

UiT

NORGES
ARKTISKE
UNIVERSITET

Faculty of Biosciences, Fisheries and Economics
The School of Business and Economics

The influence of product, contextual and individual characteristics on food evaluation

—
Morten Heide

A dissertation for the degree of Philosophiae Doctor – September 2017



Acknowledgments

It has been a long and winding road since I started my doctoral thesis in 2006. It feels really good to finally complete the thesis and to be able to focus on other things, both professionally and privately.

This thesis would not have been possible without the inspiration and support of a number of wonderful people — my thanks and appreciation to all of them for being part of this journey and making this thesis possible. I owe my sincere gratitude to my supervisor Svein Ottar Olsen for never giving up on me, your academic input, advice and help during all these years. Big thanks to Pirjo Honkanen for your patient, for giving me time and funding to complete this process, and for your help and advice with the thesis. I would also like to thank the co-authors of my papers, Themis, Mats and Domingo.

Thanks to all my present and former colleagues at Nofima, you provide an inspiring, fun and great environment to work in.

Before finishing my thesis I have been fortunate to become the father of Kristine, who has been a big inspiration and joy in my life. To my sweetheart Elisabeth, you have my deepest gratitude for your patient, support and love. I look forward to spend more time with you both. I am forever thankful to my parents and sister for believing in me and supporting me through this process. To my family and friends, thank you for being there for me and providing the support and friendship that I needed.

Abstract

Purpose - The overall objective of this thesis is to provide insights with regard to how characteristics of the product, the context and the individual relate to consumer evaluation of food products. The specific objectives of the thesis are to explore:

1. The influence of test situation and satisfaction with preparation on evaluation (Paper 1)
2. The influence of time use and co-production on evaluation (Paper 2)
3. Consumer use of and trust in product information (Paper 3)
4. The influence of packaging attributes on evaluation (Paper 4)
5. The importance of food quality and prestige benefits when buying food for a special occasion (Paper 5)

Design/methodology/approach - The data analysis in this thesis consists of 3 main methodologies: Structural equation modelling (Paper 1, 2), cluster analysis (Paper 3-5) and conjoint analysis (Paper 4).

Findings and contributions – The results in Paper 1 showed no significant differences in the mean scores of attitude and intention towards consuming the new product across the two different test situations. After splitting the home testing sample into groups with different levels of satisfaction with the preparation of the product, significant differences in attitudes and intention to consume the product were found. This indicates that satisfaction with the preparation, and the product's level of convenience, may influence evaluative outcomes.

Paper 2 demonstrated that satisfaction with co-production (preparation) has a strong and positive effect on the evaluation of the final outcome of the co-processed product. This is an important finding that extends previous studies by showing that not only participation in a co-production process is important for evaluation, but also the satisfaction with the actual co-production process. Furthermore a negative relation was found between time use and the evaluation of a product.

Paper 3 identified three distinct consumer segments based on the consumers' use of and trust in information sources regarding the freshness of fish. The segments were further profiled using product and individual characteristics. This study reported some new theoretical findings and partially expanded earlier works.

Paper 4 indicated that informational packaging attributes (freshness statements, information about taste and convenience) are more important than visual attributes (shape of packaging and colour) when consumers evaluate cod fillets. Segmentation of the consumers in Paper 4 based on the informational and visual attributes revealed three clusters, which was further profiled using individual

characteristics. From a theoretical point of view, this study provides insights and empirical support for using visual and informational packaging attribute importance as a basis for consumer segmentation.

Paper 5 revealed that that food quality benefits are more important than prestige benefits for consumers. This result confirms that food quality benefits like taste and health of food are the foremost perceived benefits across consumer segments. Segmentation of the consumers in Paper 5 identified four distinct consumer segments. A theoretical contribution of this study was the distinction between consumers preferring premium and luxury products. Consumers in the Luxury segment prefer products with high prestige quality, uniqueness and social benefits while consumers in the Premium segment focus on food quality, price and hedonic benefits.

Research limitation - A general limitation of the thesis is that all studies were conducted in a single European country or focused on how consumers evaluate one particular food product. Furthermore, this thesis investigates a limited number of products, contextual and individual characteristics. Future research could extend this research by including other variables. Finally, this thesis focuses mainly on similarities and differences in consumer evaluations. However, evaluation or attitudes is suggested to influence consumer's behavioural responses, something that could be included in future research.

Conclusion and implications – This thesis considered evaluation of food as a global attitude and as an evaluation of various attributes as expectations or experiences, and explored how evaluation is influenced by product, contextual and individual characteristics.

This thesis contributes to the understanding of how food preparation or co-production influences evaluation. Satisfaction with co-production is an important determinant in the evaluation of a food product. Including this variable in product development may yield valuable insights as to how consumers evaluate food products and enable the developer to tailor the products to the consumers' needs and wants.

The thesis demonstrates the importance of segmenting consumers based either on how they evaluate different product or individual characteristics. The findings can be used by industry, retailers or other relevant stakeholders to develop products and marketing strategies.

Table of contents

Part I

1	Introduction.....	1
1.1	Aims.....	1
2	Theoretical and conceptual framework.....	2
2.1	Consumer evaluation and attitudes.....	3
2.2	Expectations and experience.....	5
2.2.1	Intention.....	6
2.3	Characteristics of the product.....	6
2.3.1	Taste.....	7
2.3.2	Freshness.....	8
2.3.3	Packaging and informational cues.....	8
2.3.4	Perceived product convenience.....	9
2.3.5	Health benefits.....	9
2.3.6	Prestige benefits.....	10
2.4	Characteristics of the context.....	10
2.4.1	Test situation and survey mode.....	11
2.4.2	Time use.....	11
2.4.3	Special meal occasions.....	12
2.5	Characteristics of the individual.....	13
2.5.1	Knowledge.....	13
2.5.2	Involvement.....	14
2.5.3	Co-production.....	14
2.5.4	Trust and use of information.....	16
2.5.5	Behavioural indicators.....	16
3	Methodological issues.....	17
3.1	Structural equation modelling.....	17
3.2	Cluster analysis.....	18
3.3	Conjoint analysis.....	19

Part II

Paper I-V

Part III

4	Main findings, contributions and implications.....	1
4.1	The influence of test situation and satisfaction with preparation.....	1
4.2	The influence of time use and co-production.....	2
4.3	Consumer use of and trust in product information.....	3

4.4	The influence of packaging attributes	5
4.5	The importance of food quality and prestige benefits.....	7
4.6	Limitations and suggestions for future research.....	9
5	References.....	10

List of Papers

- I: Heide, M., Olsen, S. O., & Dopico, D. C. (2010). The influence of test situation and satisfaction with preparation on evaluation and intention to consume a new seafood product. *British Food Journal*, 112(7), 763-774.
- II: Heide, M., & Olsen, S. O. (2011). Co-production and time use. Influence on product evaluation. *Appetite*, 56(1), 135-142.
- III: Altintzoglou, T., Heide, M., & Carlehög, M. (2014). French consumer profiles' reactions to information on cod fillet products. *British Food Journal*, 116(3), 374-389.
- IV: Heide, M., & Olsen, S. O. (2017). Influence of packaging attributes on consumer evaluation of fresh cod. *Food Quality and Preference*, 60, 9-18.
- V: Heide, M., & Olsen, S. O. (2017). The use of food quality and prestige based benefits for consumer segmentation. Submitted to *British Food Journal*.

Part I

1 Introduction

Every day people evaluate a number of objects such as products, situations or other individuals. For example, when eating a meal people can evaluate the meal as a whole, the taste of the different ingredients in the meal and how the meal has been prepared. The evaluation of the meal can be influenced by a number of factors, such as the situation in which the meal is consumed, how involved the consumer is in the meal or the ingredients of the meal and how healthy the meal is (Meiselman, 2007; Grunert, 2002).

Evaluation, defined as determining the importance, value, worth or benefit of an object with some degree of favour or disfavour, is assumed to be among the most universal and dominant human responses (Jarvis & Petty, 1996). A vast amount of research has been directed at understanding how people evaluate different physical and psychological objects. These objects might be virtually anything that can be evaluated such as physical products, sensory characteristics, social issues, persons, situations, ideas and behaviours (Eagly & Chaiken, 1993). The mere number of objects that can be evaluated exemplifies how universal evaluative responding is considered to be.

Through 5 papers, this thesis will focus on how consumers evaluate food. Evaluation of food is important for a number of reasons including understanding food choice behaviour, development and promotion of healthy diets, product development and formulating marketing strategies (Nowlis & Simonson, 1997). Food evaluation is a complex process, which is influenced by several interrelated factors (Grunert, 2002; Shepherd, 1989; Steenkamp, 1993). This thesis will provide insights into some of the factors influencing food evaluation, how these factors are related and how consumers evaluate these factors depending on the characteristics of the product, the context and the individual (Meiselman, 2007; Grunert, 2002). The thesis will focus on food product evaluation on two levels: global attitude as a summary evaluation of the food product (object) and evaluation the various characteristics or attributes with food products.

1.1 Aims

The overall objective of this thesis is to provide insights with regard to how the characteristics¹ with the product, the context and the individual relate to consumer evaluation of food products. The specific objectives of the thesis are to explore:

The influence of test situation and satisfaction with preparation on evaluation (Paper 1)

¹ In this thesis characteristics is used as a term for quality, attribute or trait of an object

1. The influence of time use and co-production on evaluation (Paper 2)
2. Consumer use of and trust in product information (Paper 3)
3. The influence of packaging attributes on evaluation (Paper 4)
4. The importance of food quality and prestige benefits when buying food for a special occasion (Paper 5)

This thesis addresses these objectives by using different forms of evaluations from an attitudinal perspective (Fishbein & Ajzen, 2010; Eagly & Chaiken, 1993). Besides using experienced attribute and attitude evaluation (e.g. perceived quality) and intention to consume (Grunert, 2002), it also focuses on expected values or desire such as benefits or pre-purchase expectations (Onwezen et al., 2012). Finally, the thesis combine different techniques to analyse data such as structural equation modelling, conjoint- and cluster analysis, to gain insights with regard to how characteristics with the food, the context and the individual relates to consumer evaluations.

2 Theoretical and conceptual framework

Food evaluation is a complex process, which is influenced by several interrelated factors. For this reason, food evaluation has been integrated into extensive theoretical frameworks (Furst et al., 1996; Grunert et al., 1996; Marreiros & Ness, 2009; Steenkamp, 1989; Steptoe et al., 1995). Most of these models distinguish between three main factors that influence the consumer's food evaluation: the food, the situation and the individual (Meiselman, 1996). Evaluation can be specified in different formats such as before (expectations/benefits) and after (experience/perceptions) consumption, on a general attitudinal level or as evaluation of specific attributes, as cognitive and affective response or as intention to pay or consume in the future (Desmet & Hekkert, 2007; Fishbein & Ajzen, 2010; Golder et al., 2012). This thesis adapts elements of these various frameworks to focus on combinations of characteristics related to the food, context and the individual:

1. Characteristics of the food itself: taste, freshness, packaging, convenience, health and prestige.
2. Characteristics of the context in which the evaluation is made: test situation, time use and special occasion.
3. Characteristics of the individual making the evaluation: knowledge, involvement, value of co-production, trust and use of information, domain specific behaviour indicators and demographics.

The importance of these characteristics is likely to vary between consumers, products and contexts, making it crucial to understand which characteristics are important among specific markets or market

segments for the evaluation of food products. Figure 1 is a visual presentation of the theoretical framework used in this thesis.

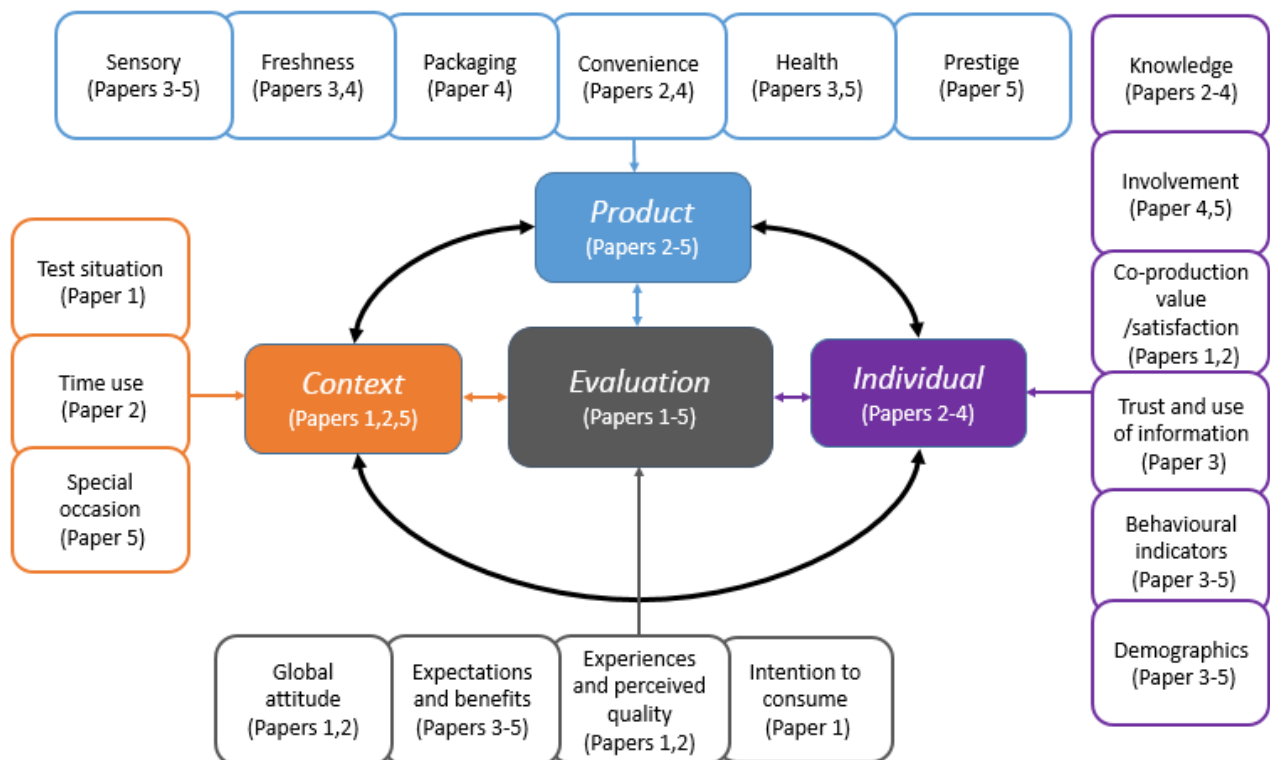


Figure 1 The influence of product, contextual and individual characteristics on evaluation

Evaluation of food as a global attitude/intention or as an evaluation of various attributes as expectations or experiences (Fishbein & Ajzen, 2010; Grunert, 2002), is the main focus of the thesis (Paper 1-5). How individuals evaluate specific product attributes (Steenkamp, 1989; Grunert, 1997) is the focus of Papers 2-5. The influence of contextual factors on evaluation (King et al., 2007; Meiselman, 2007; Onwezen et al., 2012) is the focus of Papers 1, 2 and 5. The influence of individual characteristics on evaluation (Steenkamp, 1997; Story et al., 2002) is the focus of Papers 2-4. Which specific characteristics are used and how they are related to each other within our theoretical framework will be discussed in the following sections.

2.1 Consumer evaluation and attitudes

Attitude is one of the core psychological concepts for understanding consumer evaluation. Thus, this thesis uses an attitudinal perspective of food evaluation (Eagly & Chaiken, 1993). An attitude can be defined as a summary evaluation of a psychological object with some degree of favour or disfavour (Fishbein & Ajzen, 2010). Psychological objects or attitude objects might be virtually anything that can be evaluated such as physical objects, sensory characteristics, social issues, persons, situations, ideas

and behaviours (Eagly & Chaiken, 1993; Greenwald, 1989). The response can be expressed at different levels (attribute and global) and with different degrees of specificity depending on the object (Fishbein & Ajzen, 2010).

The evaluative responses elicited by the attitude object are sometimes separated into three classes; cognitive, affective and behavioural expressions or responses (e.g. Breckler, 1984). The cognitive category contains thoughts, beliefs or judgements about an attitude object; the affective category consists of feelings, moods or emotions; and the behavioural category encompasses actions and intentions to act. Although attitudes may be expressed by cognition, affective, and behavioural responses, and be formed through responding to each of these types, attitudes do not necessarily have all three aspects, either at the point of their formation or at the point of attitudinal response (Eagly & Chaiken, 1998). Although discussed in some papers (e.g. Ajzen, 2001), this thesis does not make any distinction between cognitive and affective evaluations at the global level of evaluation, but to a certain degree on the attribute level.

Furthermore, this thesis makes a distinction between attribute evaluation and global evaluation. Within an attitudinal framework, the distinction is explained by several theories such as multi-attribute models – expectancy value model and information integration theory (Anderson, 1981; Eagly & Chaiken, 1993). It is further adapted into more specific theoretical frameworks of product (quality) evaluation in marketing (e.g. Golder, Mitra, & Moorman, 2012) and food science (e.g. Grunert, 2002). Beliefs are considered to be the building blocks of attitudes and can be defined as ‘associations or linkages that people establish between the attitude object and the various attributes’ (Eagly & Chaiken, 1993, p.103).

According to the expectancy-value model (Fishbein & Ajzen, 1975; 2010) attitudes arise spontaneously as we form beliefs about the object. The expectancy-value model suggests that an attitude is a function of an individual’s beliefs and that these beliefs are a product of the expectancy and value attached to each of the perceived attributes of the attitude object. The expectancy is the perceived likelihood that the attribute will occur, and the value represents one’s evaluation of the attribute (Fishbein & Ajzen, 1975). Beliefs about an object’s attributes can be formed on the basis of expectations (i.e. information cues or expected benefits) and/or experience (i.e. actual experience with the attributes or perceived quality). An individual’s overall attitude towards an object is determined by the subjective values of the object’s attributes in interaction with the importance (Fishbein & Ajzen, 1975; van der Pligt & De Vries, 1998) or strength of the associations (Ajzen, 2001). This thesis includes evaluations as both expectations (Papers 3-5) and experiences (Papers 1,2) at both global (Papers 1,2) and attribute levels (Papers 3-5). To some degree, it also includes intentional forms of evaluation (Paper 1).

2.2 Expectations and experience

Throughout the consumption cycle, from pre-purchase consideration of alternatives to choice to after purchase reflection and consumption, consumers evaluate products (Gardial et al., 1994; Grunert, 1997). Pre-purchase, expected attribute performance, values or benefits represent consumers' means. Through consumer beliefs, these expectations are linked towards global attitudes, goals and need fulfilment (Gutman, 1982; Homer & Kahle, 1988). These evaluations are different from general or specific post-purchase satisfaction judgements where consumers make their evaluation based on real experience of the attributes and their ability to deliver the desired outcome (Smith & Deppa, 2009). Several theoretical frameworks have been proposed to explain pre-purchase and after consumption evaluation of (food) products (Fernqvist & Ekelund, 2014; Golder et al., 2012; Grunert et al., 1996; Marreiros & Ness, 2009; Steenkamp, 1989).

Expectations serve as standards with which subsequent experiences are compared, resulting in evaluations of satisfaction or quality (Golder et al., 2012; Zeithaml et al., 1993). Expectations are viewed as the desires or wants of consumers (Parasuraman et al., 1988). Consumer expectations are raised by prior knowledge of the product and information about it (Tuorila et al., 1998). Individual, product and contextual characteristics can influence consumer expectations and affect evaluation (Golder et al., 2012; Spence and Piqueras-Fiszman, 2014; Woods et al., 2010).

At the basic level, expectations can be formed based on information about a product's attributes. These expectations are usually product or product category specific attributes (Zeithaml, 1988). It is possible to suggest that attributes form the basis for the next level - expectations about benefits for individual desires (Olson & Reynolds, 1983; Reynolds & Gutman, 1988). Thus, consumer benefits are the desires or consequences that consumers seek to fulfil or achieve when purchasing or consuming a product. Prior to consumption, for example going into a store to buy ingredients for home meal consumption, consumers base the attribute evaluation on expected benefits from products they consider and buy. The importance that consumers attribute to different product benefits is an indication of the motives underlying their product choices. For example, because different consumers have different desires they seek to fulfil in different times and situations, they are also expected to differ in their evaluation of the importance of food benefits in a given context or situation (Meiselman, 2007; Onwezen et al., 2012). Thus, this thesis chooses to use the importance of specific food product attributes or food-category attributes (Verain et al., 2016) and benefits (Onwezen et al., 2012) as measures of consumer expectations in order to form segments of consumers based on their individual desired buying consequences (Papers 3-5).

Post-purchase evaluation is generally conceptualised as a comparison between actual experience with a particular product or service and pre-purchase expectations of that product's performance (Inman et al., 1997). The interaction with the product and the individual experience is widely discussed in the consumer literature and from different perspectives (e.g. Brakus, Schmitt, & Zarantonello, 2009). A central dimension of the quality experience is how the quality is perceived by the consumer (Grunert, 2002). When preparing or consuming food products, perceived or experienced quality can be defined and measured as belief statements or attribute performance (Churchill & Surprenant, 1982) or as the consumers' evaluation of a product's overall excellence or superiority (Golder et al., 2012; Zeithaml, 1988). The relationship between quality expectation and quality experience is commonly believed to determine consumer satisfaction with the product and, hence, the probability of repeated purchases (Oliver, 2010). Satisfaction will be addressed in a later chapter. The experience of food products are considered to be influenced by individual, product and contextual characteristics (Steenkamp, 1989; Grunert, 2002). Thus, this thesis chooses to use experience with a product and/or product attributes as measures of global evaluation (Papers 1,2).

2.2.1 Intention

One of the evaluative responses elicited by the attitude object is intention (Fishbein & Ajzen, 2010). Intention is commonly defined as indication of how hard people are willing to try or how much effort they are planning to exert, in order to perform the behaviour (Ajzen, 1991). Intention is the most immediate determinant of behaviour (Fishbein & Ajzen, 2010) and, implicitly, the most direct predictor of engaging in consumer specific behaviour (Oliver, 2010). Many research studies indicate that intentions, when properly measured in a given context and under the individual's sole control, are reasonable predictors of specific behaviours (Armitage & Conner, 2001). In many studies of food, attitudes are found as the strongest predictor of intentions to buy that food (e.g. Povey et al., 2001). For a wide range of behaviours, attitudes are found to correlate well with intentions (Ajzen & Fishbein, 2005). This thesis measures intention as a general and broad construct including planning, expectation and willingness to consume (Fishbein & Ajzen, 2010) in one paper (Paper 1).

2.3 Characteristics of the product

Most studies describe food characteristics by means of quality attributes or benefits (Grunert, 2002; Onwezen et al., 2012; Steenkamp 1989). Product quality can be described as a bundle of characteristics that determine the product's performance (Caswell & Mojduszka, 1996). In general, the most important quality dimensions of the product (like taste) cannot be evaluated before the purchase. Therefore consumers form quality expectations to make purchase decisions. The information used to form quality expectations are usually called quality cues (Steenkamp, 1989), expectations (Golder et

al., 2012) or quality benefits (Onwezen et al., 2012). It is common also to distinguish between intrinsic and extrinsic quality cues (Grunert, 2002; Olson & Jacoby, 1972). Intrinsic quality cues refer to the physical characteristics of the products. Important intrinsic quality cues for food are sensory information such as taste, colour and texture (Ophuis & Van Trijp, 1995). Extrinsic cues are product related, but not a part of the physical product itself, for example price and packaging. Extrinsic cues can both be informational or visual, such as a picture of packaging or a brand. Important extrinsic cues for food products are freshness, visual and informational packaging characteristics, information cues, convenience and price (Ophuis & Van Trijp, 1995; Silayoi & Speece, 2004).

Quality attributes can also be categorised as experience attributes, credence attributes or search attributes (Grunert, 2002). The latter is similar as quality cues discussed above. Experience attributes can only be ascertained on the basis of actual experience with the product (Steenkamp, 1989). For food products, experience attributes usually involve sensory characteristics of the product, such as taste, colour and appearance or convenience characteristics (Brunsø et al., 2002). Credence attributes are those where the average consumer can never ascertain the quality by him-/herself, but has to trust the judgement of others (Grunert, 2002), such as how healthy a product is. Health characteristics are probably the most important credence attribute for food products (Brunsø et al., 2002).

For the purpose of this thesis, no effort to categorise product attributes or benefits based on intrinsic versus extrinsic, nor experience, credence attributes or search attributes has been made. However, the different studies include and combine salient and important attributes or benefits based on the purpose of the different studies. For example, the inclusion of attributes will differ depending on whether we focus on expectations (benefits) versus perceived experiences, or on packaging (Paper 4), sensory product attributes, physical freshness (Paper 3) or convenience (Paper 2). Thus, this study will argue for the inclusion of the different characteristics based on their importance and relevance for the different purposes of the empirical studies included in this thesis. For example for seafood in general, and fresh seafood in particular, the evaluation of food characteristics can be influenced by the type of food (Carlucci et al., 2015). However, sensory expectations and experiences, as the most important characteristics for food choice (Grunert, 2002) or seafood consumption (Carlucci et al., 2015) is our starting point.

2.3.1 Taste

Food is particularly associated with sensory characteristics such as taste, odour, texture and visual appearance (Aikman et al., 2006; Clark, 1998; Grunert, 2002; Steptoe et al., 1995). Taste is suggested to be the most important quality attribute of food (Ophuis & Van Trijp, 1995). When consuming a food product there will always be some taste sensation, which can be evaluated. As an informational cue or

benefit, taste is mostly promoted to increase expectations about premium quality ('good', 'excellent', 'tasty'), but also to signalise differential values such as sweet, bitter, natural, mild etc.

Taste is also important in establishing both consumer attitudes and preferences towards luxury or premium products (Laurent et al., 2011; Van der Veen, 2003). Evaluation of sensory characteristics is influenced also by the eating context such as for example eating a main meal at home compared with eating and snacking outside of one's home (Onwezen et al., 2012). Thus, this thesis focuses on the importance of the most important sensory characteristic, taste, both as an informational attribute for a specific product (Paper 4) and a food-category attribute (Paper 3 and 5).

2.3.2 Freshness

Despite that fish and seafood can be perceived in different ways, only few studies have explored the impact of freshness perception on consumers' choice of seafood (Carlucci et al., 2015). Previous literature refers to freshness as a multidimensional construct because consumers evaluate the freshness of fish based on both sensory attributes like smell, colour and appearance, and informational cues like branding, labelling and product/processing information (Carlucci et al., 2015; Zhang et al., 2016). Freshness is very important in consumers' evaluations of perceived quality and satisfaction with fish in general and fresh fish in particular (Carlucci et al., 2015; Olsen, 2004). Thus, this thesis puts a special emphasis on freshness in Paper 3 and 4 with an intention to explore the importance of freshness indicators and shelf life on choice sets in a conjoint experiment (Paper 4).

2.3.3 Packaging and informational cues

Previous research has shown that packaging plays an important role in attracting consumer attention and formulating consumers' evaluation of quality (Karimi et al., 2013; Silayoi & Speece, 2007). In the context of food packaging, Silayoi and Speece (2004) divided packaging attributes into two main categories: visual attributes and informational attributes. Visual attributes consist of graphics, colours, placements, photos, sizes and shapes of packaging, whereas informational attributes or cues relate to information provided on and technologies used in the packaging. Information attributes on food packaging typically consist of labelling and brand information (Silayoi & Speece, 2004), such as the product's technical characteristics, ingredients and serving size, as well as information related to recommended uses, cooking instructions, instructions for proper disposal and shelf life (Harcar & Karakaya, 2005).

Following Silayoi and Speece (2007), this thesis (Paper 4) examines shape and colour as the primary visual attributes while information regarding taste (Carlucci et al., 2015), convenience (Olsen et al., 2007) and freshness (statements/shelf life) are used as the primary informational attributes. When

developing, testing and profiling the important packaging attributes, it is important to note that not all consumers evaluate and value packaging in the same way (Golan et al., 2001; Verbeke, 2008). To address this challenge, this thesis (Paper 4) segment the consumers based on preference for different packaging attributes using cluster analysis (Hair et al., 1998).

Labelling a product with information about processing, such as whether a fish product is fresh or frozen, can influence consumer evaluation (Altintzoglou et al., 2012). Little is known about how different kinds of communication strategies affect consumer perception about fresh, frozen and thawed fish products. Thus, in Paper 3, this thesis will explore how different consumer segments react to labelling regarding the processing (fresh, frozen or thawed) of cod fillet products.

2.3.4 Perceived product convenience

Convenience is believed to be one of the most important determinants of food choice (Steptoe et al., 1995), including the choice of seafood (Carlucci et al., 2015; Olsen et al., 2007). Convenience represents the time and effort saved when preparing or consuming food (Candel, 2001). Meal convenience is suggested to be related to different stages in the consumption process (Candel, 2001; Gofton, 1995): planning, acquisition/purchasing, preparation, consumption/eating, and disposal. At each stage, convenience can play a role, and may differ in its importance between different situational contexts.

Perceived product convenience refers to convenience as a characteristic or attribute of the food, i.e. how consumers evaluate convenience attributes or benefits associated with a specific product, product category, or meal solution (Olsen et al., 2007; Steptoe et al., 1995). This thesis includes consumers evaluations of perceived convenience (Furst et al., 1996; Olsen et al., 2007) in two studies; as an informational cue in Paper 4 (i.e. skin and boneless fish fillets) and as an experience attribute in Paper 2 (i.e. experiencing that the meal is convenient to prepare).

2.3.5 Health benefits

Health and nutrition are probably the most important credence quality attributes, values or benefits for food products in general (Ares & Gámbaro, 2007; Grunert, 2002; Roininen et al., 1999; Pieniak et al., 2010), and is one of the main reason for choice of fish and seafood (Carlucci et al., 2015). Health has also been found to be one of the most important benefits for consumer segmentation of food (Onwezen et al., 2012). In Paper 5, this thesis includes the importance of health benefits in addition to other important food characteristics (e.g. food quality and prestige), in order to identify segments of food consumers.

Health can also be addressed in terms of individual aspects of the consumer, referred to as health concern, attitudes or involvement in the literature (Zaichkowsky, 1985; Olsen, 2003; Pieniak et al., 2010). This thesis will use both approaches. Health involvement will be addressed in a later chapter.

2.3.6 Prestige benefits

Research on luxury and prestige consumption behaviour has been an important and growing topic for nearly 20 years (Miller & Mills, 2012). However, in the area of food evaluation and food choice, this issue is nearly unexplored (Hartmann et al., 2016). Thus, the main focus of Paper 5 is to identify consumer segments based on the importance of food quality and prestige benefits when buying food for a special occasion such as dinner party with friends.

Prestige is a subjective evaluative judgement about the prestige status of people or products (Hanzaee & Taghipourian, 2012; Vigneron & Johnson, 1999). Different theories have been developed to identify or assess how consumers develop prestige benefits for products based upon interactions with people (social, prestige, extended self, power or similar benefits), product properties (functional benefits; quality and uniqueness), individual motives (hedonic or emotional benefits) and conspicuousness/price (Brun & Castelli, 2013; O’Cass & Frost, 2002; Vigneron & Johnson, 1999; Wiedmann et al., 2007). Thus, prestige is a subjective and multidimensional construct, but the number of dimensions and their theoretical and conceptual foundations vary in the literature (see for example Miller and Mills (2012) review of definitions and dimensions of luxury or prestige brands).

Two of the main conceptual frameworks for assessing the underlying benefits or motives for buying prestigious products or brands are Vigneron and Johnson (2004) and Wiedmann et al. (2007). This thesis will not test the dimensionality of prestige and luxury benefits per se, but includes five important and relevant motivational factors and some of their benefits, values or attributes as a basis for consumer segmentation (Wiedmann et al., 2009) when buying food for a dinner party with friends. Those five benefits are perceived quality benefits, uniqueness benefits, hedonic benefits, price benefits and social benefits, and included with traditional food benefits (e.g. taste, quality and health) in the cluster (segmentation) analysis performed in Paper 5.

2.4 Characteristics of the context

Contextual factors include reference to physical, social, temporal, and other aspects of settings (Marshall, 1993; Meiselman, 1996). Researchers often use different terms to describe the consumption context such as situation, setting and occasion. The effect of the context in which food are consumed is well documented in the literature (see Meiselman, 2007, for a review). However, there is little consensus regarding how it effects the evaluation (Boutrolle et al., 2007). Contextual factors can

influence both consumers' food choices and evaluation, and differ among individuals (Daniels et al., 2012; Edwards et al., 2003; King et al., 2007; Onwezen et al., 2012).

2.4.1 Test situation and survey mode

In the later years a growing body of literature has shown how test situational variables can influence how consumers evaluate food products (Edwards et al., 2003; King et al., 2004; Meiselman, 1996; 2007). The most widely used method of testing products is the standardised situation test, such as laboratory tests or central location tests. Such tests are suggested to have high internal validity, but lower external validity (Van Trijp & Schifferstein, 1995). The alternative is to conduct product testing in surroundings that are more natural to the consumer. The most common method of performing such tests is home use tests or tests in real canteens or restaurants. One major drawback of testing in natural surroundings is the introduction of uncontrollable experimental conditions, which causes this kind of product testing to have low internal validity. When comparing natural with standardised situations, many factors may potentially affect the results and explain differences in product evaluation. Freedom to choose the moment of consumption, the way in which products are eaten, influence of food combination, and social interaction are just a few factors that can be different in standardised and natural eating situations (Boutrolle et al., 2007).

Theories on measurement context effects in survey research suggest that perceptions of a stimulus are not fixed, but depend on the context in which they are grounded (Schwartz and Sudman, 1992). There have been numerous studies of how the mode of survey data collection affects the answers that respondents give (Tourangeau et al. 2000). For example, expectations are more likely to influence answers in interview surveys than those that use self-administration because of the presence of an interviewer (Tourangeau et al. 2000). This thesis tests different locations (at home and in a canteen) where the respondents make their evaluation. One possible explanation of why test location influences consumers' product evaluation can be based on differences in the context or mode of the survey situation (Boutrolle et al., 2007). Thus, this thesis contributes to the literature by determining whether potential differences in evaluations are due to a context on behaviour effect or a context on survey answering effect. The former allows for a regular comparison of evaluations between different eating situations, whereas the latter makes such comparisons difficult (Steenkamp & Baumgartner, 1998). The thesis will investigate differences in attitudes and intention as evaluative measures in two different research situations: at home and in a canteen setting (Paper 1).

2.4.2 Time use

Time has been recognised as an important situational factor in consumer behaviour (Belk, 1975). Time is studied from different perspectives, such as how consumers perceive time (Graham, 1981; Mantel

& Kellaris, 2003), or use their time (Strober & Weinberg, 1980). How consumers value and use their time depend on both contextual characteristics and characteristics with the person involved (Leclerc et al., 1995). In a food context, time is an important factor in explaining the attitude and evaluation of meals and food products (Candel, 2001; Jaeger & Meiselman, 2004; Mantel & Kellaris, 2003). This thesis defines time use as the subjective duration of the time it takes to prepare a food product for consumption. The subjective duration of the tasks in the preparation process may influence outcomes such as evaluations, satisfaction and consequent behaviours (Dube-Rioux et al., 1989; Taylor, 1994). When consumers buy, prepare, consume and dispose of food products, they may have information (e.g. recipes or information provided on the products) or general expectations about time use. Based on the expectation-disconfirmation approach (Oliver, 1980), one can expect that a higher time use than expected may negatively affect the overall evaluation of the product. Thus, this thesis investigates whether time use is negatively related to the evaluation of a product (Paper 2).

Sometimes, consumers try to minimise time use through the purchase of convenience products (Jacoby et al., 1976). Within the service literature, time has been found to influence the perception of convenience (Gagliano & Hathcote, 1994). In food consumption behaviour, convenience is largely explained by products that are fast and easy to provide, prepare, serve, and eat (Candel, 2001). Thus, the less time and effort spent preparing a meal, the more convenient the consumer will perceive the meal to be. This thesis explores whether time use is negatively related to perceived convenience (Paper 2).

Time is a major resource in co-production (Etgar, 2008). In general, the more complex a co-production process is, the more time the consumer will need to complete the process. To be able to produce a satisfactory result, the consumer must use the time necessary to complete the product or service. Consumers receive both psychological and economic benefits when engaging in co-production activities (Lusch et al., 2007). The more time a consumer spends on a co-production activity, the higher the probability that the consumer will reach a satisfactory result of the co-production. Thus, this thesis investigates whether time use is positively related to satisfaction with co-production (Paper 2).

2.4.3 Special meal occasions

Previous studies have shown that different consumption moments, especially the time of the day, type of meal and meal occasion can influence consumers' choices and acceptance (Hanzaee & Taghipourian, 2012; Piqueras-Fizman & Jaeger, 2014; Rappoport et al., 2001; Rozin & Tuorila, 1993; Van der Veen, 2003). In a similar way, the social situation in which food is consumed can affect food choice and perception (King et al., 2004; King et al., 2007). Recent segmentation studies have emphasised the

importance of segmenting consumers in the food domain on the basis of consumers' motives for food choice in everyday contexts or without context specification (Onwezen et al., 2012).

Food and prestige benefits for special occasions have not received much attention in the literature (Hartmann et al., 2016). Thus consumers may emphasise the importance of benefits for unique, prestigious or special occasions differently compared to daily or regular occasions (Piqueras-Fiszman & Jaeger, 2015a; Van der Veen, 2003; Hanzae & Taghipourian, 2012; Vigneron & Johnson, 2004). This thesis will contribute to the existing literature on benefit segmentation (Onwezen et al., 2012; Verain et al., 2016) in a high involvement meal context (dinner party with friends) by identifying segments based on the importance of consumer evaluation of food quality and prestige benefits and values (Paper 5).

2.5 Characteristics of the individual

Consumers have different personalities, personal values, needs, attitudes, motivations, goals, preferences, perceptions and other individual characteristics. Those individual differences influence evaluation and choice of food products, and reflect what is salient and meaningful to individuals based on needs and preferences derived from psychological and physiological traits (Furst et al., 1996). This thesis includes several individual difference variables, but has a particular focus on knowledge, co-production and trust in some salient object or behaviour under investigation (e.g. information sources and meal preparation). In addition, some studies include relevant indicators of differences in consumers' evaluation and behaviour (knowledge, involvement and behavioural indicators) (Steenkamp, 1997; Story et al., 2002).

2.5.1 Knowledge

Consumer knowledge is a multidimensional construct involving the familiarity and expertise the consumer has with a product (Alba & Hutchinson, 1987). Responses to information can be related also to the consumers' knowledge, including both objective (actual) knowledge and subjective (perceived) knowledge as shown for fish (Pieniak et al., 2006; Pieniak et al., 2007). Previous studies have shown that subjective knowledge is more strongly associated with behaviour than actual (objective) knowledge (Pieniak et al., 2010; Verbeke et al., 2007). This thesis will examine differences between French consumer segments regarding objective and subjective knowledge (Paper 3).

Knowledge is also connected to perceived convenience (Berry et al., 2002) and time use (Alba and Hutchinson, 1987). Perceived convenience is not only an attribute of the products, but also the capacity of consumers to employ particular resources such as knowledge and expertise, as well as simply time available (Gofton, 1995). Within the field of food studies, Candel (2001) argues that transference of

expertise leads to the saving of time and effort in meal preparation. Several studies indicate that the knowledge of how to prepare meals at home is declining in several countries (Jaffe & Gertler, 2006). Consumers buy convenience food not only because they have less time and more money, but also because they lack skills and knowledge in meal preparation (Buckley et al., 2005). In this sense products and services offer more convenience by saving cognitive efforts (Berry et al., 2002). This thesis examines whether knowledge is positively related to perceived convenience and negatively related to time use (Paper 2).

2.5.2 Involvement

Involvement refers to the personal relevance and importance attached to an object based on inherent needs, values and interests (Zaichkowsky, 1985). Thus, involvement as a motivational construct can be associated with different objects or activities in the same way as consumer attitudes discussed above. Consumers differ in their interests and involvement in food in general (Marshall & Bell, 2004), and fish in particular (Olsen, 2001). They differ in their involvement to buy or consume healthy food (Verbeke & Vackier, 2005) and prestige products (Vigneron & Johnson, 1999). For example, Sapp and Jensen (1998) tested the health belief model for its ability to predict actual dietary quality and behaviour. Of the 15 independent variables, product and health involvement (consciousness) were the most important determinants. In the case of fish, involvement in both health and fish influence frequency of product usage and preference (Carlucci et al., 2015; Juhl & Poulsen, 2000; Olsen, 2003).

Finally, prestige products have been used as an example of extreme-end high-involvement decision making. The assumption is that prestige products are infrequently purchased and require a higher level of involvement than normal products (Vigneron & Johnson, 1999). This thesis will investigate how segments based on preference for packaging characteristics and food and prestige benefits relate to their involvement in health, seafood and luxury (Paper 4, 5)

2.5.3 Co-production

Within the marketing literature, one line of research focuses on the degree to which consumers actively participate in producing and delivering a product or a service; this is termed co-production of value (Auh et al., 2007; Etgar, 2008; Lusch et al., 2007; Vargo & Lusch, 2004). Active participation implies that consumers use both mental and physical resources to co-produce the value or performance of a product or service. The psychological and mental effort involved in the process includes activities like planning and assembling the inputs and evaluating the various aspects of the process and its outputs (Xie et al., 2008). Co-production of food typically involves meal preparation which includes the acquisition, combination, transformation, and presentation of food in order to produce various kinds of nutritional and psychosocial values (Xie et al., 2008).

As previously explained (chapter 2.3.1) food products are tested in various test situations, such as standardised and natural eating situations. When comparing different test situations, one factor that can differ is whether the consumers are required to prepare the food themselves. In contrast to laboratory or central location tests, food preparation in home use tests is usually done by the consumers themselves, involving the individuals' knowledge and skill or expertise at preparing food (Alba & Hutchinson, 1987).

In the home situation, satisfaction with the co-production or preparation of the food may be of vital importance (Boutrolle et al., 2005). Satisfaction has been defined and operationalised in various ways (Yi, 1990). One of the more recent definitions of satisfaction as a composite construct was developed by Oliver (1997) who proposed it to be 'the consumer's fulfilment response, the degree to which the level of fulfilment is pleasant or unpleasant' (p. 28). Consumer satisfaction is an emotional or cognitive response based on personal experience with a particular product (Giese & Cote, 2000) or process such as co-production (Bendapudi & Leone, 2003). Consumers compare their pre-consumption expectations and post-consumption perceived and experienced quality, and form their satisfaction response (Oliver, 1993). Food preparation requires the consumer to use time and effort, factors that also have been proven to influence consumer evaluations of food (Candel, 2001). Thus this thesis investigates if and how satisfaction with preparation (co-production) influences evaluative outcomes (Paper 1).

Previous studies have shown that co-production is an important determinant of the evaluation of a product or service (Bendapudi & Leone, 2003; Auh et al., 2007; Olsen et al., 2007; Xie et al., 2008). The evaluation of the product or service is dependent on the attitude towards and outcome of the co-production process (Bendapudi & Leone, 2003; Xie et al., 2008). This thesis explores whether participation in the co-production process affects the overall evaluation of the product positively (Paper 2).

The more convenient a product is to prepare, the less skill and effort is required in the co-production of the product (Gofton, 1995; Jaffe & Gertler, 2006). Accordingly, one could expect that the perceived level of convenience in the preparation of a meal will increase the satisfaction with the co-production effort. Thus, this thesis investigates if perceived convenience is positively related to satisfaction with co-production (Paper 2).

Co-production requires the consumer to use their knowledge linked to the specific tasks that are being performed (Lusch et al., 1992). This implies that knowledge can be important for the success of the co-production effort in the food context. This implies that the total performance of the product may be

evaluated differently, depending on the success or failure of the co-production process. This thesis investigates if knowledge is positively related to satisfaction with co-production of the product (Paper 2).

2.5.4 Trust and use of information

Consumers' choice of products can be influenced by the source of information about the product. Information on different food topics and nutrition is available from a wide variety of different sources (for example mass media, producers, retailer, authorities and scientists). There is evidence that consumers use different information sources in different situations, depending on the product choice faced, the type of information being communicated and the type of potential issue or hazard in question (Gutteling & Wiegman, 1996; Jungermann et al., 1996; Richardson et al., 1994). Information addressed to consumers must be reliable and trustworthy (Salaün & Flores, 2001). Pieniak et al. (2007) showed that consumers in Europe did not trust all information sources about fish. This thesis uses trust and use of information about fish to identify consumer segments in France (Paper 3).

2.5.5 Behavioural indicators

This thesis focuses mainly on similarities and differences in consumer evaluation of food products. However, evaluation or attitudes are suggested to influence consumer's behavioural decisions, choice and loyalty (Fishbein & Ajzen, 2010; Oliver, 2010; Steptoe et al., 1995). In this thesis, behavioural indicators describe an individual's past behaviour or an individual's inclination to perform a specific behaviour in the future.

Consumption frequency is a direct measurement of behaviour and it has been included in previous studies regarding seafood consumption (for a recent review, see Carlucci et al., 2015). Consumption frequency has also been used in a number of studies to profile different fish consumer segments (Brunsø et al., 2009; Verbeke et al., 2007). Storage behaviour in this thesis is the amount of days a consumer stores fish in the refrigerator or freezer after it is bought. This indicator was included in Paper 3 based on a pre-study (focus group) where consumers reported that they were unsure about the amount of days thawed fish (as compared to fresh fish) could be stored in the refrigerator or freezer after it was bought. In the same study, use of information cues as how often a consumer uses information cues on the package or supermarket shelf/fresh fish counter, is included.

Thus, this thesis uses consumption frequency (Paper 4), storage behaviour and use of information (Paper 3) as profiling variables.

Willingness to pay has been defined as the maximum amount of money a consumer is willing to spend on a product or service (Cameron & James, 1987). It is a measure of the value an individual assigns to a consumption or usage experience in monetary units. Despite the importance of price related issues in studies on consumer evaluation, few studies have investigated the link between consumer evaluation and willingness to pay (Anderson, 1996, Homburg et al., 2005). Willingness to pay can be used also as a consumer segment profiling variable (Breidert et al., 2006). Accordingly, this thesis uses willingness to pay as a profiling variable in Paper 4 and Paper 5.

3 Methodological issues

Data analysis in this thesis consists of 3 main methodologies: Structural equation modelling (Paper 1, 2), cluster analysis (Paper 3–5) and conjoint analysis (Paper 4).

3.1 Structural equation modelling

Structural equation modelling (SEM) is a tool for analysing multivariate data that has been long known in marketing and consumer behaviour to be especially appropriate for construct validation and theory testing (e.g. Bagozzi, 1980). In recent years, it has frequently been used in food science and to assess and modelling food attitudes and consumption behaviour. There are several advantages of using SEM (MacKenzie, 2001). Perhaps the most important advantage is the ability to take measurement error into account. This is important because most measures used in consumer research reflect not only the construct they are intended to represent, but also random and systematic measurement error. Another advantage is that SEM has the potential to fundamentally improve experimental research in the field. This is partly because measurement error can be taken into account. This is especially true for the kinds of variables frequently examined in consumer research experiments (e.g. beliefs, emotions, attitudes, satisfaction, involvement, product knowledge etc.). Another advantage of SEM is the ability to compare complex theoretical models, involving whole systems of conceptual relationships. A final advantage of SEM is that it has the potential to improve scale development in the field by providing statistical tests of construct dimensionality, new indices of construct/item reliability, and more rigorous procedures for evaluating discriminant validity (MacKenzie, 2001).

The first step in the analytic procedure for Paper 1 and 2 was to use confirmatory factor analysis in order to confirm that each indicator reflects the intended construct (convergent validity) and that the constructs are distinct from each other. The hypotheses were then tested using SEM, which enables estimates of relationships among unobserved latent constructs.

In order to conduct meaningful comparisons between consumers in the two different test situations in Paper 1, we had to test whether the measurement of two constructs (global evaluation and intention) yielded measurement of the same attributes in the different groups (Horn and McArdle, 1992). This is commonly referred to as measurement invariance. Using the guidelines suggested by Steenkamp and Baumgartner (1998), the cross-group invariance of the two measurement models was assessed in a multigroup analysis to determine whether they were invariant. Scalar invariance has been considered a requirement for making a meaningful comparison of mean scores between groups, cultures, or nations (e.g. Eertmans et al., 2006). When this is not performed, it is difficult to decide whether differences in means are caused by true differences in the underlying construct or merely by group-specific bias (e.g. differences in the way people from different groups respond to certain items).

In order to evaluate the goodness of fit of the models, the traditional χ^2 (chi-square) fit test is reported. However, because it has been recognised as an inappropriate test for a large sample size (Browne & Cudeck, 1992), three other indices are also included: Root Mean Square Error of Approximation (RMSEA), Non-Normed Fit Index (NNFI), and Comparative Fit Index (CFI). Acceptable model fits are indicated by NNFI and CFI values exceeding 0.90, and RMSEA values below 0.08 represent a moderate fit, while values less than 0.05 are considered good (Browne and Cudeck, 1992). The data was analysed using LISREL 8.72.

3.2 Cluster analysis

Cluster analysis is a statistical method for classification. The primary use of cluster analysis in marketing has been for market segmentation (Punj & Stewart, 1983). All segmentation research, regardless of the method used, is designed to identify groups of objects (individuals, markets, organisations) that share certain common characteristics (attitudes, product characteristics, individual characteristics, etc.). Unlike other statistical methods for classification, such as discriminant analysis and automatic interaction detection, cluster analysis makes no prior assumptions about important differences within a population (Punj & Stewart, 1983). The selection of appropriate clustering algorithms (i.e. the rules or procedures followed to sort observations) is critical to the effective use of cluster analysis (Punj & Stewart, 1983). There are two basic types of algorithms: hierarchical and nonhierarchical. Hierarchical algorithms progress through a series of steps that build a tree-like structure by either adding individual elements to (i.e. agglomerative) or deleting them from (i.e. divisive) clusters. Nonhierarchical algorithms partition a data set into a prespecified number of clusters (Ketchen & Shook, 1996).

In Paper 3, cluster analysis was performed to identify groups based on differences in use of and trust in information sources regarding fish freshness. A hierarchic cluster analysis based on Ward's method was performed in order to identify the appropriate level of clusters. In Paper 4, hierarchical cluster

analysis of the part-worth utilities for each attribute level was utilised to identify the specific clusters or segments. In Paper 5 two-step cluster analysis of the benefits for everyday dinner was utilised to identify specific clusters or segments with similar responses to the measured variables. This method allows the stability and the validity of the cluster solution to be generated (Hair et al., 2010). According to this method, log-likelihood option is chosen for distance measure and Schwarz's Bayesian Criterion (BIC) as the determinant of the number of clusters.

3.3 Conjoint analysis

Conjoint analysis is a research technique used to evaluate factors that influence consumers' product preferences, trade-offs and, therefore, purchasing decisions (Green et al., 2001). More specifically, conjoint analysis studies the affinity of consumers towards specific configurations of product attributes. When considering the attributes and levels, these should be carefully chosen to best represent what would be realistic in the market (Gil & Sanchez, 1997). The relative importance of each attribute can be identified and compared to other attributes of one or more products. The results of the conjoint analysis can help identify the market segments between consumers with similar affinities towards one or more product attributes (Hair et al., 1998).

In Paper 3, conjoint analysis was applied to determine how individual consumers evaluate the different attribute levels of the packaging of fresh cod. This approach allowed the estimation of individual attribute levels on the overall utility of fresh cod, especially for the specific configuration of attributes in the present study (Green & Krieger, 1991; Lee et al., 2007). This study was designed using Sawtooth SSI Web 8.4.6 software, and it consisted of six attributes (4 informational and 2 visual) in a $3 \times 3 \times 2 \times 2 \times 2 \times 2$ design.

Part II

Paper I

The influence of test situation and satisfaction with preparation on evaluation and intention to consume a new seafood product

Paper II

Co-production and time use - Influence on product evaluation

Paper III

French consumer profiles' reactions to information on cod fillet products

Paper IV

Influence of packaging attributes on consumer evaluation of fresh cod

Paper V

The use of food quality and prestige based benefits for consumer segmentation

The Use of Food Quality and Prestige-Based Benefits for Consumer Segmentation

Morten Heide^a and Svein Ottar Olsen^b

^aNofima AS, P.O. Box 6122, 9291 Tromsø, Norway; E-mail: morten.heide@nofima.no

^bSchool of Business and Economics, UiT the Arctic University of Norway, P.O. Box 6050 Langnes, 9037 Tromsø, Norway; E-mail: svein.o.olsen@uit.no

Abstract

Purpose - This study aims to identify consumer segments based on the importance of food quality and prestige benefits when buying food for a special occasion; dinner party with friends.

Design/methodology/approach - Using cluster analysis, the importance of food quality benefits (quality, taste and health) and prestige benefits (prestige quality, hedonic, uniqueness, price and social) were investigated. The consumer segments were profiled using individual consumer characteristics (involvement in luxury, willingness to pay and socio-demographics).

Findings - This study found that food quality benefits are the most important benefits when buying food for a party with friends and identified four distinct consumer segments based on 20 different food quality and prestige benefits: *Perfectionists*, *Premium*, *Luxury seeking* and *Value focused*. Three of the four consumer segments (*Perfectionists*, *Premium* and *Luxury seeking*) find traditional food quality benefits important but differ in the importance they attribute to the different prestige benefits. The *Value focused* segment is not driven by prestige consumption but wants high quality at an affordable price.

Research limitation/implications - This study demonstrates that consumers are driven by different food and prestige benefits when buying food for a special occasion.

Originality/value - This study suggest some important differences between Premium consumers, looking for food quality and hedonic benefits, and Luxury seeking, with a relatively higher focus on prestige quality, uniqueness and social benefits. This study also identifies a significant distinction between Perfectionists and Value focused consumers. Both segments are focused on food quality benefits but differ in their focus on value and prestige benefits.

Keywords - Consumer segmentation; Food and prestige benefits; Special occasion; Norway

1 Introduction

This study focuses on the use of food quality and prestige-based benefits as the basis of consumer segmentation for buying food for a special occasion, a dinner party with family or friends. Consumer benefits, which are the desires, preferences or expectations that consumers seek to fulfil when purchasing or consuming a product, have been suggested as one of the most important means of identifying different consumer food segments (Onwezen *et al.*, 2012). The importance that consumers attribute to different product benefits is an indication of the motives underlying their product choices. Benefits are suggested to be better predictors of consumer behaviour than personality, value, lifestyle, volumetric, demographic or geographic measures (Myers, 1996). Despite the theoretical and strategical relevance of benefit segmentation, it is rarely applied in the food domain (Onwezen *et al.*, 2012).

Prestige is a subjective evaluative judgement about the prestige status of people or products (Hanzaee and Taghipourian, 2012; Vigneron & Johnson, 1999). Generally, prestige products have been used as an example of extreme high-end, high-involvement decision making. Even though the concept of prestige can mean different things to different consumers, it has been assumed that prestige products are infrequently bought, require a higher level of involvement and knowledge and strongly relate to the individual's self-concept (Vigneron & Johnson, 1999). Existing literature divides prestige products and brands into a hierarchical order, but both the number of levels and the categorisation criteria vary. For example, Vigneron & Johnson (1999) defined three levels of prestige for brands, products or services: luxury, premium and upmarket, including a lower level for other types of brands. Kapferer (2008) included 'The Griffe' and Corbelini & Savilo (2009) included 'Supreme Luxury' at the top of the prestige hierarchy. This study defines prestige as a continuum from low to high importance of benefits associated with buying food for a high-involvement occasion.

Different theories have been developed to identify or assess how consumers develop prestige values for products based on interactions with people (social, prestige, extended self, power or similar benefits), product properties (functional benefits; quality and uniqueness), individual motives (hedonic or emotional benefits) and conspicuousness/price (Brun & Castelli, 2013; O' Cass & Frost, 2002; Vigneron & Johnson, 1999; Wiedmann *et al.*, 2007). Thus, prestige is a subjective and multidimensional construct; however, the number of dimensions and their theoretical and conceptual foundations vary in the literature (see for example, Miller and Mill's (2012) review of the definitions and dimensions of luxury or prestige brands). This study adapts two of the main conceptual frameworks (Vigneron &

Johnson, 2004; Wiedmann *et al.*, 2007) to assess the underlying benefits or motives for buying prestigious products or brands.

Which foods consumers prefer and eat are highly influenced by the context, situation or occasion (Meiselman, 1996). Recent segmentation studies have emphasised the importance of segmenting consumers in the food domain based on consumers' motives for food choice in everyday contexts or without contextual specification (Onwezen *et al.*, 2012). However, food benefits for special occasions have not received much attention in the literature. Thus, consumers may emphasise the importance of benefits for unique, prestigious or special occasions differently compared with daily or regular occasions (Piqueras-Fiszman & Jaeger, 2015; Van der Veen, 2003; Hanzaae and Taghipourian, 2012; Vigneron & Johnson, 2004). Thus, this study will contribute to the existing literature on benefit segmentation (Onwezen *et al.*, 2012; Verain *et al.*, 2016) in a high-involvement meal context by identifying segments based on the importance of consumer evaluation of food quality and prestige benefits and values. How do consumers differ in their perceived prestige product benefits compared with more traditional food benefits? Which benefits are most important when consumers want to buy food for preparing dinner for a special occasion (dinner party with friends)? How are the segments related to their involvement in luxury food products, willingness to pay (WTP) for a premium product and demographics?

2 Theoretical background

2.1 Conceptual framework

This study uses perceived benefits as an assessment of consumers' *pre-purchase expectations* (Smith & Deppa, 2009). Prior to consumption, such as going into a store to buy ingredients for home meal consumption, consumers base the attribute evaluation on *expected benefits* from products they consider and buy. Expected attribute performance, values or benefits represent their means linked towards their attitudes, goals and need fulfilment through a set of expectations and consequences made relevant by an underlying value system (Gutman, 1982). These evaluations differ from specific *post-purchase* satisfaction judgements where consumers make their judgements based on real experience of the attributes and their ability to deliver the desired outcome (Smith & Deppa, 2009). In addition, benefit segmentation literature (e.g. Haley, 1984) relies on the notion that although all

consumers may like or prefer all benefits, the relative importance they attach to individual benefits is evaluated differently.

Prestige and luxury are often synonymously used in brand marketing literature (Miller & Mills, 2012; Vigneron & Johnson, 2004). As multidimensional constructs, there is little agreement regarding how to define, understand and measure prestige or luxury products, brands or services. Two of the most used theoretical frameworks for assessing the underlying benefits or motives for buying prestigious products or brands are Vigneron & Johnson's (2004) Brand Luxury Index scale (BLI) and Wiedmann *et al.* (2007) model of Consumers' Perceived Value (CPV). In their review and conceptual framework of prestige-seeking consumer behaviour, Vigneron and Johnson (1999) drew a distinction between three interpersonal values (conspicuousness, uniqueness and social) and two personal values (emotional and quality). These ideas were later developed into a framework for assessing perceptions of brand luxury based on five dimensions of values: conspicuousness, uniqueness, quality, hedonic and extended self. Wiedmann *et al.* (2007) expanded the BLI framework by suggesting four latent dimensions: financial value (price), functional value (usability, quality and uniqueness), individual value (self-identity, hedonic and materialism) and social value (conspicuousness and prestige).

Recent research suggests that the dimensionality of prestige and luxury brands is not stable across cultures, segments, products, brands and services (e.g. Christodoulides *et al.*, 2009) and is highly influenced by individual perception and what individuals' value (Brun & Castelli, 2013). Prestige values or benefits as a theoretical framework for the evaluation or choice of food products is rarely discussed in food science literature (Van der Veen, 2003). This study will not test the dimensionality of prestige and luxury values or benefits *per se*, but it includes five motivational factors and some of their benefits, values or attributes as a basis for consumer segmentation (Wiedmann *et al.*, 2009), which we believe are the most relevant for this study context. These benefits are perceived quality benefits, uniqueness benefits, hedonic benefits, price benefits and social benefits. Figure 1 is a visual presentation of our conceptual model for the identification of benefits of overall prestige that we discuss in the following sections.

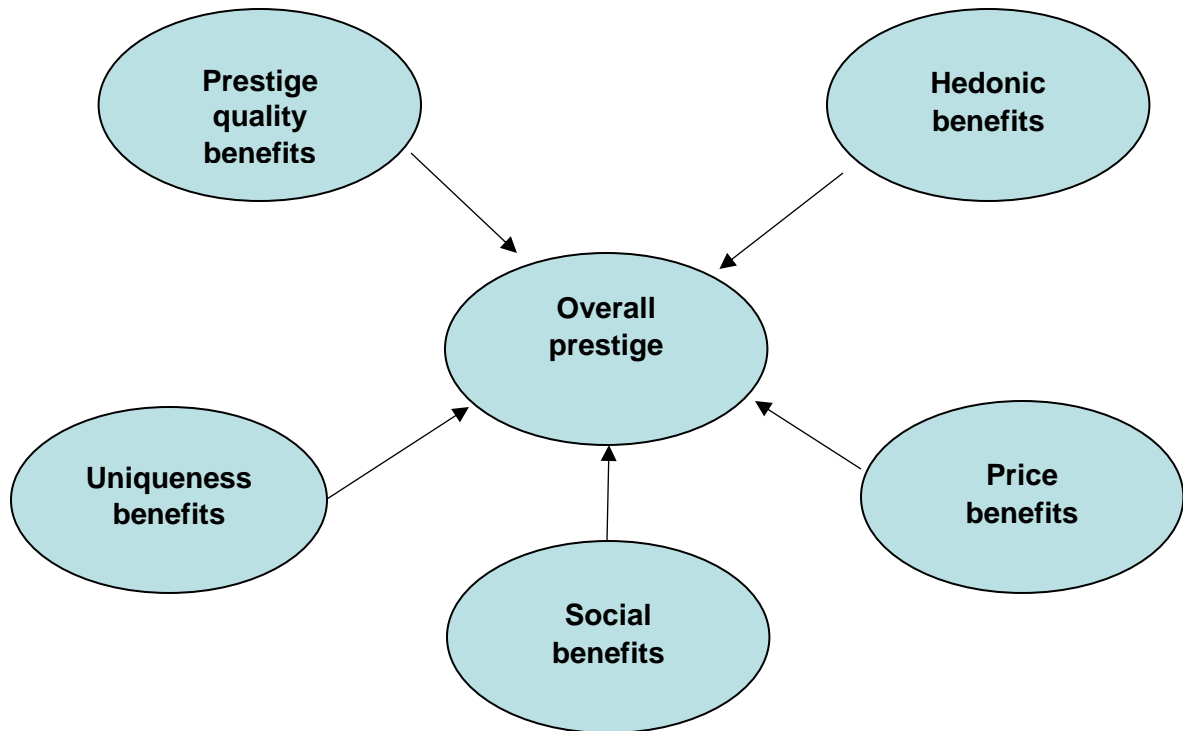


Figure 1: The conceptual model for the identification of benefits of overall prestige

2.2 Perceived quality benefits

Consumer behaviour literature defines perceived quality as the consumer's judgement about a product's overall excellence or superiority (Zeithaml, 1988). According to Zeithaml (1988) higher standard of quality is an essential part of prestige consumption because superiority or excellence can broadly define quality. Previous studies on prestige consumption often emphasise the importance of quality to ensure perceptions of luxury (Rao and Monroe, 1989; Roux, 1995). In studies on luxury and prestige, perceived quality is defined and measured as the superior quality characteristics of a product or brand (Vigneron & Johnson, 2004) and, at a higher level, is compared with premium or excellent quality (Vigneron & Johnson, 1999). This study defines quality on two levels. The first is the consumer's evaluation of the salient quality benefits of food products (e.g. taste and health), which represent more traditional perspectives on *food quality benefits* (Brunsø *et al.*, 2002). The second includes associations towards superior and luxury quality benefits (e.g. superior and luxurious), focusing on *prestige quality benefits*.

As an attitudinal construct, the perceived quality of food is particularly associated with sensory benefits or attributes such as taste, odour, texture and visual appearance (Aikman *et al.*, 2006; Clark, 1998; Grunert *et al.*, 2000; Steptoe *et al.*, 1995). Several studies have found that taste is most important for consumers' choice of food products (Cardello & Schutz, 2003; Roininen *et al.*, 1999). Taste is also important in establishing both consumer attitudes and preferences towards luxury products (Laurent *et al.*, 2011; Van der Veen, 2003). Perception of taste is also influenced by the eating context such as eating a main meal at home compared with eating and snacking outside one's home (Onwezen *et al.*, 2012). While taste is considered to be the most important experienced quality benefit of food choice (Ophuis & Van Trijp, 1995), health and nutrition are probably the most important credence quality attributes, values or benefits (Ares & Gámbaro, 2007; Roininen *et al.*, 1999; Pieniak *et al.*, 2010). Health has also been found to be one of the most important benefits for consumer segmentation of food (Onwezen *et al.*, 2012).

Consumption context can also influence the importance of healthiness for food choice. Owensen *et al.* (2012) found that health-related benefits are more important for main meals compared with snacks. Neumark-Sztainer *et al.* (2000) found that adolescents are more motivated to eat healthy food when eating dinner with their family than alone or with friends. Finally, special occasions, such as holidays and parties, can lead to a choice of more unhealthy food (Furst *et al.*, 1996; Hesketh *et al.*, 2005). Thus, this study uses quality, taste, health and nutrition as specific indicators of perceived food quality benefits when buying food for special occasions. In addition, and in accordance with definitions and assessment of perceived quality of luxury and perceived prestige products or brands, we include superior, sophisticated and luxurious as perceived prestige quality benefits (Vigneron & Johnson, 2004).

2.3 Hedonic benefits

Hedonic consumption can be defined as products that generate emotional arousal (Mano & Oliver, 1993) and with benefits that are evaluated primarily on aesthetics, taste, symbolic meaning and sensory experience ([Holbrook & Moore, 1981](#)). Hedonic, affective and emotional benefits are gaining importance for differential advantage in food markets because most products are similar with respect to quality, convenience and price (Schifferstein *et al.*, 2013; den Uijl *et al.*, 2014). Research in the field of prestige consumption has revealed that prestige products are likely to provide such subjective hedonic benefits as fun, enjoyment, pleasure, gratification or similar emotions (Dubois and Laurent, 1994).

Furthermore, research on prestige consumption has repeatedly identified sensory pleasure and gratification with luxury value and consumption (Vigneron & Johnson, 2004).

It has been suggested that the consumption context influences consumers' feelings of affect, mood and emotion (Desmet & Schifferstein, 2008; Richins, 1997) and affects their food choices (Hartwell *et al.*, 2013). For example, consumers evaluate their hedonic feelings for food differently depending on whether it is consumed as breakfast on a weekend morning, afternoon break snack on a weekday or after a dinner at home in good company (Piqueras-Fiszman & Jaeger, 2014a; 2014b). How enjoyable consumers remember food to have been has also been demonstrated to be a significant predictor of food choice and perception (Piqueras-Fiszman & Jaeger, 2015; Robinson *et al.*, 2012). Affective or emotional food benefits have also been used as a basis for identifying consumer food segments (Onwezen *et al.*, 2012; Verhoef, 2005), as well as for providing segments of prestige consumption in general (Wiedmann *et al.*, 2009). Thus, it is reasonable to expect that consumer expectations of hedonism in the form of fun and excitement can be important for understanding consumers' motivation to buy products for a special meal occasion.

2.4 Perceived uniqueness

Besides quality and hedonic value, uniqueness is an important benefit or value of prestige and perceived luxury value (Miller & Mills, 2012; Vigneron & Johnson, 1999; 2004; Wiedmann *et al.*, 2007). Uniqueness can be defined as an individual's need for pursuing products or services that differentiate them from others by enhancing self-image and social status (Tian *et al.*, 2001). In prestige literature, uniqueness is based on the assumption that perceptions of exclusivity and rareness of the product increase a consumer's desire or preference for it (Verhallen, 1982; Lynn, 1991). Furthermore, this desirability increases when the product is also perceived as expensive (Groth & McDaniel, 1993; Verhallen & Robben, 1994). Therefore, the more unique, exclusive and expensive a product is perceived to be compared with normal standards, the more valuable it becomes in terms of prestige (Verhallen & Robben, 1994; Tian *et al.*, 2001). Uniqueness is also important for special occasion products, in contrast to everyday products (Pocheptsova *et al.*, 2010). Thus, one important motivation when buying products for special occasions can be to look for unique and exclusive products that enhance the prestige motives of the individual.

2.5 Price exclusivity benefits

Exclusive price is an important benefit, attribute or value of prestige products and services (Vigneron & Johnson, 2004; Wiedmann *et al.*, 2007). A high price gives products the value of conspicuousness, power, status and uniqueness because not all consumers can afford it even though they desire the product (Vigneron & Johnson, 1999). Many authors have demonstrated that the high or exclusive price of a product also works as a signal for consumer perception of high and exclusive quality or prestige (Erickson & Johansson, 1985). For example, one of the most important consumer associations with luxury restaurants is the high price of food (Lee & Hwang, 2011).

Consumers' perceptions and concerns regarding price are also important for consumer segmentation of prestige products and services in general (Dubois *et al.*, 2005) as well as for food (Olsen *et al.*, 2009). Furthermore, consumers purchasing for a special occasion, such as a party, claim to buy more expensive premium labels as reassurance that the food they serve is of high quality (Wells *et al.*, 2007). Parties, weddings, holidays and birthdays are typical contexts of high-end food consumption where more expensive food is used either to enhance or to establish social relations (Van der Veen, 2003) and to express social status or power (Dietler & Hayden, 2001). Thus, this study includes expensive in addition to the traditional regular ('fair') price as a basis for assessing premium price benefits as a motive for buying products for special meal occasions.

2.6 Social benefits

Consumption of prestige products appears to have a strong social dimension, as consumers often acquire products to impress others, to be popular or to be a member of their social reference groups (Kim, 1998; Vigneron & Johnson, 1999; Wiedmann *et al.*, 2007). 'Veblen', 'snob', 'bandwagon' and 'symbol' effects are terms used to express individuals' motivations to consume conspicuously and to increase their social popularity and social status. Findings reveal that luxury products consumed in public are more likely to be perceived as prestigious and conspicuous than privately consumed luxury goods (Vigneron & Johnson, 2004). Hence, a person may buy less prestige food products during the week to enhance their family's position or identity and more prestige food products during the weekend by visiting a gourmet restaurant to match their social position towards their neighbourhood or friends. For example, the nature of the social occasion can be of major importance for wine choice (Hall *et al.*, 2001). In addition, buying high-priced luxury products can influence individuals' feelings of guilt (Hagtvedt &

Patrick, 2016). However, this may feel different when serving prestige food to friends and families at parties, weddings, birthdays and other special occasions.

In prestige segmentation research, previous research suggests that some consumer segments focus on social prestige benefits as the most important for luxury consumption (Wiedmann *et al.*, 2009). Thus, this study expects that social benefits in the form of achieving popularity, prestige, status and showing who they are can explain consumers' motivation to buy meals consumed in the presence of other people at a special occasion (Rozin, 1996; Herman *et al.*, 2003). In addition, we included one social disadvantage by assessing the importance of guilt when buying such food.

2.7 Individual characteristics to profile segments

In accordance with previous research in the area of prestige consumption, this study includes involvement in luxury (Vigneron & Johnson, 1999) and willingness to pay (WTP) (Breibert *et al.*, 2006) as profiling variables. Involvement in luxury is defined and measured in this study as personal relevance and importance attached to luxury (food) products based on inherent needs, values and interests (Zaichkowsky, 1985). This study uses a direct survey approach to measure WTP (Miller *et al.*, 2011; Sattler & Hensel-Börner, 2003). Finally, socio-demographic characteristics (age, gender and income) are used as additional profiling variables (Dubois & Laurent, 1996; Husic & Cicic, 2009).

3 Methodology

3.1 Design and subjects

Data collection used a cross-national, web-based survey of a representative sample of 1,000 adults (18–80 years of age). Norwegian respondents were selected randomly from a pool of pre-recruited respondents by a professional research agency. However, an effective sample size of 851 was used in this study after deleting the cases with missing values and answers of 'don't know'.

A summary analysis of the main characteristics of the sample shows that 53 % of the respondents were female. The average age was 46 years, and approximately 38 % of the respondents had a household income level of 400,000–900,000 NOK per year (middle class).

3.2 Questionnaire and variables

Each respondent was asked to rate the importance of 20 benefits for buying food for a dinner party with family or friends. The items were assessed on a nine-point scale from not important (1) to extremely important (9). A similar scale has previously been used to assess food benefits (Onwezen *et al.*, 2012).

Four items were used to measure the food quality benefits (Onwezen *et al.*, 2012; Pieniak *et al.*, 2008). Prestige quality benefits (three items), hedonic benefits (three items), uniqueness benefits (three items), price benefits (two items) and social benefits (five items) were measured based on previous prestige literature including items from the BLI scale (Hung *et al.*, 2011; Vigneron & Johnson, 2004; Wiedmann *et al.*, 2009) items are presented in Tables 1 and 2.

Willingness to pay was assessed using three items. Consumers were shown a photo of pre-packed fresh cod and asked, 'What is the highest price you are willing to pay in NOK for this product' under three different freshness conditions: 12 hours, 48 hours and 4 days after catching. Fresh seafood costs more than, for example, frozen seafood in Norway (Østli *et al.*, 2013). It is also considered to be more exclusive and to have higher prestige among consumers (Carlucci *et al.*, 2015). Different freshness conditions, from extremely fresh (12 hours) to a high but more commonly found freshness in Norwegian supermarkets (4 days), were used in this study as products that could be associated with different prestige levels. All respondents were given a reference price of 150 NOK for products like this when sold in a supermarket. The assessment of this construct is adapted from Breidert *et al.* (2006).

Consumers' involvement in luxury food were measured on a seven-point Likert scale based on three items from Zaichkowsky (1985) such as 'Luxury food ... (a) means a lot to me ... (b) is very important for me'.

3.3 Data analysis

Data analysis was performed in three steps. First, Friedman and Wilcoxon tests were used to determine significant rank differences in perceived benefits. Second, two-step cluster analysis of the benefits for everyday dinner was utilised to identify specific clusters or segments with similar responses to the measured variables. This method allows the stability and the validity of the cluster solution to be generated (Hair *et al.*, 2010). According to this method, the log likelihood option is chosen as the distance measure and the Schwarz's Bayesian Criterion (BIC) as the determinant of the number of clusters. Third,

analysis of variance (ANOVA) was conducted to profile the different consumer clusters. SPSS 24.0 software was used for clustering and conducting ANOVA.

4 Results

The analytical result of the descriptive statistics and ranking order for the 20 benefits are shown in Table 1. There was a big gap between the most important benefit ‘quality’ (mean score of 8.0) and the least important benefit ‘expensive’ (mean score of 3.4). Traditional food quality benefits were, in general, the most important benefits and significantly more important ($p \leq 0.05$) than the prestige quality benefits. The food quality benefit ‘quality’ was most important ($p \leq 0.05$), followed by ‘taste’, ‘health’ and ‘nutritionally right’. Of the prestige benefits, hedonic benefits (e.g. exciting) were most important followed by social benefits (e.g. popular). Hedonic benefits were of a medium level of importance and significantly ($p \leq 0.05$) more important than social benefits, uniqueness benefits (e.g. unique) and prestige quality benefits (e.g. luxurious), which had medium to low levels of importance. The price benefit ‘expensive’ was the significantly ($p \leq 0.05$) least important benefit.

Table 1: Benefits, Importance and Mean Ranks of Food for a Dinner Party with Family and Friends

Construct	Specific items	Mean rank	Mean
Food quality	Good taste	16.87a	7.99
Food quality	Good quality	16.18b	7.55
Food quality	Healthy	13.74c	6.42
Food quality	Nutritionally right	13.67c	6.35
Price	Fair price	12.74d	6.02
Hedonic	Exciting	12.64d	5.88
Hedonic	Wonderful	12.45d	5.89
Hedonic	Fun to eat	11.67e	5.49
Social	Popular	10.06f	4.71
Social	Shows who I am	8.90g	4.25
Social	No feeling of guilt	8.84g	4.37
Uniqueness	Unique	8.81g	4.24
Uniqueness	Exclusive	8.74g	4.17
Prestige quality	Luxurious	8.46h	4.05

Prestige quality	Superior	8.35h	4.04
Prestige quality	Sophisticated	8.21h	4.03
Social	Gives me prestige	7.94i	3.78
Social	Gives me status	7.57j	3.68
Uniqueness	Rare	7.37j	3.75
Price	Expensive	6.78k	3.39

Note: Different letters within the same column indicate significant differences ($p \leq 0.05$).

A two-step cluster analysis performed on the different benefits for a dinner party with friends presented below provided four clusters with different patterns (Table 2). The segments were named on the basis of the benefits with the highest importance for each cluster for a party dinner: *Perfectionists*, *Premium*, *Luxury seeking* and *Value focused*.

The first segment (N = 158; 20.4 %) was called the *Perfectionists*. Compared with the other segments, members of this segment had significantly higher ($p \leq 0.05$) scores for the prestige benefits price, hedonic, uniqueness and social. For the food quality benefit 'taste', this segment's score was similar to that of the *Premium* and *Value focused*, and for 'quality', the score was similar to that of the *Premium* segment. For the food quality benefits 'health' and 'nutrition', this segment scored the highest. In general, almost all benefits are of vital importance for the *Perfectionists* when buying food for a special occasion.

The second segment was named *Premium* (N = 291; 37.6 %). Food quality benefits (e.g. quality and health) and hedonic benefits (e.g. exiting) are important to this segment. Price benefits were of above average importance for this segment and of significantly higher importance ($p \leq 0.05$) than for the *Luxury* and *Value seeking* segments. Uniqueness benefits (e.g. unique and rare) were less important for this segment compared with the *Perfectionists* and *Luxury seeking*; in other words, these segments are definitely not looking for status when they buy food for a special occasion.

The third segment was *Luxury seeking* (N = 104; 13.5 %). This segment differs from the *Premium* segment with lower evaluations of traditional food quality benefits (e.g. taste and health) but higher evaluations of prestige quality benefits (e.g. superior and sophisticated). Another reason to term this segment *Luxury seeking* is that they also have significantly higher scores on uniqueness (unique, exclusive and rare) and social benefits (e.g. prestige and status) compared with the *Premium* segment.

Almost all benefits were of average importance for this segment but not at the same level as for the *Perfectionists*.

The final segment was the *Value focused*. Food quality benefits 'quality' and 'taste' were of high importance for this segment, whereas health benefits were of medium importance. The remaining benefits were of below average or low importance. In particular, this segment evaluated prestige benefits (prestige quality, hedonic, uniqueness, price and social) as of extremely low importance compared with the three other segments. The reason we term this segment *Value focused* is that it has high benefit expectations towards food quality but is not willing to pay a high price for products compared with, for example, the *Premium* segment.

Table 2: Cluster Differences of Benefit Importance

Construct	Specific items	Segment			
		Perfectionists	Premium	Luxury seeking	Value focused
Food quality	Good taste	8.27a	8.35a	5.40b	8.10a
Food quality	Good quality	8.14a	7.90a	5.33c	7.45b
Food quality	Healthy	7.57a	6.78b	5.23c	5.65c
Food quality	Nutritionally right	7.56a	6.74b	5.17c	5.54c
Prestige quality	Luxurious	7.12a	4.07c	5.21b	1.62d
Prestige quality	Superior	6.99a	4.11c	5.28b	1.59d
Prestige quality	Sophisticated	6.92a	4.19c	5.21b	1.54d
Hedonic	Exciting	7.51a	6.42b	5.35c	4.08d
Hedonic	Wonderful	7.62a	6.19b	5.30c	4.40d
Hedonic	Fun to eat	7.32a	5.96b	5.15c	3.60d
Uniqueness	Unique	7.18a	4.53c	5.10b	1.77d
Uniqueness	Exclusive	7.13a	4.34c	5.19b	1.60d
Uniqueness	Rare	6.63a	3.63c	5.09b	1.58d
Price	Fair price	7.25a	6.21b	5.34c	5.10c
Price	Expensive	5.99a	5.15b	3.16c	1.60d
Social	Popular	7.21a	5.06b	5.38b	2.22c
Social	No feeling of guilt	6.56a	4.50c	5.13b	2.49d

Social	Gives me prestige	6.91a	3.83c	5.24b	1.42d
Social	Shows who I am	6.93a	4.51c	5.06b	2.06d
Social	Gives me status	6.82a	3.46c	5.40b	1.48d
	N (% of sample)	158 (20.4 %)	291 (37.6 %)	104 (13.5 %)	220 (28.5 %)

Note: Different letters within the same row indicate significant differences ($p \leq 0.05$).

The results of profiling the clusters on involvement in luxury, willingness to pay and demographics are presented in Table 3. The *Perfectionists* and *Premium* segments scored highest on involvement in luxury foods, followed by the *Luxury seeking*. The *Value focused* scored the lowest of all the segments on involvement in luxury. There was no significant difference in WTP between the *Perfectionists*, the *Premium* and the *Luxury seeking*; however, the *Premium* segment had a tendency to a slightly higher WTP than the *Perfectionists* and the *Luxury seeking*. The *Value focused* had the lowest WTP for the different freshness of cod products.

Luxury seeking consumers were significantly younger than the rest of the segments. This segment also comprised more men compared with the other segments, whereas the *Premium* and *Value seekers* had more female consumers. The *Perfectionists* segment had an even distribution of men and women. No significant difference between the segments in household income was found.

Table 3: Profiling of the Segments by Involvement, Willingness to Pay and Demographics

	Segment			
	Perfectionists	Premium	Luxury seeking	Value focused
Involvement in luxury foods	4.25a	2.47b	3.87a	1.63c
Willingness to pay 12 hours	109.9a	115.5a	105.3a	83.0b
Willingness to pay 48 hours	93.2a	98.0a	88.9ab	74.8b
Willingness to pay 4 days	76.0a	77.3a	67.9ab	59.1b
Age	47.38a	45.13a	39.99b	48.05a
Gender	1.51ab	1.45b	1.62a	1.45b
Income	600K–700K NOK	600K–700K NOK	600K–700K NOK	600K–700K NOK

Note: Different letters within the same row indicate significant differences ($p \leq 0.05$).

5 Discussion

Our study expands on previous research on consumer segmentation of benefits by measuring food quality and prestige benefits for a special occasion. This study identified four distinct consumer segments (*Perfectionists*, *Premium*, *Luxury seeking* and *Value focused*) based on food quality and prestige benefits. As expected, traditional food quality benefits were the most important; however, three of the four consumer segments differ in the importance they attribute to the remaining prestige benefits.

The first segment, *Perfectionists*, is similar to the perfectionist in Vigneron & Johnson's (1999) prestige-seeking framework. According to this framework, Perfectionists are more interested in hedonic benefits (e.g. exciting and fun to eat) derived from the use of luxury products and less interested in the price than prestige quality benefits. The *Perfectionists* in this study follow a similar pattern, i.e. the price benefit 'expensive' receives the lowest mean score of all benefits in this segment and a much lower score than the prestige quality benefits. Cross-cultural research on prestige (Hennigs *et al.*, 2012) has found similar characteristics of prestige-seeking consumers.

The second segment, *Premium*, focuses on food quality (e.g. quality, taste, nutrition and health), price and hedonic benefits (i.e. exciting and wonderful). This segment could also be called the 'gourmet' segment as these consumers want the sensuous enjoyment of high-quality food products. Literature on situational price sensitivity finds similar results, suggesting that consumers are less sensitive to price when purchasing for hedonic benefits (Maehle *et al.*, 2015; Wakefield & Inman, 2003). The *Premium* segment has a high WTP for a prestige product, which is on a slightly but not significantly higher level compared with the *Perfectionists* and *Luxury seeking* segments. This segment also contained more women consumers, which supports previous studies suggesting that women emphasise hedonism more closely with prestige consumption (Roux *et al.*, 2017). The *Premium* segment has less positive attitudes towards luxury food compared with the *Perfectionists* and *Luxury seeking* segments.

Luxury seeking consumers prefer products with high prestige quality (e.g. superior and sophisticated) and uniqueness (e.g. exclusive and rare). Social benefits (i.e. popular and status) are also quite important. Traditional food quality benefits (e.g. taste and healthiness) are not as important for this segment compared with the other segments. In contrast to the *Premium* segment, this segment is not concerned about eating high-quality food for its sensuous enjoyment but rather wants to eat food

that is perceived as luxurious and that enhances social status. The distinctive profile between the *Premium* and the *Luxury seeking* segments is clear and interesting. It is reasonable to expect that in a special context (a party with friends), the benefits sought are both more unique and more socially prestigious than for an everyday meal (Belk, 1988; Lockshin *et al.*, 1997; Shukla, 2010). Parties have two principal characteristics: the communal consumption of food (including drink) and the social component of display (Dietler & Hayden, 2001). The communal consumption of food usually includes foods that are different from everyday practice (Dietler & Hayden, 2001). Thus, *Luxury seeking* consumers might seek unique products because this is what is expected by their guests. This segment consisted of younger consumers and more men. Younger consumers and men are suggested to be generally more concerned about uniqueness and luxury (Roux *et al.*, 2017).

The final segment, *Value focused*, is not driven by prestige consumption. This segment wants high food quality and taste at an affordable price and is similar to the distance segment of Dubois *et al.* (2005), which considered prestige products as expensive and useless. Thus, this study identified a significant distinction between *Perfectionists* and *Value focused* consumers. Both segments are focused on food quality benefits but differ in their focus on value and prestige benefits. This is not always confirmed in the consumer decision making or shopping orientation literature (Rezaei, 2015).

5.1 Marketing implications

This study confirms that food quality benefits, like taste and health, are the foremost perceived benefits across consumer segments (Carlucci *et al.*, 2015) and that such benefits are important and necessary for all consumers. Thus, it is difficult to differentiate food for special occasions on those benefits. Similarly, it is hard to satisfy *Perfectionists* if you do not provide high value on all benefits.

However, this study suggests some important differences between *Premium* consumers looking for food quality and hedonic benefits and *Luxury seeking*, with a relatively higher focus on prestige quality, uniqueness and social benefits. These two segments give the food industry the opportunity to develop different products and/or different forms of communicating the different benefits for these segments. For example, it would be effective to promote status self-prestige for the *Luxury seekers* but not for the *Premium* segment. The *Premium* segment might give higher relative profitability because of its higher acceptance of exclusive price and because of its size: 2.8 times larger than the *Luxury seekers*.

The *Value focused* segment wants good quality and taste, but it does not want to pay a premium price for it and will look for non-prestige products that offer these benefits.

5.2 Limitations and extensions

Even though this is a representative survey of Norwegian consumers and framed towards food products, studies in other countries and of specific prestige food products are encouraged. This study tested 20 expected benefits, and the list of benefits is not exhaustive. For example, brand, packaging, convenience, usability, sustainability, risk, self-identity and materialistic benefits can be considered for future research (e.g. Husic & Cicic, 2009; Köster, 2009; Wiedmann et al., 2009). This study examines which benefits are most important when buying food for a special meal occasion, a party with friends. Other eating occasions (Jaeger *et al.*, 2011), such as eating out at restaurants, weekends/holidays and special events, are relevant as well. Furthermore, research on specific food products or other kinds of products can be considered in future research. This study introduces a few profiling constructs, such as WTP and attitudes towards luxury. Relevant motivational variables not included in this study are, for example, involvement, convenience orientation, impulse buying, social norms, moral obligation, personality, variety seeking or personal values (Brunsø *et al.*, 2004; Carlucci *et al.*, 2015; Olsen, 2001).

References

- Aikman, S. N., Crites, S. L., & Fabrigar, L. R. (2006). Beyond affect and cognition: identification of the informational bases of food attitudes. *Journal of Applied Social Psychology, 36*(2), 340-382.
- Ares, G., & Gámbaro, A. (2007). Influence of gender, age and motives underlying food choice on perceived healthiness and willingness to try functional foods. *Appetite, 49*(1), 148-158.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of Consumer Research, 15*(2), 139-168.
- Breidert, C., Hahsler, M., & Reutterer, T. (2006). A review of methods for measuring willingness-to-pay. *Innovative Marketing, 2*(4), 8-32.
- Brun, A., & Castelli, C. (2013). The nature of luxury: a consumer perspective. *International Journal of Retail & Distribution Management, 41*(11/12), 823-847.
- Brunsø, K., Fjord, T. A., & Grunert, K. G. (2002). Consumers' food choice and quality perception. Aarhus: The Aarhus School of Business Publ.
- Brunsø, K., Scholderer, J., & Grunert, K. G. (2004). Testing relationship between values and food-related lifestyle: results from two European countries. *Appetite, 43*, 195-205.

- Cardello, A. V. & Schutz, H. G. (2003). The importance of taste and other product factors to consumer interest in nutraceutical products: civilian and military comparisons. *Journal of Food Science*, 68(4), 1519-1524.
- Carlucci, D., Nocella, G., De Devitiis, B., Viscecchia, R., Bimbo, F., & Nardone, G. (2015). Consumer purchasing behaviour towards fish and seafood products. Patterns and insights from a sample of international studies. *Appetite*, 84, 212-227.
- Christodoulides, G., Michaelidou, N., & Li, C. H. (2009). Measuring perceived brand luxury: an evaluation of the BLI scale. *Journal of Brand Management*, 16(5-6), 395-405.
- Clark, J. E. (1998). Taste and flavour: their importance in food choice and acceptance. *Proceedings of the Nutrition Society*, 57(4), 639-643.
- Corbellini, E. & Saviolo, S. (2009). *Managing Fashion and Luxury Companies*. Rizzoli Etas, Milan.
- Desmet, P. M., & Schifferstein, H. N. (2008). Sources of positive and negative emotions in food experience. *Appetite*, 50(2), 290-301.
- Dietler, M., & Hayden, B. (2001). Digesting the feast—good to eat, good to drink, good to think: an introduction. In M. Dietler, & B. Hayden (Eds.), *Feasts: Archaeological and ethnographic perspectives on food, politics, and power* (pp. 1-20). Washington, DC: Smithsonian Institution Press.
- Dubois, B., & Laurent G. (1994). Attitudes towards the concept of luxury: an exploratory analysis. In J. A. Cote and S. M. Leong (Eds.), *AP - Asia Pacific advances in consumer research* (pp. 273-278). Provo, UT: Association for Consumer Research.
- Dubois, B., & Laurent G. (1996). The functions of luxury: a situational approach to excursionism. In K. P. Corfman and J. G. Lynch Jr. (Eds.). *NA - Advances in consumer research* (pp. 470-477). Provo, UT: Association for Consumer Research.
- Dubois, B., Czellar, S., & Laurent, G. (2005). Consumer segments based on attitudes toward luxury: empirical evidence from twenty countries. *Marketing Letters*, 16(2), 115-128.
- Erickson, G. M., & Johansson, J. K. (1985). The role of price in multi-attribute product evaluations. *Journal of Consumer Research*, 12(2), 195-199.
- Furst, T., Connors, M., Bisogni, C. A., Sobal, J., & Falk, L. W. (1996). Food choice: a conceptual model of the process. *Appetite*, 26(3), 247-266.
- Gad Mohsen, M., & Dacko, S. (2013). An extension of the benefit segmentation base for the consumption of organic foods: a time perspective. *Journal of Marketing Management*, 29(15-16), 1701-1728.

- Groth, J. C., & McDaniel, S. W. (1993). The exclusive value principle: the basis for prestige racing. *Journal of Consumer Marketing*, 10(1), 10-16.
- Grunert, K. G., Bech-Larsen, T., & Bredahl, L. (2000). Three issues in consumer quality perception and acceptance of dairy products. *International Dairy Journal*, 10(8), 575-584.
- Gutman, J. (1982). A means-end chain model based on consumer categorization processes. *The Journal of Marketing*, 46(2), 60-72.
- Hair, J. F. Jr., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis*, 7th ed. New Jersey: Pearson Prentice Hall.
- Hall, J., Lockshin, L., & Barry O'Mahony, G. (2001). Exploring the links between wine choice and dining occasions: factors of influence. *International Journal of Wine Marketing*, 13(1), 36-53.
- Haley, R.I. (1984). Benefit segmentation: 20 years later. *Journal of Consumer Marketing*, 1, 5-13.
- Hanzaee, K. H., & Taghipourian, M. J. (2012). The effects of brand credibility and prestige on consumers purchase intention in low and high product involvement. *Journal of Basic and Applied Scientific Research*, 2(2), 1281-1291.
- Hartwell, H. J., Edwards, J. S., & Brown, L. (2013). The relationship between emotions and food consumption (macronutrient) in a foodservice college setting—a preliminary study. *International Journal of Food Sciences and Nutrition*, 64(3), 261-268.
- Hagtvedt, H., & Patrick, V. M. (2016). Gilt and guilt: should luxury and charity partner at the point of sale?. *Journal of Retailing*, 92(1), 56-64.
- Hennigs, N., Wiedmann, K. P., Klarmann, C., Strehlau, S., Godey, B., Pederzoli, D., Naulinger, A., Kartik, D., Aiello, G., Donvito, L., Taro, K., Āborecka-Petrovicov, J., Santos, C. R., Jung, J., & Oh, H. (2012). What is the value of luxury? A cross-cultural consumer perspective. *Psychology & Marketing*, 29(12), 1018-1034.
- Herman, C. P., Roth, D. A., & Polivy, J. (2003). Effects of the presence of others on food intake: a normative interpretation. *Psychological Bulletin*, 129(6), 873.
- Hesketh, K., Waters, E., Green, J., Salmon, L., & Williams, J. (2005). Healthy eating, activity and obesity prevention: a qualitative study of parent and child perceptions in Australia. *Health Promotion International*, 20(1), 19-26.
- Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: emerging concepts, methods and propositions. *The Journal of Marketing*, 46(3), 92-101.
- Holbrook, M. B., & Moore, W. L. (1981). Feature interactions in consumer judgments of verbal versus pictorial presentations. *Journal of Consumer Research*, 8(1), 103-113.

- Hung, K. P., Huiling Chen, A., Peng, N., Hackley, C., Amy Tiwusakul, R., & Chou, C. L. (2011). Antecedents of luxury brand purchase intention. *Journal of Product & Brand Management*, 20(6), 457-467.
- Husic, M., & Cicic, M. (2009). Luxury consumption factors. *Journal of Fashion Marketing and Management: An International Journal*, 13(2), 231-245.
- Jaeger, S. R., Bava, C. M., Worch, T., Dawson, J., & Marshall, D. W. (2011). The food choice kaleidoscope. A framework for structured description of product, place and person as sources of variation in food choices. *Appetite*, 56(2), 412-423.
- Kapferer, J.N. (2008). *The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term*, 4th ed. London: Kogan Page.
- Kim, J. S. (1998). Assessing the causal relationships among materialism, reference group, and conspicuous consumption of Korean adolescents. *Consumer Interests Annual*, 44(1), 155-156.
- Köster, E. P. (2003). The psychology of food choice: some often encountered fallacies. *Food Quality and Preference*, 14(5), 359-373.
- Laurent, G., Dubois, B., & Czellar, S. (2011). *Consumer Rapport to Luxury: Analyzing Complex and Ambivalent Attitudes* (No. 736). Paris: HEC.
- Lee, J. H., & Hwang, J. (2011). Luxury marketing: The influences of psychological and demographic characteristics on attitudes toward luxury restaurants. *International Journal of Hospitality Management*, 30(3), 658-669.
- Lockshin, L. S., Spawton, A. L., & Macintosh, G. (1997). Using product, brand and purchasing involvement for retail segmentation. *Journal of Retailing and Consumer services*, 4(3), 171-183.
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43-57.
- Maehle, N., Iversen, N., Hem, L., & Otnes, C. (2015). Exploring consumer preferences for hedonic and utilitarian food attributes. *British Food Journal*, 117(12), 3039-3063.
- Mano, H., & Oliver, R. L. (1993). Assessing the dimensionality and structure of the consumption experience: evaluation, feeling, and satisfaction. *Journal of Consumer research*, 20(3), 451-466.
- Meiselman, H. L. (1996). The contextual basis for food acceptance, food choice and food intake: the food, the situation and the individual. In H. L. Meiselman & H. J. H. Macfie (Eds.), *Food choice, acceptance and consumption* (pp. 239-263). USA: Springer.
- Miller, K. M., Hofstetter, R., Krohmer, H., & Zhang, Z. J. (2011). How should consumers' willingness to pay be measured? An empirical comparison of state-of-the-art approaches. *Journal of Marketing Research*, 48(1), 172-184.

- Miller, K. W., & Mills, M. K. (2012). Probing brand luxury: A multiple lens approach. *Journal of Brand Management*, 20(1), 41-51.
- Myers, J. L. (1996). *Segmentation and Positioning for Strategic Marketing Decisions*, American marketing association. Chicago, IL: McGraw-Hill Inc.
- Neumark-Sztainer, D., Story, M., Ackard, D., Moe, J., & Perry, C. (2000). Family meals among adolescents: Findings from a pilot study. *Journal of Nutrition Education*, 32(6), 335-340.
- O' Cass, A., & Frost, H. (2002). Status brands: Examining the effects of non-product-related brand associations on status and conspicuous consumption. *Journal of Product and Brand Management*, 11(2), 67-88.
- Olsen, S. O. (2001). Consumer involvement in seafood as family meals in Norway: an application of the expectancy-value approach. *Appetite*, 36(2), 173-186.
- Olsen, S. O., Prebensen, N., & Larsen, T. A. (2009). Including ambivalence as a basis for benefit segmentation: A study of convenience food in Norway. *European Journal of Marketing*, 43(5/6), 762-783.
- Onwezen, M. C., Reinders, M. J., van der Lans, I. A., Sijtsema, S. J., Jasiulewicz, A., Guardia, M. D., & Guerrero, L. (2012). A cross-national consumer segmentation based on food benefits: The link with consumption situations and food perceptions. *Food Quality and Preference*, 24(2), 276-286.
- Ophuis, P.A.O., & Van Trijp, H.C. (1995). Perceived quality: A market driven and consumer oriented approach. *Food quality and Preference*, 6(3), 177-183.
- Onwezen, M. C., Reinders, M. J., van der Lans, I. A., Sijtsema, S. J., Jasiulewicz, A., Guardia, M. D., & Guerrero, L. (2012). A cross-national consumer segmentation based on food benefits: The link with consumption situations and food perceptions. *Food Quality and Preference*, 24(2), 276-286.
- Pieniak, Z., Verbeke, W., Olsen, S. O., Hansen, K. B., & Brunsø, K. (2010). Health-related attitudes as a basis for segmenting European fish consumers. *Food Policy*, 35(5), 448-455.
- Pieniak, Z., Verbeke, W., Scholderer, J., Brunsø, K., & Ottar Olsen, S. (2008). Impact of consumers' health beliefs, health involvement and risk perception on fish consumption: A study in five European countries. *British Food Journal*, 110(9), 898-915.
- Piqueras-Fiszman, B., & Jaeger, S. R. (2014a). The impact of evoked consumption contexts and appropriateness on emotion responses. *Food Quality and Preference*, 32, 277-288.
- Piqueras-Fiszman, B., & Jaeger, S. R. (2014b). The impact of the means of context evocation on consumers' emotion associations towards eating occasions. *Food Quality and Preference*, 37, 61-70.

- Piqueras-Fiszman, B., & Jaeger, S. R. (2015). Emotions associated to mealtimes: Memorable meals and typical evening meals. *Food Research International*, *76*, 243-252.
- Pocheptsova, A., Labroo, A. A., & Dhar, R. (2010). Making products feel special: When metacognitive difficulty enhances evaluation. *Journal of Marketing Research*, *47*(6), 1059-1069.
- Rao, A. R., & Monroe, K. B. (1989). The effect of price, brand name, and store name on buyers' perceptions of product quality: An integrative review. *Journal of Marketing Research*, *26*(3), 351-357.
- Rezaei, S. (2015). Segmenting consumer decision-making styles (CDMS) toward marketing practice: A partial least squares (PLS) path modeling approach. *Journal of Retailing and Consumer Service*, *22*, 1-15.
- Richins, M. L. (1997). Measuring emotions in the consumption experience. *Journal of Consumer Research*, *24*(2), 127-146.
- Robinson, E., Blissett, J., & Higgs, S. (2012). Changing memory of food enjoyment to increase food liking, choice and intake. *British Journal of Nutrition*, *108*(8), 1505-1510.
- Roininen, K., Lähteenmäki, L., & Tuorila, H. (1999). Quantification of consumer attitudes to health and hedonic characteristics of foods. *Appetite*, *33*(1), 71-88.
- Roux, E. (1995). Consumer evaluation of luxury brand extensions. In: EMAC Conference, May (pp. 1971-1980). Paris: ESSEC.
- Roux, E., Tafani, E., & Vigneron, F. (2017). Values associated with luxury brand consumption and the role of gender. *Journal of Business Research*, *71*, 102-113.
- Rozin, P. (1996). The socio-cultural context of eating and food choice. In H. L. Meiselman and H. J. H. Macfie (Eds.), *Food choice, acceptance and consumption* (pp. 83-104). USA: Springer.
- Meiselman, H. L. (1996). The contextual basis for food acceptance, food choice and food intake: the food, the situation and the individual. In H. L. Meiselman & H. J. H. Macfie (eds.), *Food choice, acceptance and consumption* (pp. 239-263). USA: Springer.
- Sattler, H., & Hensel-Börner, S. (2003). A comparison of conjoint measurement with self-explicated approaches. In A. Gustafsson, A. Herrmann & F. Huber (Eds.), *Conjoint measurement* (pp. 147-159). Berlin Heidelberg: Springer.
- Schifferstein, H. N., Fenko, A., Desmet, P. M., Labbe, D., & Martin, N. (2013). Influence of package design on the dynamics of multisensory and emotional food experience. *Food Quality and Preference*, *27*(1), 18-25.

- Shukla, P. (2010). Status consumption in cross-national context: Socio-psychological, brand and situational antecedents. *International Marketing Review*, 27(1), 108-129.
- Smith, R., & Deppa, B. (2009). Two dimensions of attribute importance. *Journal of Consumer Marketing*, 26(1), 28-38.
- Step toe, A., Pollard, T. M., & Wardle, J. (1995). Development of a measure of the motives underlying the selection of food: the food choice questionnaire. *Appetite*, 25(3), 267-284.
- Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' need for uniqueness: Scale development and validation. *Journal of Consumer Research*, 28(1), 50-66.
- den Uijl, L. C., Jager, G., de Graaf, C., Waddell, J., & Kremer, S. (2014). It is not just a meal, it is an emotional experience – A segmentation of older persons based on the emotions that they associate with mealtimes. *Appetite*, 83, 287-296.
- Van der Veen, M. (2003). When is food a luxury? *World Archaeology*, 34(3), 405-427.
- Verain, M. C. D., Aijtsema, S. J., & Antonides, G. (2016). Consumer segmentation based on food--category attribute importance: The relation with healthiness and sustainability perceptions. *Food Quality and Preference*, 48, 99-106.
- Verhallen, T.M. (1982). Scarcity and consumer choice behavior. *Journal of Economic Psychology*, 2(4), 299-322.
- Verhallen, T. M., & Robben, H. S. (1994). Scarcity and preference: An experiment on unavailability and product evaluation. *Journal of Economic Psychology*, 15(2), 315-331.
- Verhoef, P. C. (2005). Explaining purchases of organic meat by Dutch consumers. *European Review of Agricultural Economics*, 32(2), 245-267.
- Vigneron, F., & Johnson, L. W. (1999). A review and a conceptual framework of prestige-seeking consumer behavior. *Academy of Marketing Science Review*, 1, 1-15.
- Vigneron, F., & Johnson, L. W. (2004). Measuring perceptions of brand luxury. *Journal of Brand Management*, 11(6), 484-506.
- Wakefield, K. L., & Inman, J. J. (2003). Situational price sensitivity: the role of consumption occasion, social context and income. *Journal of Retailing*, 79(4), 199-212.
- Wells, L. E., Farley, H., & Armstrong, G. A. (2007). The importance of packaging design for own-label food brands. *International Journal of Retail & Distribution Management*, 35(9), 677-690.
- Wiedmann, K. P., Hennigs, N., & Siebels, A. (2007). Measuring consumers' luxury value perception: a cross-cultural framework. *Academy of Marketing Science Review*, 7, 1-21.

- Wiedmann, K. P., Hennigs, N., & Siebels, A. (2009). Value-based segmentation of luxury consumption behavior. *Psychology & Marketing, 26*(7), 625-651.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *The Journal of Marketing, 52*(3) 2-22.
- Østli, J., Esaiassen, M., Garitta, L., Nøstvold, B., & Hough, G. (2013). How fresh is fresh? Perceptions and experience when buying and consuming fresh cod fillets. *Food Quality and Preference, 27*(1), 26-34.

Part III

4 Main findings, contributions and implications

The overall objective of this thesis is to provide insights with regard to how characteristics with the product, the context and the individual relate to consumer evaluation of food products. In this chapter specific aims, insights and findings from the five academic papers forming the 'body' of this thesis will be presented. The main theoretical and empirical contributions will be presented, as well as some of its implications. Limitations and suggestion for future research will be discussed in the end of the chapter.

4.1 The influence of test situation and satisfaction with preparation

Paper 1 explored the influence of test situation and satisfaction with preparation on evaluation and intention to consume a new seafood product. The first aim of the paper was to use multiple measures for the constructs of attitude and intention to test for construct reliability and validity within each test group. In addition, a multigroup analysis was used to test for measurement invariance across groups. The second aim was to test for perceived differences in consumer attitudes and intention towards a new product in two different research situations: at home and in a canteen setting. The third aim of the paper was to investigate if and how satisfaction with the preparation of a convenient product influences evaluative outcomes.

The findings showed reliable and valid measurements of the overall evaluation and intention to consume a fish burger by Spanish consumers in two different test situations: at home and in the canteen. These results supported a meaningful comparison of latent means across the test situations.

The findings showed no significant differences in the mean scores of attitude and intention towards consuming the new product across the two different test situations. The finding regarding overall evaluation supports the results of some earlier studies (Hersleth et al., 2005; Pound et al., 2000). By incorporating a measure of intention to consume, Paper 1 expands the results of earlier studies. This finding implicates that it would be both quicker and cheaper to conduct a central location test, such as a canteen test with equal validity.

After splitting the home testing sample into groups with different levels of satisfaction with the preparation of the product, significant differences in attitudes and intention to consume the product were found. This indicates that satisfaction with the preparation, and the product's level of convenience, might influence evaluative outcomes. The implications of this finding are that if a product is developed for home use, tests in the actual preparation and consumption situation might yield valuable insights for the developer.

4.2 The influence of time use and co-production

The overall objective of Paper 2 was to investigate how time influences the customers' psychological processes and evaluations when they engage in a co-production activity. Paper 2 explores the relationships between global evaluation, satisfaction with co-production and perceived convenience. Furthermore, knowledge is included as an antecedent of both satisfaction with co-production and perceived convenience. Finally, the influence of time use as a situational variable is investigated.

Paper 2 demonstrated that satisfaction with co-production has a strong and positive effect on the evaluation of the final outcome of the co-processed product. This is an important finding that extends previous studies by showing that not only participation in a co-production process is important for evaluation (Auh et al., 2007; Xie et al., 2008), but also the satisfaction in the actual co-production process.

Another finding of Paper 2 was that convenience has a positive influence on product evaluation and satisfaction with co-production. Previous studies within the 'time is a cost perspective' (e.g. Berry et al., 2002; Jacoby et al., 1976; Leclerc et al., 1995) or about food and convenience (Furst et al., 1996; Olsen et al., 2007) supports that convenience has a positive influence on evaluation. Xie et al. (2008) suggest that the more activity required by the consumer to produce desired outcomes, the lower the degree of control the consumer has of the outcome. The findings of this study extend these results. When using food products that are perceived as more convenient to co-produce, it may be easier for the consumer to achieve a satisfactory result in the co-production effort.

The findings of Paper 2 show a positive relationship between knowledge and satisfaction with the co-production. Having the necessary knowledge about the main raw materials composing a meal, and how to prepare them, make it more likely that a successful preparation process and finally a good end result will be achieved. In the study, the results suggest that, to achieve a satisfactory co-production result, it is more important that the meal is convenient to co-produce than that the consumer has the knowledge about how to co-produce the meal. However, this may be a result of the context of this study.

Previous studies suggest that knowledge influences the perceived convenience of a food product (Gofton, 1995). This study finds no relationship between knowledge and perceived convenience. A possible explanation for this result might be that knowledge is directly linked and important for the consumers' satisfaction with co-production, but not important in this setting for the perception of how convenient a product or service is. However, knowledge may help the consumer reach a solution to a

problem faster (Alba & Hutchinson, 1987). This study confirms this finding in that the more knowledge the consumer has, the faster she/he is able to complete the co-production effort.

A negative relation has been found between time use (as cost) and the evaluation of a product (Dube-Rioux et al., 1989; Taylor, 1994). The results of Paper 2 show a negative, but not significant, relationship between time use and evaluation. However, a weak, positive relationship between time use and satisfaction with co-production is found. This implies that time use is not necessarily an important factor when evaluating the end product, but has some importance for the satisfaction with the co-production process in which the product is created. The more time a consumer spends, the more likely that the consumer will be satisfied with the co-production process. This is in accordance with the value of co-production perspective (Etgar, 2008; Lusch et al., 2007).

Paper 2 confirms the logic of the convenience construct by showing that the less time a consumer uses in the preparation of a product, the more convenient it is perceived to be (Berry et al., 2002; Candel, 2001). However, it is interesting to note that satisfaction with co-production seems to increase the time the consumer uses ('the value of co-production perspective'), whereas perceived convenience decreases with increased time use and has a positive effect on satisfaction with co-production ('the convenience perspective'). From a theoretical perspective, this study confirms the advantage of combining research from both a co-production perspective and a convenience perspective in understanding the process behind consumers' value and evaluation of a product.

At a theoretical level, Paper 1 and 2 contributes to the understanding of how food preparation or co-production influences evaluation. Both papers demonstrate that satisfaction with co-production is an important determinant in the evaluation of a food product. This factor could thus be used to gain better insights into how consumers perceive different products and the co-production involved in these products. Including this variable in product development may yield valuable insights as to how consumers evaluate food products and enable the developer to tailor the products to the consumers' needs and wants. As an example, if a food product is perceived as difficult to prepare by the consumer, providing the consumer with preparation instructions or developing a more convenient product (ready to cook/heat etc.) might increase the success of the product in the marketplace.

4.3 Consumer use of and trust in product information

Paper 3 identified consumer segments based on their use of and trust in information sources regarding the freshness of fish in France. In addition, it examined differences between the segments regarding the use of and interest in information cues and objective and subjective knowledge. Finally, the paper compared the consumer segments regarding their fish consumption and fish storage behaviour and

explored how different consumer segments reacted to labels regarding the processing of cod fillet products.

Paper 3 identified three distinct consumer segments based on the consumers' use of and trust in information sources regarding the freshness of fish. These segments were comparable to the consumer segments in other European countries as presented by Pieniak et al. (2007). However, some characteristics of the segments presented in this paper differed from those previously described.

The first segment, the Unsure consumers, did not report the lowest values regarding trust and use of information sources, but were near the midpoint of the scales. Additionally, they reported the lowest scores for use of and interest in potential information cues. This consumer segment reported a medium consumption frequency, when compared to the other two clusters. This information led to the exclusion of low experience with fish as a reason for their reported behaviour. No significant difference in objective knowledge was found between the segments; however, the Unsure consumers reported a lower subjective knowledge.

The individuals in the second cluster, called Enthusiastic consumers were comparable to the findings of Pieniak et al. (2007). Members of this cluster reported the highest use of and trust in all information sources, except for trusting their own judgement (inspecting the fish). They also reported the highest use of information cues and the highest interest in all potential information cues except for 'previously frozen' and 'fed with genetically modified feed'. This group reported a higher subjective knowledge than the Unsure consumer cluster, but not significantly different from the Confident one. Consumers in this segment reported the highest frequency of fish consumption.

The third segment, Confident consumers was also comparable to the findings reported by Pieniak et al. (2007). However, some differences were evident. The Confident consumers in the present study reported a very low trust in and use of information about fish freshness from employees at supermarkets and a relatively high use of and trust in information from fish mongers and most of all, their own judgement. Consumers in this group reported high use of all information cues except for 'nutritional composition' and a high interest in most potential information cues, particularly regarding the topics 'previously frozen' and 'fed with genetically modified feed'. This group's confidence was confirmed by a high subjective and objective knowledge.

Consumers in all segments reported a preference for the labels 'Fresh' and 'Frozen at sea'. Even though the label 'Frozen at sea' was rated lower than the label 'Fresh', it still received favourable ratings when compared to the far lower rated labels 'Thawed' and 'May have been frozen'. The latter may be an indication that a short label with information about time and location of the freezing process may lead

to positive associations regarding the quality and taste of previously frozen cod fillets. This pattern of reactions to potential cod fillet products labelling was present in the evaluation of both expected quality and taste. The Confident consumers were most influenced by labels, but all three consumer clusters showed reactions to labelling. The Unsure consumers' expectations were also affected by potential labels, showing that their reporting behaviour in previous parts of the survey was not due to unfamiliarity with the use of questionnaires in general (Köster, 2003). These findings imply that information regarding thawed cod fillet products should be carefully communicated. Fresh fish remains at the top of consumers' aspirations regarding fish. However, a short label indicating that fish was frozen directly after catch and thawed directly before they were put on the retailers' displays may lead to an improvement of the image of convenient cod fillet products that undergo extensive processing in order to reach the consumers with minor quality compromises.

This study reported some new theoretical findings and partially expanded the work presented by Pieniak et al. (2007). From a theoretical perspective, food choice based on emotional reactions such as trust has shown to affect various types of individuals. However, since in reality these reactions may be mostly affective and to a lesser degree cognitive, the use of methods that measure affective responses to information about food might lead to more valid indications of actual behaviour and its understanding.

4.4 The influence of packaging attributes

The main aim of Paper 4 was to investigate the importance of packaging attributes on consumer evaluation of fresh cod. The first aim of this paper was to evaluate the relative importance of the visual and informational packaging attributes of fresh cod through a conjoint study. The second aim was to segment the consumers based on preference for different packaging attributes using cluster. The third aim was to validate (predict) the segments against the survey responses regarding the individual characteristics of consumers, specifically consumption and preferences, health and seafood involvement, knowledge about quality, willingness to pay and demographics.

In general, the findings of Paper 4 indicate that informational packaging attributes (freshness statements, information about taste and convenience) are more important than visual attributes (shape of packaging and colour) when consumers evaluate cod fillets. Specifically cognitive freshness information (shelf life and cognitive freshness statement, were the most important attributes. This finding supports Ragaert et al. (2004), who found that shelf life is used as a proxy for credence attributes, such as information about freshness in consumer decision-making process. This finding also imply that consumers have low need for affect and high need for cognition regarding information about freshness (Haddock et al., 2008).

Segmentation of the consumers in Paper 4 based on the informational attributes (freshness statements, information about taste and convenience) and visual attributes (shape of packaging and colour) revealed three clusters named: the Packaging, Quality and Convenience segment.

The Packaging segment, which was the largest segment, preferred the visual attributes of shape and colour followed by the freshness attributes. In this segment short shelf life and the cognitive freshness statement were of similar importance. This was a different result compared with the entire sample, which preferred short shelf life to freshness statements. Profiling the Packaging segment by using individual characteristics showed that consumers in this segment had high consumption rate and preference for cod, and they were highly involved in fish. However, this segment had the lowest willingness to pay for extremely fresh fish, showing that they focused more on the packaging than on quality attributes. They were also between the two other segments in terms of age and knowledge of how to judge the quality of fish. This shows that lower subjective knowledge does not necessarily result in lower consumption, something that has been shown in other studies (Altintzoglou & Heide, 2016).

The Quality segment preferred the informational freshness attributes short shelf life and cognitive freshness statements. The quality segment was highly involved in fish, had high subjective knowledge and the consumers had a high consumption and preference for cod. This is in accordance with previous research, which showed that highly involved consumers with high subjective knowledge tend to consume fish more frequently (Olsen, 2001; Verbeke et al., 2007). This was also the segment with the oldest consumers; thus, they had the most experience dealing with fish. This was reflected also in the fact that they had the most knowledge of how to judge quality, which is in line with previous research (Verbeke et al., 2007).

The Convenience segment used convenience information and preferred fish that was skin and boneless. This segment had the lowest frequency of cod consumption and the lowest preference for cod. The Convenience segment had the youngest consumers, and they expressed lower involvement in fish compared with the two other segments. Previous research has shown that younger consumers are generally less involved in fish, and they perceive the inconvenient aspects of fish as a barrier to consumption (Olsen, 2003). From a theoretical point of view, this study provides insights and empirical support for using visual and informational packaging attribute importance as a basis for consumer segmentation. The seafood industry should, for example, design attractive packaging and emphasise information about freshness by using labels with short shelf life and other cognitive freshness statements.

4.5 The importance of food quality and prestige benefits

The main aim of Paper 5 was to identify consumer segments based on the importance of food quality and prestige benefits when buying food for a special occasion: dinner party with friends. The first aim of the paper was to explore how consumers differ in their perceived prestige product benefits compared to more traditional food benefits. The second aim was to identify the most important benefits when consumers want to buy food for preparing dinner for a special occasion (dinner party with friends). The third aim was to relate the consumer segments to individual characteristics (involvement in luxury, willingness to pay and demographics).

The findings of Paper 5 revealed that that food quality benefits (quality, taste and health) are more important than prestige benefits (prestige quality, hedonic, uniqueness, price and social). This result confirms that food quality benefits like taste and health of food are the foremost perceived benefits across consumer segments (Carlucci et al., 2015), and that such benefits are important and necessary for all consumers (Brunso et al., 2002).

The findings of Paper 4 and 5 indicate that the importance of taste can be evaluated differently. As an informational attribute, taste was found to have little importance compared to freshness, packaging and convenience in Paper 4. This is somewhat surprising given that most previous studies find taste as one of the most important informational attributes (Acebrón, & Dopico, 2000; Cardello, & Schutz, 2003; Luis Méndez et al., 2011; Tepper, & Trail, 1998). A possible explanation for this result is that the consumers in our study were familiar with the taste of cod, and accordingly, this information was perceived as unimportant for the consumers. As a food benefit, taste was found to be the most important attribute compared to other quality benefits (quality and health) and prestige benefits (Paper 5). These findings contribute to existing literature by showing that the importance of taste can be evaluated differently depending on how taste is perceived by the consumers as an informational attribute. Segmentation of the consumers in Paper 5 the identified four distinct consumer segments (Perfectionists, Premium, Luxury seeking and Value focused) based on food quality (quality, taste and health) and prestige benefits (quality, uniqueness, hedonic, price and social).

The Perfectionists were more interested in hedonic benefits derived from the use of luxury products and less interested in the price than prestige quality benefits, following a similar pattern as Vigneron & Johnson's (1999) perfectionists. Cross-cultural research on prestige (Hennigs et al., 2012) has found similar characteristics of prestige-seeking consumers.

The Premium segment focused on food quality (e.g. quality, taste, nutrition and health), price and hedonic benefits (i.e. exciting and wonderful). This segment could also be called the 'gourmet' segment

as these consumers want the sensuous enjoyment of high-quality food products. Literature on situational price sensitivity finds similar results, suggesting that consumers are less sensitive to price when purchasing for hedonic benefits (Maehle et al., 2015; Wakefield & Inman, 2003). The Premium segment had a high WTP for a prestige product, which is on a slightly but not significantly higher level compared with the Perfectionists and Luxury seeking segments. This segment also contained more women consumers, which supports previous studies suggesting that women emphasise hedonism more closely with prestige consumption (Roux et al., 2017).

Luxury seeking consumers prefer products with high prestige quality (e.g. superior and sophisticated) and uniqueness (e.g. exclusive and rare). Social benefits (i.e. popular and status) are also quite important. Traditional food quality benefits (e.g. taste and healthiness) are not as important for this segment compared with the other segments. In contrast to the Premium segment, this segment is not concerned about eating high-quality food for its sensuous enjoyment but rather wants to eat food that is perceived as luxurious and that enhances social status. The distinctive profile between the Premium and the Luxury seeking segments is clear and interesting. It is reasonable to expect that in a special context (a party with friends), the benefits sought are both more unique and more socially prestigious than for an everyday meal (Belk, 1988; Lockshin et al., 1997; Shukla, 2010). Thus, Luxury seeking consumers might seek unique products because this is what is expected by their guests. This segment consisted of younger consumers and more men. Younger consumers and men are suggested to be generally more concerned about uniqueness and luxury (Roux et al., 2017).

The Value focused, are not driven by prestige consumption. This segment wants high food quality and taste at an affordable price and is similar to the distance segment of Dubois et al. (2005), which considered prestige products as expensive and useless. Thus, this study identified a significant distinction between Perfectionists and Value focused consumers. Both segments are focused on food quality benefits but differ in their focus on value and prestige benefits. This is not always confirmed in the consumer decision making or shopping orientation literature (Rezaei, 2015), and can be addressed as a theoretical contribution together with our findings about the distinction between premium and luxury. The practical implication of this is that Luxury seeking consumers should be targeted with information about prestige quality, uniqueness and social benefits, while Premium consumers form their expectations based on food quality (taste, nutrition and health) and hedonic benefits.

The findings of Paper 3, 4 and 5 demonstrate the importance of segmenting the consumers based either on how they evaluate different product attributes or benefits (Golan et al., 2001; Verbeke, 2008) or individual characteristics such as use and trust of information. A number of distinct segments, which evaluates the importance of product or individual attributes differently, have been identified. The

segments are further described and profiled by using product and/or individual characteristics. The findings can be used by industry, retailers or other relevant stakeholders to develop products and marketing strategies tailored to the needs and wants of different consumers. For example, designing attractive packaging could be a good strategy for targeting the Packaging segment in Paper 4.

4.6 Limitations and suggestions for future research

The studies in this thesis have several limitations. A general limitation is that all studies were conducted in a single European country (Norway, France or Spain), and the results may not be applicable to other countries or cultures. Future research could extend this work by including other cultures and countries.

Paper 1 and 2 investigated how consumers evaluated one particular food product (fish burger and cod fillet). Future research should extend this work to different products or meals with different degrees of convenience and difficulty in the co-production stage.

Another limitation of this thesis is that it does not investigate the relationship between evaluation of food before and after purchase, but rather focuses on either expectations or experience. Future research could explore this relationship to better explain the relationship between expectations, experience and evaluation and how this is influenced by characteristics with the product, the context and the individual (Brunsø et al., 2002; Piqueras-Fiszman & Spence, 2015b).

This thesis investigated how characteristics with the product, the context and the individual relate to consumer evaluation of food products. Each of these characteristics is influenced by a number of variables, and only a few of them are investigated in this thesis. Future research could include other variables as for example how and where the product is produced (organic vs. genetic modification, local vs. global production etc.), other test situations (standardised, natural or simulated environments), emotions and other individual characteristics (personal values, social norms, habits etc.) (Carlucci et al., 2015; Köster & Mojet, 2015; Meiselman, 2013).

Finally, this thesis focuses mainly on similarities and differences in consumer evaluations. However, evaluation or attitudes are suggested to influence consumer's behavioural responses, choice and loyalty (Fishbein & Ajzen, 2010; Oliver, 2010; Steptoe et al., 1995). Future research could also include measures of other outcome variables such as loyalty or actual behaviours (Oliver, 1999).

5 References

- Acebrón, L. B., & Dopico, D. C. (2000). The importance of intrinsic and extrinsic cues to expected and experienced quality: an empirical application for beef. *Food quality and preference*, *11*(3), 229–238.
- Aikman, S. N., Crites, S. L., & Fabrigar, L. R. (2006). Beyond affect and cognition: Identification of the informational bases of food attitudes. *Journal of applied social psychology*, *36*(2), 340–382.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational behavior and human decision processes*, *50*(2), 179–211.
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual review of psychology*, *52*(1), 27–58.
- Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behavior. *The handbook of attitudes*, *173*(221), 31.
- Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of consumer research*, *13*(4), 411–454.
- Altintzoglou, T., & Heide, M. (2016). Fish quality and consumers: How do consumers' knowledge about and involvement in fish quality define factors that influence fish buying behavior?. *Journal of Aquatic food product technology*, *25*(6), 885–894.
- Altintzoglou, T., Helen Nøstvold, B., Carlehög, M., Heide, M., Østli, J., & Egeness, F. A. (2012). The influence of labelling on consumers' evaluations of fresh and thawed cod fillets in England. *British food journal*, *114*(11), 1558–1570.
- Anderson, E. W. (1996). Customer satisfaction and price tolerance. *Marketing letters*, *7*(3), 265–274.
- Anderson, N. H. (1981). Integration theory applied to cognitive responses and attitudes. In R. E. Petty, T. M. Ostrom, & T. C. Brock (Eds.), *Cognitive responses in persuasion* (pp. 127–133). Hillsdale, NJ: Erlbaum.
- Ares, G., & Gámbaro, A. (2007). Influence of gender, age and motives underlying food choice on perceived healthiness and willingness to try functional foods. *Appetite*, *49*(1), 148–158.
- Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British journal of social psychology*, *40*(4), 471–499.
- Auh, S., Bell, S. J., McLeod, C. S., & Shih, E. (2007). Co-production and customer loyalty in financial services. *Journal of retailing*, *83*(3), 359–370.
- Bagozzi, R. P. (1980). *Causal models in marketing*. New York (NY): Wiley.
- Belk, R. W. (1975). Situational variables and consumer behavior. *Journal of consumer research*, *2*(3), 157–164.
- Belk, R. W. (1988). Possessions and the extended self. *Journal of consumer research*, *15*(2), 139–168.

- Bendapudi, N., & Leone, R. P. (2003). Psychological implications of customer participation in co-production. *Journal of marketing*, 67(1), 14–28.
- Berry, L. L., Seiders, K., & Grewal, D. (2002). Understanding service convenience. *Journal of marketing*, 66(3), 1–17.
- Boutrolle, I., Arranz, D., Rogeaux, M., & Delarue, J. (2005). Comparing central location test and home use test results: Application of a new criterion. *Food quality and preference*, 16(8), 704–713.
- Boutrolle, I., Delarue, J., Arranz, D., Rogeaux, M., & Köster, E. P. (2007). Central location test vs. home use test: Contrasting results depending on product type. *Food quality and preference*, 18(3), 490–499.
- Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: what is it? How is it measured? Does it affect loyalty?. *Journal of marketing*, 73(3), 52–68.
- Breckler, S. J. (1984). Empirical validation of affect, behavior, and cognition as distinct components of attitude. *Journal of personality and social psychology*, 47(6), 1191.
- Breidert, C., Hahsler, M., & Reutterer, T. (2006). A review of methods for measuring willingness-to-pay. *Innovative marketing*, 2(4), 8–32.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological methods & research*, 21(2), 230–258.
- Brun, A., & Castelli, C. (2013). The nature of luxury: a consumer perspective. *International journal of retail & distribution management*, 41(11/12), 823–847.
- Brunsnø, K., Fjord, T. A., & Grunert, K. G. (2002). Consumers' food choice and quality perception. *The Aarhus school of business publ., Aarhus, Denmark*.
- Brunsnø, K., Verbeke, W., Ottar Olsen, S., & Fruensgaard Jeppesen, L. (2009). Motives, barriers and quality evaluation in fish consumption situations: Exploring and comparing heavy and light users in Spain and Belgium. *British food journal*, 111(7), 699–716.
- Buckley, M., Cowan, C., McCarthy, M., & O'Sullivan, C. (2005). The convenience consumer and food-related lifestyles in Great Britain. *Journal of food products marketing*, 11(3), 3–25.
- Cameron, T. A., & James, M. D. (1987). Estimating willingness to pay from survey data: an alternative pre-test-market evaluation procedure. *Journal of marketing research*, 389–395.
- Candel, M. J. (2001). Consumers' convenience orientation towards meal preparation: conceptualization and measurement. *Appetite*, 36(1), 15–28.
- Cardello, A. V., & Schutz, H. G. (2003). The importance of taste and other product factors to consumer interest in nutraceutical products: Civilian and military comparisons. *Journal of food science*, 68(4), 1519–1524.

- Carlucci, D., Nocella, G., De Devitiis, B., Viscecchia, R., Bimbo, F., & Nardone, G. (2015). Consumer purchasing behaviour towards fish and seafood products. Patterns and insights from a sample of international studies. *Appetite*, *84*, 212–227.
- Caswell, J. A., & Mojduszka, E. M. (1996). Using informational labeling to influence the market for quality in food products. *American journal of agricultural economics*, *78*(5), 1248–1253.
- Churchill, G. A., & Surprenant, C. (1982). An investigation into the determinants of customer satisfaction. *Journal of marketing research*, *19*(4), 491–504.
- Clark, J. E. (1998). Taste and flavour: their importance in food choice and acceptance. *Proceedings of the nutrition society*, *57*(4), 639–643.
- Daniels, S., Glorieux, I., Minnen, J., & van Tienoven, T. P. (2012). More than preparing a meal? Concerning the meanings of home cooking. *Appetite*, *58*(3), 1050–1056.
- Desmet, P. M. A., & Hekkert, P. (2007). Framework of Product Experience. *International journal of design*, *1*(1), 13-23.
- Dubé-Rioux, L., Schmitt, B. H., & Leclerc, F. (1989). Consumers' Reactions to Waiting: When Delays Affect the Perception of Service Quality. *Advances in Consumer Research*, *16*(1), 59-63.
- Dubois, B., Czellar, S., & Laurent, G. (2005). Consumer segments based on attitudes toward luxury: Empirical evidence from twenty countries. *Marketing letters*, *16*(2), 115–128.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Harcourt Brace Jovanovich College Publishers.
- Eagly, A. H., & Chaiken, S. (1998). Attitude structure and function. In D. T. Gilbert, S. T. Fiske, & L. Gardner (Eds.), *The handbook of social psychology* (pp. 269–322). New York, NY: McGraw-Hill.
- Edwards, J. S., Meiselman, H. L., Edwards, A., & Leshner, L. (2003). The influence of eating location on the acceptability of identically prepared foods. *Food quality and preference*, *14*(8), 647–652.
- Eertmans, A., Victoir, A., Notelaers, G., Vansant, G., & Van den Bergh, O. (2006). The Food Choice Questionnaire: Factorial invariant over western urban populations?. *Food quality and preference*, *17*(5), 344–352.
- Etgar, M. (2008). A descriptive model of the consumer co-production process. *Journal of the academy of marketing science*, *36*(1), 97–108.
- Fernqvist, F., & Ekelund, L. (2014). Credence and the effect on consumer liking of food—A review. *Food quality and preference*, *32*, 340–353.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York, NY: Psychology Press.

- Furst, T., Connors, M., Bisogni, C. A., Sobal, J., & Falk, L. W. (1996). Food choice: a conceptual model of the process. *Appetite*, 26(3), 247–266.
- Gagliano, B. K., & Hathcote, J. (1994). Customer expectations and perceptions of service quality in retail apparel specialty stores. *Journal of services marketing*, 8(1), 60–69.
- Gardial, S. F., Clemons, D. S., Woodruff, R. B., Schumann, D. W., & Burns, M. J. (1994). Comparing consumers' recall of prepurchase and postpurchase product evaluation experiences. *Journal of consumer research*, 20(4), 548–560.
- Giese, J. L., & Cote, J. A. (2000). Defining consumer satisfaction. *Academy of marketing science review*, 2000, 1.
- Gil, J. M., & Sánchez, M. (1997). Consumer preferences for wine attributes: a conjoint approach. *British food journal*, 99(1), 3–11.
- Gofton, L. (1995). Convenience and the moral status of consumer practices. In D. W. Marshall (Ed.), *Food choice and the consumer* (pp. 152–181). London, UK: Blackie Academic & Professional
- Golan, E., Kuchler, F., Mitchell, L., Greene, C., & Jessup, A. (2001). Economics of food labeling. *Journal of consumer policy*, 24(2), 117–184.
- Golder, P. N., Mitra, D., & Moorman, C. (2012). What is quality? An integrative framework of processes and states. *Journal of marketing*, 76(4), 1–23.
- Graham, R. J. (1981). The role of perception of time in consumer research. *Journal of consumer research*, 7(4), 335–342.
- Green, P. E., & Krieger, A. M. (1991). Segmenting Markets with Conjoint Analysis. *Journal of marketing*, 55(4), 20–31.
- Green, P. E., Krieger, A. M., & Wind, Y. (2001). Thirty years of conjoint analysis: Reflections and prospects. *Interfaces*, 31(3 supplement), 56–53.
- Greenwald, A. G. (1989). Why attitudes are important: Defining attitude and attitude theory 20 years later. In A. R. Pratkanis, S. J. Breckler & A. G. Greenwald (Eds.), *Attitude Structure and Function* (pp. 429–440). Hillsdale, NJ: Erlbaum.
- Grunert, K. G. (1997). What's in a steak? A cross-cultural study on the quality perception of beef. *Food quality and preference*, 8(3), 157–174.
- Grunert, K. G. (2002). Current issues in the understanding of consumer food choice. *Trends in food science & technology*, 13(8), 275–285.
- Grunert, K. G., Larsen, H. H., Madsen, T. K., & Baadsgaard, A. (1996). *Market orientation in food and agriculture*. Dordrecht: Kluwer Academic Publishers.
- Gutman, J. (1982). A means-end chain model based on consumer categorization processes. *Journal of marketing*, 46(2), 60–72.

- Gutteling, J. M., & Wiegman, O. (1996). The source of risk messages. In J.M. Gutteling & O. Wiegman (Eds.), *Exploring risk communication* (pp. 151–169). Dordrecht: Kluwer Academic Publishers.
- Haddock, G., Maio, G. R., Arnold, K., & Huskinson, T. (2008). Should persuasion be affective or cognitive? The moderating effects of need for affect and need for cognition. *Personality and social psychology bulletin*, 34(6), 769–778.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate data analysis*. Upper Saddle River, NJ: Prentice hall.
- Hair, J. F., Jr. Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed.). Upper Saddle River, NJ: Pearson Education.
- Hanzaee, K. H., & Taghipourian, M. J. (2012). The effects of brand credibility and prestige on consumers purchase intention in low and high product involvement. *Journal of basic and applied scientific research*, 2(2), 1281–1291.
- Harcar, T., & Karakaya, F. (2005). A cross-cultural exploration of attitudes toward product expiration dates. *Psychology & marketing*, 22(4), 353–371.
- Hartmann, L. H., Nitzko, S., & Spiller, A. (2016). Segmentation of German consumers based on perceived dimensions of luxury food. *Journal of food products marketing*, 1–36.
- Hennigs, N., Wiedmann, K. P., Klarmann, C., Strehlau, S., Godey, B., Pederzoli, D., Naulinger, A., Kartik, D., Aiello, G., Donvito, L., Taro, K., Ľaborecká-Petrovicov, J., Santos, C. R., Jung, J., & Oh, H. (2012). What is the value of luxury? A cross-cultural consumer perspective. *Psychology & marketing*, 29(12), 1018–1034.
- Hersleth, M., Ueland, Ø., Allain, H., & Næs, T. (2005). Consumer acceptance of cheese, influence of different testing conditions. *Food quality and preference*, 16(2), 103–110.
- Homburg, C., Koschate, N., & Hoyer, W. D. (2005). Do satisfied customers really pay more? A study of the relationship between customer satisfaction and willingness to pay. *Journal of marketing*, 69(2), 84–96.
- Homer, P. M., & Kahle, L. R. (1988). A structural equation test of the value-attitude-behavior hierarchy. *Journal of personality and social psychology*, 54(4), 638–646.
- Horn, J. L., & McArdle, J. J. (1992). A practical and theoretical guide to measurement invariance in aging research. *Experimental aging research*, 18(3), 117–144.
- Inman, J. J., Dyer, J. S., & Jia, J. (1997). A generalized utility model of disappointment and regret effects on post-choice valuation. *Marketing science*, 16(2), 97–111.
- Jacoby, J., Szybillo, G. J., & Berning, C. K. (1976). Time and consumer behavior: An interdisciplinary overview. *Journal of consumer research*, 2(4), 320–339.
- Jaeger, S. R., & Meiselman, H. L. (2004). Perceptions of meal convenience: the case of at-home evening meals. *Appetite*, 42(3), 317–325.

- Jaffe, J., & Gertler, M. (2006). Victual vicissitudes: Consumer deskillling and the (gendered) transformation of food systems. *Agriculture and human values*, 23(2), 143–162.
- Jarvis, W. B. G., & Petty, R. E. (1996). The need to evaluate. *Journal of personality and social psychology*, 70(1), 172.
- Juhl, H. J., & Poulsen, C. S. (2000). Antecedents and effects of consumer involvement in fish as a product group. *Appetite*, 34(3), 261–267.
- Jungermann, H., Pfister, H. R., & Fischer, K. (1996). Credibility, information preferences, and information interests. *Risk analysis*, 16(2), 251–261.
- Karimi, P., Mahdih, O., & Rahmani, M. (2013). The study of relationship between packaging elements and purchase behavior: consumers of food, cosmetics and health products. *Interdisciplinary journal of contemporary research in business*, 5(3), 281–295.
- Ketchen Jr, D. J., & Shook, C. L. (1996). The application of cluster analysis in strategic management research: an analysis and critique. *Strategic management journal*, 441–458.
- King, S. C., Meiselman, H. L., Hottenstein, A. W., Work, T. M., & Cronk, V. (2007). The effects of contextual variables on food acceptability: A confirmatory study. *Food quality and preference*, 18(1), 58–65.
- King, S. C., Weber, A. J., Meiselman, H. L., & Lv, N. (2004). The effect of meal situation, social interaction, physical environment and choice on food acceptability. *Food quality and preference*, 15(7), 645–653.
- Köster, E. P. (2003). The psychology of food choice: some often encountered fallacies. *Food quality and preference*, 14(5), 359–373.
- Köster, E. P., & Mojet, J. (2015). From mood to food and from food to mood: A psychological perspective on the measurement of food-related emotions in consumer research. *Food research international*, 76, 180–191.
- Laurent, G., Dubois, B., & Czellar, S. (2011). Consumer rapport to luxury: Analyzing complex and ambivalent attitudes (No. 736). Paris: HEC.
- Leclerc, F., Schmitt, B. H., & Dube, L. (1995). Waiting time and decision making: Is time like money?. *Journal of consumer research*, 22(1), 110–119.
- Lee, C. M., Moskowitz, H. R., & Lee, S. Y. (2007). Expectations, needs and segmentation of healthy breakfast cereal consumers. *Journal of sensory studies*, 22(5), 587–607.
- Lockshin, L. S., Spawton, A. L., & Macintosh, G. (1997). Using product, brand and purchasing involvement for retail segmentation. *Journal of retailing and consumer services*, 4(3), 171–183.
- Luis Méndez, J., Oubina, J., & Rubio, N. (2011). The relative importance of brand-packaging, price and taste in affecting brand preferences. *British food journal*, 113(10), 1229–1251.

- Lusch, R. F., Brown, S. W., & Brunswick, G. J. (1992). A general framework for explaining internal vs. external exchange. *Journal of the academy of marketing science*, 20(2), 119–134.
- Lusch, R. F., Vargo, S. L., & O'Brien, M. (2007). Competing through service: Insights from service-dominant logic. *Journal of retailing*, 83(1), 5–18.
- MacKenzie, S. B. (2001). Opportunities for improving consumer research through latent variable structural equation modeling. *Journal of consumer research*, 28(1), 159–166.
- Maehle, N., Iversen, N., Hem, L., & Otnes, C. (2015). Exploring consumer preferences for hedonic and utilitarian food attributes. *British food journal*, 117(12), 3039–3063.
- Mantel, S. P., & Kellaris, J. J. (2003). Cognitive determinants of consumers' time perceptions: The impact of resources required and available. *Journal of consumer research*, 29(4), 531–538.
- Marreiros, C., & Ness, M. (2009). *A conceptual framework of consumer food choice behaviour* (No. 2009_06). University of Evora, CEFAGE-UE (Portugal).
- Marshall, D. (1993). Appropriate meal occasions: understanding conventions and exploring situational influences on food choice. *International review of retail, distribution and consumer research*, 3(3), 279–301.
- Marshall, D., & Bell, R. (2004). Relating the food involvement scale to demographic variables, food choice and other constructs. *Food quality and preference*, 15(7), 871–879.
- Meiselman, H. L. (1996). The contextual basis for food acceptance, food choice and food intake: the food, the situation and the individual. In H. L. Meiselman & H. J. H. Macfie (Eds.), *Food choice, acceptance and consumption*, Blackie Academic & Professional, London, pp. 239–263.
- Meiselman, H. L. (2007). "The impact of context and environment on consumer food choice", in L. Frewer & H. C. M. Van Trijp (Eds.), *Understanding consumers of food products*, Woodhead publishing limited, pp. 67–92.
- Meiselman, H. L. (2013). The future in sensory/consumer research:..... evolving to a better science. *Food quality and preference*, 27(2), 208–214.
- Miller, K. W., & Mills, M. K. (2012). Probing brand luxury: A multiple lens approach. *Journal of brand management*, 20(1), 41–51.
- Nowlis, S. M., & Simonson, I. (1997). Attribute-task compatibility as a determinant of consumer preference reversals. *Journal of marketing research*, 205–218.
- O'Cass, A., & Frost, H. (2002). Status brands: examining the effects of non-product-related brand associations on status and conspicuous consumption. *Journal of product & brand management*, 11(2), 67–88.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of marketing research*, 17(4), 460–469.

- Oliver, R. L. (1993). Cognitive, affective, and attribute bases of the satisfaction response. *Journal of consumer research*, 20(3), 418-430.
- Oliver, R. L. (1999). Whence consumer loyalty?. *Journal of Marketing*, 63(4), 33–44.
- Oliver, R. L. 1997. *Satisfaction: A behavioral perspective on the consumer*. New York: McGraw-Hill
- Oliver, R. L. 2010. *Satisfaction: A behavioral perspective on the consumer* (2nd ed.). Armonk, NY: M.E. Sharpe, Inc.
- Olsen, S. O. (2001). Consumer involvement in seafood as family meals in Norway: an application of the expectancy-value approach. *Appetite*, 36(2), 173–186.
- Olsen, S. O. (2003). Understanding the relationship between age and seafood consumption: the mediating role of attitude, health involvement and convenience. *Food quality and Preference*, 14(3), 199–209.
- Olsen, S. O. (2004). Antecedents of seafood consumption behavior: An overview. *Journal of aquatic food product technology*, 13(3), 79–91.
- Olsen, S. O., Scholderer, J., Brunsø, K., & Verbeke, W. (2007). Exploring the relationship between convenience and fish consumption: a cross-cultural study. *Appetite*, 49(1), 84–91.
- Olson, J. C., & Reynolds, T. J. (1983). Understanding consumers' cognitive structures: Implications for advertising strategy. *Advertising and consumer psychology*, 1, 77–90.
- Olson, J. C. & Jacoby J. (1972). Cue utilization in the quality perception process M. Venkatesan (Ed.), *Proceedings of the third annual conference of the association for consumer research*, Association for Consumer Research, Chicago (1972), pp. 167–179
- Onwezen, M. C., Reinders, M. J., van der Lans, I. A., Sijtsema, S. J., Jasiulewicz, A., Guardia, M. D., & Guerrero, L. (2012). A cross-national consumer segmentation based on food benefits: The link with consumption situations and food perceptions. *Food quality and preference*, 24(2), 276–286.
- Ophuis, P. A. O., & Van Trijp, H. C. (1995). Perceived quality: A market driven and consumer oriented approach. *Food quality and preference*, 6(3), 177–183.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). Servqual: A multiple-item scale for measuring consumer perc. *Journal of retailing*, 64(1), 12–40.
- Pieniak, Z., Verbeke, W., Brunsø, K., & Olsen, S. O. (2006). Consumer knowledge and interest in information about fish. *Seafood research from fish to dish: Quality, safety and processing of wild and farmed fish*, 229–241.
- Pieniak, Z., Verbeke, W., Olsen, S. O., Hansen, K. B., & Brunsø, K. (2010). Health-related attitudes as a basis for segmenting European fish consumers. *Food policy*, 35(5), 448–455.
- Pieniak, Z., Verbeke, W., Scholderer, J., Brunsø, K., & Olsen, S. O. (2007). European consumers' use of and trust in information sources about fish. *Food quality and preference*, 18(8), 1050–1063.

- Piqueras-Fiszman, B., & Jaeger, S. R. (2014). The impact of the means of context evocation on consumers' emotion associations towards eating occasions. *Food quality and preference*, *37*, 61–70.
- Piqueras-Fiszman, B., & Jaeger, S. R. (2015a). The effect of product–context appropriateness on emotion associations in evoked eating occasions. *Food quality and preference*, *40*, 49–60.
- Piqueras-Fiszman, B., & Spence, C. (2015b). Sensory expectations based on product-extrinsic food cues: an interdisciplinary review of the empirical evidence and theoretical accounts. *Food quality and preference*, *40*, 165–179.
- Pligt, J. V. D., & De Vries, N. K. (1998). Expectancy-value models of health behaviour: The role of salience and anticipated affect. *Psychology and health*, *13*(2), 289–305.
- Pound, C., Duizer, L., & McDowell, K. (2000). Improved consumer product development. Part one: is a laboratory necessary to assess consumer opinion?. *British food journal*, *102*(11), 810–820.
- Povey, R., Wellens, B., & Conner, M. (2001). Attitudes towards following meat, vegetarian and vegan diets: an examination of the role of ambivalence. *Appetite*, *37*(1), 15–26.
- Punj, G., & Stewart, D. W. (1983). Cluster analysis in marketing research: Review and suggestions for application. *Journal of marketing research*, 134–148.
- Ragaert, P., Verbeke, W., Devlieghere, F., & Debevere, J. (2004). Consumer perception and choice of minimally processed vegetables and packaged fruits. *Food quality and preference*, *15*(3), 259–270.
- Rappoport, L., Downey, R. G., & Huff-Corzine, L. (2001). Conceptual differences between meals. *Food quality and preference*, *12*(1), 9–17.
- Reynolds, T. J., & Gutman, J. (1988). Laddering theory, method, analysis, and interpretation. *Journal of advertising research*, *28*(1), 11–31.
- Rezaei, S. (2015). Segmenting consumer decision-making styles (CDMS) toward marketing practice: A partial least squares (PLS) path modeling approach. *Journal of retailing and consumer services*, *22*, 1–15.
- Richardson, N. J., Shepherd, R., & Elliman, N. (1994). Meat consumption, definition of meat and trust in information sources in the UK population and members of the vegetarian society. *Ecology of food and nutrition*, *33*(1–2), 1–13.
- Roininen, K., Lähteenmäki, L., & Tuorila, H. (1999). Quantification of consumer attitudes to health and hedonic characteristics of foods. *Appetite*, *33*(1), 71–88.
- Roux, E., Tafani, E., & Vigneron, F. (2017). Values associated with luxury brand consumption and the role of gender. *Journal of business research*, *71*, 102–113.
- Rozin, P., & Tuorila, H. (1993). Simultaneous and temporal contextual influences on food acceptance. *Food quality and preference*, *4*(1–2), 11–20

- Salaün, Y., & Flores, K. (2001). Information quality: Meeting the needs of the consumer. *International journal of information management*, 21(1), 21–37.
- Sapp, S. G., & Jensen, H. H. (1998). An evaluation of the health belief model for predicting perceived and actual dietary quality. *Journal of applied social psychology*, 28(3), 235–248.
- Schwarz N., & Sudman S. (1992). *Context effects in social and psychological research*. New York: Springer Verlag.
- Shepherd, R. (1989). *Handbook of the psychophysiology of human eating*. Chichester, United Kingdom: John Wiley and Sons Ltd.
- Shukla, P. (2010). Status consumption in cross-national context: Socio-psychological, brand and situational antecedents. *International marketing review*, 27(1), 108–129.
- Silayoi, P., & Speece, M. (2004). Packaging and purchase decisions: An exploratory study on the impact of involvement level and time pressure. *British food journal*, 106(8), 607–628.
- Silayoi, P., & Speece, M. (2007). The importance of packaging attributes: a conjoint analysis approach. *European journal of marketing*, 41(11/12), 1495–1517.
- Smith, R., & Deppa, B. (2009). Two dimensions of attribute importance. *Journal of consumer marketing*, 26(1), 28–38.
- Spence, C., & Piqueras-Fiszman, B. (2014). *The perfect meal: The multisensory science of food and dining*. Oxford: Wiley-Blackwell.
- Steenkamp, J. B. E. M. (1989). Product quality: an investigation into the concept and how it is perceived by consumers (WAU no. 1253). *Wageningen University Dissertation*.
- Steenkamp, J. B. E. M. (1993). Food consumption behavior. In W. F. Van Raaij & G. J. Bamossy (Eds.), *European advances in consumer research* (pp. 401–409). Provo, UT: Association for Consumer Research.
- Steenkamp, J. B. E., & Baumgartner, H. (1998). Assessing measurement invariance in cross-national consumer research. *Journal of consumer research*, 25(1), 78–90.
- Steenkamp, J.-B. E. M. (1997). Dynamics in consumer behaviour with respect to agricultural and food products. In B. Wierenga, A. van Tilburg, K. Grunert, J.-B. E. M. Steenkamp, & M. Wedel (Eds.), *Agricultural marketing and consumer behaviour in a changing world* (pp. 143–188). Dordrecht: Kluwer Academic publishers.
- Steptoe, A., Pollard, T. M., & Wardle, J. (1995). Development of a measure of the motives underlying the selection of food: the food choice questionnaire. *Appetite*, 25(3), 267–284.
- Story, M., Neumark-Sztainer, D., & French, S. (2002). Individual and environmental influences on adolescent eating behaviors. *Journal of the American dietetic association*, 102(3), 40–51.
- Strober, M. H., & Weinberg, C. B. (1980). Strategies used by working and nonworking wives to reduce time pressures. *Journal of consumer research*, 6(4), 338–348.

- Taylor, S. (1994). Waiting for service: The relationship between delays and evaluations of service. *Journal of marketing*, 58(2), 56.
- Tepper, B. J., & Trail, A. C. (1998). Taste or health: a study on consumer acceptance of corn chips. *Food quality and preference*, 9(4), 267–272.
- Tourangeau, R., Rips, L. J., & Rasinski, K. (2000). *The psychology of survey response*. Cambridge University Press.
- Tuorila, H. M., Meiselman, H. L., Cardello, A. V., & Leshner, L. L. (1998). Effect of expectations and the definition of product category on the acceptance of unfamiliar foods. *Food quality and preference*, 9(6), 421–430.
- Van Trijp, H., & Schifferstein (1995). Sensory analysis in marketing practice: comparison and integration. *Journal of sensory studies*, 10(2), 127–147.
- Van der Veen, M. (2003). When is food a luxury?. *World archaeology*, 34(3), 405–427.
- Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. *Journal of marketing*, 68(1), 1–17.
- Verain, M. C., Sijtsma, S. J., & Antonides, G. (2016). Consumer segmentation based on food-category attribute importance: The relation with healthiness and sustainability perceptions. *Food quality and preference*, 48, 99–106.
- Verbeke, W. (2008). Impact of communication on consumers' food choices: Plenary Lecture. *Proceedings of the nutrition society*, 67(3), 281–288.
- Verbeke, W., & Vackier, I. (2005). Individual determinants of fish consumption: application of the theory of planned behaviour. *Appetite*, 44(1), 67–82.
- Verbeke, W., Vermeir, I., & Brunsø, K. (2007). Consumer evaluation of fish quality as basis for fish market segmentation. *Food quality and preference*, 18(4), 651–661.
- Vigneron, F., & Johnson, L. W. (1999). A review and a conceptual framework of prestige-seeking consumer behavior. *Academy of marketing science review*, 1, 1–15.
- Vigneron, F., & Johnson, L. W. (2004). Measuring perceptions of brand luxury. *The journal of brand management*, 11(6), 484–506.
- Wakefield, K. L., & Inman, J. J. (2003). Situational price sensitivity: the role of consumption occasion, social context and income. *Journal of retailing*, 79(4), 199–212.
- Wiedmann, K. P., Hennigs, N., & Siebels, A. (2007). Measuring consumers' luxury value perception: a cross-cultural framework. *Academy of marketing science review*, 7, 1–21
- Wiedmann, K. P., Hennigs, N., & Siebels, A. (2009). Value-based segmentation of luxury consumption behavior. *Psychology & marketing*, 26(7), 625–651.

- Woods, A. T., Poliakoff, E., Lloyd, D. M., Dijksterhuis, G. B., & Thomas, A. (2010). Flavor expectation: the effect of assuming homogeneity on drink perception. *Chemosensory perception*, 3(3–4), 174–181.
- Xie, C., Bagozzi, R. P., & Troye, S. V. (2008). Trying to prosume: toward a theory of consumers as co-creators of value. *Journal of the academy of marketing science*, 36(1), 109–122.
- Yi, Y. (1990). A critical review of consumer satisfaction. *Review of marketing*, 4(1), 68–123.
- Zaichkowsky, J.L. (1985). Measuring the involvement construct. *Journal of consumer research*, 12, 341–352.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of marketing*, 52(3), 2–22.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1993). The nature and determinants of customer expectations of service. *Journal of the academy of marketing science*, 21(1), 1–12.
- Zhang, T., Lusk, K., Miroso, M., & Oey, I. (2016). Understanding young immigrant Chinese consumers' freshness perceptions of orange juices: A study based on concept evaluation. *Food quality and preference*, 48, 156–165.