

LONG-TERM IMPACT OF PANDEMIC RESTRICTIONS ON CONSUMER BEHAVIOR IN POLAND

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Purpose: The purpose of the article is to present the results of research on the long-term impact of SARS-CoV-2 pandemic restrictions on the marketing environment and consumer behavior in Poland. Two surveys conducted during the 1st lockdown and after the official end of the epidemic emergency made it possible to compare and evaluate phenomena that have perpetuated or had a potential longitudinal effect.

Design/methodology/approach: The comparative research used literature studies, analysis of reports and online publications, and an online quantitative survey; conducted in 2 phases, i.e. in 2020 and 2023 on a similar group of respondents, allowed to achieve the research objectives.

Findings: Research confirmed that many of new consumer attitudes and behaviors remained in the post-pandemic period, including increase in online shopping, greater acceptance of electronic payments, VOD subscription surge, new working time arrangements, and more sustainable consumer choices.

Practical implications: The paper provides insights into the attitudes and behaviors of consumers in Poland that have been perpetuated by long-lasting restrictions, which will help enterprises shape marketing strategies, tailored to the characteristics of post-pandemic consumers.

Research limitations: In the 1st stage of research, the snow-ball method of sampling, which has its own limitations, was adopted.

Originality/value: An important novelty of the work is the comparative research which was done with a similar survey questionnaire to assess whether the new shopping habits and behaviors observed during the pandemic remained present after it ended. An additional value is the synthesis of the changes in the marketing environment that most affected consumer behavior.

Keywords: consumer behavior, pandemic, Poland, comparative study.

Category of the paper: research paper.

1. Introduction

The SARS-CoV-2 virus confronted regulatory agencies and governments with the difficult task of reaching a balance between public health and economic protection. Restrictions imposed have resulted in increased economic risks, including customer and revenue loss for many companies. The waves of the pandemic's spread in Poland affected the health care system, the economy, education, and the daily lives of residents (Plebańska et al., 2021). During the first wave, which lasted from March to May 2020, the full lockdown featured border closures, rigorous constraints on social mobility, a decrease in the operation of shopping malls, the shutdown of gyms and fitness clubs, swimming pools, museums, libraries, theatres, and cultural institutions (Serwis RP, 2020).

As a result of the second wave, which occurred between September and November 2020, the economy experienced another downturn, and many companies were forced to reduce their workforce. After the second wave subsided, the action taken by the government was to enter the “Stage of Responsibility” (Golinowska, Zabdyr-Jamroz, 2020). Stores and services in malls were restored, and some cultural institutions were re-opened. Unfortunately, the recovery did not last long, as again a national quarantine was established, which lasted until January 2021 (Polityka Zdrowotna, 2020).

During the third and fourth waves of the pandemic (Spring and Autumn 2021, respectively), a renewed increase in infections and deaths caused by new variants of the virus was registered, again spurring restrictions that affected both businesses and consumers (Ministerstwo Zdrowia, 2021). Throughout the last fifth wave of the pandemic (2022), Poland tried to return to normal, restrictions were lifted and those businesses that survived the hardest moments began to rebuild their operations. The most significant changes affecting citizens include the abolition of the requirement to wear masks in enclosed public spaces, and the discontinuation of isolation and quarantine in March 2022. Online forums also mentioned 6th and 7th waves of Sars-CoV-2, but these were unofficial terms. Ultimately on July 1, 2023, the state of epidemic emergency imposed in Poland due to SARS-CoV-2 viruses was canceled.

Restrictions on the functioning of the economy, such as the closure of certain sectors and limitations in social mobility, resulted in a decline in demand for many services and products. Due to lockdowns, many companies were forced to temporarily close their operations or operate in a limited capacity. In addition, entrepreneurs faced changing customer preferences and behaviors as a result of the pandemic. Remote working and learning, travel restrictions and health concerns have caused consumers to change their purchasing habits (Długosz, 2021).

Many entrepreneurs had to take quick and strategic action to survive the difficult times. These included shifting operations to the virtual space, creating loyalty programs, investing in digital marketing and building relationships with customers online. While the pandemic restrictions were still in place, researchers and practitioners were considering the extent to

which new consumer buying patterns would be established, requiring changes in corporate strategy and the adaptation of business practices to the new conditions.

The own study was conducted during the period of the most restrictive epidemic restrictions, with the main goal of determining how these limitations influenced consumers' purchasing behavior and decisions. To verify whether the observed changes in buying behavior persisted, the survey was conducted again, after the cessation of pandemic restrictions. The research was conducted in 2020 and 2023 on a similar group of respondents using literature studies, analysis of reports and online publications, and online quantitative surveys. It was found that acceptance for online exchanges and electronic and mobile payments has increased, similarly to the share of some consumer goods (such as pets' accessories and food) in online shopping. Respondents indicate that a favorable change is the ability to work remotely and hybrid work, although this mainly applies to those under 40. The survey results show changes in buyer attitudes that were initiated during the pandemic restrictions. The article includes a presentation of original survey research conducted by the author and a synthesis of source materials and academic publications - especially in the area of studying changes in the marketing environment.

2. Research methodology

The study on the impact of pandemic restrictions on consumers in Poland during the SARS-CoV-2 virus pandemic and after its cessation was conducted in 2 stages. To empirically confirm to what extent the changes in Polish consumers' shopping behavior caused by the SARS-CoV-2 virus pandemic have been perpetuated, surveys were conducted during the pandemic lockdown (2020) and after all restrictions were removed (2023).

The 1st part of the study was designed and conducted in the period March-May 2020, when the first lockdown was still in progress. This stage of the research was exploratory in nature, and it tried to describe a new phenomenon: a global pandemic that affected almost all spheres of the marketing environment, the operations of businesses and consumer behavior. The aim of the study was to determine the impact of pandemic restrictions on consumer purchasing behavior and decisions.

The methodology of the study included the measurement of secondary sources of information, including online publications and reports from the Statistics Poland, because at the time, scientific publications on this new phenomenon were not yet available (Bedgood, 2020; Deloitte, 2020; Drozdowski et al., 2020; Gorzelany-Dziadkowiec, 2020; GUS, 2020a; 2020b; McKinsey & Company, 2020; Alfonso et al., 2021).

Primary sources were measured through an online survey based on an originally designed survey questionnaire. 301 respondents participated in the survey.

Part II of the survey was conducted after the cancellation of the pandemic emergency in Poland in June 2023, to determine whether the perceived changes in consumer behavior, such as a change in shopping routines, a slower and more sustainable lifestyle, and an increase in online shopping, have been perpetuated in the long term. A research assumption was that all of the changes in consumer behavior observed in the first part of the study would be sustained.

Pandemic restrictions have affected many spheres of social and economic life. Therefore the analysis covered the economic environment, online exchange and electronic currency, the labor market and working conditions, the socio-cultural environment, including attitudes toward remote work, sustainable consumption, new consumer behaviors, and the environmental impact of the pandemic.

The aim of the study was to determine how consumers' experiences during the Covid-19 pandemic, the threat of an epidemic and the cessation of pandemic restrictions affected their purchasing behavior and decisions. The crucial task was to identify changes in the marketing environment, which provided a framework for studying new consumer behavior. The assessment was conducted on the basis of secondary sources e.g.: available scientific studies, reports and statistical data on the impact of pandemic restrictions on the economic domain, socio-cultural trends, technological and environmental aspects.

In addition to studying secondary sources of information, changes in consumer behavior were verified empirically through an online survey. A modified survey questionnaire from 1st part of the study was used. 209 respondents participated in the study.

The subject of the research was the impact of the marketing environment on consumer decisions, the balance between work and leisure, the organisation of purchases in households, and the patterns of shopping in conventional and online stores.

During the first stage of surveys, due to their pioneering nature and the specific limitations of lockdown time, the snowball method was used in selecting the sample, while during the second part of the survey, the same contact channels were used to reach a similar group of respondents (Table 1).

Table 1.
Sample structure in research 2020 & 2023

Sample structure by age					
	up to 19 yrs	20-26 yrs	27-39 yrs	40-59 yrs	over 60 yrs
Survey 2020 (n = 301)	2%	43,5%	17,6%	26,2%	10,6%
Survey 2023 (n = 209)	3,8%	60,6%	17,3%	11,5%	6,8%
Sample structure by place of residence					
	rural areas	town of up to 30,000 inhabitants	city of 30,000- 100,000 inhabitants	suburban areas	city of more than 100,000 inhabitants
Survey 2020 (n = 301)	23,6%	6,0%	14,3%	6,3%	49,8%
Survey 2023 (n = 209)	7,21%	8,65%	22,11%	12,01%	50,0%

Source: Prymon-Ryś, Galarowicz, 2021 & own study.

In the sample, 26.9% of respondents indicated that they had participated in research focused on shopping and consumer decisions during the pandemic, while the majority said they could not recall such research (58.2%).

3. Overview of pandemic-related changes in the marketing environment based on secondary studies

The long-term impact of pandemic restrictions on consumer purchasing behavior was considered in the context of trends in the marketing environment. Among the most important determinants of consumer decisions were changes observed in the economic environment, evolution of employment conditions and work arrangements, the increased role of online exchanges, and new social trends related to sustainable consumption and a strong focus on safety (safety obsession) and health care (Długosz, 2021).

3.1. Economic environment

In response to the pandemic, the Polish government responded by seeking to offset the negative consequences of both the virus infection and the restrictions introduced at the same time. The government legislated act that were called “Anti-Crisis Shields”, consisting of a package of solutions to protect the Polish state and citizens from the crisis caused by the coronavirus pandemic (Koman, Syta, 2022).

The cost of all the Anti-Crisis Shields estimated by the Polish government was more than PLN 312 billion, the largest part of which was support in the form of, among other things, non-refundable loans to companies, tax changes in PIT and CIT settlements, exemptions from Social Security contributions, and suspension of tax payments (Serwis RP, 2021). Approx. 30 billion was allocated to subsidize public investment in areas such as infrastructure, modernization of schools and hospitals, energy transition, digitization, biotechnology and pharmaceuticals, and environmental policy. Another 30 billion has been earmarked for worker security, preserving jobs through initiatives such as wage subsidies of up to 40% of average monthly wages, assistance for the self-employed through Social Security benefits, supplementary care allowance, loan deferment and reductions in non-interest costs for consumer loans. For health care, mainly in terms of COVID-19, 7.5 billion was allocated. This amount also included the digitization of the health care system, the construction of day care homes or the expansion of the Patient Telephone Hotline (Polski Fundusz Rozwoju, 2021).

Decisions to increase demand at the expense of new investments have boosted consumer spending. However, many people changed their purchasing preferences, switching to cheaper brands or local products. During the COVID-19 pandemic, many people experienced a drop in income or financial uncertainty, which forced them to change their shopping preferences.

They began to look for cheaper alternatives to their existing products and paid more attention to local brands and products (Korzeniowska et al., 2023).

The Act on Special Arrangements for Preventing, Countering and Combating COVID-19 provided support to Polish entrepreneurs whose turnover was reduced by 15% or 25% (depending on the period used for calculation) during the pandemic (Żelazowska, 2020).

Thanks to the law, entrepreneurs were able to reduce wages paid by up to 50% during the shutdown and receive subsidies for reduced wages equal to 50% of the national minimum wage. They were also authorized to reduce the time of those employed to 20% and receive wage subsidies of up to 40% of the average, national wage.

It may be stated that through such interventions an overwhelming number of entrepreneurs, despite the threat of closure of their businesses, have demonstrated the ability to resilience, adapt, take advantage of state aid or make plans that reach beyond the crisis period.

According to economists' predictions, the effects of the pandemic will be experienced up to 5 years. Steadily rising prices are the result of the disruption caused by the pandemic and will be felt in the long term. The main reason for the negative market sentiment related to the economic collapse during the pandemic has become rising inflation, which at the same time worries people the most of all factors that threaten the development of the economy (Hamulczuk, Idzik, 2022).

3.2. Electronic payments

Long-term effects of pandemic-related changes are (Kubiczek, 2022):

- growth of e-commerce and technologies supporting remote communication and online exchange,
- high degree of acceptance of these IT solutions,
- change in consumer payment habits.

One of the more significant changes brought about by the pandemic has been the circulation of money by consumers. The payment market has changed dramatically over the past decade or so due to the increasing use of credit and debit cards at many points of sale, making it possible to make payments via payment terminals. In the year affected by the pandemic, the number of purchases paid for with cash declined by more than 30% (Każmierczak et al., 2021).

Not only has the number of electronic transactions among different age groups increased, but also the use of the newest of the common types of payment - BLIK. After the pandemic explosion, the share of this form of cashless payment increased from 24% to 39%. It has become the most popular method of paying for purchases and services among the youngest age group (18-34) - who, on average, spend smaller amounts, which is typical of BLIK payments. The older-than-mentioned age group, having given up cash during the pandemic, were more likely to switch to payment cards or start using fast payment operators such as PayU or BlueMedia.

The main reasons for the increase in cashless transactions are the increasing presence of payment terminals in Poland, the possibility to pay with BLIK - also using smartphones/smartwatches, the increase in widespread trust in these forms of payment, low commissions for merchants for processing such transactions (Kubiczek, 2022).

The high degree of acceptance of online exchange and electronic payments, also among people who previously used the Internet to a limited extent, has influenced the consolidation of these shopping habits. The surge in online shopping during the pandemic is one of the most persistent phenomena that has persisted after the cessation of pandemic restrictions (Amsari, Sari, 2022), as also confirmed by the results of the surveys conducted (see section 4).

3.3. Labour market

The coronavirus pandemic proved to be an exogenous shock to the economy and to the labor market. The external factor has disrupted labor markets and has long-term consequences for the economic performance of companies (Radlińska, 2020).

In Poland, the number of new jobs has steadily increased since 2015, at the same time the number of jobs lost has remained at a similar level. 2020 turned out to be the first year in the period under review, the number of newly created jobs fell below 500,000. The moment of the market collapse was the first wave of the pandemic - the period from March to May 2020 (GUS, 2020a). The relatively rapid introduction of restrictions by the government, which most companies did not anticipate and for which they did not prepare safeguards, led to internal crises. So, many companies have decided to cut staff and stop recruiting new employees. In order to limit staff cuts, quite a few companies decided to remodel their organizational structures and make internal redeployments of employees (Witkowska-Pertkiewicz, 2020). As a result, changes in the labor market manifested themselves in, among other things, a reduction in employment, an increase in part-time employment and, to a some extent, an increase in unemployment.

Several support programs were introduced by the government including the Anti-Crisis Shield, as a response to the main problems arising from the pandemic (Polski Fundusz Rozwoju, 2021). However, the restrictions introduced, albeit for the safety and health of citizens, led to the collapse of many businesses.

The Anti-Crisis Shield was a set of assistance programs aimed at workers and entrepreneurs. It was based on five pillars (Departament Rynku Pracy, 2020):

- job protection and worker security,
- financing for entrepreneurs,
- health care,
- strengthening the financial system,
- public investment.

Compensation in the form of support programs has certainly been essential and has been a kind of "last lifeline" for many companies. The possibility of taking advantage of subsidies, tax breaks, refinancing and a number of other measures made it possible to avoid the closure of many companies, and thus saved jobs, so vital in the context of the unemployment phenomenon.

Despite the substantial assistance, however, the labor market has not returned to its full pre-pandemic condition, and assessing the long-term impact of the pandemic restrictions is hampered by the outbreak of war in Ukraine and related ongoing changes in the labor force structure.

3.4. Work-time arrangements and job attitudes

In the early days of the pandemic, in many companies the ability to continue working could only be done remotely. Employees performed their duties from a home office. This solution has many advantages like optimization of rental costs for the employer or a flexible work mode for the employee. Taking advantage of this mode, employers often placed greater emphasis on monitoring working hours and properly securing company data.

At the same time, some companies have decided to strengthen the competencies of hired employees by organizing training courses conducted by internal and external trainers and e-learning platforms. A great number of developmental forms were created that employees could take advantage of (Dolot, 2020):

- online training,
- remote coaching,
- e-conferences
- e-learning,
- webinars,
- experience-sharing forums.

It can be concluded that the pandemic generally did not have a negative long-term impact on the course, quality and outcomes of the HR processes in enterprises. This is supported by the results of partial studies and practitioner insights.

The pandemic did not contribute to the reduction of the number of applications offered, companies hiring during the pandemic coped with the new reality by taking care of relationships with candidates, providing them with the help they needed at every stage of the recruitment process, to the extent that they were positively assessed by candidates through the prism of an organized process.

According to forecasts for the next few years, remote work will become a permanent part of the operation of enterprises, most likely in a hybrid mode that will allow for both flexible work modes and the ability to control the progress of work among employees (Muster, 2022).

3.5. Safety and sustainability

One of the main drivers of public life during the pandemic was safety and reducing the risk of infection. Governments and regulators introduced several measures to protect public health and prevent the spread of the SARS-CoV-2 virus. Companies were obliged to make changes to their operations and procedures to comply with new requirements for stricter hygiene rules and the provision of disinfectants.

The impact of the COVID-19 pandemic on human health and safety has made health awareness a key factor in the choice of products and services. Consumers have begun to review ingredients and manufacturing processes more carefully in an effort to avoid substances harmful to health. There has been a growing interest in products with disinfectant properties that can help reduce the risk of infection (Hamer, Baran, 2021).

In addition, customers paid more attention to hygiene in public places and preferred establishments that took extra precautions. Restaurants and cafes, for example, were rated by customers for adherence to sanitary guidelines, such as disinfecting surfaces, maintaining social distance and having access to hand sanitizers (Polityka Zdrowotna, 2020). As a result, companies have had to adjust their procedures and marketing strategies to reflect these changing customer preferences and ensure that customers feel safe.

The pandemic caused by the SARS-CoV-2 virus also had a significant impact on consumer awareness (Długosz, 2021). Many people have noticed how drastic changes in traffic and production have affected the environment. As a result, there has been an increased interest in local products that generate a smaller carbon footprint and support local communities. Consumers were looking for farmers, artisans and producers in their immediate vicinity to reduce CO₂ emissions associated with transportation and support the local economy. There has also been a growing interest in organic products that are sustainably produced and minimize environmental impact (Maciejewski, 2023).

The pandemic has caused consumers, for example, to gradually reduce their spending on clothing, guided by the reflection that they own too many clothes or by reducing purchases altogether due to their deteriorating financial situation (Pang et al. 2022).

3.6. Pandemic restrictions vs. environmental pollution

The assessment and analysis carried out on the impact of the pandemic on reducing emissions of climate change-inducing pollutants allowed us to confirm that the pandemic did not significantly affect emissions of the pollutants in question into the atmosphere (Stryjek, 2021).

Analyzing the juxtaposition of concentrations of, among others, PM_{2.5} and PM₁₀ particulate matter, nitrogen dioxide, benzo(a)pyrene and carbon dioxide in 2016-2020 in Poland, the highest decreases occurred at the beginning of the epidemic and the time when the restrictions associated with it were most restrictive. However, these trends were not long-lasting

and returned to pre-restriction values after a short period. This is mainly because the majority of emissions come from the municipal and residential sectors. Thus, it can be assumed that the restriction of automobile traffic in the long term would not significantly affect the reduction of emissions of hazardous substances into the atmosphere, since the largest emitter is and will be the agricultural sector and the energy sector (the total impact of the volume of emissions of about 25-30% each). Transportation (road air, sea and rail) accounts for about 10% share of total greenhouse gas emissions and is likely to remain unchanged (IOŚ, 2021).

It may be stated that pandemic restrictions have had a bilateral impact on the natural environment. On one hand, the lockdowns and travel restrictions reduced human activities, leading to temporary improvements in air and water quality in some areas. However, there were negative effects as well. The increased use of disposable personal protective equipment (PPE) led to more waste, including plastic pollution. The pandemic also disrupted waste management systems in some places, causing improper disposal of medical waste. Additionally, conservation efforts and eco-tourism suffered due to travel restrictions, affecting funding for wildlife protection and local communities.

4. Results of the comparative study of pandemic influence on consumer decisions

During the lockdown, consumers were forced to change their daily habits and routine activities. This was related to taking on additional duties (19.9% of responses) or more responsibilities at work. (16.9%).

Some of the respondents (15.6%) said they had more free time, which they used for their own interests, study and personal work or helping other people (Galarowicz, Prymon-Ryś).

During the second part of the survey, respondents were asked to compare their current commitments (2023) with the pandemic period. The vast majority declared that they were devoting more time to work (37,5%) and additional family duties (36%). The percentage of people who now declare they have more leisure time decreased to 10,1% (Table 2).

Table 2.

Impact of Covid-19 restrictions on post-pandemic time organization (2023)

	Respondents' responses				
	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
Time organization characteristics					
Professional work takes up more of my time	37,5%	25,0%	17,3%	12,0%	8,2%
I have additional duties, e.g., with children, caring for seniors, etc.	36,1%	23,1%	22,1%	11,1%	7,7%
I devote more time to helping others	26,9%	17,8%	22,1%	20,2%	12,9%
I have more free time	10,1%	19,2%	30,3%	26,4%	13,9%
I spend more time cultivating personal hobbies	10,1%	14,9%	27,9%	26,4%	20,6%
I devote more time to self-study	8,2%	12,0%	10,1%	36,1%	33,6%

When asked about the impact of the COVID-19-induced pandemic on their shopping habits, the majority of respondents (64,1% in total) declared that their previous shopping habits had changed, 21,1% declared that they had not changed their shopping habits and 14,8% could not determine whether a change had taken place. The majority of respondents after the pandemic is over do not plan to return to the shopping habits they manifested before the outbreak (60,26% in total). A large group could not determine whether they would stay with current trends or return to shopping mainly in offline sales channels (33,9%), while the fewest respondents said that after the pandemic ended, they plan to return to the habits they manifested before the outbreak situation (5,4%).

Among the changes caused by the lockdown that were observed during Part I of the survey, the most significant was that consumers repeatedly made purchases online (67,8%). They made more purchases in terms of the amount of goods purchased (58,5%) and value of purchases (47,8%) but, in general, they spent less money (43,5%). The respondents preferred electronic payments (47,5%) and reduced time spent in the store (43,5%) (Galarowicz, Prymon-Ryś).

Some of the cited changes observed during the first wave of the pandemic have solidified, as confirmed by the results of our own research. First and foremost, consumers say they are more likely to shop online (a total of 87,5% of strongly positive and positive indications) and more likely to make electronic payments (Table 3). Customers say they spend more money when shopping and buy more products during one-time purchases - it's hard to say conclusively whether this is the result of pandemic habits or a general change in customer income.

Table 3.

Impact of Covid-19 restrictions on post-pandemic time organization (2023)

Buying behavior characteristics	Respondents' responses				
	strongly agree	agree	neither agree nor disagree	disagree	strongly disagree
I shop online more often	66,3%	21,2%	10,4%	2,1%	0,0%
I make payments by card, BLIK or electronically more often	50,6%	31,3%	9,6%	5,3%	2,4%
I spend more time shopping in the store	46,0%	27,0%	14,3%	10,4%	2,1%
I buy more items of products at once	27,0%	23,0%	23,5%	17,0%	7,7%
I generally spend less money	26,2%	29,1%	37,0%	5,3%	0,9%
I spend more money during one-time purchases	26,2%	22,2%	35,6%	6,7%	4,8%
I go shopping alone more often, without company	5,0%	11,0%	43,2%	21,2%	18,3%

However, the structure of the most frequently ordered products online has changed. Since the outbreak of the pandemic, customers were most likely to buy clothing and footwear this way (58% and 49% of respondents, respectively) due to the wide range of products offered by online stores, as well as easy and efficient return options.

Compared to the 2020 survey, among purchases made online there was an increase in games and multimedia (up from 24,7% to 58,0%) and pet products and accessories (up from 20,2% to 30%). Among the other groups of products surveyed, respondents' indications did not change significantly, with the exception of food items, where online purchases of these products fell from 14,4% to 5,8%, and medicines and personal care products, where a decrease from 14,8% to 4,8% was observed.

Another change caused by the pandemic has become the determinants of choice. Previously, customers pointed to the price of the product, the convenience of the transaction and the store's credibility as key factors (Amsari, Sari, 2022). In 2023, credibility has overtaken convenience in the classification due to the fear that an online store might not fulfill the contract and simply not ship a given order after it has been paid for. While large e-commerce platforms have systems in place to protect the buyer, smaller online stores set their own rules and regulations and are often not audited, with the added likelihood of defaulting on a consumer contract. A new feature considered by the customer has become the type of delivery and its cost.

During the lockdown, several commercial offers were introduced to provide an incentive for consumers to stay home (Olszanecka-Marmola, 2021). Obviously, many of these “real-time-pandemic-related” offers are no longer available. However, consumers accustomed to free delivery and free returns on online purchases strongly prefer them. The increase in the availability of offers from streaming channels and VOD platforms can also be counted among the long-term effects of pandemic. There is a noticeable increase in subscriptions to these platforms of almost 35% compared to the 2020 survey.

5. Discussion

During and after the cessation of the pandemic there were many studies and scientific publications on the phenomenon, including those concerning the Polish market. However, a significant novelty of the work is the comparative research which was done with a similar survey questionnaire to assess whether the new shopping habits and behaviors observed during the pandemic remained present after it ended. An additional value is the synthesis of the changes in the marketing environment that most affected consumer behavior.

The research substantially confirms the findings of other researchers, particularly regarding the increase in online shopping, greater acceptance of electronic payments, VOD subscription surge, new working time arrangements, and more sustainable consumer choices (Gorzelany-Dziadkowiec, 2020; Alfonso et al., 2021; Hamulczuk, Idzik, 2022; Pang et al., 2022; Maciejewski, 2023).

Furthermore, the survey outcomes provide insights into the attitudes and behaviors of consumers in Poland that have been perpetuated by long-lasting restrictions, which will help enterprises shape marketing strategies, tailored to the characteristics of post-pandemic consumers (Hamer, Baran, 2021).

Moreover, thanks to the research, it was possible to identify the positive changes that the pandemic caused in social and economic life in Poland. While it is common in the public space to mention the pandemic as a traumatic experience for citizens (Długosz, 2021), it has also brought innovations to support customer service and positive effects on the economy.

Considering the research, the positives include omnichannel distribution: now most companies that previously operated only in stationary stores have online sales channels. Stores are trying to make shopping as easy as possible for customers (e.g., return policy and free delivery, chat-bots and virtual consultants, VR visualizations of products or clothing sizing calculators - i.e., the customer gives his or her measurements and the system gives the right size). All these solutions allow building a relationship with the customer, and also increase the chance that a given customer will return in the future. An additional convenience for e-consumers is a wider range of products compared to a traditional store, this is since there is no need to have the product at the point of sale, and the offered products can be stored in an external warehouse. Many companies order a product from a distributor only when a customer order is received.

So-called last-mile logistics services (e.g., courier services, parcel machines, etc.) are developing rapidly.

Other positive effects after the cessation of pandemic restrictions in the perception of consumers are:

- possibility to work remotely, greater work flexibility,
- dissemination and improvement of teamwork tools (e.g. MS Teams, Zoom, Click meeting, etc.),
- availability of online services e.g. “medical tele-consulting”,
- greater acceptance of electronic payments, BLIK,
- hybrid work - new solutions in this area in the Labor Code,
- studying or lecturing remotely - ease of reconciling work with studies,
- more opportunities for online shopping, new forms of stores,
- e-commerce improvements and development of e-commerce tools that can increase sales efficiency.

During the COVID-19 pandemic, there was increased interest in shopping via mobile apps (Amsari, Sari, 2022). As a result, there has been increased interest and demand for apps that allow remote shopping, ordering take-out food, virtual business meetings, or online learning.

Research assumptions were not confirmed for all changes observed in consumer behavior. Some of the declared behaviors appeared to be specific only to the lockdown period, such as more leisure time, or certain purchasing routines. Some consumers do not continue online purchases of food, medicines, and hygiene products. In the case of the macro-environment, some changes, e.g. the rise in unemployment, proved to be short-term, although it is important to note the significant impact of other variables here e.g. the war in Ukraine, migration, remote work possibilities (Radlińska, 2020; Muster, 2022; Pozniak, 2023).

6. Conclusions

An important contribution of the work was the comparative research carried out during the pandemic lockdown and after all pandemic restrictions were removed. This made it possible to assess whether the new shopping habits and behaviors observed during the pandemic continued after the pandemic had ended. Synthesizing the changes in the marketing environment that most influenced consumer behavior was an added value. Considering the impact of restrictions related to the SARS-COV-19 virus, during and outside of the epidemic emergency in Poland - on the marketing environment and, consequently, on consumer purchasing behavior allowed to identify several lasting changes.

Among the most important factors is the growth of electronic payments and online trading. Research confirms increased online shopping and greater acceptance of electronic and mobile payments than before the pandemic.

In Poland, these are currently not only popular and easily accessible, but also widely accepted by customers. With regard to online shopping, customers expect free delivery, shipping and convenient return policies, as well as other e-commerce support solutions.

In scope of the survey, the categories of goods purchased online have changed: including a significant increase in online purchases from the categories of “clothing and footwear”, “games and multimedia” and “pet supplies”, while online purchases from the “food products” and “medicines and personal care products” categories have decreased compared to the lockdown survey. This may be related not only to post-pandemic social trends, but also to other socio-cultural changes that the pandemic restrictions have only exacerbated and accentuated.

Another change was the continued subscription to VoD services and streaming platforms. This, combined with new forms of remote or hybrid work, is influencing consumers' greater propensity to “#stay at home” (Olszanecka-Marmola, 2021).

Other observed changes in consumer behavior that have persisted beyond the pandemic period include working time arrangements, with respondents reporting more time spent at work and consequently less time for hobbies.

A desire for security - in the realm of both health and household finances - was observed in consumer behavior. A positive change is the greater inclination of consumers to recognize the environmental impact of their purchasing decisions and to consume more sustainably. Today's consumers are more aware, considerate and demanding of suppliers. This, too, can be counted among the positive changes brought about by the pandemic.

Both secondary sources and the results of our own research confirm that many of new consumer attitudes, behaviors, and buying habits remained in the post-pandemic period.

Whatever the root causes of the Covid-19 pandemic, it can be assumed that, in the realm of consumer behavior, they have contributed to a society that is more open to technological innovation (Amankwah-Amoah et al., 2021), better adapted to changes in e-commerce and, at the same time, more aware of its buying power. Consumers now have more tools to make prudent choices and meet their needs effectively, which in Poland could be a strong impetus to overcome the crisis caused by the pandemic and other political and economic changes.

References

1. Alfonso, V., Boar, C., Frost, J., Gambacorta, L., Liu, J. (2021). E-commerce in the pandemic and beyond. *BIS Bulletin*, 36. Retrieved from: <https://www.bis.org/publ/bisbull36.htm>, 30.06.2023.
2. Amankwah-Amoah, J., Khan, Z., Wood, G., Knight, G. (2021). COVID-19 and Digitalization: The Great Acceleration. *Journal of Business Research*, 136(3), pp. 602-611.
3. Amsari, S., Sari, D.P. (2022). Consumer factors in deciding to purchase online at shopee e-commerce during the Covid-19 pandemic. *Proceeding International Seminar Of Islamic Studies*, Vol. 3, No. 1, pp. 174-182.
4. Bedgood, L. (2020). *Changes in customer behavior during COVID-19*. Retrieved from: <https://www.business2community.com/consumer-marketing/changes-in-consumer-behavior-during-covid-19-02331693>, 30.04.2021
5. Deloitte (2020). *W czasie pandemii za lokalne produkty Polacy są gotowi zapłacić więcej*. Retrieved from: <https://www2.deloitte.com/pl/pl/pages/press-releases/articles/w-czasie-covid-19-polacy-gotowi-zaplacic-wiecej-za-lokalne-produkty.html>, 30.04.2021.
6. Departament Rynku Pracy (2020). Tarcza antykryzysowa COVID-19. Retrieved from: <https://psz.praca.gov.pl/dla-pracodawcow-i-przedsiębiorców/tarcza>, 30.06.2023.
7. Długosz, P. (2021). *Trauma pandemii COVID-19 w polskim społeczeństwie*. CeDeWu.
8. Dolot, A. (2020). Wpływ pandemii COVID-19 na pracę zdalną – perspektywa pracownika. *E-mentor*, 83(1), pp. 35-43.
9. Drozdowski, R., Frąckowiak, M., Krajewski, M., Kubacka, M., Modrzyk, A., Rogowski, Ł., Rura, P., Stamm, A. (2020). *Życie codzienne w czasach pandemii. Raport z pierwszego etapu badań*. Retrieved from: <http://socjologia.amu.edu.pl/images/pliki/>, 30.04.2021.

10. Golinowska, S., Zabdyr-Jamroz, M. (2020). Zarządzanie kryzysem zdrowotnym w pierwszym półroczu pandemii COVID-19: analiza porównawcza na podstawie opinii ekspertów z wybranych krajów. *Zeszyty Naukowe Ochrony Zdrowia, Zdrowie Publiczne i Zarządzanie*, 18(1), pp. 1-31.
11. Gorzelany-Dziadkowiec, M. (2020). Zmiany zachowań konsumentów w dobie COVID-19. *Problems of Economics and Law*, 5(2), pp. 1-15.
12. GUS - Główny Urząd Statystyczny (2020a). *Pracujący w gospodarce narodowej w 2020 r.* Retrieved from: <https://stat.gov.pl/obszary-tematyczne/rynek-pracy>, 30.06.2023.
13. GUS - Główny Urząd Statystyczny (2020b). *Wpływ pandemii COVID-19 na koniunkturę gospodarczą – oceny i oczekiwania (dane szczegółowe)*. Retrieved from: <https://stat.gov.pl/obszary-tematyczne/koniunktura/koniunktura>, 30.04.2021.
14. Hamer, K., Baran, M. (2021). Wpływ pandemii COVID-19 na zachowania, postawy i dobrostan Polaków. *Raport z Badań*. Retrieved from: <https://www.researchgate.net/profile/Katarzyna-Hamer/publication/>, 30.06.2023.
15. Hamulczuk, M., Idzik, M. (2022). Assessment of the economic activity in the Polish banking sector during the COVID-19 pandemic on the basis of business tendency surveys. *The Polish Statistician*, 67(9), 1-23. Retrieved from: <https://wiadomosci-statystyczne.publisherspanel.com/resources/html/article/details?id=232235&language=en>, 30.06.2023.
16. IOŚ - Instytut Ochrony Środowiska (2021). *Wpływ ograniczeń gospodarczych związanych z pandemią Covid-19 na wysokość stężeń zanieczyszczeń powietrza w 2020 roku*. Warsaw: Chief Environmental Inspectorate.
17. Kaźmierczak, A., Kotkowski, R., Maciejewski, K. (2021). Pandemia COVID-19 a popyt na pieniądź gotówkowy i zmiany w zachowaniach płatniczych w Polsce w 2020 r. *Studia i Prace Kolegium Zarządzania i Finansów*, 182, pp. 59-76.
18. Koman, K., Syta, Z. (2022). *Raport: pierwsza fala pandemii COVID-19 w Polsce: ograniczenia i pomoc kierowana do przedsiębiorców*. Kraków: Księgarnia Akademicka.
19. Korzeniowska, A.M., Rutecka-Góra, J., Swacha-Lech, M., Waliszewski, K. (2023). *Wpływ pandemii COVID-19 na finanse osobiste*. Retrieved from: <https://www.researchgate.net/profile/Joanna-Rutecka-Gora/publication/>, 30.06.2023.
20. Kubiczek, J. (2022). Effects of COVID-19 on payment method preferences of Poles. *Financial Internet Quarterly*, 18(4), pp. 35-49.
21. Maciejewski, G. (2023). Zrównoważone zachowania konsumentów w czasie pandemii COVID-19. *Studia i Prace Kolegium Zarządzania i Finansów*, 188, pp. 43-61.
22. McKinsey & Company (2020). How COVID-19 is changing consumer behavior – now and forever. Retrieved from: <https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/>, 30.04.2021.
23. Mindshare (2020). *Jak koronawirus zmienił zwyczaje zakupowe Polaków*. Retrieved from: <https://www.mindshareworld.com/poland/news/jak-koronawirus-zmieni-l-zwyczaje-zakupowe-polakow-badanie-mindshare-polska>, 30.04.2021.

24. Ministerstwo Zdrowia (2021). *Strategia walki z pandemią COVID-19 zima/wiosna 2022*. Retrieved from: <https://www.gov.pl/web/zdrowie/strategia-walki-z-pandemia-covid19>, 7.04.2023.
25. Muster, R. (2022). Pandemia COVID-19 a zmiana modelu pracy. Polska na tle krajów Unii Europejskiej. *Acta Universitatis Lodziensis. Folia Sociologica*, 81, pp. 29-44.
26. Olszanecka-Marmola, A. (2021). Techniki perswazyjne w telewizyjnych reklamach sieci sklepów spożywczych, firm telekomunikacyjnych oraz banków w początkowej fazie pandemii COVID-19. *Zarządzanie Mediami*, 9(2), pp. 369-385.
27. Pang, W., Ko, J., Kim, S.J., Ko, E. (2022). *Impact of COVID-19 pandemic upon fashion consumer behavior: focus on mass and luxury products*, 34(10), pp. 2149-2164.
28. Plebańska, M., Szyller, A., Sieńczewska, M. (2021). *Raport – co zmieniło się w edukacji zdalnej podczas trwania pandemii*. Wydział Pedagogiczny Uniwersytetu Warszawskiego.
29. Polityka Zdrowotna (2020). *II Fala epidemii COVID-19 w Europie. Gdzie jesteśmy?* Retrieved from: <https://politykazdrowotna.com/arttykul/ii-fala-epidemii-covid-19-w-europie-gdzie-jestesmy/828610>, 30.06.2023.
30. Polski Fundusz Rozwoju (2021). *Regulamin ubiegania się o udział w programie rządowym „Tarcza Finansowa Polskiego Funduszu Rozwoju Dla Małych i Średnich Firm”*. Retrieved from: <https://pfrsa.pl/tarcza-finansowa-pfr/tarcza-finansowa-pfr-10.html?tf10=mmsp>, 30.06.2023.
31. Pozniak, O. (2023). The Situation of Forced Migrants from Ukraine in Europe after Russian Military Aggression and the Problems of Ukraine’s Migration Policy in These New Conditions. *Central and Eastern European Migration Review*, 12(1), 159-181.
32. Prymon-Ryś, E., Galarowicz, A. (2021). Buying Behaviors of Polish Consumers During the Pandemic Lockdown—Research Results. *Problemy Zarządzania*, 19(4), 94, pp. 19-37.
33. Radlińska, K. (2020). Pandemia Covid-19 implikacje dla polskiego rynku pracy. *Zeszyty Naukowe Wydziału Nauk Ekonomicznych*, no. 24, pp. 113-126.
34. Serwis Rzeczypospolitej Polskiej (2020). *Od dziś wprowadzimy stan zagrożenia epidemicznego*. Retrieved from: <https://www.gov.pl/web/koronawirus/od-dzis-wprowadzimy-stan-zagrozenia-epidemicznego>, 4.04.2022.
35. Serwis Rzeczypospolitej Polskiej (2021). *Tarcza antykryzysowa*. Retrieved from: <https://www.gov.pl/web/tarczaantykryzysowa>, 30.06.2023.
36. Stryjek, J. (2021). The COVID-19 pandemic vs. the economic political dimensions of the problem of air pollution in Poland. *European Research Studies Journal*, Vol. XXIV, Special Issue 3, pp. 737-746.
37. Witkowska-Pertkiewicz, K. (2020). Firma w obliczu koronawirusa: jak pracodawca powinien postępować podczas zagrożenia epidemią? *Personel i Zarządzanie*, 4, pp. 12-17.
38. Żelazowska, W. (2020). *Covid-19 Ustawy antykryzysowe- zbiór przepisów*, Warsaw: C.H. BECK.