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marketing

# Naučni članci/Scientific papers

# Consumer habits of fashion products before and during the pandemic COVID-19 with an emphasis on online shopping

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**Abstract:** The extraordinary circumstances brought about by the COVID-19 pandemic have posed significant challenges to existing business practices and led to significant market changes, both globally and locally. The fashion industry was no exception, experiencing an existential crisis as production came to a halt, retail stores were closed and demand drastically declined. However, the COVID-19 pandemic also provided an opportunity to examine how consumer behavior and fashion have evolved during these uncertain times and how the pandemic have transformed consumers' relationship with fashion products (FP). Therefore, the subject of this paper is consumer habits of FP purchasing both before and during the pandemic, regarding the frequency of purchase methods (physical store vs. online shopping via domestic and foreign websites, and social networks Instagram and Facebook) of FP (fashion clothing, fashion footwear and fashion accessories) based on specific consumer characteristics (age categories – consumer generations, gender and monthly income levels). This study aims to identify the most frequent consumer habits purchasing of FP in Serbia and compare their behavior during and before the pandemic. According to the main research findings, there is a significant difference in the responses of respondents from different consumer generations regarding the frequency of ordering FP in Serbia through domestic and foreign websites, social media platforms (Instagram and Facebook) and types of FP (clothing, footwear and fashion accessories) before and during the pandemic.

**Keywords:** *consumers, fashion products (FP), COVID-19, Serbia, online shopping*

**JEL classification:** M31, L67

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## 1. INTRODUCTION

Dynamism, complexity and competitiveness are the terms most commonly used to describe modern business conditions. The macro-marketing environment is subject to numerous influences (Slijepčević, 2016; Slijepčević, 2019; Slijepčević, Perčić & Krstić, 2023). It is widely held that uncertainty and risk accompany every business activity, requiring all actors to possess the ability to adjust quickly to the constant changes that arise (Kokeza & Stavrić, 2022). The COVID-19 pandemic has convincingly demonstrated that these claims are not mere phrases found in economic literature.

The global pandemic of the coronavirus has had numerous consequences on people's lives – it has altered their habits, restricted movement and gatherings, and reduced their purchasing power, leaving many industries on the brink of existence. In addition to tourism and hospitality (Perčić & Spasić, 2021; Perčić & Spasić, 2022), the fashion industry was one of the most severely affected by the situation (Pantelić, Stojanović & Vićentijević, 2021; Risteski & Srebrenkoska, 2021; Saiki, Kandiah, Adomaitis & Jones, 2021; Seibel, Santos & Silveira, 2021). Challenged operations were reflected at all levels, from production through distribution to sales and marketing. Most fashion companies have shifted their production to underdeveloped countries in Asia, where labor costs were at the lowest (Milovanović, Milovanović & Popović, 2022). On the other hand, some fashion brands (e.g., *Benetton*) left global supply chains and cheaper production centers in Asia, making the Mediterranean their new production destination (Benetton Group, 2021). Additionally, due to store closures, shortened working hours and changing consumer shopping habits, significant drops in clothing sales were observed, and a large number of textile industry organizations were forced to significantly reduce their business volume or, in some cases, close their retail outlets (Sarma, Kumar, Choudhary & Mangla, 2023). This is evidenced by the fact that in 2020, textile sales in the EU decreased by 9.2%, compared to

2019, and clothing sales by 18.1% (Kokeza, Josipović & Urošević, 2022). Human lives and public safety became priorities dictating all other aspects of business.

On the one hand, companies were forced to reconsider their previous way of doing business (Mamula Nikolić, Perčić & Nećak, 2022), while consumers were reevaluating their priorities (Perčić, Slijepčević & Ašanin Gole, 2023), new needs, along with working from home, travel restrictions, online shopping, concern for physical and mental health, their environment and community (Savić, Savić & Frfulanović, 2021). For many consumers worldwide (especially those with slightly lower purchasing power), new clothing during the pandemic was not a priority (Risteski and Srebrenkoska, 2021; Vuković, Vuković, Urošević & Mladenović-Ranisavljević, 2021). People were much more focused on buying and stockpiling essential items for survival during isolation (Laato, Najmul Islam, Farooq & Dhir, 2020; Saiki et al., 2021; Atayah, Dhiaf, Najaf & Frederico, 2022; Tam & Lung, 2023). With low sales, the question was what would happen to the existing inventory of fashion products (FP) piling up in stores and warehouses. An additional danger was that most would go out of style, especially with seasonal collections (Economist, 2020). In addition, during these challenging times, consumers realized that their work productivity was unrelated to how they dressed. In other words, they began to pay more attention to the material of the clothing they wore (Risteski & Srebrenkoska, 2021). All these aspects together shaped a somewhat different global fashion market. The pandemic became a force for global change and created new attitudes in people‘s lives. In order to adjust to the changing reality, flexibility, resilience and, most importantly creativity, were necessary (Bell, 2020; Seibel et al., 2021). For example, during the pandemic, there was an increased demand for clothing tailored to the needs of people who spent most of their time at home (comfortable clothing that could also serve as work attire since many organizations adopted a more casual appearance for their employees in virtual meetings). The above led to increased efforts in digital marketing, which represented the most direct link with consumers during the pandemic (Mamula Nikolić et al., 2022). Through advertising on social media (primarily with the help of influencers) and through Google, brands built and maintained trust and loyalty with their clients (Savić et al., 2021). Furthermore, fashion companies directed their marketing logistics toward online sales channels, allowing consumers to shop without establishing physical contact with sellers or other individuals to reduce the risk of infection and virus spread (Jovanović, 2022). Meanwhile, brands began to realize the importance of the metaverse, where people work, play, socialize and shop, as an opportunity to build closer and more creative relationships with their customers, and achieve a higher return on marketing resources (McKinsey and Company, 2023). The increasing prevalence of digital platforms and digital marketing in the fashion market allows fashion brands to engage consumers through virtual reality (Gazzola, Pavione, Pezzetti & Grechi, 2020).

## 2. CHANGES IN THE HABITS OF SERBIAN CONSUMERS TOWARD CLOTHING ITEMS UNDER THE INFLUENCE OF THE COVID-19 PANDEMIC

Apart from the negative health consequences for people, the COVID-19 pandemic has led to a significant drop in economic activities and the global economy (Marjanović & Đukić, 2020; Praščević, 2020), changes in mobility patterns (Bonaccorsi et al., 2020), losses in tourism (Gössling, Scott & Hall, 2020). The aforementioned and many other consequences of the pandemic have created new conditions for people‘s daily lives (Mamula Nikolić et al., 2022). Consumers adapted to the pandemic by adjusting not only through adherence to epidemiological measures but also by changing their habits in everyday life (Lazarević & Marinković, 2021). Below are the results of some of the previous research conducted in our country on changes in the habits of Serbian consumers, primarily toward clothing items, under the influence of the pandemic.

Given that fashion influences consumer attitudes toward clothing items, research on the life cycle of clothing items in the Republic of Serbia was conducted by the Environment Improvement Centre (CUZS, 2022), in July and August 2020, through online survey, on a representative sample of 1,889 respondents. When breaking down respondents by gender, this research confirms the established notion that women are generally more informed about fashion-related matters. Only 4.3% of respondents buy clothes because of trends. In Serbia, consumers most frequently purchase clothing in global brand stores (over 60%), second-hand shops (over 16%) and domestic manufacturers‘ stores (13.4%). Less than 10% buy clothing online, at markets, or elsewhere. Men prefer to shop in global brand stores, while women are more inclined to use second-hand clothing stores. Differentiating consumer habits exists when sociodemographic indicators are taken into account. Observed through gender distribution, it is evident that there are no significant differences, except for gender-specific clothing items. Analyzing consumer practices through a generational lens indicates a mild trend where younger respondents tend to buy more on average than older ones. The level of education also significantly affects consumer habits – respondents with the highest level of education (Ph.D.) showing higher average consumer scores. The declaration of respondents as belonging to the upper class overlaps with their consumer practices, allowing them to lead with average shopping balances. The average wear time for all types of clothing items is approximately 37 months. Observation from a gender perspective dispels stereotypes according to which women lead in shopping. The wear period for clothing items is shorter among men than among women. Since the research took place during the pandemic, the findings show that, on average, respondents reduced their shopping by a significant 48%. The reduction in shopping was most pronounced among older respondents, dropping more than 76%. The pandemic significantly affected the consumer practices of respondents with primary education and lower-class backgrounds, who had to give up their previous shopping habits. The influence of this pandemic did not bypass the consumer practices of the upper class, where just over 35% of respondents reduced clothing shopping by more than 76% (Pavlica, 2020).

To determine how the habits of consumers were influenced by the outbreak of the COVID-19, namely whether they opted for online shopping during that period, the global auditing and consulting company Ernst and Young conducted research entitled „EY Consumer Habit Change Index" (Ernst & Young, 2020) at both the global and local levels. The same-named study was conducted in Serbia among 1,000 respondents to gain insight into how the habits of local consumers have changed (Ernst & Young, 2020). For the local edition of this study, respondents were asked what they had personally purchased for themselves or someone else in the last six months of 2020. Clothing, footwear and fashion accessories (new, not second-hand) were mentioned by 72% of respondents. Of that number, 68% were men, 76% were women, and more than half (56%) had a monthly household income of up to 48,000 RSD. It is worth noting that 54% of these respondents were unemployed. Since the pandemic significantly affected consumer habits worldwide, including in Serbia, the fashion industry was one category where consumers felt safe with online shopping (Ernst & Young, 2020).

## 3. METHODOLOGY

The subject of the paper is consumer habits of FP purchasing both before and during the pandemic, regarding the frequency of purchase methods of FP based on specific consumer characteristics (age categories – consumer generations, gender and monthly income levels). The goal is to determine the most frequent consumer habits purchasing of FP in Serbia and compare their behavior during and before the pandemic. Empirical, quantitative research was conducted using surveys as one of the primary research methods. From March 24 to June 21, 2021, respondents filled out a specially designed online questionnaire for this research. Some questions were formulated in the form of a five-point Likert scale. The sample is random and consists of 1,002 respondents of both genders (female 74%, male 26%) aged 18 to 72 years (Generation Z 18%, Generation Y 31%, Generation X 35% and Baby Boomers 16%). According to the amount of monthly income, the structure of the sample is the following: up to RSD 50,000 43%; RSD 50,000 - 70,000 20%; RSD 70,000 - 100,000 14%; over RSD 100,000 7%. The sample includes respondents from all regions of Serbia. The statistical error of the sample is 3%. The SPSS statistical software was used for data processing and analysis. The following quantitative statistical methods used are descriptive statistics (frequency distribution, arithmetic mean, standard deviation) and comparative statistics (t-test and ANOVA). In accordance with the defined subject and research objectives, the following hypotheses will be tested in the paper:

*$H_1$: There is significant difference in the responses of respondents from different consumer generations regarding the frequency of ordering FP in Serbia through domestic and foreign websites, social networks (Instagram and Facebook) and types of FP (clothing, footwear and fashion accessories) before and during the COVID-19 pandemic;*

*$H_2$: There is significant difference in the responses of male and female respondents regarding the frequency of ordering FP in Serbia through domestic and foreign websites, social networks (Instagram and Facebook) and types of FP (clothing, footwear and fashion accessories) before and during the pandemic; and*

*$H_3$: There is significant difference in the responses of respondents with different monthly income levels regarding the frequency of ordering FP in Serbia through domestic and foreign websites, social networks (Instagram and Facebook) and types of FP (clothing, footwear and fashion accessories) before and during the pandemic.*

## 4. RESULTS OF EMPIRICAL RESEARCH

Before the COVID-19 pandemic, consumers in Serbia most frequently purchased FP through domestic websites, with Instagram being the dominant social network. These purchases primarily consisted of clothing items, footwear and fashion accessories. It was rare for consumers to buy FP promoted by domestic and foreign influencers during the observed period. On the other hand, a decrease in the frequency of purchasing FP through domestic websites is observed when analyzing consumer behavior in Serbia during the pandemic. Additionally, the frequency of purchases in physical stores and through Instagram has slightly decreased, while it has increased through foreign websites and Facebook. Among other things, the frequency of buying clothing, footwear and fashion accessories, as well as the influence of influencers, has decreased compared to the period before the pandemic. These conclusions were reached by analyzing research results (column Mean) presented in Table 1.

According to the research results shown in Table 2, during the pandemic the frequent ordering of products through domestic websites decreased significantly (from 86% to 40%), and the frequent ordering through foreign websites increased (from 12% to 19%). As expected, the percentage of frequent purchases in physical stores decreased (from 22% to 19%). An interesting finding is that the percentage of frequent purchases in physical stores and through foreign websites is identical during the pandemic. During the pandemic, there was an increase in frequent ordering of FP through social networks (Instagram and Facebook) by 2% and a decrease in frequent purchases of clothing items (by 16%), footwear (by 11%) and fashion accessories (by 7%), as well as the influence of influencers (by 1%).

The results of empirical research analyzing the frequency of ordering FP before and during the pandemic by the consumer age, gender and income level are presented below.

Before the pandemic, the largest percentage of consumers of Generation X (90%) frequently (summed answers of respondents with „almost always“ and „often“) ordered FP through domestic websites. During the pandemic, Baby Boomers have bought through domestic websites in the highest percentage (45%) compared to other generations of consumers. Before the pandemic, the largest percentage of Generation Z (21%) frequently ordered FP through foreign websites. During the pandemic, Generation Y frequently ordered through foreign websites in the highest percentage (28%) compared to other generations (Graph 1). When it comes to frequent ordering of FP through Instagram, both before and during the pandemic, members of generations Z and Y frequently ordered through this social network, whereby the frequency of purchase during the pandemic shows an increase of 2% by Generation Y, and an increase of 3% by Generation Z. Both before (13%) and during the pandemic (17%), the members of Generation Z most frequently ordered through Facebook, whereby the frequency of purchase during the pandemic shows an increase of 2% by Generation Y, and an increase of 3% by Generation Z. Members of Generation X and Baby Boom-

**Table 1:** Descriptive statistics for the frequency of purchasing FP before and during the pandemic

| Purchase of FP | Before the pandemic | | | During the pandemic | | |
|---|---|---|---|---|---|---|
| | N | Mean | Std. Deviation | N | Mean | Std. Deviation |
| ...in physical stores | 1,002 | 2.29 | 1.319 | 1,002 | 2.22 | 1.256 |
| ...through domestic websites | 1,002 | 4.40 | 0.837 | 1,002 | 3.25 | 1.154 |
| ...through foreign websites | 1,002 | 2.33 | 0.999 | 1,002 | 2.54 | 1.095 |
| ...through Instagram | 1,002 | 1.90 | 0.949 | 1,002 | 1.84 | 0.989 |
| ...through Facebook | 1,002 | 1.67 | 0.907 | 1,002 | 1.73 | 1.016 |
| ... clothing | 1,002 | 3.44 | 0.943 | 1,002 | 3.14 | 1.004 |
| ... footwear | 1,002 | 3.11 | 1.065 | 1,002 | 2.87 | 1.059 |
| ... fashion accessories | 1,002 | 2.67 | 1.068 | 1,002 | 2.43 | 1.027 |
| ...which were promoted by domestic influencers | 1,002 | 1.47 | 0.778 | 1,002 | 1.44 | 0.756 |
| ...which were promoted by foreign influencers | 1,002 | 1.41 | 0.713 | 1,002 | 1.38 | 0.678 |

* Questions in the questionnaire related to examining the frequency of purchasing FP before and during the pandemic contained five answers that were offered: almost always, often, sometimes, rarely and never, and these were assigned values of 5, 4, 3, 2 and 1, respectively.

**Source:** Adapted according to Slijepčević et al. (2023)

**Table 2:** Percentages of respondents in Serbia according to frequent purchases of FP before and during the pandemic

| Frequent purchase of FP | Before the pandemic | During the pandemic |
|---|---|---|
| ...in physical stores | 22% | 19% |
| ...through domestic websites | 86% | 40% |
| ...through foreign websites | 12% | 19% |
| ...through Instagram | 5% | 7% |
| ...through Facebook | 5% | 7% |
| ... clothing | 50% | 34% |
| ... footwear | 37% | 26% |
| ... fashion accessories | 21% | 14% |
| ...which were promoted by domestic influencers, persons of influence | 3% | 2% |
| ...which were promoted by foreign influencers, persons of influence | 2% | 1% |

* The percentages shown in the table refer to the sum of respondents' answers with assigned values 5 (almost always) and 4 (often).

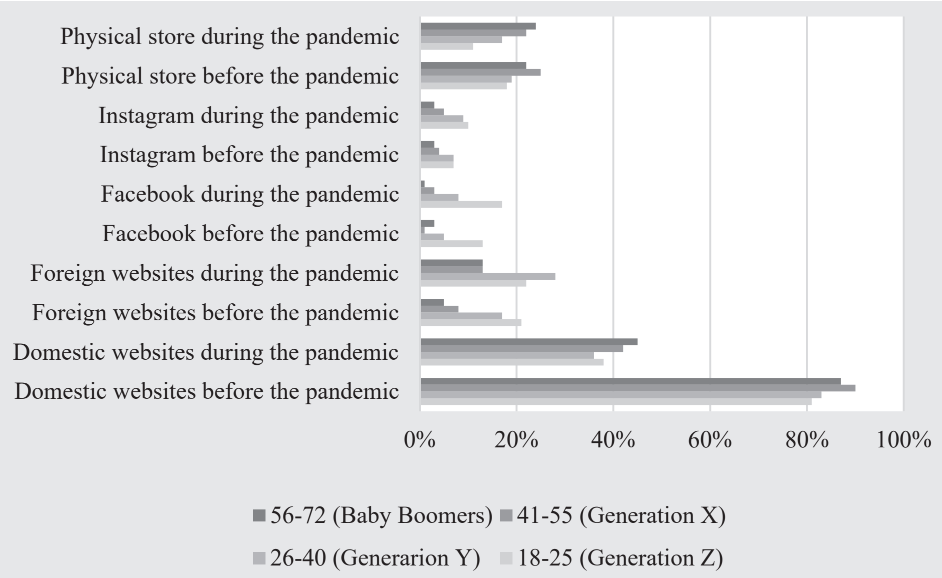
**Source:** Adapted according to Slijepčević et al. (2023)

ers most frequently bought FP in physical stores both before and during the pandemic. According to the ANOVA test, there is a statistically significant difference in the responses of respondents of different consumer generations in relation to:

- the frequency of ordering through domestic websites, both before ($p < 0.05$) and during the pandemic ($p < 0.05$);
- the frequency of ordering through foreign websites, both before ($p < 0.05$) and during the pandemic ($p < 0.05$);
- the frequency of ordering through Instagram, both before ($p < 0.05$) and during the pandemic ($p < 0.05$);
- the frequency of ordering through Facebook, both before ($p < 0.05$) and during the pandemic ($p < 0.05$);
- the frequency of purchasing FP in physical stores, both before ($p < 0.05$) and during the pandemic ($p < 0.05$) (adapted from Slijepčević et al., 2023).

Before the pandemic, a larger percentage of female respondents (88%) compared to male consumers (79%) frequently ordered FP through domestic websites. The percentage of female consumers (41%) who frequently ordered through domestic websites was higher even during the pandemic. Before the pandemic, a larger percentage of male respondents (14%) compared to female consumers (12%) frequently ordered FP through foreign websites. During the pan-

**Graph 1:** Distribution of respondents who frequently ordered FP, according to purchase method and consumer generations, before and during the pandemic

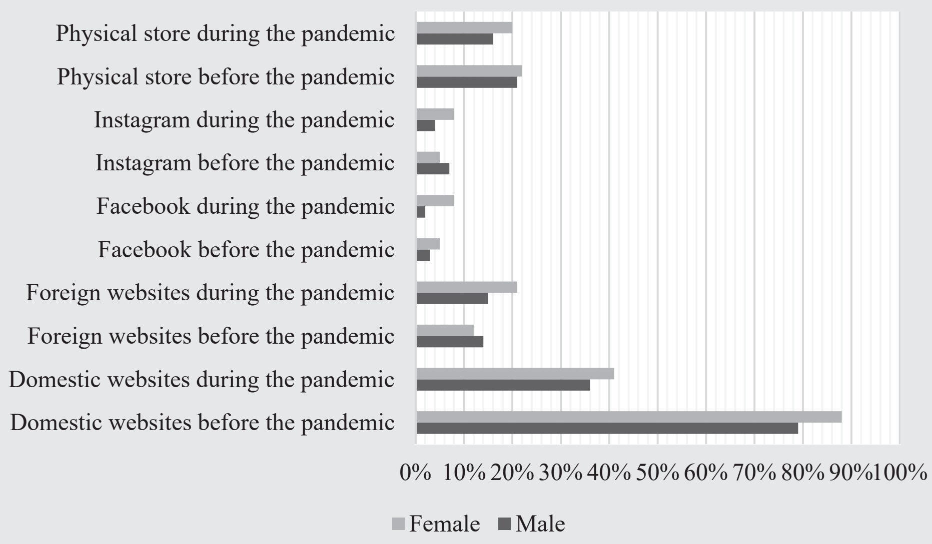



**Source:** Authors

demic, a larger percentage of female consumers (21%) compared to male consumers (15%) has frequently ordered through foreign websites (Graph 2). Before the pandemic, a larger percentage of male consumers frequently ordered through Instagram (7% compared to 5% of female consumers). During the pandemic, female consumers have frequently ordered through this social network (8% compared to 4% of male consumers). Before the pandemic, a larger percentage of female consumers frequently ordered through Facebook (5% compared to 3% of male consumers), and the situation was similar during the pandemic (8% of female consumers compared to 2% of male consumers). According to the t-test, there is a statistically significant difference in the responses of respondents of different genders in relation to the frequency of ordering FP through domestic websites before the pandemic ($t = -2.504$, $df = 998$, $p = 0.012 < 0.05$), and no difference for the period during the pandemic ($t = -0.015$, $df = 998$, $p = 0.988 > 0.05$). Then, there is no statistically significant difference in the responses of respondents of different genders in relation to the frequency of ordering FP through foreign websites before the pandemic ($t = 0.272$, $df = 998$, $p = 0.786 > 0.05$), nor for the period during pandemic ($t = -1.255$, $df = 998$, $p = 0.21 > 0.05$). According to the same test, there is no statistically significant difference in the responses of respondents of different genders in relation to the frequency of ordering through Instagram, both before ($t = 0.562$, $df = 998$, $p = 0.575 > 0.05$) and during the pandemic ($t = -0.297$, $df = 998$, $p = 0.766 > 0.05$), but there is a statistically significant difference in the responses of respondents of different genders in relation to the frequency of ordering through Facebook, both before ($t = -6.104$, $df = 998$, $p = 0.00 < 0.05$), and during the pandemic ($t = -4.781$, $df = 998$, $p = 0.00 < 0.05$). There is no statistically significant difference in the responses of different genders in relation to the frequency of purchasing FP in physical stores, both before ($t = 0.865$, $df = 998$, $p = 0.387 > 0.05$), and during the pandemic ($t = 1.049$, $df = 998$, $p = 0.295 > 0.05$).

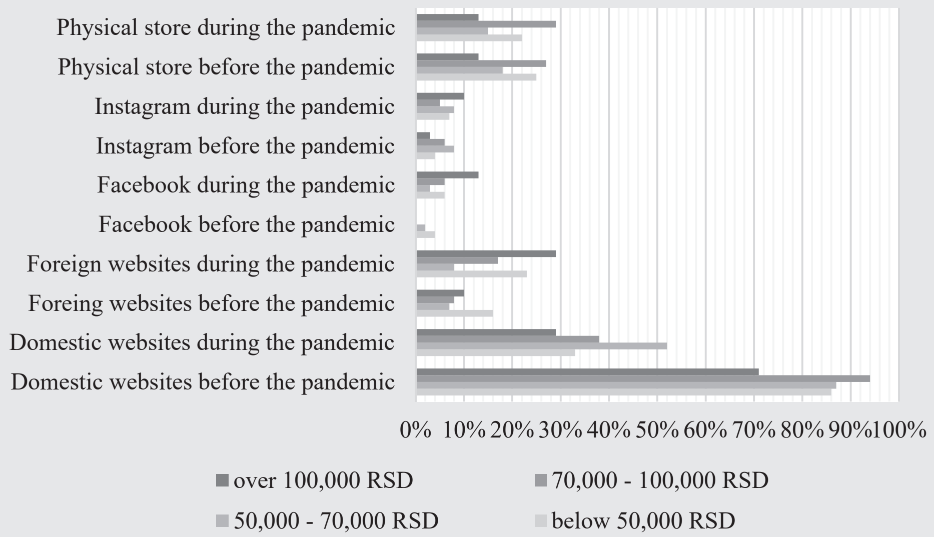
Before the pandemic, as many as 94% of consumers with income from 70,000 to 100,000 RSD frequently ordered through domestic websites. During the pandemic, the largest percentage of consumers with income from 50,000 to 70,000 RSD (52%) has frequently ordered through domestic websites. Before the pandemic, the largest percentage of consumers with income below 50,000 RSD (16%) frequently ordered through foreign websites. During the pandemic, the largest percentage of consumers with the highest income level (29%) has frequently ordered through foreign websites (Graph 3). Before the pandemic, the largest percentage of consumers with incomes of 50,000 - 70,000 RSD (8%) frequently ordered through Instagram, and during the pandemic, the largest percentage of consumers with the highest income level (10%) has frequently ordered through this social network. The largest percentage of consumers with incomes up to 50,000 RSD (4%) frequently ordered through Facebook before the pandemic, and the largest percentage of consumers with the highest income level (13%) has frequently ordered through this social network during the pandemic. According to the ANOVA, there is no statistically significant difference

**Graph 2:** Distribution of respondents who frequently ordered FP, according to purchase method and consumer gender, before and during the pandemic




**Source:** Authors

**Graph 3:** Distribution of respondents who frequently ordered FP, according to the method of purchase and the amount of monthly income, before and during the pandemic




**Source:** Authors

in the responses of respondents with different income levels in relation to the frequency of ordering FP in physical stores, both before (SS = 4.752, df = 3, MS = 1.584, F = 0.910, p = 0.436 > 0.05) and during the pandemic (SS = 2.371, df = 3, MS = 0.790, F = 0.494, p = 0.687 > 0.05), but there is a statistically significant difference in the responses of respondents with different income levels in relation to:

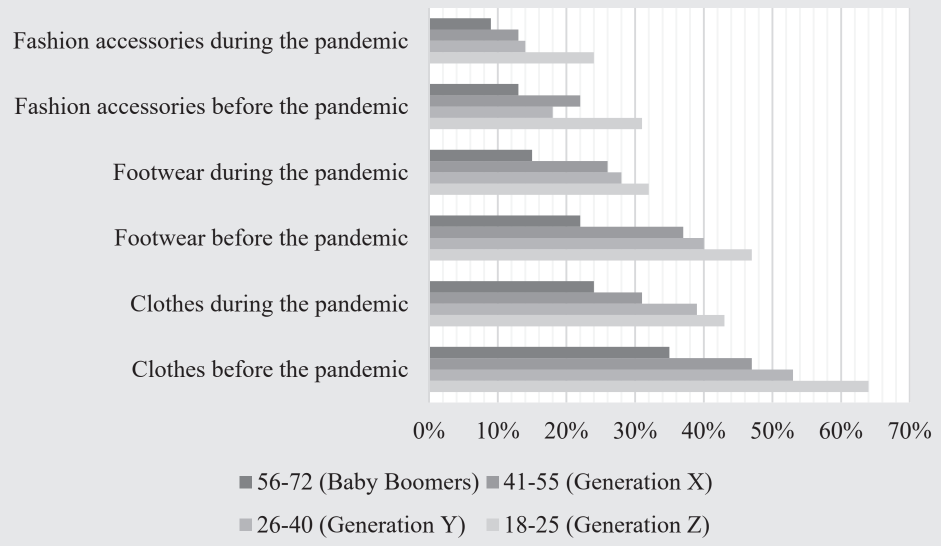
- the frequency of ordering FP through domestic websites, both before (SS = 10.507, df = 3, MS = 3.502, F = 5.477, p = 0.001 < 0.05) and during the pandemic (SS = 28.303, df = 3, MS = 9.434, F = 7.665, p = 0.00 < 0.05).;
- the frequency of ordering FP through foreign websites during the pandemic (SS = 14.438, df = 3, MS = 4.813, F = 4.035, p = 0.007 < 0.05), while according to the same test there is no statistically significant difference for the period before the pandemic (SS = 7.378, df = 3, MS = 2.459, F = 2.495, p = 0.059 > 0.05);
- the frequency of ordering FP through Instagram before the pandemic (SS = 7.658, df = 3, MS = 2.553, F = 2.845, p = 0.037 < 0.05), while according to the same test there is no statistically significant difference for the period during the pandemic (SS = 7.497, df = 3, MS = 2.499, F = 2.586, p = 0.052 > 0.05);
- the frequency of ordering FP through Facebook before the pandemic (SS = 12.102, df = 3, MS = 4.034, F = 5.586, p = 0.001 < 0.05), and during the pandemic (SS = 8.605, df = 3, MS = 2.868, F = 2.941, p = 0.032 < 0.05).

The younger the generation, the higher the percentage of them who frequently purchased FP before and during the pandemic. Also, the younger the generation, the higher the percentage of them who frequently purchased footwear as FP, both before and during the pandemic (Graph 4). Generally, the younger the generation, the higher the percentage of them who frequently purchased fashion accessories, both before and during the pandemic. The percentage of members of Generation Z who frequently purchased fashion accessories (31% before the pandemic; 24% during the pandemic) is the largest. According to the ANOVA, there is a statistically significant difference in the responses of different age groups (generations) in relation to:

- the frequency of purchasing FP, both before (p < 0.05) and during the pandemic (p < 0.05);
- the frequency of purchasing footwear as FP, both before (p < 0.05) and during the pandemic (p < 0.05);
- the frequency of purchasing fashion accessories before the pandemic (p < 0.05), but there is no statistically significant difference for the period during the pandemic (p > 0.05), (adapted from Slijepčević et al., 2023).

When it comes to the frequent purchase of FP (summed answers of respondents with „almost always“ and „often“), both before and during the pandemic, female consumers dominate compared to male consumers, with 53%:39% for the period before and 37%:25% for the period during the pandemic. When it comes to the frequent purchase of footwear

**Graph 4:** Distribution of respondents who frequently purchased FP, according to product types and consumer generations, before and during the pandemic

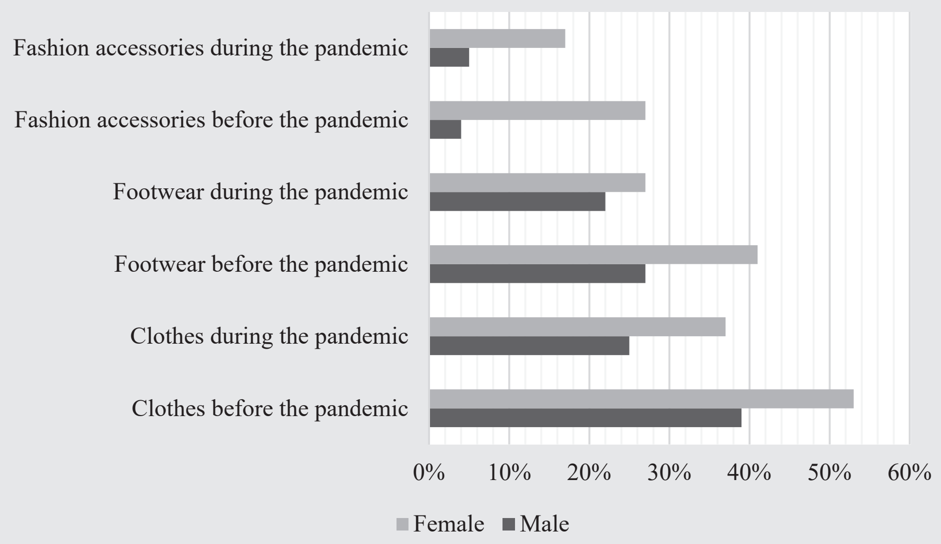



**Source:** Authors

as FP, both before and during the pandemic, female consumers frequently ordered compared to male consumers, with 41%:27% for the period before and 27%:22% for the period during the pandemic (Graph 5). It is evident that the percentage of frequent footwear purchases decreased during the pandemic. When it comes to the frequent purchase of fashion accessories, both before and during the pandemic, female consumers frequently ordered compared to male consumers, with 27%:4% for the period before and 17%:5% for the period during the pandemic. According to the t-test, there is no statistically significant difference in the responses of different gender in relation to the frequency of purchasing footwear before ($t = -1.083$, $df = 998$, $p = 0.279 > 0.05$) and during the pandemic ($t = -0.663$, $df = 998$, $p = 0.507 > 0.05$), but there is significant difference in the responses of respondents according to gender in relation to:

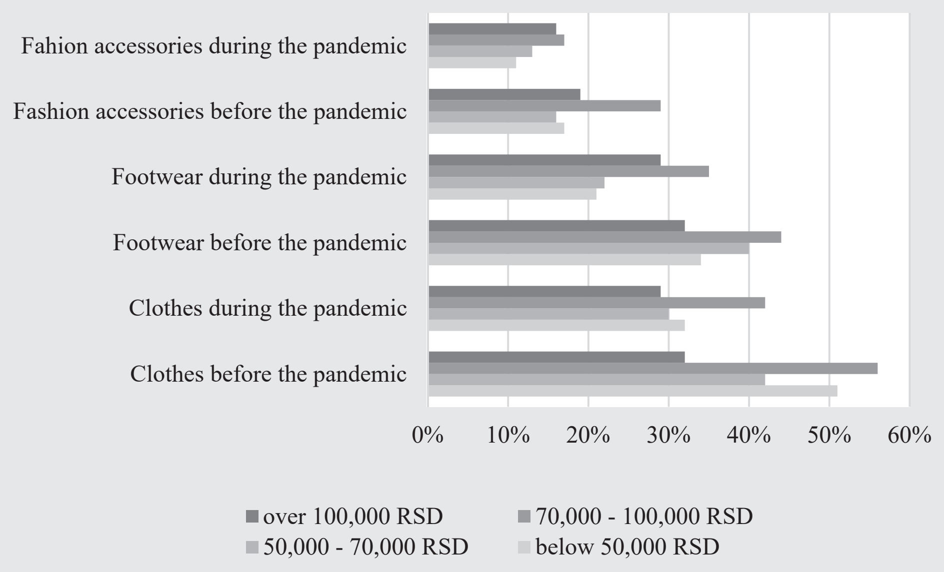
- the frequency of purchasing clothing items both before ($t = -2.743$, $df = 998$, $p = 0.006 < 0.05$) and during the pandemic ($t = -3.504$, $df = 998$, $p = 0.00 < 0.05$),
- the frequency of purchasing fashion accessories both before ($t = -10.380$, $df = 998$, $p = 0.00 < 0.05$) and during the pandemic ($t = -7.868$, $df = 998$, $p = 0.00 < 0.05$).

**Graph 5:** Distribution of respondents who frequently purchased FP, by product type and gender, before and during the pandemic




**Source:** Authors

Graph 6: Distribution of respondents who frequently purchased FP, according to the product type and the amount of monthly income, before and during the pandemic




**Source:** Authors

Consumers in Serbia with incomes from 70,000 to 100,000 RSD, in the highest percentage compared to other categories, frequently bought clothing fashion items before (56%), as well as during the pandemic (42%). Consumers with incomes from 70,000 to 100,000 RSD, in the highest percentage, also frequently bought shoes as fashion items both before (44%) and during the pandemic (35%) (Graph 6). Finally, consumers in Serbia with incomes from 70,000 to 100,000 RSD, in the highest percentages compared to other categories, frequently bought fashion accessories before (29%) and during the pandemic (17%). According to the ANOVA, there is no statistically significant difference in the responses of respondents with different income levels in relation to:

- the frequency of purchasing clothing items both before (SS = 4.583, df = 3, MS = 1.528, F = 1.790, p = 0.148 > 0.05) and during the pandemic (SS = 5.276, df = 3, MS = 1.759, F = 1.912, p = 0.126 > 0.05);
- the frequency of purchasing footwear both before (SS = 3.218, df = 3, MS = 1.073, F = 0.959, p = 0.412 > 0.05) and during the pandemic (SS = 7.234, df = 3, MS = 2.411, F = 2.330, p = 0.073 > 0.05);
- the frequency of purchasing fashion accessories both before (SS = 4.383, df = 3, MS = 1.461, F = 1.329, p = 0.264 > 0.05) and during the pandemic (SS = 1.993, df = 3, MS = 0.664, F = 0.650, p = 0.583 > 0.05).

## 5. DISCUSSION

The main results of the empirical research show a statistically significant difference in the responses of different generations in relation to the frequency of ordering FP in Serbia through domestic and foreign websites, Instagram and Facebook, and the type of FP (clothing and footwear), both before and during the pandemic. Only for fashion accessories is a statistically significant difference observed before but not during the pandemic. Based on this, the hypothesis $H_1$ is confirmed. Moreover, a statistically significant difference is found in the responses of respondents of different genders in relation to the frequency of ordering FP (clothing and fashion accessories) through Facebook, both before and during the pandemic. For ordering through domestic websites, statistically significant difference is observed before, but not during the pandemic. For ordering through foreign websites and Instagram, as well as for ordering footwear, no significant difference is observed either before or during the pandemic. Accordingly, the hypothesis $H_2$ is partially confirmed. Among other things, significant difference is found in the responses of consumers with different levels of monthly income in relation to the frequency of ordering FP through domestic websites and Facebook, in Serbia, both before and during the pandemic. For ordering through foreign websites, significant difference is observed during, but not before the pandemic. For ordering through Instagram, significant difference is observed before, but not during the pandemic. For ordering of clothing FP, footwear and fashion accessories, no statistically significant difference is observed either before or during the pandemic. Accordingly, the hypothesis $H_3$ is partially confirmed.

During the pandemic, a large number of consumers in Serbia opted for purchasing FP through foreign websites. Domestic manufacturers thus lose a particular segment of customers with the highest incomes, who has most frequently ordered through foreign websites during the pandemic. Shopping takes place through social networks, but nowhere near as much as through websites. Domestic fashion houses must be more mindful of their customers, evaluate why they often purchase through foreign websites, and increase the quality of their websites and e-stores to provide a superior user experience compared to foreign websites to recapture „lost“ consumers. Even though the largest number of consumers with a monthly income of 70,000 to 100,000 RSD most frequently buy FP, fashion houses should also pay attention to other consumers, such as the upcoming Generation Z, who most often order through social networks. The marketing teams of fashion houses face the severe task of segmenting the market according to customer categories and developing an integrated marketing strategy to answer the challenges faced by domestic manufacturers of FP.

## 6. CONCLUSION

Modern business conditions are characterized by numerous changes that are very turbulent, fast and often unpredictable. These changes may cause disruptions in the entire socio-economic environment, significantly raising the business risk for economic entities (Kokeza & Stavrić, 2022). One such change was the COVID-19 pandemic, which strongly affected all industrial sectors, especially fashion. A stoppage or interruption of production, an increase in production costs, an increase in the prices of inputs and final products, and a drop in demand, represent only some of the negative consequences of the pandemic on the fashion industry sector. Specifically, the pandemic caused by the coronavirus spread and subsequent closures significantly impacted people‘s quality of life. It significantly influenced collective and consumer behavior (Milanović & Stamenković, 2022), including how consumers perceive, evaluate and buy FP. The fashion sector has endured major economic losses and modifications to its operations during the pandemic. However, it also provided an opportunity to examine how consumer behavior and fashion have changed in these uncertain times. In an effort to contribute and meet the needs of their end users, fashion companies have turned to the production of masks and visors, the digital world and marketing, and the improvement of applications for online shopping. Consequently, due to exceptional production solutions, the fashion shows have been successfully presented through online platforms (Savić et al., 2021).

The importance of this research is reflected in the fact that, unlike the respondents' responses previously mentioned in the literature review, the responses of different consumer categories are analyzed in relation to the frequency of ordering FP in Serbia through domestic and foreign websites, social networks (Instagram and Facebook) and types of FP (clothing, footwear and fashion accessories), before and during the COVID-19 pandemic. Thus, a more in-depth examination has been conducted on buying frequency of FP in our country, both before and during the pandemic. Thanks to the obtained results, this paper will serve as a good starting point for all subsequent research on a similar or the same topic. Among other things, the presented results of this research will enable fashion companies operating in our country to better understand the changes in the behavior of their consumers and thus introduce new marketing strategies into their business.

A limitation of the empirical research is that it does not address the sustainability of the fashion industry during the pandemic. Specifically, according to numerous findings, the fashion industry is currently classified as the biggest polluter in the world. The disastrous consequences of fast fashion on the environment, climate and society are due to the uncontrolled consumption, wastage and pollution of non-renewable resources. In order to reduce these consequences, the fashion industry must be part of the circular economy, where it can extend the life of clothing items, while keeping resources in a closed circle (Kovačević & Arsić, 2021). Another limitation of the research can be related to the fact that it does not deal with the luxury goods and services industry, which involves more than just marketing and brand management, but is now being considered from different angles, such as sustainability, counterfeiting, consumption trends and the like. Within the luxury goods industry, the fashion industry occupies an important place as a cultural phenomenon that includes not only how people dress but also how they act and think (Polese & Lee Blaszczyk, 2012). Specifically, the luxury fashion industry is a place of constant changes, new trends, global successes and failures in the market (Pantelić et al., 2021). Contemporary consumers do not only want to satisfy their own needs but also to create experiences and symbols. Clothing is one of the most important aspects of consumption that enables individual expression. Since clothing can provide information about one‘s social status, personality or attractiveness, it can be defined as a medium of communication that provides a wide range of social information (Vasić-Nikčević, Alimpić & Perić, 2019). The above-mentioned are the directions for future consideration and research by the authors.

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## Apstrakt

### Navike potrošača modnih proizvoda pre i tokom pandemije COVID-19 s akcentom na onlajn kupovinu

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Vanredne okolnosti uzrokovane pandemijom COVID-19 postavile su velike izazove pred dosadašnji način poslovanja i dovele do značajnih promena na tržištu, kako na globalnom, tako i na lokalnim nivoima. Izuzetak nije bila ni modna industrija, koja je doživela egzistencijalnu krizu – proizvodnja je stala, maloprodajni objekti su bili zatvoreni, a potražnja je drastično opala. Ipak, pandemija COVID-19 pružila je i priliku da se ispita kako su se ponašanje potrošača i moda menjali u ovim neizvesnim vremenima, odnosno kako je pandemija transformisala odnos potrošača prema modnim proizvodima. Stoga, predmet ovog rada su kupovne navike potrošača modnih proizvoda pre i tokom pandemije, u pogledu učestalosti načina kupovine (fizička prodavnica naspram onlajn kupovine preko domaćih i stranih sajtova, i društvenih mreža Instagram i Fejsbuk) modnih proizvoda (modne odeće, modne obuće i modnih dodataka), a prema određenim karakteristikama potrošača (starosne kategorije – generacije potrošača, pol i visina mesečnih primanja). Ovaj rad ima za cilj da identifikuje najčešće navike potrošača koji kupuju modne proizvode u Srbiji i uporedi njihovo ponašanje tokom i pre pandemije. Glavni nalaz istraživanja je činjenica da postoji statistički značajna razlika u odgovorima ispitanika različitih generacija potrošača u odnosu na učestalost naručivanja modnih proizvoda u Srbiji preko domaćih i stranih sajtova, društvenih mreža (Instagram i Fejsbuk) i vrste modnih proizvoda (odeće, obuće i modnih aksesoara), pre i tokom pandemije COVID-19.

**Ključne reči**: *potrošači*, *modni proizvodi*, *pandemija COVID-19*, *Srbija, onlajn kupovina*

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