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Summary of Master thesis

Facteurs de transition vers une consommation alimentaire durable

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Factors of Moving Towards a Sustainable Consumption of Food

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1. Introduction

Sustainable food consumption is becoming an increasingly important topic for our society. Together with the increasing population, several issues have been put in place and among them is the importance of food consumption and how people can consume more sustainably without destroying the Earth.

Since the official definition of sustainable consumption in 1972, several initiatives, strategies and regulations have been put in place by organisations at the national and international level to reduce the human impact of sustainable consumption.

However, the factors that are influenced by political decisions are not the only factors influencing consumers in their choice of sustainable food consumption. When talking about factors influencing the consumer in sustainable consumption one should also mention economic factors (income), social factors (social status, social influence, social contagion), psychological factors (attitude, values, motivations), cultural factors (lifestyle, demographic aspects), environmental factors (environmental knowledge, environmental awareness, environmental concern) and many other factors such as health, food preferences or awareness.

The aim of this thesis is to find the factors influencing sustainable food consumption by combining the information presented in the theory, secondary data and survey data collected from Czech and Portuguese respondents. Then; to compare them with the data of consumers from other EU countries.

In this thesis, the theoretical part and the analysis of the secondary data are presented in the first chapters. Then the methodology is presented. After the results and the discussion of the evaluation, the conclusion concludes this thesis.

2. Sustainable consumption

2.1. Historical development and concept of sustainable consumption

As a result of the economic, technological development of human society, the population began to grow rapidly. This increase has been remarkable since the industrial revolution where "over the next two centuries, population increased about 10-fold" and was accelerated by "rapid accumulation of resources, environmental control and declining mortality, and peaked in the second half of the twentieth century" (Livi Bacci, 2017, p.26).

It is estimated that by 2050, the global population will increase to 9.7 billion people and its predictions also assume that by the end of the 21st century, the population should reach 10.9 billion (United Nations, 2019, p.5).

In order to be able to deal with the situation of population growth and its increasing needs, several issues began to emerge. Among these was the question of overpopulation, its consumption and the sustainability that followed. For in parallel with population growth, its needs increased significantly, including consumption of primary resources, energy consumption, food consumption. (Livi Bacci, 2017, pp. 22- 23).

The agendas of transnational organisations show us that they have understood the importance of all these problems, related to the overconsumption of our resources and their production. And following several published reports and strategies, such as the *Brundtland Report*, *Agenda 21* or the publication *Transforming our world: the 2030 Agenda for Sustainable Development*, these reports have defined strategies and a framework for sustainable consumption.

Nowadays, the focus on sustainable consumption is more important than before due to the radical change in our lives caused by the covid-19 pandemic because the population's attitudes have changed not only negatively, but also positively towards sustainable consumption habits.

The next months and years will show how human society is able to adapt and continue its path towards a more sustainable life, especially now after having gone through the health crisis and the next issues that will follow as the climate change issues and the economic crises.

2.2.Sustainable food consumption

As with sustainable consumption, the topic of food has been much discussed. As a result of population growth, which is explained in the previous section, one of the most cited issues is that of food security and how to consume more sustainably without destroying the Earth and its ecosystems (World Commission on Environment and Development, 1987, chap.5).

Since the 1960s, 'grain production has tripled, the use of fertilisers has increased ninefold, while the area of land under cultivation has not changed' (Livi Bacci, 2017, p.260).

Many barriers are still present in the way of sustainable food consumption, but despite this, several solutions can be put in place to move people towards sustainable food consumption. In the case of one third of food production that is wasted in the first phase of production "harvesting, processing and distribution" (United Nations Environment Programme, 2015, n.p).. In terms of food waste, the relationship between consumers and retailers needs to be improved. And to reduce the emissions caused by meat production, it is advisable to change eating habits towards healthier diets.

To achieve this change several diet alternatives can be proposed such as "Mediterranean, pesco-vegetarian and vegetarian diets" which considerably reduce the production of emissions but also have benefits for human health. And in the same way that dietary habits need to be changed, so too does the supply of more sustainable foods (UN System Standing Committee on Nutrition, 2017, p.12, 15).

3. European Union and sustainable food consumption

Since the CAP was established, much has changed in terms of production but also in terms of consumption. At the end of the 20th century the EU member states put more emphasis on the importance of sustainability and food security.

In 2001, the European Commission adopted the European Sustainable Development Strategy which was last renewed in 2016, had 10 objectives such as sustainable consumption and production, climate change and energy, natural resources, etc. In the Eurostat report published in 2013, which evaluates the development of this strategy. The report mentions in the section on sustainable consumption and production, the significant growth in the consumption of organic products in the EU which has since 2000 until 2018 tripled the number of organic cultivated areas across the EU (European Commission - Eurostat, 2014, p. 94; Le Douarin, 2020, p.8).

In 2019, the EU adopted the Green Pact for Europe which has among its objectives the reduction of greenhouse gas emissions by at least 55% by 2030 and making Europe the first climate neutral continent by 2050. Amongst the several objectives that allow this ambitious vision to be achieved, there are objectives related to agricultural production. These objectives highlight more environmentally friendly production, lower CO₂ emissions from food production and consumption, a more resilient food system and the overall transition to competitive sustainability (European Commission, 2019) and to achieve them, the farm-to-table strategy has been created.

The aim of the farm-to-table strategy is "to improve lifestyles, health and the environment" by innovating and improving the European food system (European Commission, 2020b, p. 2). In 2020, 27 legislative and non-legislative measures have been presented in order to achieve this vision. The adoption of this strategy is intended to be achieved in the period 2020 and 2024.

4. Factors influencing consumer choices towards sustainable consumption

4.1. Consumption value theory on sustainable food consumption

According to the article by Lee et al. (2015), the choices of consumers who consume sustainably in favour of the environment, their choices are influenced by several consumption values such as functional value, social value, epistemic value and emotional value (Lee et al., 2015, p. 598) and among these values we can also add conditional value which is not part of Lee et al.

In the case of organic foods, the functional value is determined by "quality, absence of toxic ingredients, sensory aspect, food safety, nutritional value, natural content, freshness,..." and among the other values it is one of the most important ones that influence consumer choices (Kushwah et al., 2019, p.6).

The consumer who makes his choices according to the social value theory, is influenced in his decisions by the personal experiences or social groups in which the consumer belongs, in his choices he is also directed by "recommendations, social approval, concern for reputation and personal identity" (Kushwah et al., 2019, p.6).

Then as the name of the emotional value indicates the consumer who makes decisions by applying this value, he or she decides based on his or her emotions. In the context of sustainable consumption, choices are made in relation to the emotions related to the environment and the impact of the products purchased and consumed (Roy, 2021, p.55).

The epistemic value is influenced by elements such as "nostalgia, popularity, knowledge and familiarity with organic food" (Kushwah et al., 2019, p.7).

And finally, the last of the consumption values, is the conditional value that is taken by consumers in particular situations where the consumer has to be exposed to several circumstances and is forced to make alternative choices. (Tanrikulu, 2021, p.1178).

4.2.Factors influencing sustainable food consumption

By combining the factors that influence consumer behaviour in sustainable consumption and in food consumption, the following determinants were grouped together to create the factors influencing sustainable food consumption. According to the studies of Mor & Sethia (2013), Ayoun & Ghallab (2017) and the dissertation of Lambert De Francesch (2021) these factors were determined.

Focusing on the factors that influence sustainable food consumption, several factors determine sustainable consumer behaviour. The factors can be divided into several categories containing different elements, such as economic factors (income), social factors (social status, social influence, social contagion), psychological factors (social status, social influence, social contagion), cultural factors (lifestyle, demographic aspects), environmental factors (environmental awareness, environmental consciousness, environmental concern) and many other factors such as health, food preferences or awareness.

5. Secondary data analysis

It is interesting to see the general perception of sustainable consumption among the population according to the research, the young population is more aware of environmental issues, women are more interested in "eco-responsible approaches" than men (Institut National de la Consommation & Zero Waste France, 2020, p.6).

When it comes to sustainable food consumption in the EU, according to the survey conducted by Kantar for the European Commission in 2020, European citizens (sample of 27237 respondents) put forward the following three attributes: taste (45%), food safety (42%) and cost (40%). Other attributes often mentioned were origin, minimal processing, ethical farming, etc. (p.5). Citizens also mention the perception of sustainable food "when it is nutritious and healthy (41%), has been produced with little or no pesticides (32%) and is affordable for all (29%)" and European consumers perceive the importance in local and short chains and in the low impact of food on the environment (p.5).

According to the survey, other very important points regarding sustainable food are the attribute of healthy food for human health (74%), support for the local economy (50%), control of food waste, fair support for employees in the food sectors (39%) and protection of the environment (37%) (Kantar - European Commission, 2020, p.5).

European consumers believe that the main role in creating "our sustainable food systems" is played by producers (65%), food manufacturers (58%), local governments (47%) and according to the research also play a fairly important role as well as consumers (43%) (Kantar - European Commission, 2020, p.6).

5.1. Main barriers to sustainable food consumption

According to the publication of Nicolau et al (2021) and the analysis of the European Consumers' Organisation (2020), the main barriers that prevent consumers from consuming food more sustainably are price in the sense of very expensive products, lack of information in the sense that consumers do not know exactly what information to consume food more sustainably. Moreover, despite the existence of more and more labels declaring products less dangerous for human health and the environment, consumers still have difficulties to orient themselves.

Another obstacle to consider is the low supply in the shops or the lack of time to consume more sustainably. Sometimes it is only personal resistance that prevents consumers from changing their eating habits, as for example in the case of people interviewed in Belgium, Lithuania, the Netherlands (Bureau Européen des Unions de Consommateurs, 2020, p.23).

During the COVID-19 pandemic, people who were influenced by the uncertainty of the situation bought in stock and according to the article by Li et al. (2021) "64% of consumers experienced product shortages..." and "50% of consumers stocked up on products to avoid shortages in the future during the COVID-19 outbreak" (p.2).

A large growth in online shopping has also been observed with 45% of European consumers buying more online than before the pandemic (Institut européen d'innovation et de technologie, 2021, p.7) and the development and modernisation of home shopping delivery services has increased significantly.

5.2.Improvements in sustainable food consumption habits

66.7% of the citizens surveyed agreed to change their eating habits in order to reduce their environmental impact. As a result, the majority of respondents are open to the following solutions such as increasing the consumption of fruit and vegetables in season (60%), reducing food waste (66%), a third of respondents would like to reduce their consumption of red meat (2020)

Despite the pandemic, people indicate that they are eating more healthily and that this criterion has become important in food choices. People are buying more locally than before the pandemic, buying products in bulk or in biodegradable or recyclable packaging, and people interviewed also indicated that they were reducing food waste (Institut européen d'innovation et de technologie, 2021,p.17,20,21).

6. Methodology research questions

6.1. Research questions

Based on the theoretical part and the secondary data, the research questions were created.

The first research question (RQ1) is based on the theoretical part that defines sustainable food consumption and tries to find out *How do consumers perceive sustainable consumption, and what are the most important common points for them when talking about sustainable food consumption?*

Several theories of consumption values as well as the factors that influence consumption play an important role in the consumer's decision to consume food sustainably. There are several consumption values such as functional value, social value, epistemic value, emotional value and conditional value. And the factors influencing sustainable food consumption are also quite varied, such as economic, socio-demographic, psychological, cultural, etc.

Based on these determinants, the second research question (RQ2) was created: *What criteria do consumers use to decide on sustainable food consumption and what are the most determining factors in their food consumption?*

In connection with the values and factors influencing sustainable food consumption, the research question (RQ3) analyses the potential barriers that may prevent people from consuming more sustainably: *What are the main barriers that prevent people from consuming food in a sustainable way?*

The final research question (RQ4): *What improvements in sustainable consumption habits can be observed among consumers?* looks for habits acquired by consumers towards improving their sustainable food consumption. From a general point of view and also related to the consequences of the COVID-19 pandemic.

6.2. Research methods and data evaluation

To find answers to the research questions, quantitative research was used by proposing a questionnaire, which is described in detail in the following sections.

6.3. Qualitative research

The questionnaires, the original in Czech and the translation into Portuguese were created via the Survio platform. Both versions are identical and the online translator DeepL was used for the Portuguese translation. In general, the questionnaires created on the Survio platform have a simple and modern design, they are easy to create and use by the creators and respondents

The questionnaires were sent out during the month of August. The respondents were told that the questionnaire would remain anonymous. The two versions of the questionnaire, in Czech and Portuguese, were distributed via the social network Facebook. The choice of this platform was made in order to find a panel of respondents allowing a more global view.

A total of 300 fully completed questionnaires were collected, 115 Portuguese and 185 Czech. A further 210 questionnaires were not fully completed and were not included in the study panel. The success rate for completing the questionnaire was 58.75%. 42.6% of respondents spent 3-5 minutes answering the questions. Depending on the number of respondents collected, the data collection can be considered relevant

Despite the fact that the Survio platform automatically creates graphs in the analysis part of the results, in order to be able to process all the data together, such as the Czech and Portuguese respondents, another technique for analysing the data had to be established. In order to process all the data together, Microsoft Excel was used to compare and analyse all the answers, to create the tables and graphs for the results section. For the open-ended questions, the often varied answers required the creation of categories

7. Results

7.1. Summary of the quantitative research results

According to the results, mainly young people and women are more sensitive to environmental issues than the part of the population that is represented by men.

Most respondents are familiar with the concept of sustainable food consumption. When talking about the food consumption of European citizens, they see the importance of healthy food; in supporting the local economy; in protecting the environment; in affordability; in sustainable food for all; in low or no use of pesticides.

If we look at the connection between the collected data and the value theories, most of the respondents' decisions are influenced by functional value. For according to several questions answered the important factors are taste, quality and ingredients which according to the research play a more important role among consumers.

The main barriers that prevent respondents from consuming more sustainably are the high price of food, the limited supply of sustainable food in the shops, the lack of awareness of how to find and choose sustainable food and the distance between producers and consumers. Other barriers are related to the lack of knowledge about the difference between the best before date and the minimum durability date.

Regarding the COVID-19 pandemic and its influence on consumer behaviour in sustainable food consumption, several changes in habits were observed. On the negative side, consumers had to change and adopt new habits in food shopping. The places where they did their shopping changed, they went more to hypermarkets, supermarkets and small shops than during the normal situation before and after the pandemic. Shopping in specialised grocery shops and markets has decreased, while online shopping has doubled.

However, several improvements in sustainable food consumption were also observed. Most respondents reduced their food waste, started growing their own fruit and vegetables, and bought and consumed local and seasonal food.

On a positive note, the pandemic has made respondents more aware of the importance of reducing their environmental impact and adopting a sustainable food approach. Many indicated that they have adopted these habits to reduce their environmental impact, such

as limiting and sorting packaging more carefully, building a compost bin, and raising chickens.

Several respondents to the survey indicated that they are more careful about what they eat, some have created their own fruit and vegetable gardens, some have prepared their own food stock to be more self-sufficient or some have limited their visits to large shops and have started to consume more locally from small producers

8. Conclusion

The aim of this thesis was to determine the factors that influence consumers in their sustainable food consumption choices. According to the theoretical part; several factors can be defined. Such as factors related to political decisions in the international and European context, and other factors such as economic, social, psychological, cultural, environmental, etc.

According to the theory and the results of the survey, it is interesting to look at the commitment of some people in the process of improving sustainable food consumption. Several respondents mentioned positive changes in habits during the COVID-19 period. According to the research cited in this brief, it seems that these changes will continue to increase.

Regarding the current food consumption situation, there are several improvements that can be made. It seems that people are not sufficiently informed about what exactly sustainable food consumption is, even if they apply sustainable food habits in their daily lives, e.g. eating local and seasonal food, reducing waste or growing their own food.

About the improvement of the situation, several actions can be done. It seems that people should be more aware of the importance of sustainable food and its implication in their daily lives.

This research can enrich knowledge on the subject of sustainable food consumption and the factors that influence it, but also it can contribute to the development of research on the subject especially in relation to the COVID-19 pandemic and its influence on eating habits and behaviour.

Resources

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