

Shopping Trends and COVID-19 Pandemic: Evidence from the Greek Retail Sector

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Abstract:

The paper presents the results of the consumer surveys conducted by the Research Institute of Retail Consumer Goods in Greece from April to August 2020. The study shows important changes in consumer behavioral patterns and preferences compared to the pre-COVID period. It was found that consumers prefer to buy domestic products and visit bakery stores more frequently than other food retail stores. The weekly spending for family purchases does not differ among various time periods during the pandemic, while price discounts and free products reported as the most desired promotional campaigns. Regarding online supermarkets, consumers are dissatisfied with delivery time and satisfied with the alternative payment methods and delivery staff and evaluate health protection measures differently with the "use of protective gloves by the store personnel" evaluated with the highest score.

Keywords: *Shopping Trends, COVID-19 Pandemic, Retail Stores*

1. Introduction

Retailing has seen dramatic changes from the beginning of the pandemic caused by SARS-CoV-2 virus both negative (for the retailers of non-essential goods) and positives (for the retailers of essential goods) (Roggeveen & Sethuraman, 2020). Consumers, also, had to adapt and learn how to compete with all the changes affecting their daily lives. Concerning shopping behaviors, certain attitudes came with great interest for retail managers and scholars. Stockpiling, price sensitivity and shopping frequency are key subjects among others to investigate and understand, to provide critical information in a national and global level to each member concerned (businesses, governments, policy makers, researchers et cetera). Motivated by these developments, this research presents the results of the consumer surveys conducted by the Research Institute of Retail Consumer Goods in Greece from April 2020 (one month after the beginning of the lockdown in Greece) to August 2020.

2. Literature Review and Research Hypotheses

2.1. Frequency of food retail store visits and spending for family purchases

COVID-19 and confinement, led to low physical activity levels and psychological symptoms such as fear, anxiety, sadness and depression (Ettman et al., 2020) altering eating patterns and nutrition habits (Górnicka et al., 2020), and resulting in changes in consumer preferences and buying decisions (Truong & Truong, 2022). Panic buying, as a result of fear, anxiety (Kemp et al., 2021), individualism and uncertainty avoidance (Messner & Payson, 2022) as also consumers stockpiling behavior that started with toilet papers (Kirk & Rifkin, 2020) and food (E. Wang et al., 2020) - due to the fear of food and consumer goods future shortage, higher prices and inadequacy in chain supplies (Schmidt et al., 2020) - led to empty shelves in supermarkets. This uncontrolled, in some cases, hoarding had as a consequence the increase of the weekly spending for family purchases (Long & Khoi, 2020). Shopping, during the pandemic, functioned as a self-rewarding act leading to crisis-coping shopping behaviours as a mean for distraction from negative situations and feelings at that period (Zulauf & Wagner, 2022). Specifically in retail, for needed home goods, an increased spending was observed (S. R. Baker et al., 2020) through the first weeks of the announcements about COVID-19. Thus, we hypothesize the following:

Hypothesis 1. After the traffic limitation measures caused by the COVID-19 pandemic, consumers visit supermarkets significantly more than the other food retail stores.

Hypothesis 2. During the COVID-19 pandemic, non-significant differences are observed in the weekly spending for family purchases.

2.2. Eating habits and the domestic vs. foreign products dilemma

Lockdown forced people to spend significantly more time indoors. More time at home implied that most of the people had more time to cook. Combined with fear and insecurity led to increased, more than normal, purchases of foods – using online stores or offline supermarkets depending on the spreading rate of the SARS-CoV-2 virus (Grashuis et al., 2020) – particularly for fresh foods (Hao et al., 2020). Although a trend was observed towards healthy eating, home cooking and consumption of fresh products - driven by an already existed health based, environmental and ecological consciousness as showcased by Karamani et al.(2020) in the case of northern Greece - an increase in the consumption of sweets was also observed during the same period, which is attributed to psychological factors (Romeo-Arroyo et al., 2020). Another significant issue is the consumers' decision of buying domestic versus foreign products. Fear of

imminent collapse of the global supply chain and consumer ethnocentrism, strongly influenced by personal values and moral foundations (Prince et al., 2020), an observed phenomenon of that period (along with the matter of ethics for consumers whether it is moral to buy products from foreign countries instead of domestic), led to the assumption and need for further research (He & Harris, 2020). Thus, we hypothesize the following:

Hypothesis 3. After the traffic limitation measures caused by the COVID-19 pandemic, the most frequent shopping trend is buying domestic products and cook at home.

2.3. Value perception of promotional campaigns

Consumers' perception of value when shopping in a supermarket is influenced by price levels more significantly than in other types of stores in the same industry (Zielke, 2010). Price level affect repurchase intentions (Graciola et al., 2018) and price promotion significantly affects purchase intention and perceived price attractiveness (Büyükdag et al., 2020). On the other side, store loyalty is of significant interest for brick-and-mortar stores. Discounts and good prices associated with perceived value from products positively influences shopping experience which is directly related to store loyalty (Johnson et al., 2015). The strict movement ban and the special conditions in the shopping process in supermarkets (long queues at the entrance, extended waiting, limited number of people in the store, fear of getting infected by the virus in the store) made it difficult for many consumers to visit multiple stores to find premiums or other promotional campaigns and to selectively purchase products at a reduced price in specific stores, a common behavior in the pre-COVID-19 era (Gijsbrechts et al., 2008). The perceived cost of searching for promotional campaigns versus price discounts might act as a catalyst for consumers (Palazon & Delgado-Ballester, 2009) to evaluate price discounts higher during that period. Thus, we hypothesize the following:

Hypothesis 4. During the COVID-19 pandemic, consumers prefer price discount and free-product promotional campaigns.

2.4. Evaluation of delivery time and alternative payment methods for online supermarkets

COVID-19 crisis created a blooming opportunity for the food trade industry but also an inordinate one for the online food trade (Dannenberg et al., 2020) increasing sales and number of customers (Chang & Meyerhoefer, 2020). Delivery time, as indicated by Marimon et al. (2010) in their research for online supermarkets, has a significant impact on perceived value for customers. Chaturvedi & Agnihotri, (2019) found that, for utilitarian products, customers expect shorter delivery time, though we must take into consideration that age and gender also affect delivery time preferences. Payment methods is another factor in online store attributes that comes with a great significant. Rai, (2020) in a cross-sectional study for online food ordering concluded that during pandemic era of COVID-19 there was a significant transition from cash to digital payment, calling attention towards the consumers' need for alternative payment methods. However, during the lockdown period, the sudden increase in the demand for distance shopping combined with the logistics' inefficiencies increased delivery time and retailers did not manage to fulfill corresponding promises and meet consumer expectations. The maturity of retailers (and customers) in using e-commerce infrastructures and services and the need to also offer contactless transactions to their customers due to the social distancing need, led retailers to offer attractive alternative payments methods to their customers. Thus, we hypothesize the following:

Hypothesis 5. During the COVID-19 pandemic, consumers evaluate (a) delivery time of online supermarket purchases with the lowest score compared to other online store attributes and (b) alternative payment methods with the highest one, compared to other online store attributes.

2.5. Perceived safety and evaluation of in-store health protection measures

The pandemic era brought many challenges to retailers, forcing them to adapt to this unprecedented situation, in order to come through and maybe thrive (Pantano et al., 2020). Customer experience is influenced by elements that retailers can control and others that don't. In this case the effects of SARS-CoV-2 virus on consumer psychology and behavior, were out of control. Elements such as, "interaction with the staff" and "internal shop environment" have a positive relationship with customer satisfaction (Terblanche, 2018). Employees' politeness and friendliness also play an important role on in-store customer experience (Triantafyllidou et al., 2017) among with characteristics of the environment in-store (J. Baker et al., 1991). There's a strong connection, throughout the COVID-19 period, between fear of becoming infected with a virus at a store and certain characteristics that affect consumer behavior, especially for young adults from developed countries (Rossolov et al., 2022). Relevant research revealed increase in arousal and decrease in perceived pleasure during shopping time in a store (Szymkowiak et al., 2020). Retail stores used a variety of practices and safety measures to lighten this sense of fear for their customers. The goal for the industry was to communicate to individuals (Connelly et al., 2011) that it is safe to make their in-store purchases in order to mitigate the fear of being infected and positively affect their behaviors. Bove & Benoit (2020) mapped all those safety signals to "Access to servicescape", "Servicescape physical environment", "Tangibles", "Staff", "Other Customers" and "Communication about servicescape". Thus, we hypothesize the following:

Hypothesis 6. There are significant differences among health protection measures adopted by conventional supermarkets during the COVID-19 pandemic, in terms of consumers' evaluation.

3. Research Methodology

A consumer survey was conducted by the Research Institute of Retail Consumer Goods in Greece in the beginning of April 2020 as part of an ongoing research initiative (4th wave) focusing on the investigation of consumer shopping trends in Greece. The population from which the sample was drawn was the general population in Greece. Simple random sampling was the sampling technique employed. The sample size consisted of 1045 respondents, and it was well balanced in terms of demographic characteristics (50% aged 45+, 42% live in the capital region, 65% female, 35% male). It should be clarified that for testing H2 of the present study we employed data derived also from the other phases of this research project. Specifically, we employed data derived from the 5th, 6th and the 7th wave of the consumer surveys conducted by the Institute (i.e., 1025 observations between 12th and 14th of April 2020, 1027 observations between 8th and 10th of May 2020 and 737 observations between 29th and 31st of August 2020). All these surveys were also conducted through structured online questionnaires and followed similar to the 4th wave sampling procedures (e.g., simple random sampling) while the final samples of the other surveys (i.e., 5th, 6th and 7th) were also well-balanced in terms of demographic characteristics.

4. Results

4.1 Descriptive Statistics

Regarding the results of the 4th wave of the survey (April 1-3, 2020), it is observed that almost 1 out of 4 consumers (23% of the sample) has switched the supermarket they usually visited before the lockdown period, mainly due to the lower waiting times in queues (52%) and the fact that the new store creates a better feeling regarding the application of health protection measures (38%). The 56% of the sample responded that supermarket spending is higher due to the "stay at home" situation. Security and health protection measures were evaluated as the most important store selection criteria for buying food products (31%), while product quality was the most important one in the corresponding survey conducted before the pandemic by the Institute in December 2019 (37%). Also, while price was the second most important store selection criterion in the December 2019 survey (31%), this criterion scored quite low in the April 2020 survey (17%), implying an important change in the importance attached by consumers to physical store attributes during the pandemic. Similarly, health protection measures scored quite low in the December 2019 survey (9%).

4.2 Hypotheses Testing Results

The research hypotheses of the present study were tested through one-way ANOVAs with Tuckey's HSD (Honestly Significant Difference) post-hoc comparisons in SPSS V.25. In H1, though a statistical significance was observed ($F=396.711$, $p=.000$) concerning the frequency of visiting food retail stores, the highest mean score was observed for the bakery stores (2.0268) with statistically significant differences observed between bakery stores and supermarkets (ranked in the second place with 1.8603 mean score), as well as with all other food retail stores. Thus, H1 is rejected. It should be clarified that the scale employed in the questionnaire for testing H1 was a 1-7 interval scale (1:"once a week" and 7:"every day"). In H2, no statistically significant differences were observed between the four different periods during the pandemic in terms of weekly spending for family purchases ($F=2.053$, $p=.104$). This finding implies that consumers spend the same amount of money for purchases from food retail stores during the pandemic (i.e., from April to August 2020). Specifically, the highest mean observed in the first period (3.8287) and the lowest one in the fourth period (3.6775) in an 1-7 interval scale (1: 0-25 Euros to 7: more than 150 Euros), without however, significant differences observed among the tested periods. Thus, H2 is accepted.

In H3, a statistical significance was observed ($F=80.6051$, $p=.000$). Specifically, "buying domestic products" got the highest mean score (2.3770) while "checking the origin of the food products" and "cooking more" got the second and the third mean score, respectively (2.2258 and 2.2124 in an 1-3 likert scale). However, according to the post-comparisons tests, it is observed that "buying domestic products" significantly differs with both the second and the third shopping trend (and with all the other ones), while "checking the origin of the food products" and "cooking more" do not significantly differ (they both significantly differ with all the remaining shopping trends). Thus, H3 is partially accepted. In H4, significant differences were observed ($F=61.094$, $p=.000$). Specifically, post-hoc comparisons show that during the COVID-19 pandemic, consumers prefer "price discount" (2.1675) and "free-product" (2.1378) promotional campaigns (measured in an 1-3 likert scale). The consumers' scores to these promotional campaigns significantly differ with all the remaining options in the corresponding question of the survey questionnaire. Thus, H4 is accepted.

In H5, significant differences were observed ($F=18.262$, $p=.000$). Specifically, consumers evaluated delivery time of products of online supermarket purchases with the lowest score (2.3812 in an 1-5 interval scale, where 1 stands for "very bad" and 5 for "very good") and alternative payment methods with the highest one (3.8072), compared to other online store attributes. Post-hoc comparisons reveal that "delivery time" significantly differs will all the remaining attributes, while "alternative payment methods" also significantly differs will all the

remaining attributes except the delivery force personnel (3.5336). Thus, H5a is accepted and H5b is partially accepted. In H6, significant differences were observed ($F=123.693$, $p=.000$). Specifically, consumers provided the highest mean score in an 1-5 interval scale (1: very bad, 5: very good) in the "use of protective gloves by the store personnel" (4.1852). Post-hoc comparisons revealed that this attribute significantly differs with all the remaining health protection measures adopted by conventional supermarkets during pandemic, in terms of consumers' evaluation. Thus, H6 is accepted. It should be also noted that the "use of dividing glass" got the lowest evaluation score (2.3688) with significant differences observed with all the other health protections attributes. Table 6 summarizes the hypotheses testing results.

Table 6: Hypotheses Testing Results

Research Hypotheses	Statistical Results	Findings
H1	$F=396.711$, $p=.000$	Rejected
H2	$F=2.053$, $p=.104$	Accepted
H3	$F=80.6051$, $p=.000$	Partially Accepted
H4	$F=61.094$, $p=.000$	Accepted
H5a	$F=18.262$, $p=.000$	Accepted
H5b	$F=18.262$, $p=.000$	Partially Accepted
H6	$F=123.693$, $p=.000$	Accepted

5. Discussion

The testing of H1 reveals that cultural factors play an important role in the frequency of different food retail store visits. Greek consumers traditionally visit bakery stores very frequently (even daily) and despite the lockdown measures, the study shows that they keep visit these stores more frequently than the supermarket ones. In other words, while the "one-stop-shop" experience of supermarket shopping seems to be, for obvious reasons, a suitable option during a pandemic crisis, consumers keep visiting bakery stores more frequently than supermarkets. Also, in line with relevant knowledge (Long & Khoi, 2020) and complementary to Anastasiadou et al. (2020) research for basket size in Greece and Sweden during COVID-19 crisis, weekly spending for family purchases (H2) remains the same from the beginning of the crisis (i.e. beginning of April 2020) until August 2020, implying an established shopping pattern during the lockdown and the non-lockdown periods of the pandemic. Regarding the results of H3 testing, and in line with relevant studies (He & Harris, 2020; Prince et al., 2020), it is clear that buying domestic products is the dominant trend of Greek consumers. This trend, supported by Puiras et al. (2022) research results in the Canadian market, can lead to an increase of support for domestic businesses. It should be noted that this shopping trend was also observed during the capital control measures applied in Greece before some years. Existing knowledge (Gijsbrechts et al., 2008; Schmidt et al., 2020) is also confirmed through the H4 testing. Consumers seek for price discounts and/or free-products promotional campaigns to buy and stock at home "more products at lower prices". As expected, consumers are dissatisfied with delivery times (H5a) and satisfied with the alternative payment methods offered by the online supermarkets (H5b). The findings of Chaturvedi & Agnihotri (2019) showing that customers expect shorter delivery time for utilitarian products, further strengthens the finding of the present study. Mitropoulou & Tsoulfas, (2021) in a study for Greek online supermarkets supports our findings regarding customers' dissatisfaction from on-time delivery of the orders. Also, an interesting finding is that consumers evaluate as the second most positive attribute of online supermarkets the "delivery force personnel". In other words, while consumers are dissatisfied with delivery times, they are satisfied with the people that "bring their ordered

products at home". This finding may be attributed to several factors (e.g., health protection measures, "appreciation of offering such important services during difficult times") but needs further attention. Regarding H5b, the results are in line with Rai, (2020) in the sense that the increasing need of consumers for alternative payments methods in the COVID-19 era is sufficiently met by online supermarkets as derived by reviewing the current business practice in this sector in Greece. Finally, H6 testing reveals that health protection measures adopted by supermarkets differ in terms of consumers' evaluation, implying that there are areas for improvement (Pantano et al., 2020). Specifically, while consumers are satisfied with the use of protective gloves by the store personnel, they call for further investments in retail stores' infrastructure like the case of the dividing glass.

6. Conclusions and Implications

Consumers in Greece altered several aspects of their behavior compared to the pre-COVID era, highlighting the need for retailers to adapt to keep up with the challenges and create shopping experiences that focus on safety, while also satisfying other consumer needs. During the pandemic, consumers care about in-store health protection measures and demand effective delivery services. They steadily spend comparatively high amount of money for family purchases during the pandemic and they prefer buying domestic products and cook at home. Also, consumers seek for low prices and tend to buy large quantities of products (either through free-product promotions or not) and "stock at home". Finally, consumers are satisfied with several online store attributes (e.g., alternative payment methods), implying a promising development of the e-commerce offering in Greece.

To be competitive, the retail sector needs to adapt to the current situation, offering not only a seamless experience to customers but also enhance the feelings of safety and trust. Consumers' changing preferences must be considered by retailers to enhance their offered value and satisfy evolving consumer demands. To this end, retailers could exploit the specific results reported herein towards creating attractive promotional campaigns (either online or offline), appropriately handle the issue of products' origin in the context of their assortment decisions and communication actions (especially in the food sector) and provide effective customer services (e.g., "intelligent" recipes for cooking at home, alternative payment methods, express delivery options). However, establishing and communicating a holistic sense of safety through the application of suitable health protection measures must be the starting point of each effort. In sum, retailers need to be creative in adopting new strategies and properly adjusting their existing ones through continuously monitoring highly evolving consumer needs and wants and emerging consumer behavioral patterns attributed to the pandemic. To this end, monitoring and adjusting to cultural effects and local characteristics seems to be a promising option for retailers at least for some of their stores' attributes.

This research comes with some limitations. The sociopolitical situation in Greece at the time the research took place and the ways in which the government and policy makers dealt with the pandemic, may affect the application potential of these findings in other countries. Moreover, this paper has not addressed sociopolitical factors to further explain the results. Also, since different pandemic control and response measures have been implemented in various countries around the world, the results of the present study should be interpreted with caution when applied in other countries. The results of this study conducted at a time when Greece has managed to keep the number of COVID-19 cases at low levels compared to several other countries around the world (i.e., April 2020), could well propel the execution of comparative "across-countries" studies. Future research initiatives could provide useful insights and

contribute towards continuously meeting evolving societal needs. To this end, the results of the present study could be particularly helpful in future research initiatives as a point of reference.

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