenon takes place, suggesting a case study is "the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances" (1995, p. xi).

As Yin explains, case study research works best for research questions that request a deeper understanding of a phenomenon (2003). Case study research allows a researcher to study the 'why' and 'how' of phenomena, a valuable exercise for exploratory and descriptive research (Ponelis, 2015). In order to do this, a close collaboration of the researcher with the participants is desirable. A case study allows for this, enabling the participants to share their stories (Baxter and Jack, 2008).

Case study methodology supports theory building as well as theory testing (Ponelis, 2015). Case study methodology can be especially helpful when there are no adequate existing theoretical and conceptual frameworks (Ibid.). When no specific theoretical and conceptual frameworks are available, general ideas or expectations can be formulated that guide the empirical research.

In attempting to unveil the mechanisms behind information seeking behaviour of organic consumers, an understanding of the 'how' behind a phenomenon is sought. To gain an holistic understanding of this, without existing adequate theoretical frameworks available, qualitative case study methodology is used for this research.

There are several types of case studies to consider. Baxter and Jack (2008) distinguish between explanatory, descriptive, intrinsic, instrumental, and collective case studies. A descriptive case study approach allows the researcher to describe a phenomenon in the real-life context in which it occurs (Yin, 2003, Baxter & Jack, 2008). Exploratory case study research also allows describing a phenomenon in its real-life context in cases that lack a clear set of outcomes (Yin, 2003). Both descriptive and exploratory research likely benefit this research. However, due to the lack of a predetermined theoretical approach, the study gains more from an exploratory approach.

The essence of a case study is the clear definition of the case and phenomenon under study (Ibid.). In this research, the *phenomenon* under study is ‘information seeking behaviour’, that is, a certain behaviour by individuals. The *case* consists of the highly-educated, heavy consumers of organic food in the Netherlands.

3.2 Methodological Position: Interpretivism and Social Constructivism

Several methodological assumptions underlie every research. In explaining the taken methodological stance, a researcher's view of the nature of reality is described. Positioning research within a paradigmatic framework compels a researcher to consider their perspective and the consequences of their choices (Ponelis, 2015).

3.2.1 Interpretivist stance

In social research, assumptions often originate from a positivist or interpretivist paradigm (Bryman, 2016). By choosing a positivist stance, quantitative research methods are adopted. A positivist stance assumes the research object can be controlled or isolated for the sake of research, holding variables constant while manipulating others (Gray, 2009). Positivist studies, however, do not offer insight into the underlying complexity of organic consumer behaviour, leaving the ‘why’ behind their behaviour unexposed (Rowlands, 2005). Unlike positivists, interpretivists believe a distinction should be made between humans and the material world. This stance allows a researcher to study phenomena in their natural settings, as is desired in studying organic consumers’ information seeking behaviour.

Substantial research into human information needs has been carried out from a positivist stance, which, according to Itoga (1992), has led to an ongoing discussion concerning the conceptualisation of information needs. These positivist studies provide insight into basic information needs and uses, but are unable to arrive at a universal conceptualisation of the concept (Itoga, 1992). Recognising the complexity of human behaviour, Wilson proposes a more subjective approach to better understand which information needs exists and to gain a better understanding of users (Wilson, in Itoga, 1992). This underlines the suitability of the interpretivist stance taken. Adopting an interpretivist stance allows

to understand the story “behind the factor” of information seeking behaviour (Rowlands, 2005, p. 83).

Social reality can be viewed and approached in different ways. Everyone has different ideas about the world and the nature of knowledge. Likewise, each researcher has certain assumptions about how it is possible to gain knowledge and what knowledge there is to be gained during research (Creswell, 2003). Views on the nature of reality and existence determine a researcher’s *ontological* stance, providing basic assumptions about the nature of knowledge (Bryman, 2016). What is considered valid knowledge is encompassed by *epistemology* (Ibid.).

The previous section explained the interpretivist stance in choosing the research method. In relation to ontology and epistemology, interpretivism suggests that reality (*ontology*) is multiple and relative. Subsequently, the acquired knowledge is not objectively perceived and determined, but socially constructed (*epistemology*). The world and knowledge are created by social and contextual understanding and individual’s realities are interpreted in the context of historical and social practices (Creswell, 2003.).

Humans are constantly interpreting the social world around them, which should be acknowledged in researching them (Wilson, 2002). Given that people are constantly trying to make sense of the world around them, researchers try to make sense of this sense-making (Marchionini, 2006). Information seeking behaviour is by definition a form of sense-making. It is therefore vital to adopt research methods that enable a researcher to capture the complexity of human sense-making. There is no rigid categorisation possible when studying human behaviours because it concerns people’s views and interpretations of the world (Creswell, 2003; Gray, 2009). As such, the same phenomenon can be given different meanings by different individuals (Creswell, 2003). The goal, and at the same time a challenge for research from an interpretivist stance, is to rely as much as possible on participants’ views. To ensure for this, the research is carried out systematically while staying open to whatever emerges (Ibid.). This means leaving room for participants to openly respond with their associations and opinions, and to stay open to new insights to emerge during later stages in the research.

3.2.3 From methodology to research methods

Providing insight into the mechanisms behind information seeking behaviour in organic consumers requires an open-ended approach. First, because there is little known about this specific group’s information seeking behaviour, it is not possible to test predetermined theoretical patterns (Trauth, 2001). While this research does not ‘test a theory’, the researcher begins the research with certain assumptions acquired from the literature. These insights need to be made explicit. Therefore, assumptions about relevant concepts and their interrelationships as clarified in the theoretical framework are schematically represented in the conceptual framework (see section 2.2). This conceptual model guides the research in its aim to unveil the mechanisms behind organic consumers’

information seeking behaviour by providing some initial structure. An overly rigid, pre-determined categorisation would easily have resulted in overlooking important aspects (Trauth, 2001).

3.3 Participant Selection

This section discusses the choices that have been made in terms of the participant selection. The selection criteria (3.3.1) and the sample size and technique (3.3.2) will be explained.

3.3.1 Selection criteria

Heavy consumer

Because this research is the first to investigate organic consumers' information needs, it is vital that the group under research displays information seeking behaviour with regard to organic food. Comparing non, medium and heavy users of organic foods led to the conclusion that heavy users are likely make most considerations about organic foods, and thus are most likely to search for information. Although there is no previous research into organic consumers' information seeking behaviour, there were some studies that made reference to a relation between information seeking and purchase frequency. These studies support the assumption that heavy consumers are most likely to display information seeking behaviour (Zepeda and Deal, 2009; Bamberg, 2003).

There is, however, no consensus in the academic literature on a categorisation of organic users. Many studies use terms such as heavy, medium, and light organic consumers, but provide no clear definition of these groups. We will take a look at the few studies that did define the different groups of organic consumers.

Bartels and van den Berg (2011) distinguished between light and heavy consumers based on a combination of purchase frequency and the amount of money spent on organic food monthly. Even though they combine two measurements, neither appear reliable. Purchase frequency gives no information about the number of organic products purchased. Moreover, the amount of money spent is only useful when it is viewed alongside the overall food budget share. Reinders, Ronteltap, van den Berg, Jager, van Wijk, de Winter and Tacken (2009) used a similar approach, combining purchase frequency and money spent on organic food, but categorised consumers based on household size. Considering the size of a household makes this study more reliable, as it corrects for the fact that bigger households likely spend more on food. However, it still does not consider that households may have widely different overall food budget shares. Using the ratio of organic budget share to total food budget would solve this issue. Krarup, Christensen, and Denver (2008) did so by using the organic budget share of households to categorize them as non, light, or heavy consumers. This is more reliable as it reflects the amount of organic food purchased in relation to overall food expenses. Wier et al. (2008), in their comparison of organic food markets in Great Britain and Denmark, used the organic budget share of households to categorize users. They set the organic budget share of heavy consumers at higher than

10%, medium users between 10% and 2.5%, and low users at lower than 2.5%. Although they do not make it entirely clear how they came to these numbers, they appear to have based them on the average budget share in both countries (both stay under 3%). Likewise, Krarup et al., researching Danish organic consumers, consider households spending more than 10% on organic foods as heavy consumers, but this was based on a limited group of the 32 most-purchased organic foods. There is no quantification of the average organic budget share per household in the Netherlands. When looking at the organic consumption per capita, however, the Netherlands is located between Denmark and the UK (IFOAM, 2016). The budget share considered ‘heavy’ in this research is therefore based on the abovementioned studies. Since this research focusses specifically on heavy consumers, to interview truly firmly heavy consumers, households spending more than 20% of their food budget on organic products are considered heavy consumers.

In many fields of research, the “self-presentations made by voluntary respondents cannot be taken at face value” (Douglas in Biernacki, 198, p. 150). As such, active control by the researcher is necessary. In this research, a main challenge is individual’s self-perception of their organic budget share. People tend to take all groceries into account when determining their organic budget share despite the explicit mentioning that it concerned merely their organic *food* budget share. After this glitch came forward in the pilot interview, the researcher decided to ask respondents about their organic food budget share again when making an appointment for the interview. Asking them on the telephone to about their organic food budget share led, in several cases, to the realization that the participant’s budget share of organic foods was less than the requisite 20%. These people were then dismissed as participants in the research, and the interview was not scheduled.

Education

Furthermore, as demonstrated in the literature review, education is strongly correlated with an individual’s ability to handle information (Vindigni et al., 2002). This research aims to incorporate respondents with the same level of education to reduce the change that differences in level of education influence the results. When looking at level of education, organic consumers tend to have a higher level of education (Zepeda & Deal, 2009; Denver & Christensen, 2007). This research therefore incorporates highly educated consumers.

One’s level of education is in this research determined by the highest degree obtained. Higher education in the Netherlands is offered at two levels, at a university (*universiteit*) and at a university of applied sciences (*hogeschool*). When referring to highly educated people, individuals with a bachelor's or master's degree from one of these two institutions are considered.

Age and the internet

The rise of the internet has greatly altered the availability of information, as discussed. It is therefore important to take internet access into account when selecting participants. Access to internet is, in

generally, substantial in the Netherlands, with 97% of the Dutch households having internet access at home. Also, differences in internet usage per age group, as identified in the literature review, should be taken into account. Table 2 shows the internet access and internet usage of Dutch people, divided by age category.

It shows that internet access and use are both high for individuals below 65 years old. For people aged over 65, the numbers decline rapidly. To ensure equal chances of access to information, respondents between aged between 20 and 65 are considered in the sample.

Age group (in years)	Internet access	Daily usage of internet
25-44	98.2%	94.1%
45-65	95.8%	90.4%
66-75	84.7%	75.6%
>76	49.5%	28.4%

Table 1: Internet access and usage in the Netherlands (Adapted from CBS, 2016).

3.3.2 Sample size and technique

The larger the sample size, the higher the generalisability of the findings in academic research. However, an interpretivist stance allows for smaller samples, as an in-depth understanding is sought (Ponelis, 2015). With this in mind, and considering time and resource restrictions, the sample size was set to 13.

Finding respondents who comply with the requirement of being a heavy consumer was challenging. Shops and websites through which such individuals could be reached were reluctant to place a call for respondents in their shops or on their websites. Moreover, approaching customers in organic shops was not allowed by the approached shop-owners. When it became evident that this approach would not work, the researcher started asking around in her social environment instead. The first two respondents were then found through acquaintances of the researcher. Asking these first respondents if they knew other heavy organic consumers that met the criteria led to a snowball sampling method. It is often assumed that snowball sampling needs a start and then “somehow magically proceeds on its own” (Biernacki & Waldorf, 1981, p.143). This is not the case. While snowball sampling can be used as a method to meet possible respondents, the researcher must still actively control and develop the sample formation (Ibid.).

In this research, possible respondents were first contacted by e-mail to ask them about their age, highest obtained degree, and organic budget share. When they met the criteria, a telephone call was conducted to schedule the interview. The snowballing-process was reiterated until 13 respondents were found. The characteristics of the final 13 respondents can be found in appendix A.

3.4 Data Collection: Interviews

As stated, 13 interviews were conducted to collect data. This section explains the choice of in-depth, semi-structured interviews (3.4.1), the development of the interview guide (3.4.2), and discusses the interview itself (3.4.3).

3.4.1 Semi-structured, in-depth interviews

As discussed, information seeking behaviour is not something simply *there* for a researcher to observe. Motives and information needs are a subjective experience, which can only be extracted through interaction with the person of interest (Wilson, 1997). As such, observation as a data collection method was quickly rejected. Because the data to be gathered exists primarily in the minds of individuals, two suitable data collection methods were considered: interviews and focus groups. The added value of focus groups is their ability to include human interaction and group dynamics. As group-dynamics are not of interest for the goal of this research, focus groups bring no added value. A one-on-one situation wherein respondents feel comfortable talking freely is desirable. Therefore, interviews were chosen as the most appropriate data collection technique.

Interviewing is a primary data collection method in both qualitative and case study research (Ponelis, 2015). A useful concept to identify different types of interviews is Newton's (2010) continuum: interviews can be everywhere on the line between structured (fixed questions) and unstructured (closer to observation). Asking closed questions does not do justice to grasping the complexity of information seeking behaviour. This research is therefore located in the middle, leaning more towards structured than unstructured (observation) approaches. This allows the researcher to systematically gather the data, staying open "to whatever emerges [and thus having a] lack of predetermined constraints on findings" (Patton, 2002, p40).

One pilot-interview was conducted to test the first interview guide. This interview revealed that the pilot-interviewee had difficulty answering direct questions about her information seeking behaviour. The researcher therefore amended the guide and the interviewing technique for the final interviews. This new approach allowed respondents to discuss topics of interest connected to organic foods followed by further questions or clarifications to retrieve all necessary data. By allowing respondents talk freely about their experiences with information seeking about organic food, the researcher could retrieve the necessary data while remaining open to new topics the respondent might bring up. In accordance with the interpretivist stance, this approach enriches the research with new findings and ideas that may not have been included in the theoretical framework.

3.4.2 Interview guide

To conduct the interviews, a guide for the semi-structured interviews was developed. The assumptions from the literature, as presented in chapter two, formed the basis for the interview guide. With insights from the pilot interview and to justify the interpretivist approach taken, the interview guide was designed as a checklist rather than a list of questions. This allowed room in the interview for new insights.

It is important to consider the comparability of data retrieved from interviews. Data from entirely structured collection methods (questionnaires) is easier to compare than data from observations (Newton, 2010). To ensure comparability of the data, all topics from the interview guide were discussed in all interviews and the interviews were meticulously coded. The coding process will be discussed in section (3.5).

The interview guide exists of a list of topics that should be discussed with every respondent. First, they were asked to speak about a moment when they searched for information on organic food. This way, the interviewee could speak about topics of interest, which would feel like a natural conversation. The interview guide was divided into three checklists: needs, motives, and barriers, each with the operationalisations as identified thus far. It became clear during the pilot interview that barriers were difficult to uncover in the interview. Therefore, an optional section on barriers was added. If the role of barriers, was insufficiently clear when asking interviewees about their information behaviours, this extra section of talking points was used. Then, respondent were explicitly asked about a moment when they wanted certain information but were unable to obtain it. The interview guide can be found in the appendix (Appendix B).

3.4.3 Interview

The 13 interviews were conducted in the Netherlands, between January and April 2017. Eight of the interviews were conducted at the respondents' homes, one over the telephone, while the other six took place over a video-call. Face-to-face interaction was preferred, as it is deemed most appropriate when an in-depth understanding is sought (Newton, 2010). Also, because the interview guide was designed to start a natural conversation, face-to-face contact was desired. All interviews began with the researcher providing a brief explanation of the research and the interview itself. Then, a university-approved consent form was signed (see Appendix D), asking whether the participant agreed to be interviewed, audio recorded, and to the use of his or her anonymized quotes in the final publication. The consent form also stated that the participant could ask for further information at any time and could withdraw at any time during the interview. The interviews lasted between 40 minutes and 1 hour and were audio-recorded.

3.5 Data Processing and Analysis

Chapter two specified which concepts and interrelations are used in the data collection and analysis. In line with the interpretative character of this dissertation, the operationalisation occurs in part prior to, and in part during the data collection and analysis. As such, it is possible to complete systematic research while remaining open to the unexpected. This is in line with the previously explained interpretivist stance.

The coding process of qualitative data can both be inductive and deductive. Inductive coding aims to gain new insights and develop new theories. Deductive coding is applied when testing a theoretical framework. Often, a hybrid form between inductive and deductive is chosen. This means that the process of coding is begun with a list of codes based on themes and concepts that come forward in the literature, but these codes can be supplemented with codes that emerge during the analysis (Sapsford & Jupp, 2006). The concepts and their operationalisations from chapter 2 were used to start the coding process. By conducting schematic and transparent analysis of the gathered data, conclusions that do justice to the natural context can be drawn (Patton, 2002).

The interviews were held in Dutch, as the research is conducted in the Netherlands with Dutch respondents. The audio recordings from the interviews were also transcribed in Dutch. Coding the interviews was completed with the initial Dutch text to avoid interpretation mistakes. The coding programme Atlas.ti was used to code the interview transcripts. The codes are in English. The subsequent analysis is written in English and, therefore, illustrative quotes were translated into English.

The initial codes concern three themes, similar to the three concepts of needs, motives, and barriers, each with subsequent sub-codes, and, where necessary these sub-codes had their own sub-codes. Eventually, 63 codes and sub-codes were developed. The final list of codes is attached in appendix C.

3.6 Limitations and Ensuring Validity

All studies should address their limitations and encountered difficulties, as well as how these were approached. Some of the measures taken to ensure the validity of this research were already shortly addressed in the research methodology (chapter 3). This section will address these measures in detail. Validity denotes different aspects to different observers across research traditions. The validity of qualitative data is more difficult to establish than that of quantitative data (Daniel & Onwuegbuzie, 2002). Nevertheless, there are numerous publications dedicated to establishing validity in qualitative research. Among them, Guba's (1981) construct offers criteria to assess the trustworthiness of this type of research: credibility, transferability, dependability, and confirmability.

Credibility is the qualitative equivalent of internal validity. Addressing the credibility of research means that the researcher attempts to demonstrate whether the findings of the study are believable. Ensuring honesty from interviewees when collecting data greatly contributes to the credibility of research. While full guarantee is impossible, in the present study participants were given the option to refuse to be interviewed or to quit during the interview, thereby ensuring that only people willing to participate were incorporated in the sample. Furthermore, tactics to ensure respondents' honesty during interviews can help to ensure credibility. The pilot interview in this study revealed that direct questions about individuals' information behaviour proved to be difficult to answer for respondents, and led to socially desirable answers. This might be because this unnatural asking-answering interview method felt intimidating, leading participants to provide answers that they believed were desired by the researcher. This limitation was overcome by altering the interview guide to make it less structured, allowing for a more natural conversation between interviewer and interviewee. Furthermore, a detailed description of the data enhances credibility. In this study, the interview reports and the analysis provide the reader with insight into how conclusions were drawn. The anonymised interview reports, list of codes, and audio-files of the interviews will be handed in at both Radboud University and Cardiff University.

Transferability refers to the extent to which findings can apply to other contexts (Bryman, 2016). Qualitative research often considers a relatively small number of cases or respondents, making it difficult to demonstrate that the findings are generalisable to other situations and populations. The target group of this research consisted of highly educated users of organic foods, meaning that the results are highly specific to this group. In providing a detailed explanation of this choice of target group and discussing the possible ways in which their level of education could influence their information seeking behaviour, the author aimed to be as transparent as possible. In this way, other researchers are provided with enough information to judge whether the results are transferable to other contexts of interest to them.

4. Analysis

This chapter discusses the patterns observed in the data analysis and how they relate to the literature. The sections have the same format as the theoretical framework. Section 4.1 discusses the information needs, section 4.2 the motives, and section 4.3 the barriers.

4.1 Information Needs

The first research question was, '*What information needs concerning organic foods can be identified in highly educated, heavy organic consumers?*' This was addressed in the interviews by asking the respondents what they wanted to learn when searching for information about organic foods.

4.1.1 Need for new information

The group of respondents with a strong need for new information expressed this concretely, often not long after they first indicated having no such need. This need related this to their desire to understand things thoroughly, which they expressed with comments such as, '*I always have an urge for new knowledge*' (respondent # 4). Initially, when discussing whether they experienced a need for new information, this group of respondents reacted defensively. This, combined with the contradiction between their initial statement regarding not having a need for new information and the fact that they in fact strongly felt such a need, may be explained by their confidence in their own knowledge. They felt that they were highly knowledgeable on the topic of organic foods, and several even saw themselves as experts. It is possible that expressing a need for new information made them feel as if they had insufficient knowledge. This mechanism is not discussed in the literature; however, their feeling of being experts can be related to their cognitive and affective motives, which are discussed in section 4.2.

The other half of the respondents, the group that did not express a need for new information, were also found to be highly confident about their own knowledge on the topic of organic food. Their satisfaction and confidence in this regard prevented them from forming a need for new information. However, they did refer to the origin of their current knowledge, which was often books. This means that they did have a need for new information in the past, but that they now felt that their knowledge was sufficient. One of these respondents made the following comment: '*We collected so many books on organic foods in the past 20 years, that book knowledge we have, that information is just in your head at a certain point*' (respondent #12). Several of the younger respondents also referred to their upbringing. They ate organic food at home and learned about it then, which left them with sufficient knowledge and thus no need for new information.

The difference in having a need for new information between these two groups, although both relying on their own knowledge and experience, can partially be explained by their motives. Those that did search for new information had strong cognitive motives, while the others had stronger affective motives. This is discussed in more detail in section 4.2.

4.1.2 Need for (in)validation

The same dichotomy between the respondents was visible concerning (in)validating information. Similar to their need for new information, the respondents' need for (in)validation was strongly influenced by their reliance on their own knowledge.

The group that expressed no need for new information also expressed no need to (in)validate. When discussing how they handled encountering conflicting claims, or claims that contradicted their current knowledge, they felt their own knowledge was sufficient. One respondent expressed this clearly: *'Things are not quickly confusing to me, I trust my own intellect'* (respondent #4). The interviews revealed that the respondents' reliance on their own experience in (in)validating claims mostly laid in the fact that they attributed serious health benefits to organic food. When asked about conflicting claims about organic food, almost all respondents made referred to their physical response to a product. For example, one said: *'I believe I have a physical intuition about what is right for me'* (respondent #8); another commented: *'I feel it quite soon if something is not good for me'* (respondent #12). Their bodily response was proof of their opinion about organic foods. The respondents explained that they felt healthier by eating organic food, which made it easier for them to dismiss all claims contradicting this.

In addition to the health benefits of organic foods, the respondents often brought up labelling schemes when discussing conflicting claims. In the group of respondents who did not have a need to (in)validate, several respondents wondered out loud whether an organic label truly means that a product is organically produced. However, when asked about their information seeking behaviour in relation to these statements, none of them indicated having searched for information to (in)validate this. Again, they trusted their own knowledge and (physical) experience with organic food. The following comment was highly illustrative: *'I don't know how they can ever make sure there are absolutely no pesticides used, but I want to believe it because I want to be healthy'* (respondent #10). This demonstrates how a feeling of uncertainty, which, according to Wilson's stress-coping theory (1997) is likely to lead to an information need, is dismissed by the confidence in one's own knowledge. This also shows how the respondents' trust in the health benefits of organic foods worked as an internal (in)validating mechanism: they attributed much value to their perceived health benefits of organic foods, and thus dismissed negative claims about them. To explain why they felt no need to doubt the labelling process, they referred to the better taste, quality, and health effects that they experienced from organic foods. This was expressed with comments such as, *'I can feel it is better for me, so who am I to doubt it?'* (respondent #2). If they themselves felt that this food was better, then the labelling could not be wrong.

The group of respondents who did show a strong need to (in)validate information revealed the same beliefs in the health benefits of organic foods. However, they did not use this belief to dismiss claims contradicting their current knowledge. The fact that the health benefits of organic foods were brought

up in discussing conflicting claims on organic food is no surprise. Health is regarded as one of the main reasons for people to eat organic, and this was the case for all respondents in this study (see section 4.2.1). It is therefore logical that claims contradicting these health benefits would trigger the respondents' need for (in)validation. This group with strong cognitive motives felt a strong need to find the truth. They therefore (in)validated claims about the health benefits of organic foods.

Several respondents in this group also discussed their doubts about the labelling of organic products when speaking about handling conflicting claims. This follows logically from the literature. A lack of trust in labelling schemes is a main reason for people not to purchase organic food. Although these respondents did purchase organic foods, it is logical that they too were affected by these claims. It did not make them stop purchasing organic foods, but it did push them to investigate the labelling process. As a result of their strong cognitive motives (discussed in more detail in section 4.2.3), they wanted to deepen their understanding of the process and learn the truth in the midst of conflicting claims.

The two respondents who showed the strongest (in)validation needs had a university degree. They also indicated that they used academic research methods to (in)validate claims, and preferred academic sources. One respondent explained: *'I only trust it when it is scientifically substantiated [...] I want facts'* (respondent #9). Although not all respondents with a university degree showed these academic research methods, they did all belong to the group with strong cognitive motives, and thus the need for new information and (in)validation. This supports the assumption in the literature that a higher level of education also changes one's information seeking behaviour.

While some respondents did not have the need to (in)validate claims and others felt a strong need to do so, an interesting theme that was revealed during the interviews was the need for confirmation, which was visible in all respondents. They mentioned that they often found confirmation of their current opinion and knowledge from the information channels they used. One respondent explained: *'I go to lectures, about the book "The Plant-eater" for example. They then explain why I shouldn't eat meat, I already know that, but then I hear what they say and I think "yes" that is true'* (# respondent 1). In fact, several respondents explicitly stated that they searched for confirmation of their opinion. One interviewee said about a book she had bought: *'They don't tell me anything I do not already know. But it is nice to see, "hey you see, I am right"'* (respondent #7). This search for confirmation is in line with Zepeda and Deal's (2009) model explaining pro-environmental behaviour. The authors propose that information seeking might have a reinforcing influence on one's attitude. The findings from the present study even point towards a mechanism of people deliberately searching for information that reinforces their attitude.

Relating to this search for confirmation was the respondents' strict choice of information sources: most of them indicated consulting specific outlets. Most were sceptical of the information provided by news broadcasting and reading newspapers. A highly illustrative comment in this regard

was: *MI don't watch the news, I have my own news [...] I wake up and I read the websites that I like, that is my news, and that gives me a whole day of work, believe me'* (respondent #3). Even though information channels are not the focus of this study, the fact that the respondents mentioned this specific choice of information resources reflects their information feed. Selecting sources in their line of thought made it likely to find confirmation of their current knowledge, supporting Zepeda and Deal's (2009) observation of how one's information seeking behaviour can reinforce one's attitude.

4.1.3 Elucidating information

The findings regarding elucidating information are in line with the findings regarding new information and (in)validating information. The group of respondents who did not express a need for new information or a need to (in)validate information did not express a need for education either. Their reliance on their own knowledge and physical response also meant that they felt no need to search for additional, clarifying information.

In line with this reasoning, it should not come as a surprise that the other group, who expressed a strong need for new information and (in)validation, also demonstrated a strong need for elucidation. This was shown in their will to understand topics thoroughly. However, there was one main difference between this need and their need for new information. As opposed to their initially hesitant response in relation to the need for new information, they immediately conceded to having a strong need to elucidate their knowledge. One comment illustrates this nicely, referring to visiting lectures: *'Yes, I am a real information freak, so I process that and I will even deepen my understanding of some things when I'm home'* (respondent #3). The explanation for their first, defensive reaction when discussing the need for new information can also explain why they did not react the same way when asked about their need to elucidate. Their feeling of expertise was threatened by the question of whether they needed new information, whereas this was not the case when asked about expanding their knowledge. On the contrary, they were keen to explain how they managed to stay up-to-date on all the information about organic foods.

4.2 Motives

The second research question was, *'What motives influence highly educated, heavy organic consumers' information needs, and what motives make them engage in information seeking?'* This was examined by asking the respondents 'why' they wanted to know something about a certain subject and what made them search for the information they needed.

4.2.1 Physiological motives

Physical motives were strongly present in all respondents. No dichotomy was visible between two groups of respondents, in contrast to the findings regarding information needs.

Health was noted in all interviews as being an important driver for information seeking. This is in line with the literature on organic consumers, which shows that health is a main reason for people to purchase organic food. All but one respondent referred to illnesses and diseases that prompted their interest in organic foods: *'I had health issues, and then I realised what regular foods and sugar did to my body [...] that is when I started to eat healthier and organic products'* (respondent #12). Despite this strong belief in the health benefits of organic food, however, there is no hard, scientific proof that it is healthier than regular food (Williams, 2002). The fact that scientific literature states this, contradicting the respondents' belief, might explain many respondents' distrust in scientific sources. This is discussed in more detail in section 4.3.

Another physiological motive that was an important driver to search for information was the safety of foods. All respondents, to a greater or lesser extent, expressed concerns about pesticides, fertilisers, and chemical sprays used in the production of regular food. As one respondent explained, *'We unwittingly ingest all these toxins, I then wanted to know how to reduce that, for my body, and the earth, it is toxic to the bees too'* (respondent #1). The respondents with strong cognitive motives were driven to know more about the safety of organic foods and developed corresponding information needs. For the respondents with strong affective motives, on the other hand, physiological motives were important drivers to eat and believe in organic food but, as previously stated, they did not form any information needs. As explained earlier, they believed that organic food was safer and less harmful for their body based on their own knowledge and physical response. The difference between the two groups' response to these similar physiological concerns may lie in the presence of either strong cognitive or affective motives. The following sections discuss this influence of affective (4.2.2) and cognitive (4.2.3) motives in more detail.

4.2.2 Affective motives

As already shortly referred to above, a dichotomy was visible between two groups of respondents. One group was driven by strong affective motives, and did not express strong information needs. For this group, caring for one's family and children often seemed to have initiated their interest in organic food: *'When my children were little, that is when my interest in organic foods started'* (respondent #2). They indicated that they had started to search for information on organic food because they wanted their children to be healthy. This is in fact a combination of two motives: taking care of their children (affective motive) through ensuring their health (physiological motive). The information they searched for when they had children was mainly practical in nature. One respondent explained: *'I looked things up about making organic baby food, and tea, I made tea for them with just an organic mint leaf from my*

own garden. That was healthy for them' (respondent #3). However, this practical information need arising from affective motives seemed to have changed over time. Their focus nowadays was more on philosophical matters concerning organic foods. They expressed wanting to take care of the planet as a whole, and some referred to a search for a certain sense of belonging. A highly illustrative comment came from one respondent who started to search for information on organic foods when her children were little and now described her motivation as follows: *'I feel we need to take care of the planet, and the bees and other creatures. We belong here, don't we? I like to feel that I belong to this earth'* (respondent #1)

This feeling was also expressed as belonging to a certain group. For several respondents, this coincided with having small children. Their information seeking on organic food was linked to being able to join the conversation with other parents and belonging to a group of health-conscious parents. They referred to this with statements such as, *'Other people in my environment with babies did that [...] that's just part of it'* (respondent #5). Another respondent explained how she was inspired by the mums at her kids' anthroposophical school: *'It was not until my youngest went to a [Rudolf] Steiner school that I fed my children organic. I then got this book from another mother [...] Eating organic is just part of that movement'* (respondent #3). Still, even though their interest in organic foods was sparked by their sense of belonging to a group, these respondents expressed the importance of feeding their children organic for their health. This demonstrates how these affective motives coincided with the physiological motives that were present in all respondents.

Both groups of respondents (with mainly affective or with mainly cognitive motives) showed the affective motive of a desire to help others, albeit in other forms. The respondents with strong affective motives showed an intrinsic feeling of wanting to help others. Some even expressed that they felt it was their 'duty'. One respondent explained: *'I find it very important to help others, that is the reason I am here on this planet. We believe that everyone has a role in life. I know that I have one of the roles of the messenger, providing information, sharing information'* (#12).

For the respondents with strong cognitive motives, the affective motive of helping others was more based on making others aware. As will be demonstrated later, deriving from their cognitive motives, these respondents felt a strong need to discover the truth and share it with other people. An illustrative comment was, *'I have the feeling that I, and other people, we are being fooled by the industry and bad research'* (respondent #4). This was also visible when discussing conflicting claims. Besides talking merely about how they doubted labelling, they expressed concerns about the confusion that could arise for other people. One respondent said: *'I know it is good for me, I don't doubt, ever actually. I find it sad that people try to destroy it and that other people believe that'* (respondent #3).

In terms of affective motives, the group of respondents with strong cognitive motives enjoyed information seeking: they felt enthusiastic about searching for and finding the information they wanted to have. As one respondents explained, *'I enjoy investigating things like this'* (respondent #4). Sharing

their knowledge also seemed to give them a sense of fulfilment. For instance, some of these respondents were asked by people in their social environment to investigate things for them, which they enjoyed doing. However, it seemed as if they were sometimes blinded by their own enthusiasm, not realising that other people might not feel the same. They explained how they sometimes felt that they shared their knowledge with people who did not ask for it. One respondent commented: *'Me and my partner, we are all about sharing information [...] we love to make people alert and wake them up to show them: know what you are eating'* (respondent # 12). The then added: *'But we also notice that not everyone is open to this kind of conversation, because with some people you'll literally have an argument about it'*.

This relates to symbolic-affective motives, such as prestige, status, and superiority, which can be associated with expressing pro-environmental behaviour (Steg et al., 2001). The fact that several respondents expressed feeling like experts implies that they had a sense of having more knowledge than others. Sharing knowledge with others as if one is an expert could be interpreted as having a feeling of superiority. In terms of symbolic-affective motives, it could be argued that a feeling of superiority was a motive that drove these respondents' search for information. However, it could also be stated that their feeling of expertise (and perhaps superiority) was a result of their knowledge obtained due to their strong cognitive motives. Taking the strong need to share knowledge and help others into account, it seems most likely that the latter is the case: these respondents' feeling of expertise was a result of their extensive knowledge, and their sharing of their knowledge was motivated by their will to help others.

4.2.3 Cognitive motives

As explained before, a dichotomy was found between two groups of respondents. One group was mainly driven by affective motives, and the other by mainly cognitive motives. Whereas affective motives such as enjoying searching for information and helping others could occur in respondents mainly driven by cognitive motives, the reverse was not the case: respondents driven by affective motives did not show cognitive motives.

The respondents with strong cognitive motives had a strong need to obtain new information, to (in)validate, and to elucidate. These needs arose from their cognitive motive of wanting to gain new knowledge and understand topics thoroughly. Overall, the respondents driven by cognitive motives had a strong urge to expand their knowledge and to ensure that what they learned was the truth. They expressed this with comments such as, *'I always want to know more'* (respondent #4). As explained, their information seeking was sometimes accompanied by affective motives: they enjoyed searching for information and expanding their knowledge. They searched for information out of curiosity about new products, for example: *'When I see a new product, I think "hey, that is interesting" and I go home and look it up'* (respondent #9). This illustrates how passively obtained information can spark one's curiosity, and make one engage in information seeking.

Several respondents with strong cognitive motives were driven by a great desire to know the

truth: *'I want to understand everything and especially who is telling the truth and what the real truth is'* (respondent #4). These respondents also appeared to have a different idea of how deep their understanding of topics had to be. They did not merely look for the answer to their question, but also wanted to know who produced the information; one respondent commented, *'Where do logos come from? Is that the government? Or industry? Is it retailers who make up those blue check-marks?'* (respondent #10). Another illustrative comment was the following: *'I investigate that, I look up who wrote it, according to what monetary flow the data has been produced'* (respondent #4). These comments demonstrate the thoroughness of the search that these respondents engaged in.

4.3 Barriers

The last research question was: *'When do barriers occur in information seeking and what kinds of barriers can be identified in highly-educated, heavy organic consumers' information seeking?'* This was examined by asking respondents when and how they were hindered in their information seeking behaviour.

4.3.1 Personal barriers

Respondents were found to form their own barrier in situations in which they denied having an information need. As explained in the theoretical framework, according to stress-coping theory, a feeling of uncertainty is likely to lead to an information need (Wilson, 1997). Some of the respondent's way of handling conflicting claims demonstrated ignoring this feeling. They trusted their own knowledge to the extent that they overcame the feeling of uncertainty, thus not forming an information need. Relying merely on one's own knowledge could pose a barrier, because it stops someone from searching for new information. This mechanism is related to that of denying needs. When one feels that one's own knowledge is sufficient, one ignores the information need that arises. This mechanism was visible in a few respondents. One indicated that she sometimes trusted her own knowledge too much, which led to her not acknowledging issues she encountered. She used the example of adopting a completely organic diet to solve a health issue, instead of consulting a medical expert. She explained: *'I then noticed that when I really want to look something up for myself, that I sometimes have serious blind spots, that it is sometimes good to ask someone else [...] That is what I learned, that I have a substantial blind spot'* (respondent 2). In situations like these, the respondent thus formed their own barrier.

Denying needs was only observed in respondents with weak or no cognitive needs, whereas those with strong cognitive needs did not show any signs of doing so. This derived from their cognitive motives: they had a strong need to understand topics thoroughly. This perhaps also included their

wanting to challenge their current knowledge to find the truth, which seems likely since they attached much value to the (in)validation of information.

4.3.2 Environmental barriers

As previously mentioned, three respondents referred to scientific research as their main source of information on organic food. These respondents demanded high standards from their sources. They mentioned that this cost them more time in finding what they were looking for, but they did not experience this time as a barrier. They explained that they made the time to search for information that met their standard. In relation to scientific sources, one respondent noted an interesting barrier: the marketisation of science. Whereas used to read many academic articles on organic foods in the past, the costs had become a barrier. He stated: *'I used to read a lot of academic articles [...] but on the internet academic articles are no longer free to read'* (respondent #4). He indicated that this was a major barrier for him because he could not afford access to academic publications. Another barrier that he presented was that he felt that there was no place in academic research for organic food: *'Scientists who want to publish something out of the ordinary don't have the ability to do so anymore, because they cannot put it online anymore'* (respondent #4). Only respondents with a university degree shared such concerns about access to academic literature on organic foods.

Several of the respondents with strong affective motives and no university degree did mention academic research during their interview, but with the opposite tone. They appeared to be suspicious of the trustworthiness of academic research as a whole, making statements such as *'I don't believe what scientists say about organic food'* (respondent #1). This mainly seemed to be caused by their observation that academic research contradicted their main motive and main (in)validating measure: the health benefits of organic food. As mentioned, there is no hard, scientific proof that organic foods are healthier than other foods (Williams, 2002).

Among the respondents with strong affective motives, several mentioned time as a reason not to search for information, with comments such as, *'I don't know where I have to find the time to do that'* (respondent #8). Several respondents referred to not feeling the need to make time due to other priorities. For them, a lack of time already seemed to influence them in the process of forming information needs. This might be caused by the absence of cognitive motives that could instigate their information need. When there is no strong cognitive need to search for information, there is less will to make time to do so. It is possible that the fact that they trusted their own knowledge so much strengthened this mechanism. Searching for external information sources costs more in terms of time and effort than relying on one's own knowledge and experience.

All respondents stated that the internet was their main source when searching for information. Almost every individual mentioned the overload of information available online; however, the extent to which this was considered a barrier in information seeking differed between the two groups. Those with

strong cognitive motives indicated that they had found their way in handling the overload of information. Their reliance on their own knowledge and experience was evident here in selecting which information they considered to be valuable or even trustworthy. An illustrative comment by one respondent was, *‘There is so much information on the internet, I then just use my own common sense and experience, I will go my own way’* (respondent #2). As mentioned before, a few of the respondents with strong cognitive motives used academic research methods in searching for information. Although they did mention the large availability of information, they were confident in handling it. They felt that they had found their way by relying on their academic research methods.

In the other group of respondents, those mainly driven by affective motives, several noted that the information overload on the internet posed a major barrier for them. One respondent explained: *‘There is so much information on the internet, if that happens, then I just stop. I might ask someone I know or in a store’* (respondent #1). It is interesting that this group of respondents, expressing few to no information needs, discussed such a barrier, which implies that they did search for information. It may be that this information overload plays a role in preventing them from forming an information need in the first place, since there is a great deal of information available to answer their questions.

When discussing barriers, respondents from both groups mentioned their perception of the diminishing knowledge of employees in organic shops compared to in the past. Some also mentioned small organic shops being replaced by larger organic supermarkets. One respondent commented: *‘Even the manager doesn’t know anything about the foods they sell, it is just a job nowadays’* (respondent #12). This did not mean a change in their choice of store but any of the respondents, but most said that they did not bother to ask shop employees for information anymore. For some, this presented a barrier in terms of time, as it took them longer to search for it themselves.

4.4 The Mechanisms Unveiled

This section answers each research question. In doing so, it discusses the key findings from the analysis and links these to the findings from the literature.

Answering the question *‘What types of information needs concerning organic foods can be identified in highly educated, heavy organic consumers?’* revealed a dichotomy between two groups of respondents, which was characterised by the absence of information needs in one of these groups. Although both showed a high level of trust in their own knowledge and experience, this meant that no information needs were developed for only one of the groups. This is explained by their subsequent motives. Respondents with strong cognitive motives trusted their own knowledge and experience, but still had a strong need for new knowledge and for thorough understanding of everything. That these respondents were so driven to discover the truth also caused them to have a strong need to (in)validate information. This strong need for (in)validation was expected, since the literature revealed a lack of trust to be a main theme associated with organic consumption. For the respondents in this research, this

was not expected to be a barrier that prevents them from purchasing organic food, they are heavy organic consumers after all. But the likeliness of them being confronted with other people's lack of trust, or considering topics that cause a lack of trust in non-consumers was suggested in the literature review. This was observed in the respondents, in their concern that other people would be affected by negative claims about the organic labelling process. The expectation that this would trigger consumers' (in)validation needs was thus not found.

The other group of respondents, mainly driven by affective motives, were found to strongly rely on their own knowledge and experience, and due to this reliance denied needing new information, elucidation, or (in)validation. Moreover, the mechanism of using the perceived health benefits of organic foods to dismiss counterclaims also caused them to deny such needs.

A key mechanism that was observed was that all respondents expressed a strong need to confirm their knowledge, irrespective of their main motives. The respondents with mainly affective motives had a high level of confidence in their own knowledge, so it was interesting to see their desire for confirmation. Perhaps their way of dealing with information that contradicted their knowledge – such as scientific research, in which they expressed distrust – was to search for information that confirmed their opinion. Moreover, although the group of respondents with mainly cognitive motives showed a strong need for (in)validation, they also showed a strong need to confirm the knowledge they held. In their need to challenge their current knowledge to find the truth, searching for confirmation might be a mechanism to maintain their feeling of expertise. Interesting to see is that this mechanism did not come forward in the literature on information behaviour, but did –to a certain extent- in organic consumer behaviour literature. Zepeda and Deal's (2009) found that consumers' positive attitudes towards organic food made them search for information that reinforced this attitude. This is exactly the mechanism that came forward in this research.

As demonstrated, information needs are strongly entangled with one's motives. The theory states that motives can both instigate information needs as well as influence someone to engage in information seeking. Answering the second research question, '*What motives influence highly educated, heavy organic consumers' information needs, and what motives make them engage in information seeking?*' revealed that the respondents' motives were indeed strongly connected to their needs, as discussed above. Whereas the respondents with strong cognitive motives were driven by a desire to gain more knowledge, deepen their understanding, and know the truth, those driven by affective motives had a strong desire to care for others, such as their family and mainly their children. For the latter, this caring had instigated their information needs in the past, but their affective motives had shifted over time to a more philosophical level. Regardless of the dichotomy between respondents, all had one affective motive in common: they all felt a need to share their knowledge. The group of respondents mainly driven by affective motives saw it as their duty to do so, in line with their desire to care for others. For the respondents driven by mainly cognitive motives, on the other hand, their desire to share their knowledge mainly concerned making others aware of injustices. This distinction can again be

related to their main information seeking motives: those with mainly affective motives were mostly driven by caring for others, while those with cognitive motives were driven by knowing, and in this case sharing, the truth.

Based on the literature, a strong presence of physiological motives was expected in all respondents, since the perceived health benefits are a main reason for consumers to purchase organic food. This was indeed found to be the case, as all respondents referred to their physical condition in relation to information seeking, either for them or for their family. A great share of the respondents referred to illnesses instigating them to search for information on organic foods.

It can be concluded that physiological motives were the main instigators of all of the respondents' information seeking behaviour. The presence of cognitive or affective motives determined how their information seeking behaviour developed, leading them to either show a strong need to search for information, or not to develop further information needs at all.

The last research question was, '*When do barriers occur in information seeking and what kinds of barriers can be identified in highly-educated, heavy organic consumers' information seeking?*' The findings revealed that the motives also influenced the presence of barriers. The respondents with strong affective motives were found to create their own barrier. Their way of coping with a feeling of uncertainty was to trust their previous experiences and knowledge, which prevented them from forming an information need. In addition, for some of these respondents, a lack of time also represented a barrier. However, this barrier already seemed to hinder them in the stage of forming information needs. This mechanism was also visible in some of the respondents with strong cognitive motives: their trust in their own knowledge could sometimes leave them with blind spots.

As previously explained, the group of respondents with strong affective motives showed little to no need for information. They did, however, experience the overload of information on the internet as a major barrier. Thus, their perception of this information overload as a barrier might indicate that it represented a barrier to forming information needs in the first place. The respondents with strong cognitive motives referred to the overload of online information too, but they indicated that they had found their way in selecting suitable information. These respondents also experienced time as a barrier, mainly due to the extensive search for information that they wanted to carry out. The extent to which this hindered their information seeking was low, however. They expressed that searching for information was a priority for them, and they made time to do so. This probably derived from their cognitive motives, which gave them an urge to search for information, combined with their affective motives of feeling enthusiastic about this activity.

5. Conclusion and Reflections

This final chapter presents the conclusions (5.1) of this research, followed by the recommendations (5.2) and the reflections of the author on the process of writing this dissertation (5.3).

5.1 Conclusion

The dissertation aimed to answer the following question: “What types of information needs can be identified in highly-educated heavy organic consumers and what motives and barriers influence them to engage (or not to engage) in information seeking?”. Answering this question, it can be concluded that people’s motives determine people’s information seeking, in terms of the needs they inspire, the types of needs they develop and also to a certain extent to what extent barriers influence their information seeking behaviour. It can be concluded that, for higher educated heavy consumers physiological motives were the main motive which instigated their information seeking behaviour in the past. And still, physiological motives such as health and food safety are main drivers some respondents’ information seeking behaviour. However, the physiological motives did not give a clear indication of people’s actual information needs and information seeking behaviour. It turned out to be the additional presence of respectively cognitive or affective motives that determined their current information needs. This said, a dichotomy between respondents mainly driven by cognitive motives and respondents motivated by mainly affective motives characterised the sample. Respondents show a strong need to search for information when they are driven by mainly cognitive motives, but when they are driven by mainly affective motives, the information needs stay rather absent. The respondents with strong cognitive motives strong needs for new information, elucidation and (in)validation resulted from their desire to gain new knowledge, gain a deeper understanding and their desire to the truth. Regardless of their confidence in their own knowledge - seeing themselves as experts- they felt a strong need to expand and challenge their knowledge. The other group of respondent, mainly driven by affective motives which gave them a strong desire to care for others such as their family. These respondents also showed a strong confidence in their knowledge. This confidence caused them to deny having an information, because the feeling of uncertainty that leads to an information need was soothed with their own knowledge. Also, the health benefits they feel to experience from organic foods strengthen their confidence in their knowledge on organic foods, enabling them to dismiss counterclaims. This was identified as a personal barrier, since the respondent forms his/her own barrier to forming an information need.

A key mechanism that was revealed was the need for confirmation. For the respondents with mainly affective motives, who do not have a need to (in)validate, this might be a mechanism to deal with them receiving information that contradicts contradicting their knowledge. The respondents with mainly cognitive motives showed a constant will to challenge their current knowledge and to find the truth. This might make them want to search for confirmation as a mechanism to maintain their feeling

of expertise. The motives present in the respondents also influenced the effect of barriers on their information seeking behaviour. For example a lack of time was a barrier for respondents with mainly affective motives. The respondents with strong cognitive motives, on the other hand, seem to have found their way in dealing with environmental barriers such as an overload of information or a lack of time. Their strong cognitive motives makes them prioritize information seeking.

The main conclusion that can be drawn is that there seem to be two types of highly educated heavy organic consumers. Both feel to have extensive knowledge of organic foods. One group relies on this knowledge, not having information needs, and thus not displaying information seeking behaviour. The other group has a strong desire for new knowledge and wants to be sure to know the truth, resulting in strong information needs. This research provided a first insight in the information seeking behaviour of highly educated heavy organic consumers. These insights could serve as a basis for further research into organic consumers' information seeking behaviour. The next section will present some recommendations for further research, and to use the findings from this study in practice.

5.2 Recommendations

The first and foremost recommendation to make is to conduct research into the information seeking behaviour the other groups within the population of organic consumers. Targeting people with a very high budget share of organic food, enabled this research to make a first attempt at unveiling the mechanisms behind organic consumers' information seeking behaviour. Now that there is a first understanding of the mechanisms behind their information seeking behaviour, this knowledge serve as input for studies into consumers with a lower budget share of organic foods. This group of consumers is particularly interesting to research, as their budget share is not very high (yet). Understanding these organic consumers can provide input to stimulate their purchase behaviour. After all, the ultimate goals of understanding the complexities of organic consumer behaviour is to understand how organic consumption can be enhanced.

Additionally, further research should incorporate respondents with different levels of education. With the sample size in mind, this research chose to incorporate respondents with the same level of education to reduce the change that differences in level of education influence the results. However, studies with more time and resources to their disposal could compare the information seeking behaviour of respondents with different levels of education. When looking at the data, although not the focus of this research, there are already differences to be observed between the information seeking behaviour of participants with a university degree and a degree of a university of applied sciences. This, while these are both degrees in Dutch higher education. Research combining respondents with different budget share and different degrees of education would be most desirable. This way, an overview of the information seeking behaviour of the population of organic consumers can be provided.

On a more practice oriented level, the findings of this study led to some insights that could be

interesting for marketers and other actors interested in increasing organic consumption, such as NGO's and governments. As stated in the relevance of this study, insight into people's *active* information behaviour could provide insights in their reaction to *passively* obtained information. This knowledge can be used as input for policies and campaigns to help steer society towards organic consumption. Overall, all respondents are triggered by the physiological considerations surrounding organic foods. This is already known by marketers, hence the strong focus on health in current marketing for organic food. But take for example the group of respondents with more affective motives. Their physiological motives in the sense of health, and in terms of caring for the planet are already triggered by marketers, as these two form the main advertising angles. However, this research also demonstrated that this group of respondents seems to be open for information that confirms their current opinion, but seem to be less open to information that challenges this opinion. This should be taken into consideration when presenting new ideas (in campaigns) or presenting new products to this group, for example by embedding the message in a familiar context in terms of information.

5.3 Reflection

During the writing process, especially at the start, I encountered that I depended too much on other authors. I found it hard to be critical of their thoughts. After all, when you write a book on a subject you must be right, was my thought. I experienced this during earlier phases in my studies too, but I somehow never took the time to reflect upon this. During the writing process of my dissertation, I realised that the skill to be critical is not only beneficial for my academic work, but will also come in hand in other aspects in life. I therefore decided to improve this during my dissertation writing. I read a lot of articles about critical writing, and tried to find that one 'rule of thumb' that would make it easier to have that critical view. What I learned from that, it that being able to critically reflect is a mind-set that one must acquire, and I made the first steps towards that during this process.

I had some experience in analysing and gathering primary data from my bachelor's thesis. However, analysing the amount of data that I gathered in this dissertation was a new experience. At first I was reluctant to use a computer programme to process the data. I figured it would cost too much time to learn to work with a programme, which would be inefficient considering my rather small sample. After some attempts to come up with my own coding tables, I decided to give Atlas.ti a try. Taking some time to learn to work with this programme proved to be an excellent decision. Working with atlas allowed me to make visual representations of the relations between the concepts, which was really helpful since I am a visual person.

Writing an analysis based on such a large amount of data was a first for me. Especially the difference between presenting the findings and analysing these findings was a challenge. I attempted to present the data and analyse at the same time, in one section. This turned out to be quite a challenge, which left the analysis of the results rather unexposed. Eventually, I added – as recommended by my

supervisors- an extra section after the analysis where I discussed the key findings. Doing this, allowed me to better present the findings, but also forced me to shorten my conclusions chapter. What I learned from this is, that it is sometimes better to take the starter's approach, which, in this case, was writing a separate findings and analysis section.

Writing my dissertation has been an interesting intellectual journey, and, somewhat to my surprise, one I enjoyed until the end.

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Appendices

Appendix A: Participant Information

Respondent number	Education <i>Required: University of Applied Sciences degree or University Degree.</i>	Budget share organic foods in percent (%) <i>Required \geq 20%</i>	Internet access at home (yes/no) <i>Required: yes</i>	Age group <i>Required: between 25-65</i>
1	University of applied sciences degree	50%	Yes	50-65
2	University of applied sciences degree	70%	Yes	50-65
3	University of applied sciences degree	90%	Yes	50-65
4	University master's degree	50%	Yes	50-65
5	University master's degree	45%	Yes	40-50
6	University of applied sciences degree	80%	Yes	50-65
7	University of applied sciences degree	70%	Yes	50-65
8	University of applied sciences degree	40%	Yes	50-65
9	University master's degree	50%	Yes	30-40
10	University of applied sciences degree	90%	Yes	30-40
11	University master's degree	70%	Yes	30-40
12	University master's degree	85%	Yes	40-50
13	University master's degree	80%	Yes	30-40

Appendix B: Interview Guide

Name respondent:

Place of residence:

Date:

Time:

Consent form signed? Yes/No

Short introduction of the research and about the interview itself.

Could you recall a moment when you wanted to search for information on organic foods?

- **What kind of information were you searching for? What did you want to know?** [Need] -
 - Elucidating information (clarification, know more)
 - (in)validating (conflicting claims, other opinions, unreliable information)
 - Need for new information (new knowledge, may be based on hypothetical knowledge)

- **Why did you need this information?**
- **What was the reason you searched for this information?** [Motive]
 - Physiological (health, food security, caring for others, sense of belonging, emotions)
 - Affective (sense of belonging, social status, emotional)
 - Cognitive (understand how it works, understand world, place in world)

- **Did you carry out the search eventually? → Could you tell be about things that hindered you from searching for information?**
- **Could you tell me about things that hindered you during your information search**
 - Personal barriers (handling information, priorities, time, denying need)
 - Environmental barriers (resource characteristics, no/ limited access, too much information, reliability information)

Additional questions during the interview:

- **What questions were you asking to find that information?**
- **What did you type in in the search engine?**
- **And what did you do with this information?** (leading to a new need?)

When the barriers remain unclear:

- **Can you remember a moment when you wanted to search for information but it did not happen?**
- **Can you remember a moment when you searched for information but the search did not give the desired results?**
 - Personal barriers (handling information, priorities, time, denying need)
 - Environmental barriers (resource characteristics, no/ limited access, too much information, reliability information)

Appendix C: List of Codes (ATLAS.ti)

Code-Filter: All

HU: Codes interview transcripts Master's thesis Information Seeking Behaviour Organic Consumers ATLAS bestand
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Need: denying a need

Need: New information

Need: need for new information: information freak

Need: New information: no need for new

Need: (in)validation

Need: (in)validation: handling conflicting claims

Need: (in)validation: confirmation: explicit reference

Need: (in)validation: confirmation: implicit reference

Need: (in)validation: through physiological response

Need: (in)validation: intuition/own knowledge

Need: (in)validation: no need to invalidate

Need: (in)validation: physical response

Need: elucidating

Need: elucidating: deepen understanding

Need: elucidating: no need to elucidate

Barrier: environmental: information overload: distracted, too much info

Barrier: environmental: information overload Internet

Barrier: environmental: information overload Internet: way to handle

Barrier: environmental: source characteristics

Barrier: environmental: source characteristics: scientific sources

Barrier: environmental: source characteristics: skeptical of scientific sources

Barrier: environmental: source characteristics: no access to academic articles

Barrier: environmental: source characteristics: marketization of (scientific) information

Barrier: environmental: source characteristics: references

Barrier: environmental: source characteristics: origin of the information

Barrier: environmental: source characteristics: unclear information

Barrier: environmental: source characteristics: complicated information

Barrier: environmental: source characteristics: how its written

Barrier: environmental: time

Barrier: environmental: lack of knowledge shop employees

Barrier: personal: lack of time

Barrier: personal: self

Barrier: personal: self: denying need

Barrier: personal: self: blind spots

Motive: physiological: before

Motive: physiological: now

Motive: physiological: health

Motive: physiological: safety

Motive: physiological: health children/family

Motive: cognitive: wanting to understand

Motive: cognitive: craving for new information

Motive: cognitive: staying up-to-date

Motive: cognitive

Motive: cognitive: need to know

Motive: cognitive: understanding the world

Motive: affective: need to share knowledge

Motive: affective: sharing information: Expert for social environment
Motive: affective: sense of belonging: children
Motive: affective: status
Motive: affective: sense of belonging to a group
Motive: affective share knowledge: making others aware
Motive: affective: animal cruelties
Motive: affective: sense belonging: the environment
Motive: affective: sense of belonging: something 'bigger'
Motive: affective: sense of belonging: social group
Motive: affective: sense of belonging: social group related to children
Motive: affective: help others
Motive: affective: share knowledge
Motive: affective: sharing knowledge: encountering opposition
Motive: affective: positive feelings about searching for information
Motive: affective: positive feelings about sharing information

Appendix D: Consent Form

PARTICIPANT CONSENT FORM

Reference Number:

Participant name or Study ID Number:

Title of Project: Motives and barriers in heavy organic consumer's information seeking behaviour

Name of Researcher: Minou Roelien Danel

Participant to complete this section:

Please initial each box.

1. I confirm that I have read and understand the information sheet for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason.

3. I agree to take part in the above study.

The following statements could also be included on the consent form if appropriate:

1. I agree to the interview being audio recorded

2. I agree to the use of anonymised quotes in publications

Signature of Participant

Date

Name of person taking consent

Date

Signature of person taking consent

** When completed, 1 copy for participant & 1 copy for researcher site file*

