



# Behavioural differences and purchasing experiences through online commerce or offline within mall-based retail structures

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## Abstract

Due to the economic changes in recent decades, the purchasing behaviour of consumers has significantly shifted. Buyers are no longer just seeking a place to shop but also experiences to live through. This study aims to conduct an in-depth analysis of the differences in behaviour and shopping experiences in online versus offline environments, specifically within malls. To achieve this, a quantitative marketing research was conducted, collecting data from a sample of 1030 respondents. The study results indicate that respondents perceive both online and offline commerce to evolve concurrently. These commerce modes will be strongly influenced by various factors, including technological advancements, which are considered to impact both forms of commerce. Among the study's conclusions, there is the confirmation of behavioural differences between online and mall shopping. The outcomes can be beneficial for improving the activities of retailers by offering new shopping experiences and developing new communication methods with customers.

**Keywords** Buying behaviours · Online commerce · Retail commerce · Shopping Experiences · Mall

## 1 Introduction

Because of the increasing number of malls, consumers tend to be more selective [1], and that is the most powerful reason for the managers to find the appropriate ways of attracting and retaining the customers.

From a retailer's standpoint, the major factor that has always dominated modern retail has not changed at all, and this remains: *the location*. Other essential facilities are

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accessibility [2], security [3], climate comfort, and an attractive physical environment [4]. One study about Romanian shopping malls [5] identified as the most important elements for customer satisfaction inside malls: the assortment, the price, communication, décor, and service. But all these aspects are no longer sufficient to work efficiently.

Today's retail tenants need well and clearly defined strategies for: tenant mix, marketing strategies, but also various activities for spending the time, without the immediate necessity to shop. Examples include: sophisticated leisure activities, appealing gastronomy concepts, exceptional event planning, and extraordinary brand attractiveness) [6].

Due to the changes of the last decades (online sales, growth of urbanization, aging population, people's need to socialize), shopping malls have to change the role they play in people's lives. Buyers are not only looking for a place to shop, but also for experiences far beyond traditional commercial. Therefore, shopping malls must incorporate value-added items like concerts, art centres, spas, fitness clubs, farmers' markets, dining venues, places where to spend quality time with friends and family.

The study of Venkateswarulu & Uniyal [7], shows that the appeal of a mall depends of factors such as: convenience, amenities, ambiance, personnel, parking, and seating.

This study sets out to analyse the differences in shopping behaviours and experiences both online and in person in malls before and after COVID-19. To this end, the authors have undertaken a quantitative marketing analysis.

The four objectives of this research were identified by reviewing the relevant literature. The study continues with presenting the methods used, including detailed explanations of the project's components: Questionnaire development, Data collection, location of the survey and sample, and Data Analysis Techniques. The fourth section of the work presents the results and discussion, grouped by the research objectives. Principal component analysis (a multivariate data analysis technique), which draws conclusions and introduces the two new variables. These have been generically named by the authors 'Respondents' preference for buying from the online environment represented by a series of advantages' and 'Barriers in respondents' preference for choosing online shopping'. This analysis is extremely important as its results confirm once again the behavioural differences researched here.

The article ends with a conclusions and implications section that includes the study's limits and future work.

The current study is an important step to a more thorough understanding of the evolution of shopping behaviours and preferred buying experiences of the consumers. In particular, the study is unique in presenting the effect of the COVID-19 pandemic on these aspects.

## 2 Literature review

To be successful, any organization must adopt a strong marketing strategy. Since the late 1990s, a growing emphasis has been laid on customer experiences, as value-added to the sold products. Mastering the concept and execution of exceptionally good customer experience is a real challenge, but an essential one in today's rapidly changing business environment [8, 9]. According to Oxford

English Dictionary, experience means ‘to gain knowledge or skills by doing, seeing, or feeling things; something that happens to you, that affects your feelings; something that you have to do with, that happened to you or that you felt [10]. ‘Experience’ is the key to success.

The innovative retailers have recognized the value of experiential marketing. For this reason, the trend is to create an engaging environment for the buyer. Also, for the same reason, a host of product options are offered that cater to a wide range of buyers and their lifestyles.

So, we can say that customers are no longer just interested in buying goods, they want experiences. It becomes essential for mall owners to keep up with the continuously changes, to maintain the enthusiasm of customers, and to adapt to their needs.

Customer experience comes from a set of interactions between the client and product, a company, or a part of its organization, which causes a reaction. This is strictly personal and supposes the client’s involvement at different levels (rational, emotional, sensory-physical, and spiritual) [11]. Memorable experiences can change the client and this kind of moment cannot be replicated because they are personal and powerful. Experience marketing has as its main purpose the strengthening of the emotional connection between the customer and the brand, thus managing to lead to the loyalty of buyers. Sometimes, the commercial experience is closer to a journey, as in the case of a ‘story’ [12].

To create notable experiences for the company, four elements are important, such as the process of achieving the experience, the employees, the company performance, and the possibilities to create these experiences. The most memorable customer experiences involve interaction with the employees; they are simply the custodians of customer experience [13].

The achievement of these experiences can be discussed from two standpoints. The first one refers to the client’s participation in the experience. In this situation, the client’s participation can be passive, in which case the consumer should not affect the performance of the products and services. Furthermore, customers can actively participate in the created experience. The second dimension of the experience describes the relationship with the environment, which introduces the client into the event and into the achieved experience [14].

New technologies are opportunities for engaging consumers throughout the decision-making process of purchase. Through the trend registered by the spectacular growth of technology (through social networks but also digital interactions), customers have come to put pressure on companies to create competitive experiences for them [15].

In this article, the authors have set out to study the differences in shopping behaviours and experiences both online and offline in mall, before and after COVID-19. The study follows the four objectives set after reviewing the literature, as follows:

- **O1.** Identifying offline shopping behaviours and analysing the motivations behind visiting malls.
- **O2.** Identifying online shopping behaviours and the reasons behind choosing this particular type of commerce.

- **O3.** Determining the differences between online and offline shopping experiences.
- **O4.** Identifying the differences in shopping behaviour before and after the COVID-19 pandemic.

## **2.1 O1. Identifying offline shopping behaviours and analysing the motivations behind visiting malls**

As shown previously, consumers do not visit malls simply to shop, but seek various additional experiences to enrich their time spent in these spaces. Srinivasan [16] shows that while marketing experiences are open to all clients, their assimilation is deeply personal. They depend on not only the wishes and needs, but also the self-image, social objectives, latent emotions and the values and deeply rooted wants of the consumer. The same author shows that an important element in creating an experience is the brand's identity, because the consumer pays not for the product or service, but for the experience.

This is why commerce specialists must devise more attractive shopping experiences for the visitors of malls [17].

As Flavián [18] states, one of the research topics in the field aims to identify the way in which these experiences have evolved over time and their influence on the consumers' behaviour. These studies have shown that positive experiences resulted in emotional responses like enthusiasm, fun, escapism [19] and determined what makes customers loyal to a brand or a retailer [20].

Kim et al. [21] suggest that the motivation for offline shopping is to reduce the perceived risk and make better purchases through obtaining more information and sharing the experience. Consumers consider that the information gained directly from shop clerks is more genuine than that available online, associating a higher risk and incertitude with online shopping [21].

Based on their study, Mittal & Jhamb [1] have concluded that there are four dimensions to the sixteen attributes of a commercial centre/mall's attractiveness: (1) Merchandising, (2) Variety and selection, (3) Method and facilities and (4) Convenience.

## **2.2 O2. Identifying online shopping behaviours and the reasons behind choosing this particular type of commerce**

The pandemic, as we have all seen, caused a portion of purchases to migrate online, given the restrictions on the population's movement and that many people avoided offline shopping to prevent becoming ill [22–24].

Some studies [25, 26] elucidated that, in the USA, online shopping accounted for 10–15%, and Amazon held about 40% of these sales. In March 2020, Amazon clients spent 35% more capital on the platform compared to the same time of year in previous years to buy essentials. This drove Amazon to employ 175.000 more workers to meet demand.

In Sweden, Gardshol [27], determined that in the second term of 2020, the volume of online purchase increased with 49% compared to 2019, especially for foodstuffs, which rocketed to 119% higher. In Italy, 2020 was projected to bring a 26% increase in online shopping compared to the previous year, but in reality, this increased by 56%, according to Digital4 [28], (2020).

Online shopping offers access to a large variety of products and simply the delivery process, which led to an increase in this type of purchases [29]. They are convenient for customers, and retailers should exert themselves to improve the online shopping experience [30, 31]. Alaimo et al. [32], suggests that other benefits include the option to compare more products that are not always found in stores and being able to access more information about products [33].

According to Kuoppamaki et al. [34], some of the most important drivers for online shopping include: age, education, access to technology, perception about the benefits of online shopping, and the customer's attitude and trust towards online purchases.

As Rita et al. [35], state, the challenge for online retailers is to offer and maintain client satisfaction, which requires a strategy focused on services. One necessary step towards this goal is the creation of a good quality website, with excellent information and electronic services [36]. The same idea is underlined by the study of Saha et al. [37], which shows that the intention to shop is increased by client satisfaction and prior experiences. This is why online retailers need to find strategies to make online shopping as pleasant as possible.

Bajdor [38] analysed the relationship between client experience of online shopping and variables such as the speed and interactivity of the purchasing process, the access to products/services traditionally unavailable and to sales and offers, how intuitive and transparent the ordering process is, the convenience, the level of satisfaction and whether it is beyond expectations. The study's results show that online shopping meets the customers' needs.

One of the aspects that prevents some customers from shopping online is how retailers process customer data. The study of Gouthier et al. [39], showed the importance of a fair and transparent relationship between companies and online consumers.

### **2.3 03.Determining the differences between online and offline shopping experiences**

As early as 2004 Browne et al. [40] identified that in spite of the similarities of online and offline shopping, there are some major differences between the two.

Previous studies identified one of the differences between the experience of online and offline shopping as the time and cost of collecting information about the products to be purchased [41]. These studies show that consumers prefer searching for information online because it reduces the time and cost of the search (no time lost in traffic to reach the shops, prices can be compared between more products in a shorter time, the availability of reviews from other customers) [42–44]. The lack of tactile information that can only be obtained offline is compensated by a surplus

of information about the product online. Despite this, some customers feel the need to consult with the shop clerk about some specific aspects of the products when they decide to shop (placing a high level of trust in the shop clerk, but also a need to socialise).

Another difference that was identified was that when customers shop offline, they immediately have the product at their disposal, while if the purchase is made online, they have to wait a while until the product arrives. It was also determined that younger customers have a stronger desire to have access to the product immediately [45].

At the same time, the price can be different. Usually, offline prices are higher than the ones displayed online. If this difference is significant, customers might decide to make the purchase online [46].

However, more and more customers combine shopping online with making purchases offline to minimise cost and increase benefits [47].

## **2.4 04. Identifying the differences in shopping behaviour before and after the COVID-19 pandemic**

It is known that the COVID-19 pandemic led to an unprecedented increase in online shopping, in particular for basic items, and produced major changes in the customers' shopping behaviour [48].

Mainly, there have been marked changes in the way in which the internet is used and the activities that are undertaken in this medium. In a study by Chmielarz et al. [24], it is shown that the most popular uses of the internet were: social media use, watching movies and TV series online, and listening to music online (19% each, respectively). After COVID-19, the ranking has changed to: online shopping (13%), searching for information on the Internet (13%), and telemedicine visits (over 8%). The highest increase (11–12%) could be observed in searching for information on the web and online commerce.

Sheth [49] identified eight immediate changes in shopping behaviour due to the pandemic: (1) hoarding behaviour (consumers stock essential products for daily use, which leads to shortages and the items being out of stock); (2) improvising (consumers learn to improvise when met with shortcomings. Existing habits are abandoned and new ways to consume goods are invented); (3) adoption of digital technologies (due to pure necessity, consumers have adopted more and more new technologies and applied them); (4) discovering new talents (with more time at home to spend in flexible ways, consumers have experimented with recipes, exercised their talents and discovered new ways to create and play music, to share their learning process and buy online in a more creative way); (5) restrained demand (in times of crises and uncertainty, the general tendency is to postpone the purchase and consumption of products or discretionary services); (6) Shops relocate to homes (due to strict lockdown rules, stores must be brought into the consumer's home, just like work and education. This reverses the balance between work, education, health, purchases and consumerism); (7) blurring the lines between work and personal life (consumers are confined to their homes, with limited space and too many discrete activities like

work, learning, shopping and socialising); (8) reunions with friends and family (the COVID-9 pandemic led to a desire to contact estranged friends and family, both to check on their wellbeing, but also to share stories and experiences).

Some of these changes could develop into habits which could have long term effects [49, 50].

### 3 Research method

The authors performed a study that is part of quantitative marketing research by using a survey. The data was analysed to discover opinions, attitudes and behaviours in relation to shopping. The overarching aim of this research is to detect the characteristics of online versus offline (particularly in malls) shopping behaviours.

#### 3.1 Objectives and hypotheses

The main objective of this marketing research is to identify perceptions, behaviours and attitudes in relation to shopping and the differences between online and offline purchasing experiences. Given the work's focus, the following objectives were outlined:

- **O1.** Identifying offline shopping behaviours and analysing the motivations behind visiting malls.
- **O2.** Identifying online shopping behaviours and the reasons behind choosing this particular type of commerce.
- **O3.** Determining the differences between online and offline shopping experiences.
- **O4.** Identifying the differences in shopping behaviour before and after the COVID-19 pandemic.

The following hypotheses were formulated:

1. *Hypothesis 1 (H1)* There is no correlation between the respondents' income and the frequency of visiting malls during sales;
2. *Hypothesis 2 (H2)* There is no correlation of the respondents' gender and the increase in online orders with the number of online orders placed after the COVID-19 Pandemic.

#### 3.2 Questionnaire development

To fulfil these objectives, the data was collected through a survey created after a thorough review of specialist literature and existing studies, with the addition of the author's professional experience (specialists in different interdisciplinary domains).

Before the questionnaire was distributed to the pool of participants, an initial test was performed on a sample of 25 respondents. This was done to identify and

eliminate all possibilities of ambiguity. The final version of the questionnaire, developed after the results of the pre-testing, consists of 32 multiple choice questions grouped into multiple sections that thoroughly cover the study's focus and fulfil the objectives. The last set of questions (Q27–Q32) aim to provide a profile of the respondents (gender, age, income etc.), while the other questions (Q1–Q26) seek to fulfil the study's objectives. The link between the questions asked in the survey and their respective objective are presented in Table 1.

### 3.3 Data collection, location of the survey and sample

For data collection, the Computer assisted web interviewing (CAWI) technique was employed. This method involves displaying the questionnaire on a web page, with respondents providing direct responses within their web browser. The data collection period spanned from August to September 2023, and the completion of the questionnaire took an average of 15–20 min.

The targeted respondents were individuals residing in Romania who had visited a mall at least once and had made at least one online purchase both before and after the pandemic. The questionnaire commenced with two filter questions regarding mall visits and online shopping. In cases where respondents selected the 'no' response, the questionnaire was terminated.

Participant selection was based on the assumption that these individuals were most capable of providing relevant information. A panel of 1030 respondents was interviewed, consisting of individuals who had visited a mall at least once and had placed an online order before and after the pandemic (excluding respondents who answered negatively to the initial 2 filter questions). To address the research question accurately, the authors employed convenience sampling, deemed most suitable and commonly utilized in practice. Given the non-random nature of this sampling method, the data cannot be extrapolated to the whole population. The demographic breakdown of respondents included in the sample is reproduced in Table 2.

As evident from Table 2, the majority of respondents exhibit a prominent demographic concentration among young individuals, aged between 18 and 35, comprising 79.6%. This underscores that they are the most dedicated visitors and consumers of malls. This finding aligns with the observations made by Kuruvilla [51] in their study, asserting that malls are substantially reliant on the patronage of young visitors, who also constitute the highest spenders.

### 3.4 Data analysis techniques

The obtained data were processed using the SPSS software program, employing various data analysis methods. The authors meticulously orchestrated and oversaw the entire research process, from the formulation to the implementation of the questionnaire data analysis.

A series of data analysis techniques were chosen to be consistent with the research objectives. To this end, the program IBM SPSS Statistics 20 was employed



**Table 1** List of survey questions and the objective each one fulfils. *Source* created by the authors

	Questions	Objectives
Q1	Have you been to a mall at least once so far?	O1
Q2	Have you ever made an online purchase so far?	O2
Q3	How often do you visit a mall?	O1
Q4	What is the last mall you have visited?	O1
Q5	Do you go to the mall more during sales seasons?	O1
Q6	How do you prefer to do your shopping?	O3
Q7	Overall, how satisfied are you with the attractions on offer in malls?	O1
Q8	Please state your main motivation for visiting malls.	O1
Q9	What time of the week do you prefer to go to the mall?	O1
Q10	What part of the day do you prefer to go to the mall?	O1
Q11	How do you find the interior (image, atmosphere, ambiance) of the malls your frequent?	O1
Q12	What is the number of stores you visited in your last mall visit?	O1
Q13	What category do the commercial spaces that you visit in malls fit into?	O1
Q14	What is the approximate expense you made on your last mall visit?	O1
Q15	Please express your opinion on the following affirmations: <i>Visiting malls makes me feel important.</i> <i>Mall visits are an exciting experience.</i> <i>The mall is a dynamic place where interesting things happen all the time.</i> <i>The mall is the definition of modern living.</i> <i>The shopping experience in malls is like an adventure full of surprises.</i> <i>Sometimes the crowds present in malls at peak times bother me.</i> <i>I am happy with the level of security in malls.</i> <i>I think I could spend a whole day in the mall without getting bored.</i> <i>I always spend more money than initially planned when I go to the mall.</i> <i>The atmosphere in malls is full of energy.</i> <i>I am willing to pay more for products and services in malls because I know they are part of an experience.</i>	O1
Q16	What experiences do you think are on offer offline, in malls, over the online shopping experience?	O3
Q17	During the COVID-19 pandemic, how did you prefer to purchase your essential items?	O4

**Table 1** (continued)

	Questions	Objectives
Q18	Please express your opinion on the following affirmations: <i>The increase of what electronic commerce offers had a positive influence on me, leading me to place more online orders after the COVID-19 pandemic.</i> <i>The convenience of online shopping made me place more orders</i> <i>I believe that by placing online orders I avoid wasting time</i> <i>The quick online search for products and the availability of offers are advantages of online shopping</i> <i>The possibility of my order being damaged in transit made me pay careful attention to what types of products I ordered online</i> <i>The online payment for ordered products represents a barrier that makes me careful when I place online orders</i> <i>I know how to protect myself against cybernetic attacks and online payments</i>	O2, O3, O4
Q19	After COVID-19, have you chosen to reduce the time you spent in malls?	O4
Q20	How did the COVID-19 pandemic influence your choices with regards to visiting malls?	O4
Q21	How did the COVID-19 pandemic influence your choices with regards to spending money, correlated with the number of visits you have made to malls?	O4
Q22	After the COVID-19 pandemic, meetings with friends at the mall have been...?	O4
Q23	What are the experiences you seek when going to the mall?	O1
Q24	Please express your opinion on the following affirmations: <i>I was able to easily find the products I needed on websites</i> <i>I think apps for clothing/shoe shopping are beneficial</i> <i>The products I received were adequately packaged</i> <i>I have encountered situations in which the products I received were not the same as what I had ordered</i> <i>I trust online clothing stores</i> <i>I have had trouble with finalising transactions online</i>	O2
Q25	What is the payment method you use most often for online shopping?	O2
Q26	What do you think will be the future of physical malls in rapport to online shopping?	O3
Q27	Your gender	Profiling question
Q28	Your age belongs to what interval?	Profiling question
Q29	Main activity	Profiling question
Q30	Highest level of completed education	Profiling question

**Table 1** (continued)

	Questions	Objectives
Q31	Net income of your household	Profiling question
Q32	Background	Profiling question

for: estimating descriptive analysis and illustrating respondent characteristics; conducting analyses ( $\chi^2$ , Kolmogorov–Smirnov); and performing Principal Component Analysis (a method within multivariate data analysis).

For descriptive and statistical indicators, the following measures were employed: the median, the mean, the frequency, one correlation matrix, and the Varimax rotation method [52–54].

In the Principal Component Analysis PCA, variables were measured using numerical scales with equal distances between levels (interval scales), each scale comprising 5 levels ranging from 5–total agreement to 1–total disagreement. The evaluated activities focused on characteristics related to changes in purchasing behaviour (online versus physical) after the COVID-19 pandemic and included 7 variables.

Based on these 7 variables, the aim was to identify 2 principal components (factors) that would synthesize the majority of information held by the respective variables and streamline the interpretation of the results.

## 4 Results and discussion

Results are presented and grouped by the study's objectives, and the analyses that were performed are presented in a logical succession which permitted the authors to obtain the relevant results.

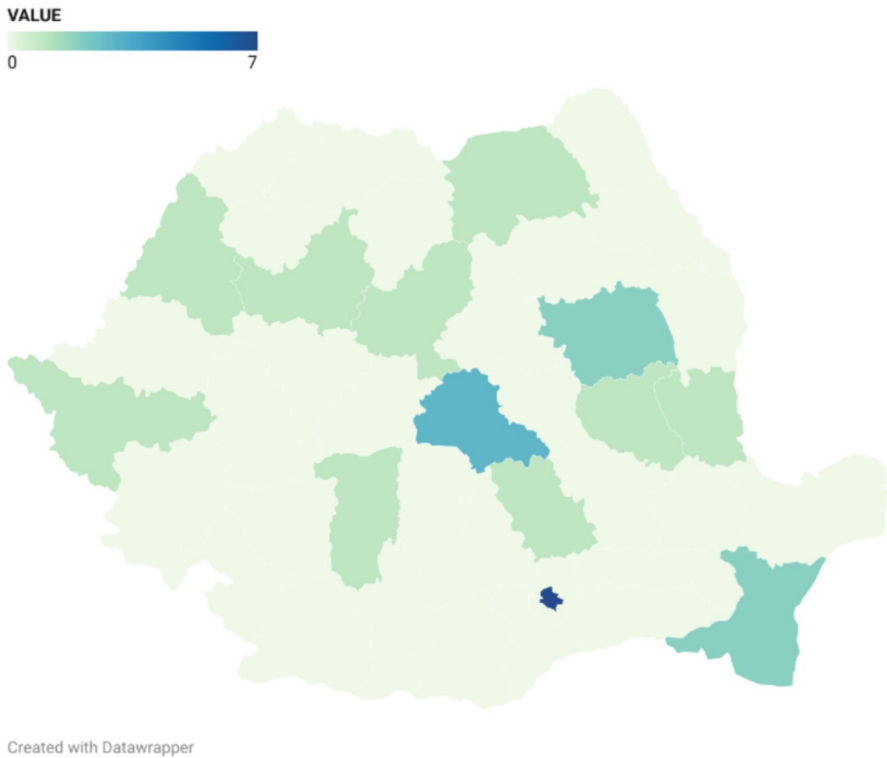
### 4.1 O1. Identifying offline shopping behaviours and analysing the motivations behind visiting malls

The results obtained for Question 3 indicate that the majority of respondents (42.2%) visit malls on a weekly basis, while 32% do so on a monthly basis. Only 1% of respondents claimed to visit malls daily, and 24.8% occasionally. Based on responses to Question 4, the authors generated a map (Fig. 1) illustrating the distribution of malls visited by respondents. The majority are situated in Bucharest, the capital of the country (34.0%), followed by Brasov (11.7%), located in the central part of the country and a tourist area. Constanta (7.8%), with access to the seaside, and Prahova (7.8%), positioned near the capital, each accounted for an equal percentage. The results indicate a relatively homogeneous dispersion of the locations of malls visited by respondents.

**Table 2** The sample structure. *Source* created by authors based on the results of the quantitative analysis

Criteria	Sample structure	
Sample (1030 respondents)	Men 25.7%	Women 74.3%
Background	Urban 74.3%	Suburban 3.4%
Net income per household	0–500 euro 19.9%	501–1,000 euro 34.5%
Highest level of completed education	Secondary school 1%	High school/vocational school 48.5%
Main activity	Employed 59.7%	Entrepreneur 5.8%
Age	18–25 years old 47.1%	26–35 years old 32.5%
		36–45 years old 11.2%
		46–55 years old 8.7%
		Over 55 years old 0.5%
		Over 1,500 euro 27.2%
		1,001–1,500 euro 18.4%
		Rural 22.3%
		Masters degree 16.5%
		Stay-at-home 1.9%
		Doctorate 2.4%
		Pensioner 0.5%

## Distribution of the malls visited by the respondents by town



**Fig. 1** Distribution of the malls visited by respondents. *Source:* created by authors based on the results of the quantitative analysis

The analysed sample members visited an average of 5.09 stores during their last mall visit, with the minimum recorded at 1 store/visit and the maximum at 30 stores/visit. This resulted in an amplitude of 29 stores, representing the difference between the maximum and minimum values.

To examine whether promotional discount periods influence respondent behaviour, Question 5 was posed. The recorded values are divided as follows: 49% of subjects provided negative responses, 36.4% affirmative responses, and 14.6% of respondents selected the response 'don't know/cannot pronounce.' The conclusion is that almost half of the respondents are not influenced by discounts to visit malls more frequently than usual.

Question 7 implemented a semantic differential scale (with scores assigned from 1 to 5 for each level, where 1 represents 'totally dissatisfied' and 5 'very

satisfied'). Frequency distribution indicates a high level of satisfaction regarding mall attractions. Approximately 70% of valid responses indicated that respondents are satisfied and very satisfied with mall attractions. The intermediate level (neither–nor) was indicated by 27.7% of those who responded to this question, while only 2.4% considered themselves dissatisfied with mall attractions. Response option 1 (very dissatisfied) did not receive any responses. In general, the conclusion is that respondents are satisfied and very satisfied with mall attractions.

The primary reason respondents visit malls is related to shopping, a motive that accounted for 69.4% of total responses. The least common responses were recorded for dining (3.9%), relaxation (8.3%), and event participation (0.5%). Under the 'other' category (registering 1.5%), respondents mentioned: free parking, information about products.

Respondents frequent malls at a rate of 55.3% on weekdays and the remaining 44.7% on weekends. Regarding the time intervals during which respondents visit malls (Q10), the majority (70.9%) prefer going between 3 and 8 pm, while 1% visit malls after 9 pm. A possible explanation for the received responses could be the operating hours of malls (usually open until 10 pm) and respondents' working hours (typically until 5 pm).

Through Question 11, the authors aimed to determine respondents' opinions regarding the interior aspect (image, atmosphere, environment) of the malls they frequent. The recorded responses, both in terms of median and mode values, confirm that the interior aspect of the mall is situated at level 4 (68.4%), representing the response option 'well-organized.' The mean for this question is 3.97 on a scale from 1 to 5. Fewer responses were recorded on the negative side of the scale, with only 3.4% of respondents considering the interior aspect of the mall not organized or poorly organized.

When asked 'What category do the commercial spaces that you visit in malls fit into?' (Q13), respondents had the option to choose multiple answers, resulting in a total of 3780 responses. The study results demonstrate that the main commercial spaces visited by respondents are: 25.8% clothing and footwear stores, 16.1% restaurants and fast-food establishments, and 15.8% supermarkets and hypermarkets. The least visited commercial spaces in malls are: 0.4% travel agencies, 1.3% children's play areas, and 1.9% flower shops and other gift stores or services.

Kuruville [51] reveals that young girls are inclined to visit stores, whereas young boys show a greater interest in recreational areas.

Regarding the amounts spent by respondents during their last mall visit (Q14), the majority of responses (50%) fell within the range of 100–299 lei (approximately 20–59.8 €). A percentage of 13.6% spent 0–99 lei (approximately 0–19.8 €) on their last mall visit, 37.4% spent between 200 and 399 lei (approximately 40–79.8 €), and 22.8% spent over 400 lei (approximately 80 €).

Question 15 aimed to identify subjects' opinions on various aspects and experiences related to physical commerce and malls (Table 3). Observations indicate that respondents do not feel important when visiting the mall (mean=2.1 points on a scale of 1–5). Statements such as 'Mall visits are an exciting experience.' scored 2.89 points, 'The mall is a dynamic place where interesting things happen all the time.'—2.87 points, 'The mall is the definition of modern living.'—3.11 points,

and 'The shopping experience in malls is like an adventure full of surprises.'—3.01 points, all recorded averages at the neutral level 3, indicating a neutral opinion toward these statements.

One aspect that bothers respondents when visiting the mall during peak hours is related to congestion, with 84% of respondents agreeing or strongly agreeing, obtaining an average of 4.23 points on a scale of 1–5. Regarding satisfaction with security and safety measures in the mall, an average of 3.54 points was recorded, with most responses indicating agreement from respondents, accounting for 42.2%.

Respondents tend to spend more money in the mall than initially planned, with 32% of responses indicating agreement. However, they believe that they cannot spend the entire day in the mall without getting bored, with 61.7% of responses reflecting this sentiment.

Concerning the statement 'The atmosphere in malls is full of energy.' there were 380 responses, representing 36.9%, for a neutral response and 375 responses, representing 36.4%, in agreement with the statement.

The final statement, which pertains to paying a higher price for products and services in the mall as part of an experience, received mostly negative responses, with 50.5% of respondents disagreeing with sacrificing their budget for an experience. This statement obtained an average of 2.52 points on a scale of 1–5.

The primary experiences sought by respondents at the mall are related to the purchase of goods and services, as indicated by 54.6% of respondents, followed by going to the cinema (31.8%) and socializing (11.4%). Participation in events does not attract respondents, with only 2.2% expressing interest in this experience.

The authors employed the Chi-Square test (Table 4) to examine the presence of an association between respondents' income and the heightened frequency of visits to malls during discount periods.

Regarding Question 5, elevated frequencies for the negative response were observed across all income groups of respondents, except for the initial category with incomes ranging from 0 to 500 euros. It is evident that individuals within this income bracket exhibit greater sensitivity to pricing in comparison to their counterparts in other income groups. Further analysis is required to determine the significance of this observed difference.

It is noted that the critical ratio attains a value of 29.305, surpassing the theoretical ratio  $\chi^2_{0.05;6} = 12,592$ . This discrepancy implies a 95% probability that within the research population, disparities exist between the expected and observed frequencies. In conclusion, a discernible connection exists between respondents' income and the heightened frequency of visits to malls during discount periods. This assertion is reinforced by comparing the minimum level of significance to the value of 0.000, which is less than the predetermined threshold  $\alpha = 0.05$ .

**Table 3** Summary of statistical results regarding the respondents' opinions on a series of affirmations. *Source* created by authors based on the results of the quantitative analysis

Affirmations	Response options					Average
	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	
Visiting malls makes me feel important.	35.4	29.1	27.2	6.3	1.9	2.10
Mall visits are an exciting experience	13.6	17	40.3	24.8	4.4	2.89
The mall is a dynamic place where interesting things happen all the time	13.1	21.4	36.9	22.8	5.8	2.87
The mall is the definition of modern living	12.1	18	26.2	34	9.7	3.11
The shopping experience in malls is like an adventure full of surprises	11.2	16.5	40.8	22.8	8.7	3.01
Sometimes the crowds present in malls at peak times bother me	4.4	3.4	8.3	32.5	51.5	4.23
I am happy with the level of security in malls	4.9	5.8	33.5	42.2	13.6	3.54
I think I could spend a whole day in the mall without getting bored	41.3	20.4	22.3	9.7	6.3	2.19
I always spend more money than initially planned when I go to the mall	6.3	16.5	24.8	32	20.4	3.44
The atmosphere in malls is full of energy	8.3	9.7	36.9	36.4	8.7	3.28
I am willing to pay more for products and services in malls because I know they are part of an experience	27.2	23.3	25.2	18.9	5.3	2.52



**Table 4** Critical report for the Chi-Square analysis. *Source* created by authors based on the results of the quantitative analysis

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	29.305 <sup>a</sup>	6	0.000
Likelihood ratio	30.040	6	0.000
Linear-by-linear association	0.029	1	0.865
N of valid cases	1030		

<sup>a</sup>0 cells (0,0%) have expected count less than 5. The minimum expected count is 27.67

## 4.2 O2. Identifying online shopping behaviours and the reasons behind choosing this particular type of commerce

To facilitate the identification of respondents' motivation for ordering online, a series of statements were presented, and respondents were asked to express their opinions. The synthesis of the obtained results is presented in Table 5.

The analysis of responses highlights that among the analysed statements, the highest average is recorded for the statement 'The products I received were adequately packaged' (mean = 4 points on a scale from 1 to 5). Conversely, the lowest average is recorded for the statement 'I have had trouble with finalising transactions online' (mean = 2.7 points on a scale from 1 to 5). It can be concluded that logistics plays a crucial role, and the packaging used is effective. However, an issue arises concerning the online payment of ordered products.

Simultaneously, for the first four analysed statements, it is observed that the highest percentages are recorded for the agreement response, while for the last two statements, the majority of responses fall into the neutral category, representing neither agreement nor disagreement. It is evident that a significant portion of respondents (44.7%) holds a neutral opinion regarding the trust they have in online clothing stores.

The most frequent payment method for online shopping is online card payment for more than half of the subjects (51.5%), followed by cash payment upon delivery (48.1%). A small percentage of respondents (0.5%) prefer payment by money order. These results closely correlate with the responses recorded above for the statement 'I have had trouble with finalising transactions online.' This may represent a reason why a substantial portion of respondents does not prefer online payment.

To ascertain respondents' opinions regarding online commerce, a series of statements on the characteristics of online orders were presented, and the synthesis of the obtained results is outlined in Table 6.

From the analysis of responses, it is evident that the average for all statements is close to the level of 3, indicating a neutral stance. The lowest average (3.2 points on a scale from 1 to 5) suggests that online payment is a barrier for respondents. Additionally, for all analysed statements, the highest percentages are observed for the agreement response, emphasizing respondents' optimistic and positive orientation in their answers.

**Table 5** Summary of statistical results regarding the respondents' opinions on a series of affirmations about motivations for choosing online orders. *Source* created by authors based on the results of the quantitative analysis

Affirmations	Response options					
	Strongly disagree (%)	Strongly disagree (%)	Strongly disagree (%)	Strongly disagree (%)	Strongly disagree (%)	Strongly disagree (%)
I was able to easily find the products I needed on websites	2.4	6.8	28.2	40.8	21.8	3.73
I think apps for clothing/shoe shopping are beneficial	2.4	4.9	31.6	38.3	22.8	3.74
The products I received were adequately packaged	0.5	2.9	17	55.3	24.3	4.00
I have encountered situations in which the products I received were not the same as what I had ordered	10.7	21.4	23.3	27.7	17	3.19
I trust online clothing stores	2.4	12.6	44.7	29.6	10.7	3.33
I have had trouble with finalising transactions online	19.9	24.8	29.6	17	8.7	2.70

The findings from this study concerning the motives for online purchases align with the results of other studies on this topic. The crucial factors related to online product/service purchases are the optimal quality/price ratio (17% of opinions) and the best price and delivery costs (14% each), reflecting primarily economic factors [24]. Nigar & Miah [55] demonstrated that three factors positively impacting the online buying behaviour of Bangladeshi shoppers during the pandemic are celebrity approval, promotional tools, and online reviews.

Regarding customer satisfaction with online shopping, analysing two dimensions, namely the process and outcome dimensions, Alaimo et al. [32] reveal that the process dimension, linked to the ease of using online tools in the phases of search and online purchase, generates a higher satisfaction level than the outcome dimension measured in terms of service utility. In other words, online customer satisfaction is higher if they can easily access information, if the website is attractive and user-friendly, if customer services are good, and if customer security is enhanced [50, 56].

### 4.3 03.Determining the differences between online and offline shopping experiences

A significant difference between online and offline commerce is identified in the swift online product search with the possibility of comparing offers, providing an advantage to online shopping. For this statement (Q18), the mean response is 3.88 points on a scale from 1 to 5. The recorded responses indicate that 41.7% of respondents agree, followed by 29.6% in complete agreement. A percentage of 19.9% marked a neutral response, neither agreeing nor disagreeing, and the options of disagreement and complete disagreement have low values (disagreement is indicated by 4.9% of subjects, while complete disagreement is mentioned by 3.9%).

62.6% of respondents stated that it is easier for them to find desired products on websites than to go to the mall. These responses correlate with those for the statement 'I believe that by placing online orders I avoid wasting time' with 68.9% of respondents answering in agreement or complete agreement.

The research has shown that another difference between online and in-store purchases concerns the possibility of receiving different or incorrect products than those ordered online. Responses indicate that 44.7% of respondents have encountered this situation, which may lead them to reconsider online purchases.

The online transaction payment, the occurrence of difficulties in completing transactions, or mistrust in the safety of online payment represent another aspect creating differences between the two types of purchases (online and offline), with some respondents being reserved about such transactions.

When respondents were asked to specify their perception of the future of physical malls in relation to online commerce, the majority, specifically 36.06%, believe that they will operate in parallel, much like they do now, and that malls will not be affected by online commerce because malls offer the advantages of socialization, product quality verification, and there are still consumers who prefer physical shopping. Negative opinions about the future of physical malls were mentioned

**Table 6** Summary of statistical results regarding the respondents' opinions on a series of affirmations about the characteristics of online orders. *Source* created by authors based on the results of the quantitative analysis

Affirmations	Response options					
	Strongly disagree (%)	Strongly disagree (%)	Strongly disagree (%)	Strongly disagree (%)	Strongly disagree (%)	Strongly disagree (%)
The convenience of online shopping made me place more orders	6.3	13.1	25.2	36.4	18.9	3.49
I believe that by placing online orders I avoid wasting time	3.4	6.8	20.9	39.8	29.1	3.84
The possibility of my order being damaged in transit made me pay careful attention to what types of products I ordered online	2.9	8.7	29.1	39.8	19.4	3.64
The online payment for ordered products represents a barrier that makes me careful when I place online orders	13.1	16	26.2	27.2	17.5	3.2
I know how to protect myself against cybernetic attacks and online payments	4.9	10.7	26.7	39.8	18	3.55

by 21.15% of respondents, who believe that fewer people will frequent malls, leading to a loss of popularity, as online commerce and VR and AR technologies gain momentum. Additionally, they consider prices to be higher in malls. At the same time, 19.71% of respondents envision an evolution in the future of physical malls because they provide experiences that online commerce cannot offer, and they do not consider it safe or trustworthy.

#### **4.4 04. Identifying the differences in shopping behaviour before and after the COVID-19 pandemic**

During the COVID-19 Pandemic, research findings indicate that consumer behaviour involved visiting grocery stores, while opting to order other types of products online (49.5%). The response to choosing to order all necessary products online recorded 31.1%. Some respondents preferred not to make any online orders, opting to go to physical stores and adhere to the protective measures imposed by authorities (19.4%).

These results align with a study conducted by Truong & Truong [57], revealing that approximately 46.1% of respondents spent more on online purchases, 42.9% spent more on curbside pickup purchases, and 39.2% spent more on in-store purchases. The article indicates that this behaviour was primarily driven by two factors: health concerns, economic apprehension, as well as age, gender, race, income, and marital status. Another research by Meister et al. [58] and Eger et al. [59] indicates that during the pandemic, 13% of food product purchase options were replaced by online shopping. The study demonstrates that this increase is evenly distributed among groups with and without prior experience in online food shopping.

To identify changes in consumer behaviour after the COVID-19 Pandemic, the questionnaire continued with the question: 'After COVID-19, have you chosen to reduce the time you spent in malls?' (Q19). The recorded results show that more than half of the respondents did not reduce the time spent at the mall (55.3%), while 22.7% did reduce it following the pandemic. A relatively large percentage (17%) mentioned that they do not know, suggesting an undecided behaviour.

To further analyse consumer behaviour, the influence of the COVID-19 Pandemic on mall visitation behaviour is presented. It is observed that the majority of respondents (39.3%) reduced mall visits, followed by 29.6% who stated that the COVID-19 Pandemic did not influence their mall visitation behaviour. Some subjects (15%) mentioned that they visit the mall as before the pandemic but have nevertheless reduced the time spent there. A percentage of 12.1% of respondents chose not to frequent malls anymore, influenced by the challenging period of the pandemic. The lowest percentage recorded (3.9%) among respondents stated that they go to the mall more often after all the restrictions imposed by authorities.

A delicate yet crucial topic of discussion is the influence of the COVID-19 Pandemic on respondents' financial decisions correlated with the number of mall visits. Half of the subjects (50%) mentioned that it had no influence. A relatively high percentage of respondents (46.1%) decided to reduce expenses, while a small portion of them (3.9%) chose to spend more money.

**Table 7** Calculated values for the Kolmogorov–Smirnov test. *Source* created by authors based on the results of the quantitative analysis

Test Statistics <sup>a</sup>		
		The increase of what electronic commerce offers had a positive influence on me, leading me to place more online orders after the COVID-19 pandemic
Most extreme differences	Absolute	0.146
	Positive	0.000
	Negative	−0.146
Kolmogorov–Smirnov Z		2.042
Asymp. Sig. (2-tailed)		0.000

<sup>a</sup>Grouping variable: Gender

Meetings with friends at the mall, from the respondents' perspective, were not influenced to any extent (41.3%) by the COVID-19 Pandemic. Similar percentages were recorded for meetings at the mall with fewer friends (27.7%) and meetings with the same number of people (26.2%). A relatively low percentage (4.4%) of respondents stated that they do not meet friends at the mall, and 0.5% mentioned that they have increased the group size. In the study by O'Meara et al. [60], it is shown that during the COVID-19 pandemic, many consumers (91.3%) reduced the number of outings in town for meals, while 75.8% of respondents said they preferred to cook at home or consumed more fruits and vegetables.

For the statement 'The increase of what electronic commerce offers had a positive influence on me, leading me to place more online orders after the COVID-19 pandemic' recorded responses show that most respondents remained neutral, marking the response option neither agree nor disagree. A percentage of 33% of subjects marked the agree option, and 15.5% marked the completely agree option. Lower percentages are recorded for disagree (12.1%) and completely disagree (4.9%). It is concluded that most respondents placed more online orders after the COVID-19 Pandemic.

The authors used the Kolmogorov–Smirnov test (Table 7) to determine whether there is a connection between respondents' gender and the increase in online orders after the COVID-19 Pandemic.

The value of  $D_{calculating} = 14.6\%$ , is compared with its theoretical value  $D_{\alpha} = 136 * \sqrt{\frac{265+765}{265*765}} = 9.69\%$ , for  $\alpha=0.05$ . The calculated value is higher than the theoretical one, which indicates a difference between male and female respondents with regard to the increase in online orders after the COVID-19 pandemic.

#### 4.5 Principal component analysis (PCA)

To identify simultaneous interdependencies among the 7 research variables, the PCA method was employed. The purpose of this analysis is to derive a reduced

number of components explaining respondents' attitudes toward changes in buying behaviour (online versus physical mall shopping) after the COVID-19 pandemic.

Based on the obtained means (Table 8), it is observed that respondents prioritize time savings through online orders and quick product searches online (considered an advantage). Positioned at the midpoint of the scale with a mean of 3.2, online payment is identified as a barrier for respondents.

After extracting the two factors representing the principal components in the proposed model, correlation coefficients between the analysed variables and the principal components are calculated in Table 9.

The first four variables (The increase in online offerings positively influenced me, resulting in more online orders after the Pandemic; The convenience offered by online prompts me to order more frequently; Through online orders, I save time in my Favor; Quick searching of products online is an advantage), along with the last variable (I know how to protect myself against cyber-attacks), strongly correlate with the first component. Meanwhile, preferences regarding the possibility that ordered products may not remain intact at home, making me choose product types carefully, and online payment is a barrier are strongly correlated with the second component.

It can be concluded that the first component is determined by (Table 10) online shopping behaviour, while the second component is particularly determined by preferences for physical shopping (in malls, in this case).

Results regarding the correlation coefficients between the analysed variables and the two principal components obtained after axis rotation using the Varimax method are presented in the table below.

It is observed that after axis rotation, there are no substantial changes in the correlation coefficient values compared to the previously presented situation (Fig. 2).

The purpose of reducing the analysed variables (the 7) to only two main components is to identify the existence of some connections between the components. Based on the average individual values of the variables included in each component, the 2 main components are created. Thus, the variable 'Respondents' preference for buying from the online environment represented by a series of advantages' was obtained, consisting of the positive influence of the increase in online offerings, the convenience offered by online orders, time saved through online orders, quick searching of products online, knowledge of protection against cyber-attacks, while the variable 'Barriers in respondents' preference for choosing online shopping' was obtained based on the other variables (the risk that ordered products may not remain intact online, respectively, online payment is a barrier).

Essentially, the findings highlight major differences between online and offline buying behaviour, emphasizing a significant impact of the COVID-19 pandemic on purchasing behaviour. Figure 3 presents the most relevant research results.

**Table 8** The average of the 7 variables introduced into the model. *Source* created by authors based on the results of the quantitative analysis

Descriptive statistics	Mean	Std. deviation	Analysis N
The increase of what electronic commerce offers had a positive influence on me, leading me to place more online orders after the COVID-19 pandemic	3.42	1.044	1030
The convenience of online shopping made me place more orders	3.49	1.127	1030
I believe that by placing online orders I avoid wasting time	3.84	1.027	1030
The quick online search for products and the availability of offers are advantages of online shopping	3.88	1.013	1030
The possibility of my order being damaged in transit made me pay careful attention to what types of products I ordered online	3.64	0.984	1030
The online payment for ordered products represents a barrier	3.20	1.272	1030
I know how to protect myself against cybernetic attacks and online payments	3.55	1.055	1030



**Table 9** Component matrix<sup>a</sup>. *Source* created by authors based on the results of the quantitative analysis

	Component	
	1	2
The increase of what electronic commerce offers had a positive influence on me, leading me to place more online orders after the COVID-19 pandemic	0.807	-0.214
The convenience of online shopping made me place more orders	0.847	-0.192
I believe that by placing online orders I avoid wasting time	0.836	-0.047
The quick online search for products and the availability of offers are advantages of online shopping	0.793	-0.119
The possibility of my order being damaged in transit made me pay careful attention to what types of products I ordered online	0.442	0.730
The online payment for ordered products represents a barrier	0.204	0.846
I know how to protect myself against cybernetic attacks and online payments	0.499	-0.052

Extraction Method: Principal Component Analysis

<sup>a</sup>2 components extracted**Table 10** Correlation between variables and factors after axis rotation. *Source* created by authors based on the results of the quantitative analysis

	Component	
	1	2
The increase of what electronic commerce offers had a positive influence on me, leading me to place more online orders after the COVID-19 pandemic	0.834	0.010
The convenience of online shopping made me place more orders	0.868	0.041
I believe that by placing online orders I avoid wasting time	0.818	0.178
The quick online search for products and the availability of offers are advantages of online shopping	0.796	0.097
The possibility of my order being damaged in transit made me pay careful attention to what types of products I ordered online	0.231	0.821
The online payment for ordered products represents a barrier	-0.030	0.870
I know how to protect myself against cybernetic attacks and online payments	0.495	0.083

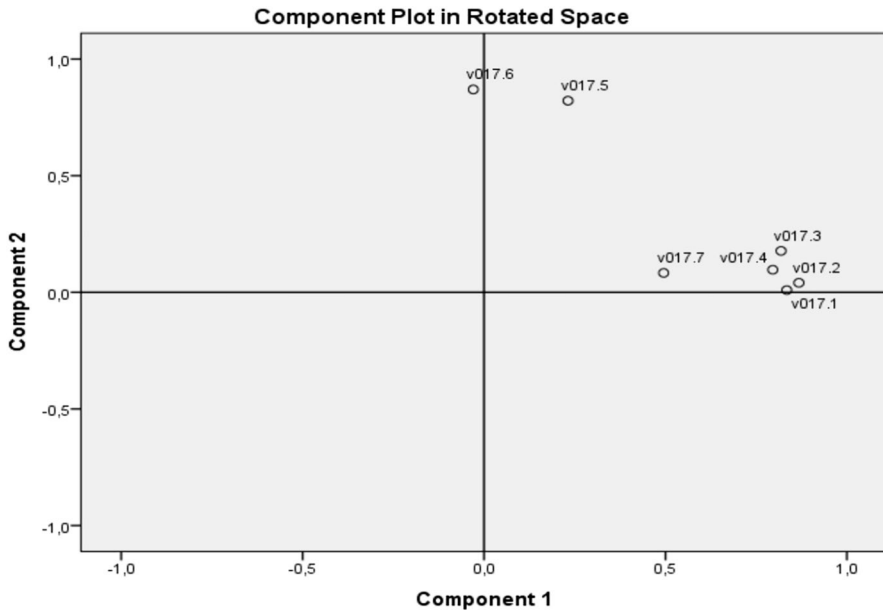
Extraction method: Principal component analysis

Rotation method: Varimax with Kaiser normalization

Rotated component matrix: Rotation converged in 3 iterations

## 5 Conclusions and implications

On a global scale, retail conducted within mall-type commercial structures has been continuously evolving in recent years until the pandemic crisis, adapting to market changes and consumer behaviours. Prior to the pandemic, the global economy, in general, experienced growth, and population incomes increased, leading to higher demand for products and services. Retailers invested in malls and product diversification to meet consumer needs.



**Fig. 2** Graphical representation of the correlation between variables and factors. Source: created by authors based on the results of the quantitative analysis, V017.1 = The increase of what electronic commerce offers had a positive influence on me, leading me to place more online orders after the COVID-19 pandemic, V017.2 = The convenience of online shopping made me place more orders, V017.3 = I believe that by placing online orders I avoid wasting time, V017.4 = The quick online search for products and the availability of offers are advantages of online shopping, V017.5 = The possibility of my order being damaged in transit made me pay careful attention to what types of products I ordered online, V017.6 = The online payment for ordered products represents a barrier, V017.7 = I know how to protect myself against cybernetic attacks and online payments

Simultaneously, another significant trend in retail is the development of online commerce, which has seen significant growth in recent years. Many retail companies have established online sales channels to reach various market segments and adapt to new consumer buying behaviours. Retail markets are dynamic and competitive, presenting good growth opportunities for companies that can adapt to consumer needs and preferences.

The entire context of the evolution of commerce in mall-type structures and online commerce, defined on the one hand by factors influencing demand (demographics, income, lifestyle, urbanization, etc.) and supply (retail concepts, innovation and technologies, infrastructure, etc.), was strongly affected by the pandemic crisis. The COVID-19 pandemic had a significant impact on the mall-type retail industry, altering consumer buying behaviour and affecting sales. The pandemic led to the closure of many physical stores in malls, severely impacting this type of commerce. At the same time, the transition to online commerce and home deliveries accelerated, resulting in a significant increase in online sales. Additionally, the pandemic increased online demand for essential products such as food, cleaning supplies, and medical products but had a negative effect on offline demand for

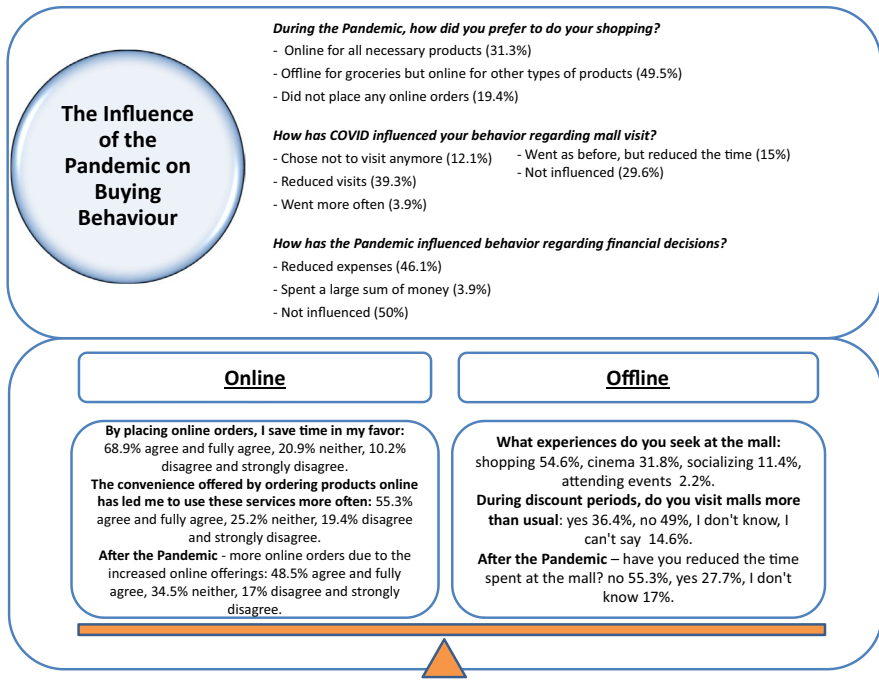


Fig. 3 Synthesis of the most relevant research results. Source: created by authors based on the results of the quantitative analysis

other products such as clothing, footwear, or cosmetics. However, the COVID-19 pandemic was a major factor that energized online commerce, as many consumers who were hesitant about online shopping during the pandemic were forced to learn to interact with online shopping.

Online and offline retail are two ways in which people can make purchases. There are advantages and disadvantages to both forms of retail, and the choice depends on various variables (demographic, socio-economic, psychographic, cultural, technological, ecological, etc.) that manifest in specific purchasing and consumption behaviours. Online retail has the advantage of being accessible from anywhere, at any time, with just a few mouse clicks or taps on a mobile phone. Additionally, online retail offers a wider range of products, making it easier to find rare or hard-to-find items compared to physical stores. Quick product searches and time savings through online ordering were the preferred responses of the surveyed subjects in the quantitative research conducted. Moreover, prices can be lower in online retail due to reduced inventory and transportation costs or other logistics costs. As for the disadvantages of online commerce, the research revealed issues such as receiving products that do not match expectations and a lack of trust in online payment methods from a significant portion of the respondents.

Despite the development of online commerce and the accelerated growth pace post-pandemic, offline retail in malls retains several advantages. For example, physical stores provide consumers with a sensory experience, allowing them to see, touch,

and test products before purchasing. Additionally, offline retail offers the opportunity, through specialized staff, to provide advice and recommendations, consultancy for those who need help in choosing the most suitable purchase solutions.

The study results also indicate that subjects appreciate that both online and offline commerce in malls will evolve in parallel, influenced by various factors. It is clear that technological evolution will impact both forms of commerce, but the strategies employed remain to be seen (there are companies that started as online startups and later added an offline component, such as eMAG, which created a network of showrooms).

The current study related to offline shopping shows that in Romania, most of the respondents visit malls weekly, mainly to buy products and services. Among the factors driving this type of shopping, the following have been identified: attractions in the mall, their organization (all types of stores are found in one place), the immediate entry into the possession of the product, actual product viewing, as well as the safety measures in place. Previous studies show that there are seven reasons why consumers visit offline stores: character, product, spending time, entertainment, photography, giving a gift and curiosity [61].

As this article shows, during the COVID-19 pandemic, online shopping has exploded, especially for food, cleaning and disinfecting products, and cosmetics. These results are consistent with the results of other studies such as: results of a study developed by The Food Industry Association (2020) [62] whose results found that approximately 77% of participants chose to buy food products online; The COVID-19 pandemic has made online grocery shopping a more popular and viable option, and this popularity has led to significant changes in transportation and supply chain management [63]; in the Lebanese society, during the COVID-19 pandemic a significant number of respondents started making fashion purchases online [64].

The results of the article show that for Romanian buyers, the main advantages of online shopping are the ease of finding and comparing offers, as well as saving time spent on shopping. A study conducted by Kulkarni and Barge [65] found that convenience and instant satisfaction were the most influential factors for online shoppers. And the study developed by Chmielarz et al. (2022) [24] shows that during the pandemic, the structure of internet activities has changed, with the biggest increases being online shopping (11%).

This study, like others, is not exempt from limitations. A limitation is that it was impossible to perform random sampling. However, the mentioned limitation does not reduce the value of the research. Among the limitations of the study is the impossibility to assist and answer the respondents in real time (in case of possible erroneous interpretations of the questions in the questionnaire), but also the distribution of the questionnaire only in the online environment (there is a possibility that some may not be able to access the completion link of the questionnaire).

The exploration of concepts and components of experience design that online commerce will develop and how the mall, from an experiential design perspective, will respond constitutes a potential future research direction. It is noteworthy that many firms operating in malls are focusing on integrating offline and online

commerce, offering a holistic approach to meet the changing purchasing behaviours and needs, providing new shopping and consumption experiences.

Based on the above research, this paper provides a clear foundation for understanding the behavioural differences and shopping experiences in the online versus offline (malls in our case) environments.

The research conducted and presented in this article is current and highly important. From a managerial perspective, our findings can be utilized by managers in the retail industry to develop effective marketing strategies aimed at improving activity by offering new shopping experiences and developing new ways of online communication with customers, ultimately increasing customer satisfaction and contentment.

The present study highlighted the practical implications of the differences in shopping behavior and experiences of online and offline shopping in shopping malls, from a national level. Although the results are presented at the level of Romania, they can also be of real use at the macro level, where retailers can similarly establish their strategies. As can be concluded, the managerial implications indicate the priority of implementing differentiated business strategies, depending on the targeted environment (online and offline), to then shape marketing strategies adapted to the buying behavior. The most important detail that business owners must understand is related to the different motivation of the consumer depending on the type of trade targeted, but also to the major influences it can have (eg: periods of crisis, Pandemic, etc.). By knowing factors such as buying behavior, customer experience, modern technology that is experiencing spectacular growth, organizations can differentiate their marketing strategies that must keep pace with the continuous changes in the market, maintain customer enthusiasm and adapt to their needs. Finally, this investigation, correlated with other specialist research, can be useful to micro and macro factors interested in trade. Consequently, this study contributes to how retailers (both offline and online) must adapt to changes in consumer behavior, but also to the measures they must use to attract consumers.

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## Declarations

**Conflict of interest** All authors state that there are no conflicts of interest.

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