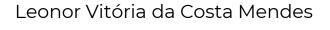


DE LISBOA

The art of grocery shopping: a consumption and shopping behaviours' study in the era of covid-19



Master in, Marketing

Supervisor:

Dr. Pedro Esteves, Department of Marketing, Operation and Management, ISCTE-IUL Business School

October 2022



SCHOOL

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If I were the star of my own coming out of age movie this would be the moment where I, alongside my family and friends, would all be crying to a very sad, but inspirational song. Another chapter ends.

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Also, I would like to acknowledge all the participants that took their time to be a part of this thesis research.

The song has reached its pick and the words "THE END" are written on the screen.

Abstract

Fast Moving Consumer Goods (FMCG) are products that are a part of everyday lives of

all human beings. Because these products are bought and used regularly and, on a loop,

they are indeed a matter of several studies. This is one of them.

This dissertation explores the shopping, consumption, and post purchase

behaviours of individuals regarding culinary broths. More than that, this study was

conducted during the covid-19 era in order to determine a change of habits.

Resorting to an In Situ methodology, the data was collected. This approach

represents a transparent and closer to reality way of gathering individuals' opinions on a

specific topic when compared to in-depth interviews.

The results provide valuable insights for FMCG retailers when selling their

products in a world that still coexists with covid-19.

Keywords: Consumer Behaviour; Fast Moving Consumer Goods (FMCG); Covid-19

JEL: M31, M39

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Resumo

Fast Moving Consumer Goods (FMCG) são produtos que fazem parte da vida

quotidiana de todos os seres humanos. Uma vez que, estes produtos são comprados e

utilizados regularmente e, em *loop*, são de facto um tópico de vários estudos. Este é um

deles.

Esta dissertação explora os comportamentos de compra, consumo e pós-compra

dos indivíduos relativamente aos caldos culinários. Mais do que isso, este estudo foi

realizado durante a era covid-19 com o objetivo de estudar uma possível mudança nos

hábitos dos consumidores.

Os dados foram recolhidos recorrendo a uma metodologia In Situ. Quando

comparada com as entrevistas tradicionais, esta abordagem representa uma forma mais

transparente e próxima da realidade de recolher as opiniões dos indivíduos sobre um tema

específico.

Os resultados obtidos proporcionam conhecimentos importantes aos retalhistas de

FMCG, especialmente porque ainda têm que comercializar os seus produtos num mundo

em que existe covid-19.

Keywords: Consumer Behaviour; Fast Moving Consumer Goods (FMCG); Covid-19

JEL: M31, M39

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1. Introduction

On the 31st of December 2019, Wuhan Municipal Health Commission, China, reported a group of pneumonia cases that soon became the first cases of what the world knows today as covid-19. It wasn't long until the World Health Organization (WHO) declared covid-19 as a pandemic on the 11th of March 2020.

Covid-19 came to change the way of living of millions of people in the entire world. In Portugal, the employed population diminished 2.1%, the Gross Domestic Product (GDP) contracted 8.4% in volume and the number of deaths rose 21.9% (Instituto Nacional de Estatística). All these factors impacted not only the way people think and interact with each other, but also the way people buy. Even transformed the normal everyday chores such as grocery shopping.

Some individuals saw themselves obligated to cut down expenses and be more rigours with their grocery shopping. Others stopped feeling comfortable going to supermarkets and started to grocery shopping online. Apart from this, the internet was filled with new hobbies such as cooking, and a lot of people began to cook new recipes. The question is: what are the current shopping and consumption behaviours of Portuguese residents and how were they affected by covid-19?

It has been estimated that almost one-third of consumers spent more on grocery products (Everett, 2020), during Covid pandemic. Not only people grocery shopped in larger quantities because they spent more time at home, but also because they were afraid. "The pandemic has been affecting the entire food system and has laid bare its fragility. Border closures, trade restrictions and confinement measures have been preventing farmers from accessing markets, thus disrupting domestic and international food supply chains and reducing access to healthy, safe and diverse diets" (World Health Organization, 2020).

The aim of this dissertation is to identify consumption and shopping behaviours of Portuguese citizens and to understand the main changes in these behaviours during the covid-19 pandemic, with a special focus on the lockdown period. Nevertheless, more than understanding what changed, this research intends to figure out what behaviours will be preserved by Portuguese consumers after the global pandemic.

2. Literature Review

2.1. Consumer Behavior Models

Several different factors can affect a consumer decision whether to buy or not to buy a certain product/service. Even if at first it seems like an easy decision, every decision can be influenced. Solomon, M.R., Bamossy, G.J., Askegaard, S., and Hogg, M.K. (2016) preserve that these factors affect different parts of the shopping experience: antecedent states, purchase environment and post-purchase activities.

Antecedent states factors like moods and emotions, situational, temporal and shopping orientation can play a powerful part in consumers' selections. For example, consumers' mood can transform abruptly during the day and the goal is to make consumers happy in the moment of purchase. If consumers are happy and satisfied, they are more willing to engage with a brand and a purchase. (Solomon, M.R., Bamossy, G.J., Askegaard, S., & Hogg, M.K. 2016).

Nowadays shopping is about having an experience, retailers must offer something that distinguish them either it is excitement and fun or good discounts. The purchase environment is so crucial for customers' engagement that the shopping experience has been compared to the theatre, where the salespeople are the actors, the store environment is the set and the store displays are the props. The environment and atmosphere of the store focus on smell, music, design, temperature and a lot more features. (Solomon, M.R., Bamossy, G.J., Askegaard, S., & Hogg, M.K. 2016).

Another factor to consider, is that currently there are several ways for a person to dispose their items. The present society is more concern with the environment and so people are more conscious in the way they dispose their products. The trend of Recycling and Lateral Cycling (occurs when we buy, sell or barter second-hand objects) is growing as consumers' environmental awareness also grows (Solomon, M.R., Bamossy, G.J., Askegaard, S., & Hogg, M.K. 2016).

Antecedent States Purchase Environment Product Disposal • Shopping experience Social and physical surrounding Moods and emotions • Trends in purchase Situational factors • Disposal options environment • Temporal Factors Lateral cycling · Ecommerce: clicks and • Shopping orientation bricks Servicescapes • Instore decision-making • Sales interactions/sales person(s)

Figure 1: Issues related to purchase and post-purchase activities

Source: Consumer Behavior, 12th edition by Michael Solomon, published by Pearson Education Inc. © 2016

2.2 Consumer Behaviour facing the shelf FMCG

Several different factors can affect a consumer decision whether to buy or not to buy a certain product. A lot of purchase decisions happen when consumers are actually inside the store and facing the shelfs. In-store factors such as price, the number of facings and their organization in the shelf, can influence consumers' attention (Janiszewski, 1998; Lohse, 1997), impact the brand sales (Drèze, Hoch & Purk, 1994) and evaluation (Chandon et al., 2009). Consequently, retailers are more concern with the amount and the display of information they have in their stores.

When it comes to the organization of the shelf, there are two main displays: vertical (from top to bottom) and horizontal (left to right). A study developed by Chandon et al. (2009) concluded that placing a product in higher positions (vertical display) have a stronger effect on visual attention, than placing products by a horizontal display. Maybe an explanation for this result is that, when inside a store, consumers tend to move their head upwards in order to search for products they intend to buy, either if it is a premium product or a budget product (Otterbring, Wästlund & Shams 2019).

Another factor that influences the consumers' visual attention when shopping is the number of facings. Studies developed by Chandon et al. (2009), Campo and Gijsbrechts (2005) and Gidlof et al. (2017) all achieved the same result: the larger the number of facings the strongest the impact on consumers' visual attention. This can lead to a higher probability of consumers buying a certain product.

The racks' orientation also plays a role in consumers' attention and decisions. Shopping is dependent on the visuals and retailers must offer something that distinguish them and create environments that stimulate people. To do so, it is important to understand how to maximize the visibility of products according to the customers' needs and facilitate the search process for consumers since the products that can't be seen by consumers, are less likely to be bought (Mowrey, Parikh & Gue, 2019).

2.3. Influence of promotions in the purchase of FMCG

Sales promotions is a technique constantly used by marketers that allows them to create temporary stimulus on a brand' sales. By resorting to sales promotions, brands can generate an interest in consumers that can be converted into purchases and, possibly, increase the brand' sales.

According to Henderson (1987), Blattberg and Neslin (1990), Schneider and Currim (1991) there are different types of sales promotions (e.g., discount coupons, price discounts, free samples, saver pack offer, free gift offer, contests, free extra quantity offer etc) which trigger different promotional responses and, also, different buying responses.

Nathwani (2017), discovered that, in the Indian market, price discount is the most influential and preferred tool and it is the one that attracts more consumers. Due to the study limited sample, this result cannot be generalized to other markets and cultures. However, it shows precisely that, different consumers have different preferences and different responses to sales promotions. According to Goyal (2019), there is a constant change in preferences of consumers and their behaviour responses vary across the product categories and product price.

Price promotions may undermine future choice by lowering consumer's perceptions of brand quality (Dodson, Tybout, & Sternthal, 1978) by training consumers to wait for promotions (Mela, Jedidi, & Bowman, 1998), or by lowering consumers' price

expectations for the brand (Monroe, 1971). Therefore, in order to take the most out of this technique, managers should make decisions related to promotion depth and how to frame the discount (Della Bitta, Monroe, & McGinnis. 1981).

Sales promotions may have an impact that extends beyond the time they are offered (DelVecchio, Henard, & Freling, 2006), resulting in a post-promotion effect. For example, if a consumer buys a certain product for the first time only because it is in promotion, he/she can become loyal to that product and brand. Nevertheless, Blattberg and Neslin (1989) states that there are mechanisms associated with positive post-promotion effect and negative effect that may operate simultaneously.

According to DelVecchio et al. (2006), there are two factors that can affect post-promotion brand preference: promotion (post-promotion preference is higher when the discount is a coupon and when there is a premium offer) and product characteristics (promotions have a more positive effect on brand preferences when competing against a larger set of products).

On top of that, sales promotions can also impact the consumer choices and preferences in out-of-stock situations (Diels, Wiebach, Hildebrandt, 2013). Customers may exhibit substitution patterns that correspond to a reversed similarity effect in the case of out-of-stock situations with non-dominating choice options and without promotion, in which case they primarily select substitutes that resemble the previously selected preference product on the considered attributes. (Diels et al., 2013). However, when it comes to high involvement products, consumers usually switch to a similar substitute regardless of whether the initially preferred out-of-stock item is announced to be on promotion or not (Diels et al., 2013).

2.4. Motivations and ways of shopping online from consumers perspective

As the years go by and technology develops, new shopping methods are emerging, such as online shopping. "Online purchase intention refers to the strength of the consumer 's plan to carry out a particular purchasing behaviour over the Internet" (Salisbury, Pearson, Pearson, and Miller, 2001).

Online shopping has been around for a while now and it has evolved to the point of consumers making a purchase in a matter of minutes or even seconds. Shopping online although it is a quick and simple way to make purchases, users are frequently reluctant to share credit card numbers or other sensitive information online. (John Horrigan, 2008).

Younger generations like Gen Z and the Millennials are usually early adopters when it comes to new technologies. However older generations tend to be more sceptic and suspicious once that it is not possible to try, feel, and touch the products before the purchase (North et al., 2003). The innovation of online shopping has generated uncertainty (Grabner-Kraeuter, 2002), increases in perceived risk (Miyazaki & Fernandez, 2001), scepticism, and distrust (Grabner-Kräuter & Kaluscha, 2003).

Frank, D.A., & Peschel, A.O., (2020) analysed the beliefs of online consumers about the importance of the characteristics of buying groceries online and resulted in 3 different segments:

Table 1 - Segments of online consumers

"Price-oriented" Customers	they reveal the highest values in price, product assortment, correct and fast delivery of the ordered goods
"Time Optimizers"	they reveal the highest values in time saving and independence of opening hours, scores second highest in price and lowest in choice of best before date
"Cautious" Customers	they reveal the highest values in personal service, the trust mark score of the retailer and the retail chain brand

Source: Own Elaboration based on Frank, D.A., & Peschel, A.O. (2020) Sweetening the Deal: The Ingredients that Drive Consumer Adoption of Online Grocery Shopping

According to most studies, convenience and time saving are the biggest motivators of online shopping, and the main obstacle is the perceived risk (Blitstein, Frentz, & Pitts, 2020; Handayani, Nurahmawati, Pinem, & Azzahro, 2020; Harris, Dall'Olmo Riley, Riley, & Hand, 2017; Mortimer, Hasan, Andrews, & Martin, 2016; Robinson, Dall'Olmo Riley, Rettie, & Rolls-Willson, 2007). However, consumers with time and physical restrictions are the most likely to start shopping online, since for them the risk is less of a concern (Morganosky & Cude, 2000; Elms, de Kervenoael, and Hallsworth, 2016; Hand et al., 2009).

Factors like the price, ease of use, usefulness and the online experience are some of the several factors that can influence online grocery shopping. Price is the main reason for consumers to buy (Kotler & Keller, 2006) and is the most effective way to stimulate consumers who are price sensitive (Brassington & Pettitt, 2006). For consumers, online consumption means a way to get good discounts and promotions (Yang and Mao, 2014).

A study developed by Blitstein, J.L., Frentz, F., & Pitts, S.B.J. (2020), in Germany and in the US, investigated the motivations of those who buy groceries online. The authors discovered that the motive most cited by respondents was "economy", meaning the consumers' belief that online food shopping offers a benefit in terms of cost and efficiency.

End of use is one of the most crucial factors when we talk about online shopping. It can be defined as "the degree to which an individual believes in using a particular system would be free of effort" (Davis, 1989). If consumers are not able to use a website than they are not able to complete a purchase. Consumers desire a simple system, one that is user-friendly, (Jaaf, and Ong, 2009), and doesn't require much effort (Teo, 2001).

In order to create a pleasant and easy online experience it is fundamental to pay attention to characteristics like: website design, visual appeal, hyperlinks, product assortment, information, security, and after sale services (Erdem et al.). As already mentioned, time-saving is one of the major reasons to grocery shop online and customers do not spend a lot of time viewing multiple pages by category. Therefore, it is understandable that the products on the first page generate more purchases and the number of pages viewed is small (Breugelmans et al., 2006).

2.5. Sustainability and Environmental Concerns

In 2015 all countries of the United Nations adopted the 17 Sustainable Development Goals (SDGs) with the aim of ensure that all humans can enjoy peace and prosperity by 2030 (United Nations 2020). Consumers are more aware of environmental and social issues. Therefore, in the marketplace, consumers worry deeply about companies behaving unethically by overpricing their products, selling defective products, privacy violations, and deceptive advertising (Pride and Ferrell, 2017).

Sustainability has been playing a major role in consumers' decisions when buying everyday products. The three dimensions of sustainability are economic, social and environmental. The economic dimension focuses on promoting the economic welfare of the society (Sheth et al. 2011), the social dimension represents social and cultural systems (Hediger 2000), and the environmental objective (Nath 2008).

However, Daniel Hanss and Gisela Böhm (2012) support that sustainability has not only 3, but 5 dimensions (environmental, economic, social, temporal and developmental). Actually, a main finding from Hanss and Böhm (2012) study is that most consumers are aware of all five dimensions of sustainability.

Dimensions of Sustainability Authors Hanss & Böhm (2012) Sheth (2011) 3 dimensions 5 dimensions Represents social and Social Social **Environmental Economic** cultural systems Refers to the protection Evaluates the of the natural **Environmental** Developemntal environmentally friendly environment and life technological advances support systems Focuses on promoting Takes into consideration **Economic Temporal** the economic welfare of the needs of future the society generations

Figure 2 - Dimensions of Sustainability According to Different Authors

Source: Own Elaboration based on Hanss, D., & Böhm, G. (2012) and Sheth et al. 2011

When it comes to everyday products, consumers resort to simple heuristics in order to help them decide making the smallest effort possible (Payne, Bettman, & Johnson, 1990). These simplifying heuristics can be choosing the product with the lowest price, or a product from a trusted brand or even just repeat a previous pleasant choice. For consumers with high environmental concerns a simplifying heuristic can be, for example, choosing the most eco-friendly product available.

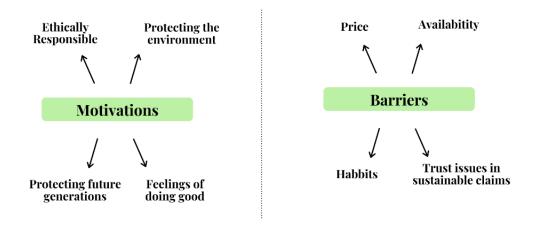
It has been shown in literature that, consumers tend to prefer products with green claims over those who have not (Hartmann and Apaolaza-Ibáñez, 2009; Hartmann et al., 2005; Matthes et al., 2014). More specifically, Ewa Jerzyk (2016), found out that for young consumers (17-30 years old; from France and Poland) the most important aspect of sustainable packaging is the credibility of the messages displayed on the packaging.

It may not come as a surprise that younger generations are even more active regarding environmental issues. These generations (millennials and gen-z) "characteristically, are very sensitive to social values and worries about the sustainability of the environment" (Ivanova et al., 2019; Valentine and Powers, 2013). This environmental awareness is also making customers to switch from regular products to environmental conscious products, such as organics (Mostafa, 2007; Ottman, Stafford, & Hartman, 2006).

However, expressing environmental concerns can be a very complex task for businesses. Consumers often feel misled by environmental claims, since they think companies only do it because sustainability has been a "trendy topic" and it is a way of increasing sales. Therefore, brands must have a very well-structured strategy on how to communicate sustainable concerns.

Figure 3 - Motivations and Barriers to Purchase Sustainable Products

Motivations and Barriers to Purchase Sustainable Products



Source: Own Elaboration

2.6. Covid-19 Impact

Covid-19 imposed a new lifestyle for everyone. The pandemic changed the way people interact, work, shop and think. Both consumers and brands have been making efforts to adapt to this new reality.

Online grocery shopping increased during lockdown once consumers felt safer shopping online from their own homes. In fact, supermarkets have adapted according to the needs of customers and this change in behaviour (PwC, 2020). In Portugal, the demand for home delivery services was so high that big retailers, such as Continente and Pingo Doce, had some difficulties answering all the requests for this type of service during the first lockdown, because they didn't expect such a high demand (Nunes, 2021).

Additionally, spending the entire day at home awoke a desire in individuals to try new things: hobbies, workouts, cooking recipes, new diets such as vegetarian or vegan etc. However, people are eager to come back to their normal lives and the acceleration of the vaccination process is giving them hope. With this in mind, are consumers going to continue to shop online or are they going back to the physical stores? Are consumers going to maintain their new cooking and diet habits or not?

It is fundamental for brands and companies to understand what changes came to stay, and what is going to return to the old pre-covid reality. Only then businesses can respond properly to the needs of its consumers.

3. Objectives and Methodology

The main objective of this research is to try to identify shopping, consumption and information sharing behaviours. As well as understand how covid-19 affected and changed present and future behaviours. In order to explore these objectives, a qualitative approach was followed resorting to an *In Situ* method. "*In Situ therefore refers to information from customers/users that originate from a real-life, value co-creation situation; the information is thus created and documented in the use situation as or just after it occurs*" (Edvardsson, B. Kristensson, P., Magnusson, P., & Sundström, E., 2012).

An *In Situ* method allows researchers to live briefly in the consumers' real-life environment. Every human feels safer and more relaxed when they are in their own space. Therefore, just like football teams feel better when they play at their own stadium, consumers also feel the same. The *In Situ* method allows consumers to be calmer when being questioned about something and consequently consumers' answers will be more honest and accurate. These are clear advantages over other methods, such as focus groups or in-depth interviews, that do not provide the same level of comfort to consumers.

3.1. Data Collection

The collection of primary data was a collaborative process between 6 master students. The collection data process was based on these students having dinner at a home of a Portuguese family, previously chosen for the study. Each student, also developing their master thesis, had a different specific topic on which they wanted information. However, in order to help each other, every student collected information not only for themselves, but also for the remaining students.

The data collection process was divided in two main moments: first dinner and second dinner. Both dinners were voice recorded with the family's permission. In total 52 families participated on this process and every family was rewarded with a voucher for grocery shopping at their favourite supermarket.

At the first dinner, the purpose of the interviewer (student) was to conduct and guide a non-directive interview based on a script previously designed. Students had to lead the interview taking into consideration the natural flow of the conversation and always making sure families would not feel pressured to answer the questions. Meanwhile, students would go home and transcript the interview in order to understand the topics that had not been covered on the first dinner. Subsequently, during the course of the second dinner, the interviewer would try to collect the information that was left and/or confirm the family's opinion on a certain subject in case of existing doubts. In the end, students would transcript the second dinner complementing the data they already had gathered from the first dinner.

3.2. Sampling

Regarding the target for the *In Situ* process there were four main concerns on the characterization of the families: location, type of family, shopping insignia and social class. The aim was to get the most diverse sample possible. The collaborative process allowed precisely this to happen. Between the 6 students a convenience sample was obtained. Without a doubt, this was another advantage of the alliance, once that each student had contacts in different parts of the country facilitating the procedure.

Table 2 - Sample Characterization

	Sample Characterization											
Lo	cation	Alentejo	Algarve	Central Coast	Covilhã	Lisbon	Porto					
	pe of mily	Couple & Children	Couple & No Children	Other People	Single Parent							
	opping signia	Auchan	Continente	Intermarché	Lidl	Mini Preço	Pingo Doce	Proximity	Other			
Soc	cial Class	Medium- high	Medium	Medium-low								

Source: Own Elaboration

3.3. Script Design

The script design was based on the Purchase and Postpurchase model of Solomon, M.R., Bamossy, G.J., Askegaard, S., and Hogg, M.K. (2016). Consumers often struggle with making a choice and especially when it comes to fast moving consumer goods (FMCG), most of the times, consumers do not even know why they made a certain choice. As mentioned on the literature review, this model is dived in three categories: antecedents states, purchase environment and post-purchase processes. With this in mind, the script was also split into three main parts: antecedents and shopping behaviours, consumption behaviours and post-purchase behaviours.

Firstly, to understand shopping behaviours were asked questions about the shopping frequency of the product, motivations to buy the product, brands usually bought by the families and others.

Secondly, regarding the consumption behaviours questions like "What are the moments of consumption?", "Everyone in the family consumes the product?" and "What are the levels of stock of the product?" were included on the script.

Thirdly, consumers were questioned about experiences they or their friends might have had regarding the purchase and/or the consumption of the product.

Another important part of the script is the demographic and more general questions. Before anything else, it was very important to learn some specifics characteristics about the family, for example, what they did for a living, how the covid-19 pandemic affected their life as a family, how they feel about recycling and sustainability and other significant complementary questions.

3.4 Data Treatment

The collected data needed to be materialized from a voice recorded dinner file into a written file. After each dinner, in a period no longer than 72 hours, the data would be organized in a Word document forming answers to the previously established scripted questions.

Some questions were selected to be analysed using a specific program: SPSS Modeler. This software allows to run and study quantitative data through data mining tools. Therefore, in two cases (Figure 4 and Figure 9) the answers gathered for these two questions were transferred to two excel sheets and afterwards imported to SPSS Modeler. When incorporating the data on excel, it was important to make sure each line of the sheet represented the answer of only one family.

Also, in order to have a more quantitative global picture, the 28 broths consumer families' conversations were passed to three excel sheets (shopping behaviours, consumption behaviours, post-purchase behaviours). This process was done through a binary numbering system to facilitate the execution of summations and subsequently graphics.

4. Data Analysis and Results

4.1 Demographics

In total, 52 families all across Portugal were interviewed. Of these 52 families, 28 families consume broths and 24 families do not consume broths. On average the families were composed by 3 members and the average age of the interviewed individuals is 35. None of the non-consumer families had in their composition an individual with more than 65 years old. Most of the interviewed families reside in Lisbon, shop at Continente and claim having concerns towards the environment.

Table 3 - Social Class

Social Class								
M-Low Medium M-High Total								
Consumers	9	14	5	28				
Non-Consumers	4	13	7	24				
Total	13	27	12	52				

Source: Own Elaboration

Table 4 - Type of Family

Type of Family									
No Children Children Single Parent Other People Total									
Consumers	4	11	7	6	28				
Non-Consumers	5	16	3	0	24				
Total	9	27	10	6	52				

Source: Own Elaboration

Table 5- Preferred Shopping Insignia

Shopping Insignia									
	Continente Pingo Doce Intermarché Auchan Lidl Mini Preço Other Proximity Total								
Consumers	10	7	0	1	5	1	2	2	28
Non-Consumers	11	7	1	0	4	0	1	0	24
Total	21	14	1	1	9	1	3	2	52

Source: Own Elaboration

Table 6 - Family Residential Location

Location									
Porto North Interior Central Coast Lisbon Alentejo Algarve						Total			
Consumers	5	2	0	13	6	2	28		
Non-Consumers	3	2	8	5	5	1	24		
Total	8	4	8	18	11	3	52		

Source: Own Elaboration

Table 7 - Environmental Habits

Environm	iental I	Habits	3
	Yes	No	Total
Consumers	18	10	28
Non-Consumers	19	2	21
Total	37	12	49

Source: Own Elaboration

4.2 Non-Consumers

IBM SPSS Modeler allowed to find some of the reasons why participants do not consume broths. Most explanations are related to health and the composition of the product itself.

Expressions such as "miscellany", "mixed product" and "colouring and preservatives" were used to justify the non-consumption of broths.

These participants are all extremely concerned with their health. Not only are they careful about what they put into their bodies, but also try to maintain an active lifestyle through sports, food, and mental health.

Figure 4 - Reasons for non-consumption

C.	NON_CONSUMPTION (6)	🖰 Categories 🔽
15	Porque é muita concentração de sal. Es a tentar ser o mais saudáveis possíveis e esses caldos	
13	Já há muitos anos que não uso, acho qu aquilo é uma miscelândia. Acho que é uma bomba	
12	Acha que aquilo tem um monte de porcarias	Negative Characteristics
8	Não usamos, é só <mark>químicos</mark> e conseguir esses sabores com condimentos por isso preferimos fazer nós, senão a comida sabe sempre ao mesmo. E acho q tem muito <mark>sal</mark> , mais de metade é <mark>sal</mark>	Characteristics
5 2	É muito <mark>produto misturado</mark>	Negative Characteristics
6 1	Porque tem coisas que não são clean, to corantes, conservantes	em Negative Characteristics

Source: Extraction from SPSS Modeler

4.3 Environmental Concerns

A significant part of the sample has concerns towards the environment. In fact, only 12 out of the 52 families claim not having in their daily routine environmental practices. Taking a closer look into these participants, it becomes clear that are two main reasons for not carry sustainable practices, specially recycling.

Firstly, some households find it difficult to recycle when there are no eco-points near their residency area. "There are no bins nearby. I have to walk one and a half blocks to take out the rubbish" (Woman, 45 years, employee at a beer company, Leça); "We don't recycle, because there are no recycling points here in the area" (Man, 24 years, church assistant, Loures).

Secondly, there are participants that explain their reason for not enduring recycling practices is a consequence of the taxes they already pay for the matter. This specific point of view comes from older generations such as baby boomers and gen x. "As I already pay for recycling, waste separation and other taxes, I do not recycle" (Woman, 49 years, saleswoman, Matosinhos); "My friends get really angry about this topic of separating the trash. They say they already pay enough taxes and now they also want to give us the extra work of sorting out the trash" (Woman, 62 years, saleswoman, Porto).

On the other hand, even the households that in fact are involved with sustainable practices have different point of views on the matter. However, there is one common aspect: they all recycle "We recycle plastic and glass. Now it's even more convenient because we have the recycling bins in front of us" (Woman, 51 years, local accommodation entrepreneur, Alentejo); "I think recycling is something everyone should be doing by now" (Man, 55 years, retired, Alentejo).

Despite recycling, some households do not engage with eco-friendly packing, mainly due to the high prices associated with it. "It is not a priority, because our budget ends up being restricted" (Woman, 41 years, professor, Maia); "I think it's wonderful, but they should make it affordable. Portuguese can't afford green products which are much more expensive" (Woman, 48 years, broker, Algarve).

Nevertheless, are several the participants who would buy more eco products if they had the financial capacity "It depends a lot on the price. I prefer if it is recyclable, if it is paper and not plastic, but if it is not affordable, I choose the cheapest" (Woman, 22 years, waitress, Loures).

In addition, there are families intensely involved with sustainable practices. These participants do not mind paying an extra price for eco products "I don't mind paying a little more to buy a product that is environmentally friendly" (Woman, 41 years, media analyst, Lisbon).

These households go further and end up engaging with more high-maintenance environmental practices for instance composting and bulk products "Now we have started to adopt cloth bags and we recycle and compost. We have a compost bin, and we use the composted to put it in flowerbeds" (Man, 44 years, professor, Oeiras); "Whenever products are available in bulk, we buy more in bulk than when they come in those styrofoam containers. If we're buying few things, we don't put them in a plastic bag. It bothers us, and it's a problem here at home, that yoghurts come packed in cardboard, milk the same thing" (Woman, 50 years, civil engineer, Loures).

Finally, one household really highlighted the problem regarding misinformation towards environmental issues and its consequences "There should be a more pedagogical attitude because at the moment there are a lot of people who don't know how to sort. For example, people stick their pizza boxes on cardboard and that's something you can't do because everything that's dirty can't be recycled" (Woman, 52 years, professor, Estoril); "It's not entirely clear what return we get from recycling. Because we've all heard stories that one person recycles, but then we get to the landfills, and it all goes to the same place. And that's complicated because it doesn't motivate people" (Man, 52 years, managing partner of a consulting company, Estoril).

4.4 Covid-19 Impacts on Daily Life

One of the most referenced changes was, of course, social distancing. When covid-19 began to spread to a wider level, social distancing became the main countermeasure. This phenomenon affected the way people relate to each other. "I am a very affectionate person and with the lockdown people have become colder and there is a lack of humanity among people" (Woman, 18 years, student, Algés); "A lot has been lost in social terms. I can say that I live badly with this situation. Not being at ease with other people, not greeting people, it has made a difference" (Man, 53 years, manager, Entroncamento).

Working from home or having online classes also became a new reality. The majority of the interviewees worked from home, if not completely at least partially. This brought new challenges on how to balance work and family specially with younger children. However, a fraction of these families has a very specific life situation, such as owning an accommodation business, drivers, or public services. Therefore, these individuals felt less the social distancing problematic. "Here we did not feel many differences. The lodgings closed in that most critical period when there was lockdown, and we were not accepting anyone. But then we had the activity of going to the field to pick pinecones and we only came back at night. So, we didn't feel much difference" (Woman, 51 years, local accommodation entrepreneur, Alentejo).

A greater number of families also affirmed resorting more often to takeaway solutions and home delivery solutions (uber eats, glovo, bolt food). This behaviour was a consequence of people getting tired of cooking constantly, or running out of creativity to cook new dishes, or even a way of replacing going out to dinner. "We already ordered, but now we order so much more" (Woman, 45 years, employee at a beer company, Leça); "It's also about laziness. Emotionally the pandemic has destroyed everyone and sometimes the night comes and we're tired so I don't go to the kitchen, I just order Uber Eats" (Woman, 24 years, university student, Lisbon); "Maybe ordering has become the new going out for dinner" (Man, 31 years, manager, Porto).

In the same way, new shopping behaviours emerged, namely online shopping not only for clothes, books, or other necessities, but also a lot of households started to grocery shopping online. "In general, we are starting to use online shopping more, including for fast moving consumer goods. However, for supermarket shopping we buy online and pick

up in shop" (Man, 46 years, professor, Lisbon); "Large purchases are done entirely online with the exception of spot purchases such as picking up bread or a drink from the Mini Preço" (Woman, 18 years, student, Algés); "I no longer like wasting time in supermarkets" (Woman, 38 years, marketeer, Algés).

On the other hand, the families that did not convert to online shopping, began to plan their meals better so that when they went to the supermarket they would shop for longer periods of time. "At the beginning of the lockdown, when I'd go grocery shopping, I tried to buy as much as possible, so I didn't have to come back in 2 or 3 days. I even used to buy bread and freeze it to avoid going there" (Man, 45 years, financial director, Porto); "I tried to go less often and bring everything I needed in larger quantities" (Woman, 56 years, professor, Grândola); "Due to the lockdown we had to re-educate ourselves a little bit and started to make a grocery shopping list that would last for the week. We started to plan more long term" (Woman, 47 years, professor, Covilhã).

Similarly, a considerable number of households shared that they picked up on some new cooking behaviours, especially during the first lockdown. Trying new dishes (mostly sweet dishes like pancakes and cakes), meal planning (organizational boards, overcooking or freezing) or install a pizza day, were some of the most acknowledged shifts in cooking habits. Nevertheless, a small portion of interviewees also tried to be healthier. "We started to use that tactic of making a lot of dinner to have lunch the next day" (Woman, 41 years, media analyst, Lisbon); "There was a time when we used to get together with her parents on a Friday and try to make a recipe we saw on the internet" (Man, 43 years, welder, Alentejo); "We started baking more and made more cakes, when we finished one we were immediately thinking «what are we going to do next?»" (Woman, 48 years, professor, Covilhã).

Covid-19 impacted not only family dynamic, but also evoked significant changes in the individual life. There was an opportunity for more family time either through meals in family or going on strolls or board games. "Even during the pandemic, we got used to go out to the countryside with the kids. The kids could run and not become sedentary like other kids who stayed at home all the time" (Woman, 38 years, analyst, Alentejo). However, "me time" also became relevant and a vast majority of the respondents admitted starting exercising more and focusing on their hobbies like reading, painting and puzzles. "I have never done so much sport as since the pandemic began" (Man, 31 years, manager, Porto).

The art of grocery shopping: a consumption and shopping behaviours' study in the era of covid-19

On top of this, some people also said that they had difficulties managing their sleep routine and distinguishing between working hours and resting hours. "For me, less holidays, less rest, less everything. Work has become different because things are totally different" (Man, 53 years, manager, Entroncamento).

Figure 5 - Impact of covid-19 on daily life

Physical Exercise

"I have never done so much sport Cooking Habits as since the pandemic began" **Social Distancing**

Family Time

more time to cook"

"We ended up having "We started to have more family moments"

"We really miss going for coffee in **Alchool** "We drink more alcohol at home"

the evening"

Hobbies

"We started reading a lot more at home. The Maia library delivered the books"

Covid-19 **Impact**

Cleaning Habits

"We use bleach for everything at the moment"

Work from Home "We have to get it into our heads

Takeaway/Home Delivery

"There comes a time when we are **Meals in Family** tired of cooking"

that online work is here to stay' **Online Shopping**

"We had lunch together **Shopping Behaviours** "Things we wouldn't normally buy online which was something we didn't remember happening "I tried to go less often and bring everything I needed in larger quantities straight away" quantities straight away"

we ended up buying"

Source: Own Elaboration

4.5 Shopping Behaviours

4.5.1 Buying Process

The next topic to be studied corresponds to the shopping behaviours of consumers. This matter was evaluated by analysing the obtained responses to this part of the script, considering the Purchase and Postpurchase model of Solomon, M.R., Bamossy, G.J., Askegaard, S., and Hogg, M.K. (2016).

Table 8 - Shopping Behaviours Script

Shopping Behaviours Questions

- **Q.1.1** In the case of broths, what is your process of choice when you get to the shelf: You start with a) Type of product? (meat broth, chicken broth, seafood broth, vegetable broth, spices, ...) b) Brand? (Knorr, Maggi, MD ...) c) Price?
- **Q.1.2** When you arrive on the supermarket shelf, there are several options in terms of products (meat broth, chicken broth, seafood broth, vegetable broth, spices, ...) AND several types of packaging (small ones with about 8 pcs, medium-sized ones with 16 pcs and larger ones with 24 pcs). Which one do you choose? And what are the reasons for choosing one or the other?
- Q.1.3 How often do you buy each of these products?
- Q.1.4 What leads you to buy again? (running out of stock at home, taking advantage of promotions, impact of the display in the shop...)
- **Q.1.5** Regarding promotions, what kind have you taken advantage of (price discount, product packs, coupons, others?)
- **Q.1.6** What image do you have of the main brands? (Knorr, Maggi and supermarket brands). Do you distinguish between them?
- Q.1.7 In the household regardless of price issues which brand would you prefer?
- Q.1.8 During lockdown what have been the changes in broths purchasing habits?
- Q.1.9 What habits have been maintained after the lockdown finished?

Source: Own elaboration based on the design script

Prior to analyzing this passage of the script, it is vital to note that only 27 broth-consuming households' replies were taken into account. The cause of this is that one household, while using broths, does not purchase them anymore because the grandmother always buys broths for the family.

Moving onwards, regarding the first question most families claim to have a very simple buying process when it comes to broths. The vast majority of families opt to make their choice solely based on their perception and connection with the brands "I only buy Knorr. It's a matter of trust, I trust Knorr because it has always been Knorr" (Woman, 43 years, professor, Covilhã); "I have Knorr brand as a reference. I already have that product that I automatically buy" (Woman, 53 years, nursing home manager, Grandôla).

On the other extreme, some families perceive price as the most important feature, claiming that the price-quality relationship is better on supermarket brand products "*I buy Continente brand, because it's cheaper and it's the same*" (Woman, 49 years, saleswoman, Matosinhos).

The rest of the families, the minority, are divided between five other different type of buying processes: brand and price, brand and product, price and brand, product and brand and no preference.

Table 9 - Families Buying Process

Buying Process				
	"I buy Continente brand, because it's cheaper and it's the same"			
	"When there is no Maggi I choose Knorr, but it's very rare to buy supermarket brands" "It's always Knorr, It's one of those things that there is not specifically always the standard of the second o			
	"It's always Knorr. It's one of those things that there isn't much choice, because Continente has very little variety. Also, It's one of those things that I buy so rarely that I don't even risk trying another brand"			
D 101	" Always Knorr. I really think it makes a difference. I've tried supermarket brands and Maggi and I didn't like them"			
Brand Only	" A lways Knorr. I've tried other brands and didn't like them. I prefer Knorr"			
	"I only buy Knorr. It's a question of trust, I trust Knorr because it has always been Knorr"			
	"Out of habit, it's Knorr, we've always liked Knorr. Nevertheless, if there isn't Knorr, we buy Maggi"			
	"We only buy Knorr"			
	"Knorr, for trust and tradition"			
	"By habit we always bring Knorr"			
Brand & Price	"We only buy Knorr and on promotion"			
Brand & Fried	"The first factor is to be a trustworthy brand and then the matter of price"			
	"We bring the Pingo Doce brand, as it's something we use so little we bring the cheapest"			
	"I try to look for the most expensive broth, because I know it will pay off"			
Price Only	"I buy Continente brand, because it's cheaper and it's the same"			
Trice Only	"The broths I buy are almost always the supermarket brands, from Lidl or			
	Minipreço, because they have a lower price and because the quality is good enough"			
	"The price decides."			
	"I buy Knorr, because they're easily on sale and that stuff lasts a long time			
Price & Brand	and I really think Knorr is better. Now if I go to Jumbo and they don't have			
	any on sale, I get the Jumbo brand"			
Product & Brand	"It's always Knorr for seafood"			
	" We buy it for a very specific purpose, it's to make risotto and it's always Knorr"			
	"It's the one from Pingo Doce because we shop at Pingo Doce, if we shopped			
No Preference	at Continente then the broths were Continente's brand"			
TAO ETETETETICE	"It is indifferent"			
	2. to thought one			

Source: Own Elaboration

Consumers are not tempted to try new flavours of broths, in fact 24 families all affirm that they stick to the flavours they already know and are used to purchase. Chicken broths are the dominant choice of the interviewed Portuguese households, followed by vegetables broths.

Figure 7 - Type of Product

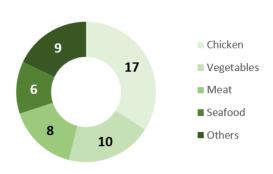
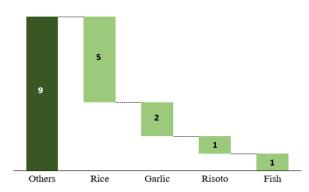


Figure 7 - Other Types of Products



Source: Own Elaboration from Excel

Source: Own Elaboration from Think-Cell

There was little agreement when it comes to the preferable size of packaging. Some families argue they prefer small packages (8 units) and others big packages (24 units), the number of households preferring the 16 units packages were negligible. However, one point everyone could agree on is the extensive expiration date these products have which contributes to a low purchase frequency (more than every 2 months). "I bring the smaller ones, because they have a long shelf life and I don't use them much" (Woman, 46 years, kindergarten teacher, Alentejo); "Oh, a long time. I don't know, I have broths there that are a year old" (Woman, 41 years, professor, Maia); "Average packaging for all, because it has a long term. I rarely use it, I use it very little, but I always have it here" (Woman, 46 years, lawyer, Matosinhos).

Table 10 - Frequency of Purchase

Frequency of Purchase		
Regular – every time goes shopping	0	
Regular – every 15 days until every 2 months	6	
Sporadically – more than every 2 months	21	
Sporadically – makes large stocks of the product	0	

Source: Own Elaboration

Regarding the motives that make participants rebuy the product, it becomes clear that consumers only purchase the product in case of need, meaning when their stock is finishing. Nevertheless, a residual part of the sample (3) admits taking advantage of promotions as long as they are in need of the product. In addition, there is one household that purchases the product exclusively due to promotions and another household that only buys it if it happens to come to mind.

Consumers were also asked about the type of promotions they resort to when buying broths. Direct discounts are the most used (18) "If I get now a coupon for 30% off Knorr broth, I'll buy it because it doesn't spoil" (Woman, 43 years, professor, Covilhã). On the other hand, 7 families stated that they do not use promotions when it comes to these types of products, since the product is not frequently used.

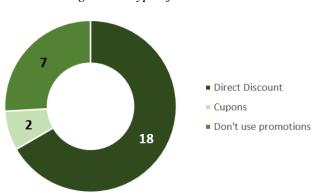


Figure 8 - Type of Promotions

Source: Own Elaboration from Excel

4.5.2 Brand Image

The participants were questioned about brand image "What is your image of the main brands (Knorr, Maggi and supermarket label?). Do you distinguish between them?". Knorr was the most recognisable brand and the brand which people had more opinions about. Maggi and supermarket brands were seen as a good substitute. Specially for households that value price the most, supermarket brands were often referred as a good quality-price option.

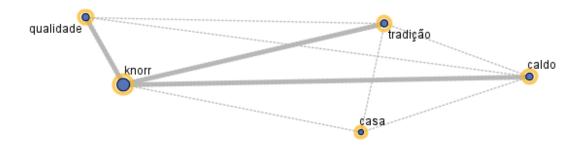
Table 11 - Brand image of the main brands

	Positive	Negative	Neutral
Knorr	17	9	3
Maggi	2	3	18
Supermarket Brand	2	2	1

Source: Own Elaboration

The vast majority of the families, associates Knorr with words such as "tradition" and "home". Participants often would mention memories of their parents cooking in the kitchen and using Knorr. "About Knorr let me tell you it's an image that has always stayed with me. Because it's the one I've had since I was a little girl at home, my mother always used to buy Knorr broths" (Woman, 49 years, saleswoman, Matosinhos).

Figure 9 - Knorr Web-Concepts



Source: Extraction from SPSS Modeler

4.5.3 Covid-19 Impact on Buying Broths

Regarding the consumers, 25 out of the 27 interviewed households stated not to have suffered significant changes when it comes to shopping broths during the lockdown period. "We are very careful with our diet. The confinement only made a difference to our professional life, otherwise it made no difference towards our eating habits" (Woman, 43 years, professor, Covilhã). However, one family claimed to have increased the amount of purchased broths "It is possible that during the lockdown I used broths more often, because I had more meals at home and had to be more creative eventually"

(Woman, 37 years, financial director, Corroios) and another family said to have diminished the amount of purchased broths "Even less, much less. I wasn't worried about putting broths on the shopping list" (Woman, 41 years, professor, Maia).

After the lockdown period, the vast majority of respondents affirm that the quantities of purchased broths did not changed at all. Only one family started to buy more online after the lockdown period including broths. The remaining families did not change the place where they shop for broths.

4.6 Consumption Behaviours

4.6.1 Moments of Consumption

Moving onwards to the following part of the script, consumption behaviours, the first topic under study was moments of product consumption.

A considerable number of households use broths on soup, especially on chicken soups or vegetable soups "It depends on the food, for example, in soup I like to put a little bit" (Women, 53 years, insurance broker, Tavira). Nevertheless, the vast majority prefers to use broths on main dishes. The most commonly cooked dishes are risotto, a variety of seafood dishes, stew meat and chicken. "If I make seafood rice or a bread soup, or shrimp rissoles" (Man, 44 years, professor, Oeiras); "I put a little on the chicken and a little on the meat" (Woman, 55 years, housekeeper, Loures).

A great number of Portuguese families are also very fond of cooking white rice with broths "Only for making rice" (Woman, 29 years, architect, Grândola). On the other hand, two families can be considered outliers for using broths on more creative dishes such as *Feijoada* and *Jardineira*. "For soups or a more refined food, like feijoada" (Woman, 45 years, employee at a beer company, Leça).

Finally, a few respondents reinforced the idea that broths are not healthy. These consumers, despite using the product seemed conscious about the health implications of the product and claimed that try to make a controlled consumption of it "I personally associate those things a lot with not being healthy, and so I only use it when I really need to get some flavour in there" (Woman, 41 years, professor, Porto).

Table 12 - The most popular meals made with broths

Soups	10
Rice	9
Seafood	7
Stews	7
Chicken	6
Risotto	4
Meat	4
Pasta Dishes	3
Online Recipes	2
Feijoada	1
Jardineira	1

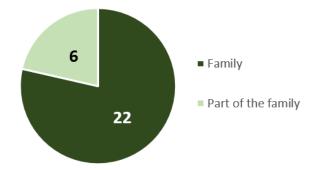
Source: Own Elaboration

4.6.2 Consumption of broths inside the family

In general, all members of the interviewed households consume broths, once that, usually, when a meal is cooked, is for every member in the family. However, in some households, members affirm that when they cook, they tend not to use the product, claiming to be healthier. Although, if another member uses it, they end up consuming it.

Nevertheless, in a small part of the families there are some members that do not consume or use the product for cooking. In these cases, the members of the family usually use broths when cooking only for themselves and not for the rest of the family. The only exception is a middle-class family from Estoril with a young daughter (10 years old) that confess sometimes making two pans of rice: one with broth and one without.

Figure 10 - Consumption of broths within the family



Source: Own Elaboration from Excel

4.6.3 Pre-lockdown consumption of broths and covid-19 implications

Taking into consideration the pre-lockdown period, most interviewees were consuming less than one broth per week "I don't make very large quantities of food because it's just the two of us, but even if I did, I wouldn't use an entire broth because it's too strong" (Woman, 48 years, professor, Covilhã). In fact, some families aren't even consuming one broth per month "0,5 per month" (Man, 29 years, key account manager, Algés); "It must be half a cube a month" (Woman, 45 years, employee at a beer company, Leça).

A low number of households were using two to four broths a week for cooking. These families are similar within each other on the location aspect, since none of these families live in big city centres. Also, two of these families have older individuals living with them, interestingly both are 91 years old woman.

The one and only family that was using broths almost every other day of the week was using them almost exclusively on soups "Only soups, eventually I can use it on stewed meat" (Woman, 55 years, professor, Algés).

Table 13 - Pre-lockdown consumed quantity of broths

Consumption of Broths		
Less than 1 per week	21	
1 per week	2	
2 – 4 broths a week	4	
5 or more per week	1	

Source: Own Elaboration

Covid-19 did not cause severe changes on the consumption of broths. Indeed, 24 of the 28 families that consume the product declare not have suffered any changes at all "There was no change because even before the lockdown we never went out for lunch. As we were always close to home we would come to eat at home and we were already used to cooking a lot" (Woman, 53 years, professor, Amadora).

From the remaining four households, three decreased the use of broths when preparing their meals and only one household increased the consumption. The reduction is mainly due to the family's desire to be healthier or simply because they stopped cooking dishes were usually use the product "Perhaps we prepared the recipes that call for broths less frequently because they are typically dishes for large crowds" (Woman, 30 years, university student, Porto). On the other hand, the amplificated consumption of broths is a consequence of boredom and the need of experimenting new dishes "It is possible that during the confinement I used broths more often, because I had more meals at home and had to be more creative eventually" (Woman, 37 years, financial director, Corroios).

Once that the consumption habits of most families were not disrupted by covid-19, these households expect their customs to remain intact when coming back to normality. Nevertheless, were identified a few exceptions of expected consumption reduction. These cases are justified by the number of meals (especially lunch) at home diminishing when returning to regular life.

4.6.4 Broths Stock Level

Remarkably almost all interviewees have no stock level of broths. The main reasons are related to the extensive expiration date of the product, the low frequency of product use and even for a matter of space "Here at home we don't stock almost anything. Because we also don't have much space" (Man, 24 years, actuarial analyst, Lisbon); "I have no pantry which is very bad, so I spend my life in the supermarket" (Woman, 48 years, kindergarten teacher, Covilhã).

A considerable number of households maintain only one package of their most used broths in stock "We always have them at home" (Woman, 74 years, retired, Lisbon).

On the contrary, purely two families claim having two or more packages in stock "At most two vegetable ones, because we use them more than the chicken ones. So, it would be 2 vegetables and 1 chicken" (Woman, 30 years, university student, Porto).

4.6.5 Communication Advertising Awareness

A great majority of households have no memory of product advertising. Nevertheless, the ones that remember always mention Knorr advertising. In fact, a greater part have memories of renown chefs being protagonists on Knorr commercials "I remember a commercial from a while back, which was a bald chef, who was the head chef of Unilever" (Man, 37 years, consultant, Porto); "I also remember seeing that advertisement with a famous chef, it's always some famous chef praising the efficiency and time-saving powers of Knorr broths" (Man, 31 years, manager, Porto). Even in Brazil, interviewed consumers remember Knorr commercials, although with a slightly different approach: instead of chefs cooking, mothers were the protagonists "The advertisements in Brazil always had the mother cooking and then a child would appear and say, «what a good smell»" (Woman, 24 years, university student, Lisbon).

Only one consumer remembers Maggi commercials from their childhood, the remaining consumers have no memory whatsoever "I haven't seen Maggi commercials for many years. I remember an old advertisement in which some guests appeared and a lady said «Hmmmm magic»" (Woman, 53 years, school employee, Loures).

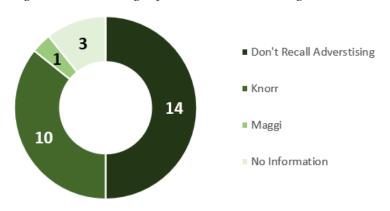


Figure 11 - Knowledge of communication messages

Source: Own Elaboration from Excel

4.7 Post-consumption of broths

The last part of the script also inspired on the Purchase and Postpurchase model of Solomon, M.R., Bamossy, G.J., Askegaard, S., and Hogg, M.K. (2016) was composed by two simple questions. The end goal of this section was to try to understand what post-consumption events affect or not the next purchase.

Table 14 - Post-purchase Script

Post-purchase Questions

Q.3.1 - Do you remember being told about experiences, either physical or digital, of buying and/or consuming broth products or brands?

Q.3.2 - Do you remember sharing the experience, physically or digitally, of buying and/or consuming broths products or brands?

Source: Own elaboration based on the design script

From the 28 interviewed households, very few have heard experiences related to the product. Nevertheless, the ones that have heard said experiences, have heard them face-to-face instead of digitally.

In some cases, these experiences impacted the consumption of the interviewed families "I started using Knorr rice broth under the influence of an old classmate at college" (Woman, 29 years, architect, Grândola); "For some time I stopped eating Knorr broths because they were said to be very bad for your health" (Woman, 55 years, professor, Algés). However, some consumers did not alter their intrinsic habits "A friend of mine told me that Knorr had some natura broths that were better than the traditional ones, but I continued with my habits and never looked for them" (Woman, 53 years, professor, Amadora).

On the other hand, when it comes to the participants themselves sharing events related to broths, many of them never have "Broths are not usually a topic of conversation" (Woman, 37 years, financial director, Corroios). The small part that indeed share experiences it is always face-to-face "With friends from time to time we talk about the fact that I like to cook with broths, and they don't" (Woman, 41 years, analyst, Alfragide).

5. Conclusion and Business Insights

Consumer behaviour has been a topic of studies for many years now. Ajzen and Fishbein took a revolutionary approach on several theories before and presented the world with the Theory of Reasoned Action (Ajzen and Fishbein, 1980) being a tremendous part and influence on the well-known Theory of Planned Behaviour (Azjen, 1985).

Since then, multiple models have emerged such as the Purchase and Postpurchase model by Solomon, M.R., Bamossy, G.J., Askegaard, S., and Hogg, M.K. (2016) which takes alongside the perspective of theory role, meaning consumer behaviour is similar to a play.

Culture can be manifested in many ways: food, clothes, economy, ways of thinking and, also, through consumption behaviours. The manners by which individuals carry on with their consumption life fluctuate extraordinarily, starting with one European country onto the next, and at times even inside various areas of a similar country (Solomon, M.R., Bamossy, G.J., Askegaard, S., & Hogg, M.K. 2016). Therefore, this dissertation focused only on Portuguese residents. The main goal was to study consumption and shopping ways of Portuguese residents regarding grocery shopping.

One of the main conclusions of this research is that online grocery shopping grew during the pandemic situation, due to necessity and fear, but it appears that it's becoming a constant even when returning to normality. Online consumers have gotten used to the convenience of ordering their groceries instead of wasting time going to supermarkets. Accordingly, retailers should indeed invest in a digital component making sure their websites are user-friendly and appealing.

Further, it was discovered that the use of grocery shopping lists became even more popular and a regular habit of the interviewees. This change in behaviour was mostly prompted by the financial crisis which forced families to be more careful with their economies. Therefore, if it was already important to be on consumers' minds, now more than ever it is essential to be present on moments such as elaborating grocery shopping lists. Otherwise, certain products will not be purchased, once that covid-19 also diminished the frequency of families going to supermarkets, betting on a more long-term shopping strategy.

Another main finding of the study is that Knorr is the strongest brand on the Portuguese broths market, being often associated with feelings of trust and nostalgia. Not only Portuguese consumers feel more connected with the Knorr brand, but they have a willingness to pay higher prices for Knorr over more affordable brands.

The most purchased broth flavour is chicken and only a small part of consumers buy other flavours, such as rice or seafood. Indeed, consumers are not eager to try new products and when purchasing broths, they are consistent with their choice, always buying the same flavours.

This reveals that when it comes to non-essential products, in this case broths, consumers have more specific and rigid buying processes, mainly following a "brand first" buying process. Businesses can turn this into an opportunity and bet on a pack approach. Most consumers resort to direct discount promotions, however, if brands presented the option of pack discounts, consumers would be more tempted to try new flavours. By selling the most purchased products (chicken broths) with less popular products (seafood, rice, meat etc) at a competitive price, brands could engage their loyal consumers to expand their consumption and capture new consumers.

Another crucial discovery is that a considerable number of interviewees are more conscious about product composition and are making healthier options. This market requires more healthy versions of the product, as well as an effort on promoting it near customers. For example, Knorr has the natura broths, a healthier version of the traditional broth, but it is not common knowledge among consumers.

Brands must invest on an aggressive digital strategy. This study findings reveal that most participants do not recall recent advertisings, only mentioning old commercials almost exclusively regarding Knorr. Of course, every time these commercials were mentioned it was sensed a nostalgic feeling towards the product. However, if the new generations are not targeted and do not engage with these brands in the long run the product might disappear.

When targeting the upcoming generations millennials, but especially gen-z these three pillars must be taken into consideration: digital presence in a unique way, be on top of trends and always send a strong and singular message to their consumers. Brands can resort to an influencer strategy, choosing one or more personalities that embodies the brand values.

Choosing to invest on digital awareness brands can mitigate the negative or, maybe worst, the non-existent post purchase experience. The consumer decision journey by McKinsey considers post purchase experience one of the most important stages of the model because it is going to influence the decision of the next purchase. The main goal of all business is to captivate its customers and that can only be done once consumers enter the loyalty loop¹.

Almost every participant claimed to not have experienced or shared a post purchase situation, mostly because broths are not considered a common topic of conversation. However, it falls within the companies' responsibility to make their products sexy and appealing. This can only be done resorting to creativity, understanding consumers' needs, and keeping up with the current trends.

5.1 Limitations and Future Work

This paper took a different approach compared to other consumer behaviour studies when it comes to its methodology, resorting to an *In Situ* procedure. This method allowed performed this very deep and exhausted qualitative study. Regardless, it is imperative to understand that this research doesn't have a quantitative relevance.

Although, there are clear advantages to an *In Situ* method, notably a more trustworthy data collecting, there are also some limitations. Because it is a more complex and arduous data collecting method, it was difficult to gather a larger sample. Also, the participating families were somehow acquaintances of the six master students, which all come from different geographies and so realities. However, they all frequent the same university and have similar academical backgrounds which might indicate that they have similar ideals and consequently similar circles of friends and family.

Therefore, for future studies that wish to apply this methodology, they should invest on a larger and diverse team to convene a wider and more distinct sample. Nevertheless, the collaborative process between six master students had many positive results, allowing to collect the most diverse data possible in weeks what would take months if one did it by itself.

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¹ Loyalty Loop is a concept developed by McKinsey that illustrates how consumers buy focusing on four stages: initial consideration, active evaluation, moment of purchase, and post-purchase experience.

Moreover, another limitation is regarding time itself. Individuals change their opinions and habits over time. Even thought many individuals affirm that they're keeping a certain behaviour after the covid-19 pandemic, no one can know for sure. This study was conducted on a very specific and powerful moment in time, so it might not allow for conclusions on a very long term. Therefore, this study should be conducted again in a different time in future to understand the new changes in consumer behaviour.

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References

Aagerup, U., Frank, A. -., & Hultqvist, E. (2019). The persuasive effects of emotional green packaging claims. British Food Journal, 121(12), 3233-3246. doi:10.1108/BFJ-08-2019-0652

Ajzen, I. (2012). Martin Fishbein's Legacy: The Reasoned Action Approach. The ANNALS of the American Academy of Political and Social Science, 640(1), 11–27. https://doi.org/10.1177/0002716211423363

Akhtar, R., Sultana, S., Masud, M. M., Jafrin, N., & Al-Mamun, A. (2021). Consumers' environmental ethics, willingness, and green consumerism between lower and higher income groups. Resources, Conservation and Recycling, 168 doi: 10.1016/j.resconrec.2020.105274

Anesbury, Z., Nenycz-Thiel, M., Dawes, J., & Kennedy, R. (2016). How do shoppers behave online? An observational study of online grocery shopping. Journal of Consumer Behaviour. doi: 10.1002/cb.1566

Badenhop A. & Frasquet M. (2021) Online Grocery Shopping at Multichannel Supermarkets: The Impact of Retailer Brand Equity, Journal of Food Products Marketing, 27:2, 89-104, doi: 10.1080/10454446.2021.1894296

Bialkova, S.; Grunert & K.; Trijp, H. (2020). From desktop to supermarket shelf: Eyetracking exploration on consumer attention and choice. *Food Quality and Preference*, 81. Retrieved 11 April 2021 from https://doi.org/10.1016/j.foodqual.2019.103839

Blitstein, J.L., Frentz, F., & Pitts, S.B.J. (2020) A Mixed-method Examination of Reported Benefits of Online Grocery Shopping in the United States and Germany: Is Health a Factor?, Journal of Food Products Marketing, 26:3, 212-224, doi: 10.1080/10454446.2020.1754313

Buerke, A., Straatmann, T., Lin-Hi, N. & Muller, K., (2016, September 13). Consumer awareness and sustainability-focused value orientation as motivating factors of responsible consumer behavior. Rev Manag Sci 11, 959–991 (2017). https://doi.org/10.1007/s11846-016-0211-2

Chandon, P.; Hutchinson, J. W.; Bradlow, E. T. & Young, S. H. (2009). Does in-store marketing work? Effects of the number and position of shelf facings on brand attention and evaluation at the point of purchase. *Journal of Marketing*, 73(4), 1–17.

Chouhan, V., & Goswami, S. (2020). Impact of change in consumer behaviour and need prioritisation on retail industry in Rajasthan during COVID-19 pandemic. *Materials Today: Proceedings*. Retrieved 13 April 2021, from https://doi.org/10.1016/j.matpr.2020.12.073

Corinne H. Mowrey, Pratik J. Parikh & Kevin R. Gue (2019) The impact of rack layout on visual experience in a retail store. *INFOR: Information Systems and Operational Research*, 57 (1), 75-98, doi: 10.1080/03155986.2017.1402475

Court, David, Dave Elzinga, Susan Mulder, and Ole Jørgen Vetvik (2009), "The Consumer Decision Journey," McKinsey Quarterly (June), 96–107

DelVecchio, D., Henard, H. D., Freling, H. T. (2006). The effect of sales promotion on post-promotion brand preference: A meta-analysis. *Journal of Retailing*, 82(3), 203-213. Retrieved from https://doi.org/10.1016/j.jretai.2005.10.001

DelVecchio, D., Krishnan, S. H., Smith, C. D. (2007). Cents or percent? The effects of promotion framing on price expectations and choice. *Journal of Marketing*, 71(3), 158-170. Retrieved from https://doi.org/10.1509/jmkg.71.3.158

Diels, J. L., Wiebach, N., Hildebrandt, L. (2013). The impact of promotions on consumer choices and preferences in out-of-stock situations. *Journal of Retailing and Consumer Services*, 20, 587-598. Retrieved from http://dx.doi.org/10.1016/j.jretconser.2013.04.009

Frank, D.A., & Peschel, A.O. (2020) Sweetening the Deal: The Ingredients that Drive Consumer Adoption of Online Grocery Shopping, Journal of Food Products Marketing, 26:8, 535-544, DOI: 10.1080/10454446.2020.1829523

Gidlof, K.; Anikin, A.; Lingonblad, M.; Wallin, A. (2017). Looking is buying. How visual attention and choice are affected by consumer preferences and properties of the supermarket shelf. *Appetite* (116), 29-38.http://dx.doi.org/10.1016/j.appet.2017.04.020

Gilli, M., Nicolli, F., & Farinelli, P. (2018). Behavioural attitudes towards waste prevention and recycling. Ecological Economics, 154, 294-305. https://doi.org/10.1016/j.ecolecon.2018.08.009

The art of grocery shopping: a consumption and shopping behaviours' study in the era of covid-19

Goyal, P. (2019). Measures to Improve Sales Promotion Effectiveness: The Consumer Perspective. *Pranjana: The Journal of Management Awareness*, 22(1), 54-67.

Gupta, S., & Kumar, V. Sustainability as corporate culture of a brand for superior performance. Journal of World Business (2012), http://dx.doi.org/10.1016/j.jwb.2012.07.015

Hanss, D., & Böhm, G. (2012). Sustainability seen from the perspective of consumers. International Journal of Consumer Studies, 36, 678–687. doi: 10.1111/j.1470-6431.2011.01045

Instituto Nacional de Estatística - Um ano de pandemia: uma breve síntese: 2020-2021. Lisbon: INE, 2021. Disponível na www: <url:https://www.ine.pt/xurl/pub/436991959>. ISBN 978-989-25-0594-7

Karthikeyan, B., & Panchanatham, N. (2013). Impact of Sales Promotion Techniques on Consumers towards FMCG. *International Research Journal of Business and Management*, *5*, 128-135

Koo, D.-M. (2006). The fundamental reasons of e-consumers 'loyalty to an online store. Electronic Commerce Research and Applications, 117-130. doi: 10.1016/j.elerap.2005.10.003

Marketing FutureCast Lab. (2009). Rethinking Consumption. *Tendências internacionais de Marketing* (pp. 1-15). ISCTE-IUL, Instituto Universitário de Lisbon.

Marketing FutureCast Lab. (2009). The rise of the impulse channel. *Tendências internacionais de Marketing* (pp. 2-13). ISCTE-IUL, Instituto Universitário de Lisbon.

Montarezi, S., Tamaddoni, A., Stakhovych, S., & Ewing, M. (2020). Empirical decomposition of customer responses to discount coupons in online FMCG retailing. *Journal of Retailing and Consumer Services*, 58. Retrieved from https://doi.org/10.1016/j.jretconser.2020.102340

Nasution, M., Rossanty, Y., Ariffin K., & Zaini, N. (2019). An empirical examination of the factors influencing consumer's purchase intention toward online shopping. Journal of Business and Retail Management Research, 14-29. DOI: 10.24052/JBRMR/V13IS04/ART-02

Nathwani, D. (2017). Impact of Sales Promotion on Consumer Buying Behaviour. Journal for Contemporary Research in Management, 4(1), 1-11.

Nunes, F. (2021). Supermercados e entregas reforçados para responderem ao novo confinamento. *Eco Sapo*. https://eco.sapo.pt/2021/01/15/supermercados-e-entregas-reforcados-para-responderem-ao-novo-confinamento/

Otterbring, T., Wästlund, E., Shams, P. Spotlighting Customers' Visual Attention at the Stock, Shelf and Store Levels with the 3S Model. *J. Vis. Exp.*(147), e58846, doi:10.3791/58846 (2019)

Peterson, M., Minton, E. A., Liu, R. L., & Bartholomew, D. E. (2021). Sustainable marketing and consumer support for sustainable businsses. *Sustainable Production and Consumption*, 27, 157-168. doi:10.1016/j.spc.2020.10.018

Solomon, M.R., Bamossy, G.J., Askegaard, S., & Hogg, M.K. (2016). Consumer Behavior: A European Perspective (6th ed.). United Kingdom: Pearson, p. 69-111.

Thøgersen, J., Jørgensen, A. -., & Sandager, S. (2012). Consumer decision making regarding a "green" everyday product. Psychology and Marketing, 29(4), 187-197. doi:10.1002/mar.20514

Valenzuela, A.; Raghubir, P.; Mitakakis, C. (2013). Shelf Space Schemas: Myth or Reality? *Journal of Business Research* (66), 881-888. doi:10.1016/j.jbusres.2011.12.006

Wang, Y., Xu, R., Schwartz, M., Ghosh, D. & Chen, X. (2020). COVID-19 and Retail Grocery Management: Insights From a Broad-Based Consumer Survey. IEEE Engineering Management Review, 48(3), 202-211. doi: 10.1109/EMR.2020.3011054

World Health Organization. (2020, October). *Impact of COVID-19 on people's livelihoods, their health and our food systems*. https://www.who.int/news/item/13-10-2020-impact-of-covid-19-on-people's-livelihoods-their-health-and-our-food-systems