

FQD Consumer Science

Information about BSc & MSc thesis



You are welcome to join us!

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FQD Consumer Science

What does the world look like when consumer scientists are in charge? Then it all starts with the needs and wants of the consumer. Every consumer tries to maximise satisfaction with the products and services available to them in their context. For some consumers, their behaviour is based on health and sustainability; for others, their behaviour is based on convenience. Each consumer also has their ways of dealing with products, but these ways are often unconscious and habitual.

The consumer science team of the chair group Food Quality and Design (FQD) aims to study how consumer insights can be used in an integrative way to optimize product development, use and quality. Therefore, FQD focuses on the interaction between consumers and products with which the consumer gets in touch in a certain context.

The consumer science team of FQD is engaged in:

- Studying consumer needs and wishes
- Understanding the daily life context of the consumer to solve complex consumer issues
- Analysing the interrelationship between consumers and products to gain insight into consumption patterns and behaviours
- Translating consumer insights into guidelines for other stakeholders to enable optimisation of the consumer context and experience

There are all kinds of questions you can ask yourself when studying the consumer-product interaction. What is important to the consumer? Why does the consumer behave in a certain way? A lot is yet to be discovered, which is why FQD offers students a lot of opportunities to uncover the fascinating world of the consumer.

Why FQD?

Consumer centred

Your research always begins with a particular consumer-centred issue. What does the consumer find important, what are the mechanisms behind their needs and wishes? What does the consumer want? These are also relevant questions for businesses, so if you specialise in business (BSc) you are also welcome to write your thesis in our group.

Different products and cases

The research focuses mostly on food-related topics, but there are also plenty of possibilities for you to study any other type of product that consumers use.

Real scientific project

You approach this research empirically, and as a real scientific project. You don't just do a literature study, but you really develop a methodology (qualitative or quantitative) and will use it to collect data to address your issue in the research field.

Lots of possibilities

You can set your own direction and shape your own research. This may be in collaboration with other stakeholders, such as food technologists or companies.

Application procedure



Read the course guide

Read the course guide on Brightspace and read through this inspiration booklet



Mail the thesis coordinator

Send a motivation letter and planning to pieter.groen@wur.nl and your study advisor (CC) as soon as possible



Have an orientation talk

Chat with one of the team members about your interests and potential topics



Fill the contract

Fill in the thesis contract as document (BSc) or via Osiris (MSc)



Read information

Read the thesis information that is send by the FQD office

Team and topics



Bea Steenbekkers



Pieter Groen
(coordinator)



Esther Oldenhuis



Annelies Blok



Lotte Pater



Mariëlle de Vaal

Topics

Within FQD, you have a lot of freedom to come up with a topic of your own interest or liking. However, you can also connect to an already existing research of one of our team members. In the rest of the booklet, you'll find some inspiration and examples of thesis topics and projects in our four main research areas.



use

A consumer chooses a product with a certain goal. You may investigate whether that goal is an (un)conscious goal, and if and how that goal is eventually met



perception

How does the consumer perceive the quality of a product or service? Within this topic, you will be able to focus on different aspects that might influence the (quality) perception of consumers



requirements

By studying how the consumer perceives the usability of a product, you can find out which requirements are necessary. This can be used to improve the usability of a product or design a new product



wishes and needs

Consumers have latent wishes and needs. Within this topic, you might study wishes and needs of a product that is currently in the development phase or for a product that does not even exist yet

Use

A consumer uses a product with a certain goal. At Food Quality and Design (FQD), you may investigate whether that goal is an (un)conscious goal, as well as how that goal is eventually met. Which products will a consumer choose to meet this goal? How does the consumer store or prepare these products? Does this influence the goal? What could be done to improve the interaction between the consumer and the product, in order to increase the chances that a goal is met? These are all questions that fit the *use* topic within FQD.



Thesis topic examples

A choice to bake

Baking from scratch can be for some consumers a fun activity. On the other hand, ready-to-bake mixes offer consumers convenience. Why do consumers choose for either baking from scratch or baking with ready baking mixes? And how are the baking mixes used by consumers?

Biobased bags

We are supposed to separate our household waste. Different collection methods exist. For collecting green waste biobased bags are used. How satisfied are consumers with these bags? How are they used? What factors influence the way they are used? Are consumers satisfied?

A reusable future

Consumers use enormous amounts of plastic. To stop the waste of plastic single-use packaging, supermarkets are introducing new ways of buying groceries in reusable packages. What are drivers and barriers for consumers to use reusable packages for goods that can be bought in the supermarket?



Current research project

Plastic packaging for fruits and vegetables

Plastic packaging can extend the shelf life of fresh fruits and vegetables, especially in temperature-controlled environments such as during transport and in the supermarket. However, consumers store and handle fruits and vegetables in different ways, which may not always benefit the shelf life of these products. Storage location and temperature affect the quality of fresh fruits and vegetables, which could

shorten the shelf life and thereby ultimately lead to food waste. This project explores the different ways in which consumers store fresh fruits and vegetables in the domestic environment and their motives for this behaviour. Moreover, the project focuses on the effect of plastic packaging on consumers' storage practices of fresh fruit and vegetables, and how this influences their quality.





“In my opinion plastic packaging is never a good thing, because vegetables cannot breathe when they’re packaged in plastic”

There are several options for these topics in this project. One possibility is to focus on consumer behaviour in relation to storage of fresh fruit and vegetables by performing consumer research (for example using photo-diaries, interviews and questionnaires). Another option is to investigate the effect of packaging and storage conditions on the quality of fresh fruits and vegetables.

Quality perception

How does the consumer perceive the quality of a product or service? That is what this second topic is all about. Think of a bag of tea that says 'relaxing'. What does the consumer do with this tea? Does he drink it in the evening, or during breakfast? And does he indeed perceive the effects of this tea as relaxing? Why (not)? Within this topic, you will be able to focus on different aspects that might influence the (quality) perception of consumers. An additional angle could be how for example claims influence consumers' perception.



Thesis topic examples

Plant-based milk foam

Dairy alternatives are becoming more common to be used. A company developing automatic coffee machines is interested in consumer perception of cappuccino foam prepared with different types of milk alternatives. Which quality attributes are taken into account by consumers?

Convincing claims

Producers of products use different claims and labels to convince consumers of the quality of their products. How are different MSC fish sustainability labels understood, interpreted and assessed by consumers? How is this related to the actual fish consumption of consumers?

Intelligent shelf life communicators

Food waste in the household consumption context needs to be reduced. Implementing intelligent packaging could improve the indication of the shelf life and the quality and safety perception. Understanding of the impact of intelligent shelf life communicators on consumer perception of highly perishable food is therefore needed. What is the effect of current data labeling on consumers' perception of a product's quality and safety? Does this perception change with intelligent shelf life communicators on packaging? To what extent can shelf life communicators of intelligent packaging increase perceived suitability to consume a product?

Current research project

Children's perception of plant-based alternatives

The shift of consumption from animal- to plant-based food alternatives is one of the major food-related challenges in the coming decades, considering the negative impact of animal-based food production and consumption on the environment, animal welfare and human health. Families could play an important role in the mainstream acceptance and consumption of plant-based alternatives.

Food perceptions and preferences of children are of great influence on parents' food choice and children can have a promising influence on the consumption of plant-based alternatives of the whole family. Attempts to understand consumer acceptance and to direct consumers towards plant-based alternatives have higher potential when children are convinced to eat those alternatives.



Children have a pivotal role as actors of environmental change, starting at the dinner table. A deep understanding of children's perception of plant-based alternatives is needed to effectively transit from an animal- to a plant-based diet.

The project aims to:

understand children's perception of plant-based food alternatives and the influence of product-related and context-related factors on this perception

understand children's influence on plant-based food perception and choices within the household

develop an innovative qualitative mixed method design for investigating children's perception in a more accurate and valid way

Different traditional and novel qualitative research methods can be used, applied and evaluated to enhance the effectiveness of qualitative research in understanding children as a target group. Creating a deep understanding on children's perception of plant-based food alternatives enables the development of plant-based alternatives that better fit children's needs and wishes, for current and future plant-based food innovations.

Product requirements

Why are canned beans consumed less than beans sold in a glass jar? Or what causes a consumer to describe a certain burger as 'dry'? These are questions you might aim to answer when you study product requirements. Usability is a common aspect that is discussed within this topic. By studying how the consumer perceives the usability of a product, you can find out which requirements are necessary for the usability of a product to be improved or for a new product to be designed. A possibly interesting angle within this topic is to study the consumer in his own environment. This way you will be able to observe the consumer interacting with a product in his natural environment, which is probably closest to his true environment.



Thesis topic examples

Sustainable seaweed

Seaweed can be a sustainable product or ingredient. However, consumers often don't know how to use it. To understand how consumers can be helped to adopt such a new product, it is relevant to study what information about the product is lacking and how that should be used to inform consumers about the possibilities of a product.

Takeaway containers

WUR's caterer makes use of a system with takeaway containers for meals in their restaurants. Using the system requires users to install an app. How does the consumer make use of this system? How is the usability of this system perceived by the consumer? How could the system be improved in the future?

Carbon footprint labels

Currently, the food industry and production context plays a prominent role in climate changes. Therefore, it is important to study how the consumer could make a sustainable positive contribution to the food industry and how the food industry could help consumers to make more sustainable food choices. One of the possibilities could be carbon footprint labels or other sustainability labels. What should these labels look like? What is needed to make them usable for consumers?

Current research project

Hybrid meat; what should it look like?

Meat production is negatively linked to environmental problems, animal welfare, deforestation and depletion of natural resources amongst other, while on the other hand the overconsumption of meat is related to public health issues like cardiovascular diseases and colorectal cancer. To move consumers to a more plant-based diet, many meat substitutes are launched on the market, especially meat analogues

that mimic the appearance, taste and texture of animal meat. Although consumers show a general interest to consume alternative protein sources, research shows that the actual meat consumption per capita (NL) is still growing. Actual consumption of meat substitutes remains low, which suggests that the products that enter the market do not (yet) meet consumers' expectations or wishes.



A growing trend in both research and society is that of hybrid meat: a product consisting of both 'real' meat and more sustainable plant-based ingredients. With hybrid meat products one could aim to decrease consumers' meat consumption without cutting it completely from their meals. Such products might convince regular meat eaters to consume less meat.



Research on consumers' perception of hybrid meat products is still very limited. There are several aspects within this topic that could be interesting to study. For example regarding the composition of the product: what type of meat and plant-based ingredients should be included, and in what ratio? It might also be interesting to study how such products should fit in a consumers' diet, how it has to be named or categorized. This can all be done within this multi-disciplinary study.

Needs and wishes

Which new products and services could be made in order to fulfil the wishes and needs of the consumer to a greater extent? Within this topic, you might study a product that is currently in the development phase or a product that does not even exist yet. For example, what information does a consumer need in order to be willing to try a new product such as edible insects? This topic (just like the other topics) does not limit itself to food products but allows to focus on all kinds of consumer products and services! You can stand at the beginning of inventions! Think about for instance the consumer wish of being able to have an easy cup of coffee: researching this wish ultimately led to the invention of the Senseo coffee machine.



Thesis topic examples

Sustainable office products

The paper industry still has not managed to work in a sustainable way globally. The transition towards a more sustainable supply chain is needed to save more natural forests. One way to accomplish this is increasing sustainable paper-based office products and decreasing regular paper-based office products.

To increase the consumption of more sustainable paper-based office products it is important to know what drives or holds consumers in purchasing or using sustainable office products. Therefore, it is needed to find consumers' and business' needs and wishes towards purchasing and using sustainable office products.

Packaging free

Initiatives are taken towards packaging free shops or towards the introduction of reusable packaging. For these initiatives to be successful, it is necessary to understand how such an initiative would fit into the daily practices of consumers or how the initiative should be improved to get it accepted.



Current research project

Snackification: consumer and nutrition science

Consumers nowadays are increasingly moving towards a more flexible eating pattern, where they rely on the consumption of snacks at any time and any location to fulfil dietary needs, instead of a traditional format of three meals - breakfast, lunch and dinner - interspersed with snacks at predetermined times each day. This trend where snacking is becoming the new way of eating, is

known as Snackification, and has a substantial impact on consumers' lives and the snacking industry: it has not only been leading to an increase in the consumption of snacks, but it has also changed the definition of snacks and snacking, consumers' snacking needs and desires, and the competitive and nutritional snacking landscape.



