Changing in-Store Customer Behaviour in Hungary During the Covid-19 Pandemic

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SUMMARY

The spread of the coronavirus pandemic has fundamentally changed all aspects of our lives, but the new situation has certainly had the greatest impact on mobility and the way we use space. The health crisis and the strict restrictive measures have had a major impact on the retail sector as well, and have changed our shopping habits. Although the epidemic threat is still not over, the accessibility to coronavirus vaccines has led to more relaxed measures in Hungary than in the past. The high vaccination rate of the population was also an important milestone for shops, as this measure allowed customers to freely visit their favourite stores. The main objective of the study is to show how store visiting habits of Hungarian shoppers have changed until the end of third pandemic wave in Hungary. Results are based on primary researches conducted independently and in collaboration with our colleagues. On the basis of these researches, we have attempted to track the main changes in shopping habits during the different waves of the coronavirus pandemic in Hungary.
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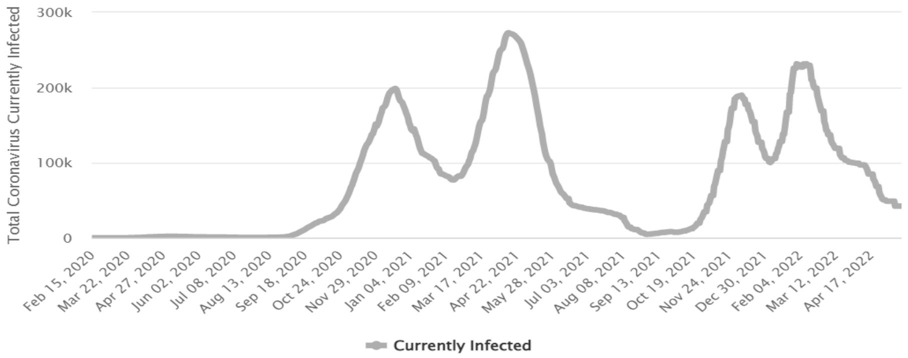
INTRODUCTION

The coronavirus pandemic has had a significant impact on the retail sector, to which retail stores have had to adapt at a rapid pace (Vizuete-Luciano et al. 2022). The fear of the COVID-19 virus has accelerated the consumer acceptance of online shopping and different types of delivery systems among customers, especially in the case of Fast Moving Consumer Goods (FMCG) products (Kovács Cs. J. 2021). It has changed their shopping habits with a speed unimaginable before the coronavirus pandemic. Mobility restrictions to slow down the spread of the virus have also supported these retail channels. As a result of these processes, studies about changes in shopping habits have recently become a popular research topic in both the Hungarian literature (e.g. Németh et al. 2021, Keller & Huszka 2021, Madarász et al. 2022) and the international marketing literature (e.g. Jensen et al. 2021, Baarsma & Groenewegen 2021, Rossolov et al. 2022).

The main aim of this study is to identify and describe changes in shop-going behaviour in Hungary from the declaration of a health emergency[i] until the abolition of the face mask wearing obligation[ii] (11 March 2020 - 3 July 2021). In Hungary, the timing of the coronavirus waves (Figure 1) was very similar to that of other countries in the Eastern-Central European region. However, the national immunization schedule in Hungary progressed more rapidly than other European countries during the spring of 2021. The gradual lifting of restrictions was linked to the number of first vaccinations, which was undoubtedly an important factor motivating motivating to become vaccinated (Szabó 2021).



Source: Worldometer (2022)

Figure 1. Number of active coronavirus cases in Hungary since the beginning of the epidemic

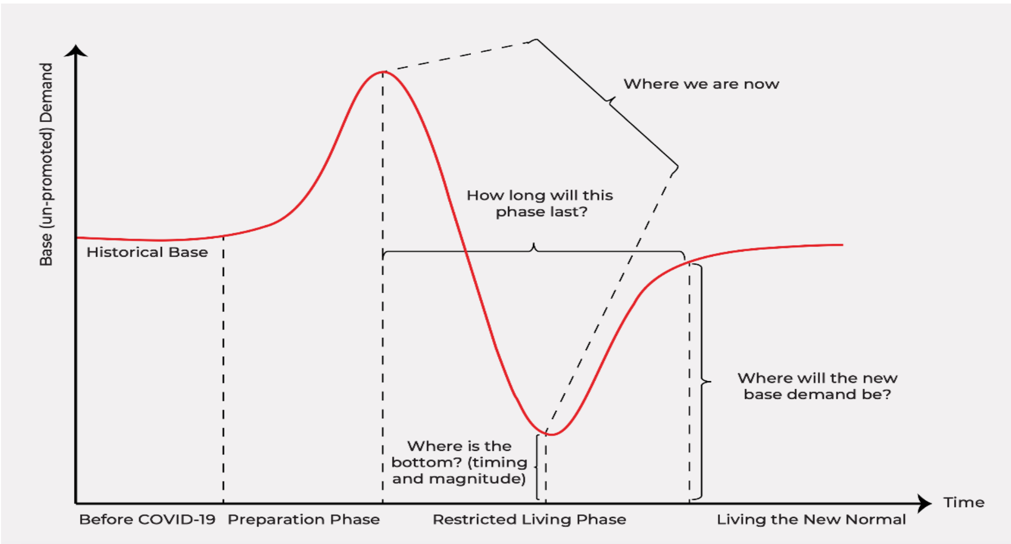
In this paper, we review the literature on the international trends that have characterised the behaviour of retail customers during the Coronavirus pandemic in the previous years. We also created a logical framework that has been applied to identify and distinguish the main stages in the spread of the coronavirus. In the methodological section of the study, we presented the research that we have conducted over the previous years to get a better understanding of the store visiting behaviour of Hungarian shoppers. Finally, we summarized main research findings and draw conclusions in the last section.

Evolution of shopping habits in the epidemic phases – literature review

Some new shopping behaviours and attitudes could be observed in all stages of the coronavirus pandemic, but there were also a number of them that were only related to a smaller, more limited period of the coronavirus crisis. Therefore, it was crucial to delineate and characterise the main stages of the COVID pandemic on the basis of marketing literature in the first phase of the research work.

The market research company Nielsen (2020) published a threefold approach on its website. Firstly, they distinguished the stage of preparation for an epidemic, which is essentially a period of panic buying and stockpiling. They envisaged the middle phase as a period of uncertain outcomes, characterised by both closures and easing of restrictions. According to this model, new shopping habits become embedded in daily routines and a transformed consumer mindset emergesing after the end of coronavirus pandemic in the last phase of the crisis.

The tripartite approach is suitable to the examination of basic necessities (Ayer & Gurman 2020), as it provides an adequate reflection for the expected evolution of the demand curve for basic needs (Figure 2).



Source: Ayer & Gurman (2020)

Figure 2. Demand for essential categories during and after the outbreak

According to GKI Digital (2021), the on-going health emergency should be broken down into five key periods. This approach can be best applied when the analysed product category is not among the essential needs. In accordance to this five-stage approach, consequences of the coronavirus pandemic had already begun before the declaration of the emergency. Though the danger of coronavirus epidemic was perceived by market actors, there were no general responses to the potential risks ("the calm before the storm"). In the second stage, there was a mass preparation and panic buying ("panic buying"). This was followed by the period of restrictions, when the frequency of store visits was significantly reduced ("quarantine period"). In the fourth stage, the discipline of communities was reduced and the restrictive measures were relaxed ("habituation to the health crisis"). In the final phase, all restrictive measures will be phased out at the very end of the emergency ("the new normal").

In the models described above, a one-epidemic-wave scenario was envisaged by economists. Therefore, we considered that it is necessary to modify their model to account for the effects of the second and third epidemic waves in the course of our research in order to place changes in consumer behaviour into a more suitable logical framework. (Sikos T. & Kovács Cs. J. 2022). For this purpose, we developed a new time series in the model to reflect the key specifities of the pandemic more properly in the study (Table 1).

Table 1
Changes in shopping habits over time in the wake of the COVID-19 epidemic

Period	**Most important feature**	**Shopping turnover**
Before coronavirus pandemic	Normality	Normal
Preparing for pandemic	Accumulation, panic buying	Extreme increase
Curfews & restrictions	Consumer awareness, the purchase of essential goods	Decrease
After mass vaccination	Non-purchase of products, "revenge shopping"	Increase
At the end of the pandemic	"New normality" (adaption)	Decrease

Source: Sikos T. & Kovács Cs. J. (2021)

In the first phase of the outbreak, people prepared for a period of restrictions on movement. During this stage of the crisis, the fear of the virus and a sudden surge in demand for retail products led to panic shopping in stores (Sikos T. et al. 2021a). During the period of panic shopping, the stocking of basic food products generated the highest turnover in the FMCG retail sector (Tyagi et al. 2020). In large part of the rapid growth of the online retail sector, the impending coronavirus epidemic has led to an even greater increase in the Courier, Express and Parcel Services (CEP) as well. The turnover in the sector almost doubled by April 2020 compared to the previous year (KSH 2020). In addition to these, the popularity of various digital solutions in stores also skyrocketed. The main driver of the grown acceptance of these solutions was the increased customer demand for contactless shopping (Pintér 2020). It is also worth highlighting the importance of generational differences between new online shoppers, as older generations have been more affected by the digitalisation in consumer behavior caused by the health crisis than younger generations (Jordan 2020).

Subsequently, during the phase of restrictive mobility measurements, the number of in-store purchases and the length of time that was spent in the shops dropped significantly. Meanwhile, shopper awareness has become an increasingly important factor in the composition of shopping baskets. This stage of the pandemic situation, partly due to the declining impulse purchases and partly because of the economic uncertainty and the worsening living conditions of households, the total value of shopping baskets showed a downward trend in the retail sector (Portfolio 2020). An increase in price sensitivity has been an other major consequence of the pandemic crisis, but health and environmental awareness have also increased in shopping decisions (Orîndaru et al. 2021). However, the importance of these aspects varied widely across countries, mainly depending on avarage income levels (Nielsen 2021).

The mass vaccination and the easing of the epidemic situation in the number of active cases led to a gradual or complete abolition of lockdown measures in many European countries in the summer of 2021 (Hotrec 2021). The new situation allowed for the replacement of previously postponed purchases of products and the experience of in-store shopping in most of these advanced economies. Here we see a phenomenon which is often associated with purchases that exceed the real needs of customers, a behaviour known in the international marketing literature as “revenge shopping” (Lins et al. 2021). Revenge shopping occurs when customers suddenly get access to goods or services after a frugal consumer spending period (Ström 2021). At this stage of the epidemic crisis, new buying habits were already established, and therefore there were no significant changes in customer behaviour expected in the wake of the new epidemic waves.

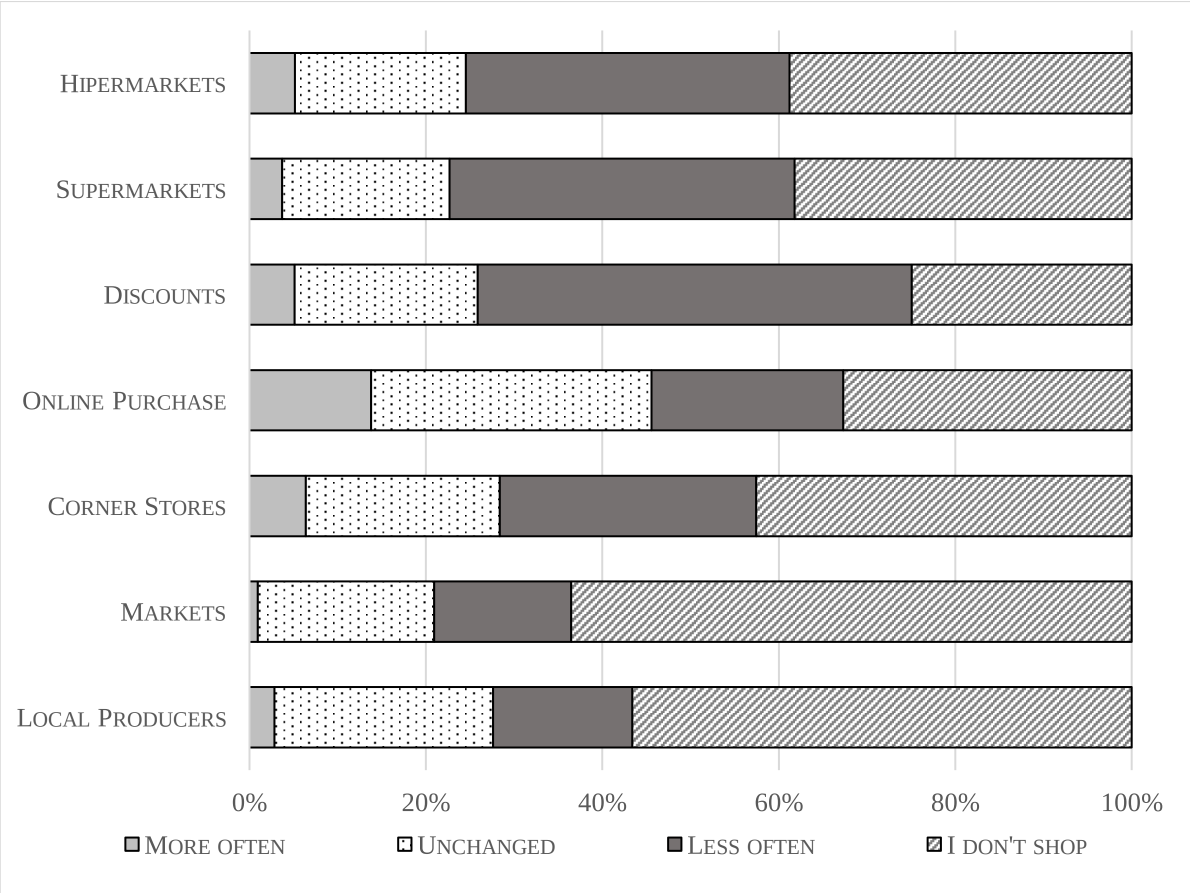
However, the period of “new normal” has not yet arrived. The economic consequences of the epidemic situation continue to have a major impact on consumer behaviour. The main reasons for this can be attributed to a number of factors, two of which are highlighted in this section. Supply chains are still disrupted, leading to shortages of many retail products in shops (Kavilanz 2022). Besides of it, the prolonged epidemic situation and the rising inflation due to restrictive measures are decreasing shoppers’ living standards. This has an impact on the size of shopping baskets and negatively affects shoppers’ price sensitivity as well (Yang et al. 2022).

METHODOLOGY

In this paper, we present results of our three previous studies to identify main changes in shopping behaviours in Hungary. Primary data were gathered anonymously through a self-completed online questionnaire survey in Google form on the Facebook social networking site in all three previous studies, but at distinctly different stages of the epidemic. The aim of the first customer survey was to observe the impact of the first wave of the coronavirus epidemic on a sample of 450 people, including in particular consumer reactions to panic buying. The questionnaire survey was conducted in March 2020 (see Sikos T. et al. 2021b for more details). The number of respondents for the second survey was 353 people. Data were collected after the lifting of the spring restrictive measures in June 2020 (for more details see Kovács 2021). The third survey was carried out at the end of May 2021 and a total of 310 respondents completed the questionnaire (for more information see Sikos T. & Kovács Cs. J. 2022). All samples were characterised by an over-representation of women, residents of the capital and respondents with tertiary education compared to the actual demographic composition of the Hungarian population. For these reasons, surveys cannot be considered to representative of the entire society. The use of a similar methodology makes primary data that were extracted from the three questionnaire samples comparable to each other. Analyses were carried out with descriptive and mathematical-statistical methods.

RESEARCH RESULTS

The results of the first survey confirmed the hypothesis that the retail sector has been severely affected by the impact of the coronavirus situation. When analysing the data as a proportion of respondents, the frequency of food shopping occasions for retail shoppers in March 2020 across all sales channels decreased significantly compared to March of the previous year due to the emergency (Figure 3).

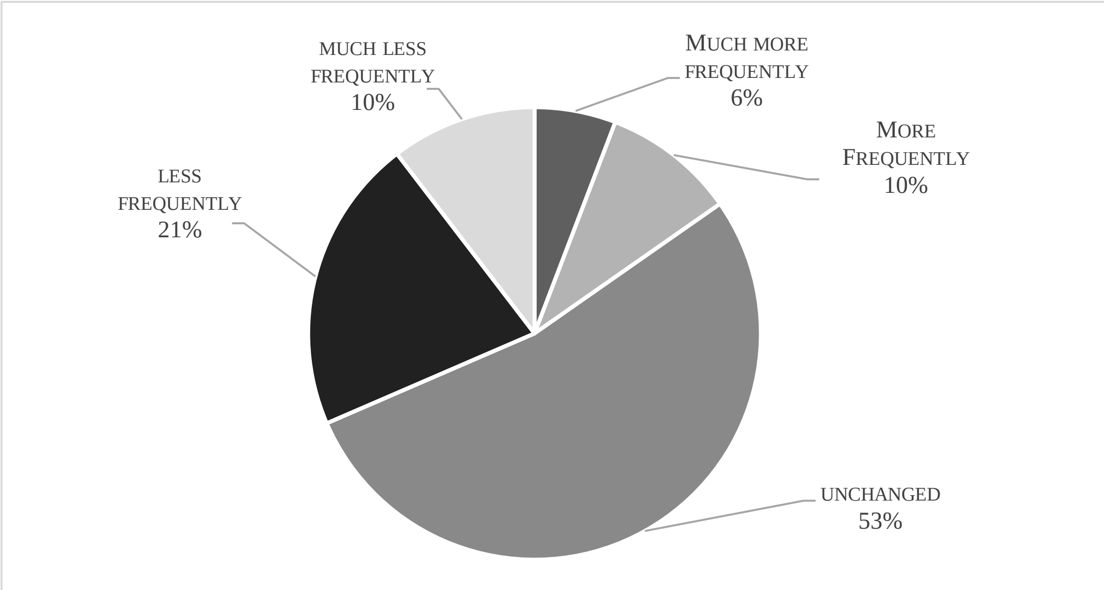


Source: Sikos T. et al (2021)

Figure 3. Comparison of the frequency of food shopping before and at the beginning of the COVID-19 pandemic in Hungary, March 2020, N= 423-432 (varies by store format)

Shops selling through online channels were clearly in the best market position, with 46% of shoppers buying online as often as or more often than before the coronavirus pandemic. In contrast, all in-store formats were in a significantly worse situation. Shoppers reported that they were shopping less often in these store formats, because of the epidemic situation (28.4 – 20.9%). There was a particularly large difference in the category of more frequent buyers, which also indicates a weakening of the position of in-store sales channels compared to internet retailers. Local markets and producers were in the most difficult market position, because there were a particularly high proportion of people who did not shop at all in these retail formats. Meanwhile discount retail chains proved to be the most resistant in this respect. Only 24.9% of shoppers did not visit these shops. Other types of retail formats showed almost the same level of dispersion, ranging from 38.2% to 42.6%.

We compared these research results with from responses of another questionnaire survey (Kovács Cs. J. 2021). It also shows the lasting impact of the coronavirus crisis on the trend in the frequency of store visits. Nearly 53% of the respondents in the second questionnaire survey at the time of the temporary lifting of the stict mobility restrictions in spring 2020 answered that they did not plan to change the frequency of their store visit occasions compared to the period before the coronavirus epidemic (Figure 4).

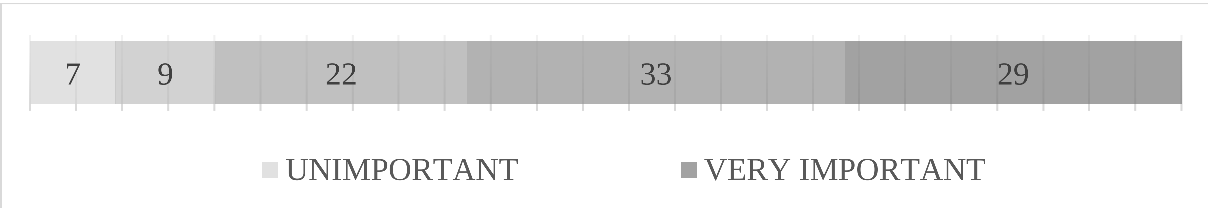


Source: Kovács Cs. J. (2021)

Figure 4. Planned frequency of shop visits after the epidemic, compared to 2019, N=327

Among those respondents who wanted to make a lasting change in their in-store visiting behaviour after the coronavirus pandemic, the majority planned to reduce shopping occasions. There was no statistically verifiable correlation between the age and the place of residence of respondents. Roughly, a third of potential shoppers intended to increase the number of occasions they go to the stores, while two thirds would shop less often in the stores in the future. These are particularly drastic shifts in shopper preferences given that only a quarter of a year had elapsed between the two surveys. However, it is important to stress that there is no comparison between the respondents' perceptions and the evolution of actual sales figures. These results only provide information for the analysis of customer expectations, which may change in a short period of time, depending on how the epidemic situation develops.

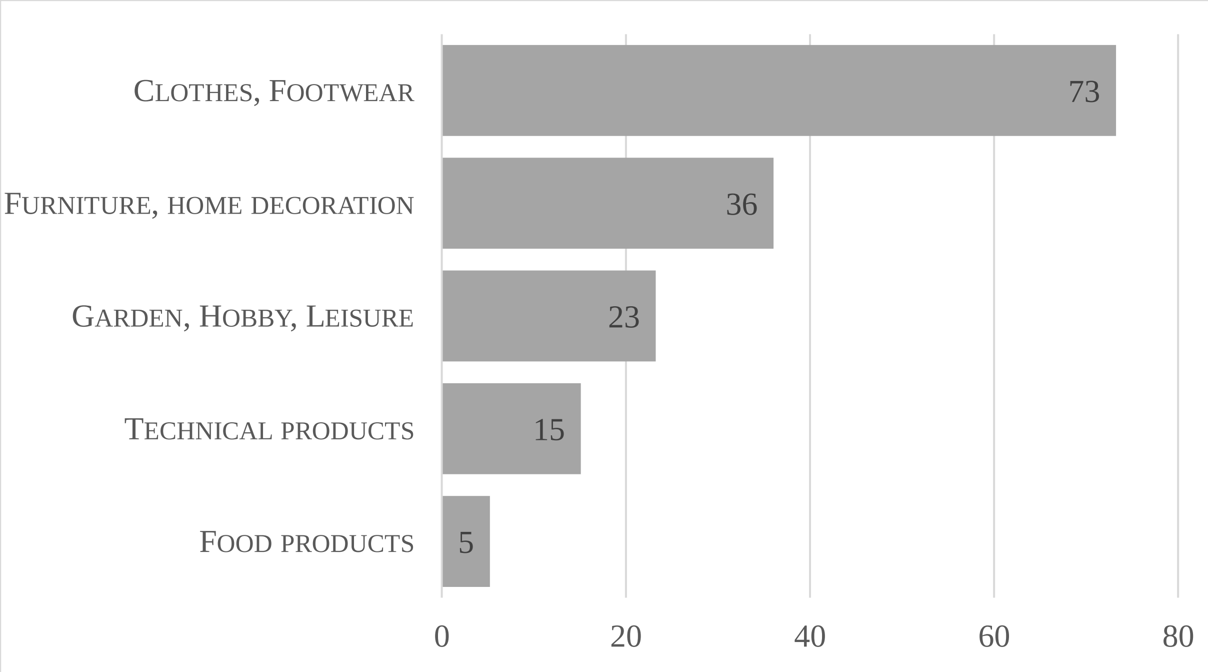
In addition to these conclusions, the third questionnaire survey (Kovács Cs. J. 2021) shows that respondents still feel the importance of viewing products in person, despite the rapid growth of online retailing in market share (Figure 5).



Source: Sikos T. & Kovács Cs. J. (2021)

Figure 5. Preference for personal viewing as a percentage of responses (%), N=309

According to the primary data, 62% of respondents feel that face-to-face visits are rather important or very important when shopping, while only 16% of them consider it a less relevant influencing factor when purchasing retail products. No statistically significant relationship between age groups could not be detected in the questionnaire sample based on the cross-tabulation analysis. These results suggest that the majority of shoppers in product categories requiring personal viewing are likely to prefer in-store locations for products, even with the significant improvements in logistics solutions following the end of the epidemic. Finally, we examined whether shoppers plan to make up for their postponed product purchases after mass vaccination and the reopening of stores (Figure 6).



Source: Sikos T. & Kovács Cs. J. (2021)

Figure 6. Breakdown of postponed purchases by product category (%), N=272

The results showed that a narrow majority of respondents (56%) would like to make up their postponed purchases in at least one product category. The highest proportion of respondents (73%) will make up for their postponed purchases in the clothing and footwear product categories. Undoubtedly, this is an exceptionally high propotion, even taking into account that the rotation rate for clothing is higher than for the next-most-popular product category. Within the furniture and housing product categories, 36% of respondents plan to make purchases. Public subsidies for the renovation and modernization of houses from the Hungarian government certainly have an important impact on this category. In addition, puchases in the case of garden, hobby, leisure (23%) can be considered a moderately high proportion as well. However, it must be noticed that answers were gathered after the spring seasonal peak of this product category.

CONCLUSION

In this study, we examined the impact of the coronavirus on store-visiting patterns at different stages of the COVID-19 epidemic. Overall, results of the research about shoppers in Hungary are in line with consumer responses that were identified in the international literature. Our findings were conducted by empirical research methods through questionnaire surveys. Among other things, the analyses have contributed to a better understanding of the panic shopping phenomenon in Hungary. Results of questionaire responses confirmed that shoppers became more conscious of their purchase decisions in stores during a transitional period of restrictions and relaxations. This mainly showed up in an overall increase in price sensitivity and in spending shorter shopping time, but it could be clearly observed in the increased importance of environmental and in health-consciousness among consumers as well. Besides these phenomena, the presence of 'revenge shopping' was also detected from the survey responses in Hungary, though the extent of the impact varied by product categories.

The market position of small shops has been further weakened by the coronavirus epidemic in relation to multinational retail companies. While the in-store shopping experience remained an important influencing factor, digital solutions and product delivery, in particular home delivery, have become an essential claim for all retailers. Research findings in the study confirmed that the process of adaptation to digital technologies has accelerated significantly during the epidemic, especially among the older generations. Online retail sales increased significantly in the coronavirus pandemic, with the most dynamic growth in FMCG. If not for the recent health crisis, the distribution of online purchases among retail channels and the prevalence of use of various digital solutions in retail stores by customers would have reached its current level in the next 5-10 years.

REFERENCES

AYER, A. & GURMAN, S. (2020): COVID-19: It is All About the Baseline for Retail & CPG. WNS website. https://www.wns.com/insights/articles/articledetail/764/covid-19-it-is-all-about-the-baseline-for-retail-and-cpg (downloaded: 02.02.2022.)

BAARSMA, B. & GROENEWEGEN, J. (2021): COVID-19 and the Demand for Online Grocery Shopping: Empirical Evidence from the Netherlands. *De Economist*, Springer, 169(4), 423-426.

GKI DIGITAL (2020): A koronavírus nyertese?! – lendületben az e-kereskedelem [Profiting from the coronavirus?! - e-commerce on the rise]. 7 May. GKI Digital marketing research firm homepage. https://gkidigital.hu/2020/05/07/koronavirus/ (downloaded: 03.07.2021.)

HOTREC (2021): Lockdown measures eased throughout Europe over the course of summer 2021. 15 September. HOTREC Hospitality Europe website. https://www.hotrec.eu/newsletter/live-from-brussels-issue-105/lockdown-measures-eased-throughout-europe-over-the-course-of-summer-2021/ (downloaded: 02.02.2022.)

JENSEN, K., YENERALL, J., CHEN, X. & YU, T. (2021). US Consumers' Online Shopping Behaviors and Intentions During and After the COVID-19 Pandemic. *Journal of Agricultural and Applied Economics*, 53(3), 416-434. doi:10.1017/aae.2021.15

JORDAN, K. (2020): How COVID-19 is impacting boomers' shopping behavior. The pandemic has shifted boomers' priorities. 9 June, blog. National Retail Federation website. https://nrf.com/blog/how-covid-19-impacting-boomers-shopping-behavior (downloaded: 03.06.2021)

KAVILANZ, P. (2022). Here's why grocery stores are struggling to stock their empty shelves. 11 January. CNN website. https://edition.cnn.com/2022/01/11/business-food/grocery-store-shelves-empty/index.html (downloaded: 29.01.2022)

KELLER, V. & HUSZKA, P. (2021): Élelmiszer-vásárlási szokások a koronavírusjárvány második hullámában. [Food Purchasing Habits in Times of the Second Wave of the Coronavirus Pandemic] *Gazdálkodás*, 65(2), 158-171.

KOVÁCS, CS. J. (2021). Vásárlói döntések az online és offline térben. [Customer Buying Decisions in Online and Offline Environments]. PhD thesis, Hungarian University of Agriculture and Life Sciences.

KSH (2020): A kiskereskedelmi forgalom többéves növekedését törte meg áprilisban a koronavírus okozta járvány gazdaságba begyűrűző hatása. [Several years of growth in retail sales interrupted in April by the economic spill-over of the coronavirus outbreak]. Hungarian Central Statistical Office. https://www.ksh.hu/docs/hun/xftp/idoszaki/kiskereskedelmi-forgalom/index.html (downloaded: 03.09.2021)

LINS, S., AQUINO, S., COSTA, A. R. & KOCH, R. (2021). From panic to revenge: Compensatory buying behaviors during the pandemic. *International Journal of Social Psychiatry*. doi: https://doi.org/10.1177/00207640211002557

MADARÁSZ, T., KONTOR, E., ANTAL, E., KASZA, G.,SZAKOS, D. & SZAKÁLY, Z. (2022). Food Purchase Behavior during the First Wave of COVID-19: The Case of Hungary. *International Journal of Environmental Research and Public Health*, 19, 872. doi: https://doi.org/10.3390/ijerph19020872

NÉMETH, P., LÁZÁR, E., SZŰCS, K. & TÖRŐCSIK, M (2020). Vásárlási szokások változása a koronavírus okozta járványhelyzet hatására - az online vásárlási magatartás vizsgálata. [Changes in shopping habits due to the coronavirus epidemic – examination of online shopping behavior] In: Ercsey, I. (Ed.), Marketing a digitalizáció korában (pp. 305–315). Széchenyi István Egyetem: Győr.

NIELSEN (2020): Key consumer behavior thresholds identified as the coronavirus outbreak evolves. Nielsen website. https://www.nielsen.com/us/en/insights/article/2020/key-consumer-behavior-thesholds-identified-as-the-coronavirus-outbreak-evolves/ (downloaded: 08. 08. 2020)

NIELSEN (2021): Unlocking consumption: Four consumer groups driving spend. 22 February. Nielsen website. https://nielseniq.com/global/en/insights/analysis/2021/unlocking-consumption-four consumer-groups-driving-spend/ (downloaded: 03.06. 2021)

ORÎNDARU, A., POPESCU, M., CĂESCU, Ș., BOTEZATU, F., FLORESCU, M. S. & RUNCEANU-ALBU, C. (2021). Leveraging COVID-19 Outbreak for Shaping a More Sustainable Consumer Behavior. *Sustainability*, 13 (11), 1-19.

PINTÉR, R. (2020). Beköszönthet-e az érintésmentes vásárlás korszaka? [Could the era of contactless shopping be dawning?] 5 May. g7 website. https://g7.hu/tech/20200505/bekoszonthet-e-az-erintesmentes-vasarlas-korszaka/ (downloaded: 09.10.2021)

PORTFOLIO (2020). A koronavírus-járvány nagy változásokat hozott az üzletekben [The coronavirus outbreak has brought big changes to business]. 13 December. Portfolio website. https://www.portfolio.hu/uzlet/20201213/a-koronavirus-jarvany-nagy-valtozasokat-hozott-az-uzletekben-461568

(downloaded: 2021.09.03)

ROSSOLOV, A., ALOSHYNSKYI,Y. & LOBASHOV, O. (2022). How COVID-19 Has Influenced the Purchase Patterns of Young Adults in Developed and Developing Economies: Factor Analysis of Shopping Behavior Roots. *Sustainability*, 14 (2), 941. https://doi.org/10.3390/su14020941

SIKOS T., T. & KOVÁCS, CS. J. (2022). Generációk fogyasztási szokásai: Y generáció és 60 év fölötti nemzedékek. [Consumption patterns of generations: Generation Y and generations over 60] In: Sikos T., T. & Molnár, D. (Eds.): A COVID-19 világjárvány hatása a kiskereskedelemre. Akadémiai Kiadó, Budapest (in press)

SIKOS T., T. & PAPP, V. & KOVÁCS, A. (2021a). Panic Buying in Hungary During Covid-19 Pandemic *'Review of Business and Management' Theory, Methodology, Practice* 17 (1), 53–65. http://doi.org/10.18096/TMP.2021.02.06

SIKOS T., T. & PAPP, V. & KOVÁCS, A. (2021b). A vásárlói magatartás változása a COVID-19 idején [Changes in Hungarian shopping behavior during the first wave of COVID-19] *Területi Statisztika*, 61 (2), 135–152. https://doi.org/10.15196/TS610201

STRÖM, B. (2021). Revenge Shopping 101: What Is It and Why Is It Important? https://ombori.com/blog/revenge-shopping (downloaded: 13.05. 2022)

SZABÓ, K. (2021). Magyarország lassan elveszti előkelő helyét az európai első adagos oltási ranglistán [Hungary slowly losing its place in the European first-dose vaccination ranking]. 28 May. Atlatszo website. https://atlatszo.hu/adat/2021/05/28/magyarorszag-lassan-elveszti-elokelo-helyet-az-europai-elso-adagos-oltasi-ranglistan/
(downloaded: 23.01.2022)

TYAGI, P., SINGH, U. & SHARMA, R. (2020). Panic shopping in COVID 19 pandemic: A comparative study of eastern and western culture. *International Journal of Creative Research Thoughts*, 8 (8), 44–49.

VIZUETE-LUCIANO, E., BORIA-REVERTER, S., SOLÉ-MORO, M.L. & GIL-LAFUENTE, A.M. (2022). Adaptation of Grocery Stores to the Post-Covid-19 Environment. The Case of Barcelona. In: Gil-Lafuente, A.M., Boria, J., Torres, A., Merigó, J.M., Kacprzyk, J. (eds) Computational and Decision Methods in Economics and Business. REDCID 2019. Lecture Notes in Networks and Systems, vol 388. Springer, Cham. https://doi.org/10.1007/978-3-030-93787-4_17

Worldometer (2022). Active Cases in Hungary https://www.worldometers.info/ coronavirus/country/hungary/ (downloaded: 13.05. 2022)

YANG, B., ASCHE, F. & LI, T. (2022). Consumer behavior and food prices during the COVID-19 pandemic: Evidence from Chinese cities. *Economic Inquiry*, 60 (3), 1437–1460. doi: https://doi.org/10.1111/ecin.13067

[i] A Kormány 40/2020. (III. 11.) Korm. rendelete veszélyhelyzet kihirdetéséről [Government Decree 40/2020 (III. 11.) on the declaration of a state of emergency]

[ii] 365/2021. (VI. 30.) Korm. rendelet a védelmi intézkedések lépcsőzetes feloldásának hatodik fokozatára tekintettel a veszélyhelyzet idején alkalmazandó védelmi intézkedéseket szabályozó kormányrendeletek módosításáról [Government Decree 365/2021 (30.VI.) amending the Government Decrees regulating the protection measures to be applied during an emergency with regard to the sixth stage of the staggered lifting of protection measures]

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