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From Browsing to Buying: Analyzing Preferences of Females and Males in Non-Luxury Online Apparel Shopping in Croatia – An Exploratory Analysis

Ana Budimir*+*
Blaženka Knežević****

Abstract: *E-commerce influences every aspect of human life and affects consumer behavior across numerous product categories. However, contemporary research in the field is insufficient to explain how specific consumer groups utilize e-commerce to satisfy their needs, particularly in narrow product niches. This paper focuses on non-luxury apparel as an important product niche in fashion retail and aims to investigate differences between males and females in online purchasing. Qualitative research was conducted based on semi-structured one-on-one interviews. The paper covers three aspects of online non-luxury apparel shopping. Firstly, the paper firstly explores the characteristics in preferences of online apparel retailers. Secondly, it explains the different impacts of the elements of the UTAUT2 constructs on purchase intentions. Thirdly, it discusses the influence of sustainability concerns on purchasing behavior. Findings indicate that both females and males favor pure-play e-retailers over omnichannel retailers in this fashion niche. Key differences between males and females exist in UTAUT2 dimensions, such as hedonic motivation and price prioritization. While both females and males express certain concerns regarding sustainability issues, males emphasized specific problems related to gas emissions and packaging. Despite limitations in sample size and geographic scope, the paper offers deep insights and provides directions for future quantitative research in niche-oriented omnichannel retail.*

Keywords: online shopping; consumer preferences; consumer behavior; apparel industry; shopping methods

JEL Classification: L81, L86, D91

* Faculty of Economics and Business, University of Zagreb, Zagreb, Croatia.
\+ Corresponding Author E-Mail: abudimir5@gmail.com
** Faculty of Economics and Business, University of Zagreb, Zagreb, Croatia.

Introduction

As technology continues to progress, its integration into daily life has become routine. It strongly influences how contemporary consumers search for information and purchase products. Thus, technology is shaping the retail marketplace in numerous product categories. Compared to 2022, the proportion of regular online shoppers purchasing fashion goods increased, with women rising from 63% in 2022 to 68% in 2023, and men increasing from 39% to 44% during the same period (GeoPost, 2023). A term "regular e-shopper" typically refers to an individual who makes online purchases consistently. These individuals engage in online shopping activities regularly, demonstrating a pattern of behavior that involves purchasing goods or services from e-commerce platforms or online retailers. Croatia, along with other countries such as Romania, Hungary, Czechia, Lithuania, Bulgaria, and Slovakia, experienced notable growth in the share of online shoppers, with Croatia showing a 32% increase between 2013 and 2023 (Eurostat, 2023). The COVID-19 pandemic significantly altered consumers' shopping habits (Belošević et al., 2021). Moreover, Pal and Kumari (2023) noted that the COVID-19 pandemic emphasized the importance of online consumer behavior, leading to a habitual shift towards online shopping. Researchers have also noted that the COVID-19 pandemic may have significantly influenced the values and experiences consumers prioritize when shopping through specific retail channels (Mortimer et al., 2024; Sheth, 2020; Kumar, 2021). There are numerous papers and research studies addressing e-commerce consumer behavior in general (e.g. Cho et al., 2015; Arora and Sahney, 2019; Fernández et al., 2020; Jayasingh et al., 2022). Some studies emphasized that consumer attitudes and behavior strongly depend on product category being purchased (Knežević et al., 2021; Pavić, 2024). However, there is a notable research gap when it comes to deeper analysis among online purchasing attitudes and habits in narrower, specialized product niches, especially in markets of CEE and SEE regions where e-commerce is still in growing trend. Therefore, this paper focuses on online purchasing of the niche of non-luxury apparel and examines female and male consumers' attitudes and behavior in this particular segment of fashion retail in Croatian market.

The paper is structured as follows. Firstly, theoretical background section outlines the key concepts of e-retailing and three main research questions. Second part describes methodology of research, research design, instruments and research sample. Then follows the section of results discussions. Finally, the conclusive part summarizes the main findings, limitations, and future research potentials.

Theoretical Background

E-retailing – key concepts

Online retailers can be divided into two groups: pure play e-retailers and omnichannel retailers (Budimir and Knežević, 2023). Pure play e-retailers, also known as classic e-retailers, represent a distinct category within e-commerce, characterized by their lack of physical retail outlets. Unlike Brick-and-Mortar (B&M) retailers, these businesses operate only online, without any physical stores or showrooms for customers to visit. On the other hand, Rigby (2011) claims, that omnichannel retailing is "a mashup of digital and physical experiences where retailers interact with customers through countless channels—websites, physical stores, kiosks, direct mail and catalogues, call centers, social media, mobile devices, gaming consoles, televisions, networked appliances, home services, and more". In the omnichannel retailing, the natural borders between channels begin to disappear (Verhoef et al. 2015) because this type of retailing involves a fully integrated approach to commerce, providing shoppers with a unified experience across all channels or touchpoints. Kim et al. (2020) and Melero et al. (2016) found that in an omnichannel environment, shoppers move freely among channels (online, offline, and mobile devices). Brynjolfsson et al. (2013), and Grewal et al. (2009) pointed out that shoppers have begun to use online and offline platforms together in their purchasing processes, leveraging the advantages of both channels because this offers consumers the same purchasing experience as offline channels. Sebald and Jacob (2020) mentioned that the effects of omnichannel retailing and the related shift to online shopping are particularly noticeable in the fashion and apparel retail industry.

In the broader context of an omnichannel approach, two primary channels are typically considered: online and offline. Throughout all stages of the purchase process, consumers have the option to determine their usage of these channels. In omnichannel retailing, retailer control is weaker compared to traditional retailers due to a partial or complete lack of direct human interaction. However, advancements in technology, such as Artificial Intelligence (AI), chat boxes, and similar tools are gradually diminishing this discrepancy. When discussing combinations of online and offline channels in the purchase and post-purchase phases, the literature offers various classifications. Although different authors use similar labels to describe these combinations, their focus often differs: omnichannel fulfillment methods and omnichannel shopping behaviors.

Viejo-Fernández et al. (2020) present a classification that primarily reflects fulfillment-oriented channel combinations, describing how consumers receive or return products across channels. Their typology includes: (1) BOPIS (Buy Online, Pick Up In Store); (2) BOSS (Buy Online, Ship to Store); (3) BODFS (Buy Online, Deliver From Store); (4) BORIS (Buy Online, Return In Store); and (5) "Click and drive".

Although these involve online–offline movement, they largely refer to operational delivery and return options, rather than consumer decision-making patterns. Jayasingh et al. (2022), on the other hand, offer a classification that combines both fulfillment options and consumer shopping behaviors and their typology captures how consumers navigate channels before, during, and after the shopping experience. However, only some of these categories—specifically webrooming and showrooming—describe genuine consumer behavioral patterns, while the others remain tied to logistical outcomes.

Given this distinction, the present study focuses exclusively on omnichannel shopping behaviors, understood as patterns in how consumers search for information and make purchasing decisions across channels. Two behaviors stand out in the literature are: webrooming (i.e. searching online, purchasing offline) and showrooming (i.e. searching offline, purchasing online). While some authors label them as shopping methods, others classify them as behaviors (e.g., Flavián et al. 2020). In this research, webrooming and showrooming are examined as key omnichannel consumer behaviors, reflecting deliberate cross-channel navigation in the pre-purchase and purchase phases.

Contextualizing the Research Question

In the following section, we present three main research questions and provide a brief explanation of the key concepts relevant to each.

RQ1: How do female and male buyers differ in their preferences for online non-luxury apparel retailers, considering both pure-player e-retailers and omnichannel retailers?

Pure-play e-retailers operate exclusively online and do not have any physical stores. They offer their products only on digital channels. In contrast, omnichannel retailers combine both physical and digital touchpoints, providing a seamless shopping experience across multiple channels, including brick-and-mortar stores, websites, and mobile platforms. Many studies have highlighted significant gender differences in general online shopping behavior (e.g. Alsharawy et al., 2021; Chetioui et al., 2021; Koch et al., 2020). As it is previously mentioned, literature emphasize that there is a notable difference in online shopping focused on narrow product categories, our study aims to investigate and elaborate differences among female and male online shoppers of non-luxury apparel.

RQ2: What are the significant differences in the context of UTAUT2 constructs when examining their impact on apparel purchase intentions between females and males?

The Extended Unified Theory of Acceptance and Use of Technology (UTAUT2) is a well-known theoretical framework used to understand the adoption and usage

of technology by individuals, specifically in the context of consumer usage (Venkatesh et al. 2012). According to Venkatesh et al. (2012), its constructs include: (1) Performance Expectancy (the perceived usefulness of the technology); (2) Effort Expectancy (the perceived ease of use); (3) Social Influence (the impact of social factors on technology adoption); (4) Facilitating Conditions (the perceived resources and support available); (5) Hedonic Motivation (the pleasure derived from using the technology); (6) Habit (the extent to which people tend to perform behaviors automatically because of learning) and, (7) Price Value (the perceived benefits relative to the cost). Many scholars examining e-retailing and omnichannel retail use the UTAUT2 theory. This theory contributes to the understanding of important phenomena such as omnichannel consumers' attitudes toward technology and how they influence purchase intention in the shopping-process context (Juaneda-Ayensa et al., 2016). However, differences between genders in case of non-luxury fashion are not explained sufficiently, same claim is valid for other product niches in online retail.

RQ3: In what ways do sustainability and environmental concerns shape the online apparel purchasing behavior of females and males, and how do these influences vary between genders?

Niinimäki et al. (2020) assert that fast fashion has led to a significant rise in material throughput within the system. Currently, fashion brands are generating nearly double the volume of clothing compared to pre-2000 levels. Consequently, prevailing fashion consumption patterns yield substantial textile waste. A considerable portion of this waste ends up being burned, placed in landfills, or sent to developing nations. Although sustainability is an important and well-researched topic nowadays, there are not many studies that approach the topic in this specific manner. According to Cho et al. (2015), women tend to be more frugal and fashion-conscious, exhibit a greater tendency of style consumption (SC), and are more likely to practice sustainable apparel consumption. Based on the latest Cross-border Shopper Survey, less than 10% changed their shopping behavior due to sustainability concerns (IPC, 2023). Therefore, sustainability aspect is going to be incorporated in our qualitative primary research.

Methodology and Data

Researchers have noted that e-commerce still lacks tailored analysis, both when it comes to product classification and the socio-demographic segmentation of consumers. Consequently, this research engages in a qualitative exploratory study to address this gap and focuses on the niche of non-luxury fashion. Nascent theory involves exploring phenomena through qualitative data (Edmondson and McManus, 2007). Qualitative, inductive, and exploratory research sets out to explain limited segments of reality by suggesting a causal order and sequence of events (Reiter, 2017). The

exploratory study was tailored to capture a wide range of data based on usage of semi-structured one-on-one interviews with non-probability sampling.

According to Eurostat (2023), individuals aged 25-34 and 35-44 have surpassed the EU average in online shopping engagement, with 87% and 84%, respectively, making internet purchases in 2023. These figures represent a slight increase from 2021, indicating sustained growth in e-commerce activity post the COVID-19 pandemic-induced surge. Younger internet users aged 16–24 also exhibited growth in e-shopping, with 82% making online purchases in 2023. It is evident that younger adults shop online more regularly and generate the highest online sales revenue within their demographic segment. Therefore, the research sample included 10 females and 10 males online shoppers aged 18-39 years. Table 1 presents characteristics of respondents and outlines their response to the first interview question regarding the frequency of online purchasing. We can observe that the average respondents' age is 29,6 in case of females and 31,4 in case of males. All respondents have a certain shopping experience in apparel online retail. More than a half of respondents claim that they often purchase clothing online.

Table 1. Characteristics of respondents and online apparel shopping frequency

Female/Male	Candidate	Age	Status	Disposable Monthly Income	In your opinion, how frequently do you purchase clothing online?
F	1	18	Student	under 970	Often
F	2	23	Student	under 970	Occasionally
F	3	30	Student	under 970	Occasionally
F	4	29	Employed	971-1.133	Occasionally
F	5	25	Employed	971-1.133	Often
F	6	29	Employed	more than 2.000	Often
F	7	32	Employed	1.134-2.000	Often
F	8	43	Employed	1.134-2.000	Often
F	9	30	Employed	971-1.133	Often
F	10	37	Employed	under 970	Often
Average		**29,6**			
M	1	28	Employed	more than 2.000	Rarely
M	2	23	Student	under 970	Often
M	3	39	Employed	more than 2.000	Often
M	4	28	Employed	971-1.133	Often
M	5	39	Employed	more than 2.000	Occasionally
M	6	39	Employed	more than 2.000	Occasionally
M	7	35	Employed	1.134-2.000	Rarely
M	8	34	Employed	more than 2.000	Often
M	9	24	Employed	under 970	Occasionally
M	10	25	Employed	1.134-2.000	Occasionally
Average		**31,4**			

Source: author's own work

In-depth semi-structured interviews were conducted in Zagreb (Croatia) between August 4th and August 9th, 2023, for females. And between April 3rd and April 10th, 2024, for males. The interviews were designed to be comprehensive yet concise, lasting approximately 30 to 45 minutes each, and were divided into three parts.

- The first part sought a broad view of the participants' online shopping interests and patterns during the shopping process.
- The second part delved into their decision-making, drawing on the elements of UTAUT2 constructs for a more in-depth understanding.
- The last part focused on the sustainability aspects of online shopping.

The Appendix provides a detailed outline of the questions used to conduct the interviews. During the interview, particular attention was given to the dynamics of the conversation. We asked follow-up questions to ensure participants provided detailed responses. Not all questions required the same level of detail, yet some called for more comprehensive answers. We consistently transcribed all interviews and used them as the main data source for qualitative analysis, which helped uncover meaningful insights from participants' feedback.

Results and Discussion

The following section presents the results and discussion of the study, focusing on the distinct shopping behaviors and preferences of male and female consumers in the online apparel industry. The analysis explores differences in the decision-making process, use of elements of UTAUT2 constructs, and attitudes towards sustainability, providing valuable insights into online shopping patterns in niche-oriented retail (particularly – non-luxury apparel fashion). **Table 2** shows the key findings of research summarized from interview transcripts. Number in brackets outlines how many respondents our of total number of respondents gave similar answers. The results are outlined regarding purchasing process, UTAUT dimensions and regarding sustainability issues.

Table 2. Key Findings Summary

		Females	Males
Purchase process	**Pre-purchase**	dominant online information seeking (10/10)	both online and offline information search
		find the required information (10/10)	find the required information (6/10)
		showrooming habits with omnichannel retailer (6/10)	some participants mentioned they engage in webrooming due to a dislike for waiting for products (7/10)
	Purchase	using online shopping often (7/10)	using online shopping often - tend to buy clothes less frequently than female
		combine retailers (importance of prices, delivery, and assortment)	combine retailers (importance of prices, simplicity, and assortment)
		preferred e-retailers (9/10) RQ1	**preferred e-retailers (7/10) RQ1**

		Females	Males
Purchase process	Post-purchase	experience with product returns (8/10)	experience with product returns (6/10)
		main reasons for return: wrong size, she didn't like it, damaged	main reasons for return: wrong size, didn't like the fabric
		no fears or problems with returns (10/10)	expressed greater concern regarding the terms and security of returns (2/10) but in general no problems with returns (10/10)
UTAUT2 - RQ2	Performance Expectancy	frequent use of the Internet for online shopping (10/10)	shop less online, emphasizing the importance of physical stores to them as well (3/10)
		main reasons for online shopping: easier, time-saving, more product, no crowd and contact with staff (younger participants)	main reasons for online shopping: easier, time-saving, more product, shopping from the comfort of own bed
		some describe it as the only way to shopping (2/10)	
	Effort Expectancy	better chat box and support 24/7	more VR in online shopping process
		visualization of yourself in selected items	fast and reliable web site for online shopping
	Social Influence	impulsive buying	less impulsive that female
		social networks: influencers and advertising (6/10)	social networks: less influenced than females (4/10)
		influence of other people (family and friends) are stronger than social networks and Internet in general (9/10)	influence of other people (family and friends) (7/10); less influenced than females
	Facilitating Conditions	positive impact of AI: customer's perspective (users support, easier decision-making, personalization) and retailer's perspective (labor shortage)	positive impact of AI: customer's perspective (personalization, machine learning shopping) and retailer's perspective (better advertising)
		negative impact of AI: customer's perspective ("too much" personalization, personality loss, imposing ideas) and retailer's perspective (customer segmentation)	no one particularly pointed out the negative impact
	Hedonic Motivation	the process of searching information and the purchase represent entertainment (10/10)	view shopping and information-seeking as essential tasks rather than leisure activities (4/10)
	Price Value	review the prices when they buy at e-retailer (5/10)	price is important for them, but less compared to female (4/10)
		transition for offline to online and from one e-retailer to other can be price stimulate (4/10)	when they make a purchase decision, they follow through with it regardless of the channel or price
	Habit	some mentioned shift in online shopping after COVID 19 (younger participants)	they do not emphasize their habits
Additional - RQ3	Sustain-ability	negative impact on the environment and sustainability outweighs its benefits (6/10)	gas emissions and the amount of packaging as the biggest negative impacts (5/10)
		aware of greenwashing (2/10)	informed about the problems of the fast fashion industry (3/10)

Source: author's own work

Note: The values represent absolute counts from a total of 10 participants. If no value is provided, it indicates a general observation or a point that predominates among the majority.

In the purchase process, clear differences emerge between male and female participants. During the pre-purchase phase, almost all female participants (9 out of 10) actively seek extensive information online, thoroughly searching the Internet to gather essential product details. In contrast, male participants combine online and offline sources, adopting a hybrid approach to information gathering.

In the purchase phase, females shop online more frequently and often compare multiple retailers, focusing on factors such as price, delivery, and assortment. Males, on the other hand, buy online less often, place greater value on physical stores, and display less impulsive behavior. Three participants (M1, M5, and M7) confirmed this pattern. Both groups show preferences for specific e-retailers and report minimal issues with product returns. Participants mainly return items because of incorrect sizes, dissatisfaction with the product, or damage upon arrival.

Female participants display stronger showrooming tendencies, usually driven by specific product requirements, price sensitivity, or limited in-store availability. Respondents F1, F2, F4, F5, and F7 expressed this behavior most clearly. Several studies (Gensler et al., 2017; Fernánde zet al., 2018; Flavián et al., 2020) have also discussed similar showrooming patterns. In contrast, most male participants (8 out of 10) prefer webrooming as a strategy to reduce uncertainty about fit, size, or product attributes.

Their statements illustrate this behavior well. M1 explained that he "*checked online if the product was available in the store and then went to try it and buy it*." M2 said that when he finds trousers online, "*I need to go and try them on*," while M3 admitted that he "*often behaves this way when buying footwear*." Price also triggers webrooming behavior. M4 shared that after seeing an expensive clothing item online, he "*went to the store, tried it on, and bought it immediately*."

Although some participants rarely or never engage in this behavior (M5 and M7: "never"), most noted that webrooming becomes relevant when they feel uncertain about product fit. M6 said he used this approach because he "*did not know whether the size would fit*," while M8 explained that he does so "*when I want to be sure about the size*." M9 described similar reasoning: "*when I wanted to be certain I bought the correct number*," and M10 added that he chooses webrooming "*when buying something I need to try on – like a blazer*."

Overall, these statements show that male participants use webrooming primarily as a risk-reduction strategy motivated by the need for certainty about fit, size, and product suitability. This finding aligns with the results reported by Aw (2020), Arora and Sahney (2019). Despite these differences, both genders emphasize a shared "need for touch" in their shopping behavior.

In relation to UTAUT2 constructs, these findings highlight behavioral tendencies that shape online consumer actions. Female participants show notable individual differences. F6 reported that she "*always shops online*" and explained that her habits changed significantly after the COVID-19 pandemic. Most female participants, however, confirmed a stronger preference for online shopping in the post-COVID period

(4 out of 10 explicitly noted this), which supports findings by Sullivan and Hyun (2016). Their study also suggests that most female consumers prefer digital-only or hybrid digital-store channels for purchasing clothing.

Female participants value improved chat support and visualization features and respond strongly to social networks, influencers, and recommendations from family and friends, which often trigger impulsive purchases. Nearly all female participants (9 out of 10) admitted they are more likely to make an impulsive purchase when a product is recommended by someone they know. They also express mixed feelings about Artificial Intelligence (AI): they appreciate its ability to personalize shopping and assist buyers but worry that excessive personalization may reduce individuality.

Male participants engage less in online shopping. They value physical stores more, appreciate e-commerce primarily for its convenience and time efficiency, and express interest in Virtual Reality (VR) integration and fast, reliable websites. They show limited influence from social media or advertisements, and they place less emphasis on price than females do. Males also review prices less frequently and rarely switch channels based on price. The clearest difference in UTAUT2 constructs appears in **hedonic motivation**.

All female participants view online shopping as a pleasant and emotionally rewarding activity, but the sources of enjoyment differ. F4, F7, F9, and F10 mentioned the anticipation of buying something new; F5 enjoyed discovering unique products unavailable offline; F3 found pleasure in unexpectedly coming across interesting items; F1 enjoyed shopping when the product was already defined; and F2 found satisfaction simply in browsing. Male participants, by contrast, treat online shopping as a practical, goal-driven activity rather than a leisure pursuit. Four men (M3, M6, M7, M10) stated that they shop only out of necessity, while others (M1, M2, M4) said they experience enjoyment only occasionally or under specific conditions, such as when the desired item is already known (M8). This pattern is consistent with the findings of Wang et al. (2022).

The section on sustainability included only a few questions, designed mainly to interest in the topic for future research. Both female and male participants expressed some awareness of the environmental impact of online shopping, particularly in relation to packaging, CO_2 emissions, and resource use. Female participants often emphasized both the positive and negative sides of e-commerce, highlighting issues such as overconsumption, poor labor conditions, and environmental costs of production and fast fashion (F1, F2, F3, F5, F7, F8, F9). For instance, F2 noted that "*everything is available almost immediately, but poor working conditions and the environmental impact of production, including dyes and waste, are concerning*," while F5 reflected on "*greenwashing practices in fashion and the industry's role as one of the largest polluters*." F10 mentioned that she does not actively consider sustainability when shopping online.

Male participants presented mixed views. Some pointed out positive effects, such as lower energy consumption in stores, reduced physical traffic, and potential savings

in resources (M2, M3, M7, M8, M9). Others focused on negative aspects, including environmental costs related to production, packaging, and fast fashion (M1, M4, M6, M10). M4 remarked that "*large volumes of packaging and emissions are negative, but reduced in-store crowding is positive*," while M10 acknowledged "*fewer emissions but negative impacts from packaging*." M5 simply noted fast fashion as a concern without elaboration.

While existing literature offers limited insight into how sustainability shapes the online apparel purchasing behavior of men and women differently, these preliminary findings point to several promising directions for further research. The growing importance of sustainability in the fashion industry — particularly among Generation Z — reinforces the relevance of these issues (Gazzola et al. 2020). Overall, the findings suggest that female participants are generally more attuned to environmental and ethical dimensions, while male participants focus more on operational and resource-related impacts. These gendered perspectives highlight subtle but meaningful differences that warrant deeper exploration in future studies.

Conclusions

This study aimed to address three fundamental research topics expressed as three research questions. Firstly, the distinctions between female and male preferences for online non-luxury apparel retailers. Secondly, the significant differences in the impact of UTAUT2 constructs on apparel purchase intentions. Thirdly, the varying influences of sustainability concerns on online apparel purchasing behaviors. Unlike previous studies in field of e-commerce that generalized consumer attitudes across genders and product categories, this research focused specifically on differences between male and female non-luxury apparel shoppers. The study examined a narrowly defined geographic area (Croatian consumers) and was a focused on a narrow product category to provide more focused and context-specific insights. The research methodology employed a rigorous semi-structured one-on-one interview conducted on a sample of 10 female and 10 male participants aged between 18 and 39.

Regarding **the first research question (RQ1)**, findings suggest that differences in preferences between males and females for online apparel retailers are not particularly significant. Both genders displayed a preference for pure-play e-retailers, highlighting factors such as a larger assortment, better prices, and the convenience of purchasing from home. Turning to **the second research question (RQ2)**, analysis uncovered differences in the impact of UTAUT2 constructs on apparel purchase intentions between females and males. Specifically, the construct of hedonic motivation stood out, with females viewing shopping for apparel as a relaxing activity, while males perceived it more as a necessity. Additionally, females placed greater emphasis on price, whereas males prioritized quality. Furthermore, males were found to be less

influenced by promotional activities, influencers, or recommendations from friends and family compared to females. Addressing **the third research question (RQ3)**, the study revealed that both genders demonstrated an awareness of sustainability concerns related to online apparel shopping. While female participants highlighted issues such as overconsumption, poor labor conditions, and environmental costs of production and fast fashion, males more emphasized operational issues such as gas emissions and packaging.

The findings of this study have several implications for retailers and future research in the online apparel sector. Firstly, retailers can benefit from tailoring their marketing strategies to align with the preferences and behaviors identified in this study. For instance, emphasizing wide assortments, competitive pricing, and the convenience of pure-play e-retailers could attract both male and female shoppers. Secondly, understanding the distinct behaviors of male and female consumers can help retailers optimize their online platforms. For example, enhancing user experience with features like better chat support and visualization tools for females, and focusing on fast, reliable websites and virtual reality integration for males, could improve overall customer satisfaction and loyalty. Thirdly, the study suggests that there are differences in what males and females prioritize when shopping online, which could guide retailers in product assortment and presentation.

The study has several limitations that warrant consideration. Firstly, the sample size and type were restricted, potentially limiting the breadth of insights gained. Secondly, the research focused solely on participants from Zagreb, Croatia, potentially limiting the broader applicability of the findings. Thirdly, the presence of social desirability bias and response variability could have influenced participant responses, affecting the reliability of the data. Additionally, the findings may have limited generalizability due to the specific demographic and geographic scope of the study. It is also important to note that no software was used during the data analysis process, as the analysis was conducted manually. To address these limitations, future research could explore diverse socio-economic groups and geographical regions to enhance the breadth of understanding. Furthermore, expanding the sample size and conducting quantitative surveys across multiple countries and age groups within the online shopper population could provide a more comprehensive understanding of consumer behavior in the non-luxurious apparel online retail sector.

Declarations

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Conflicts of interest/Competing interests

There is no conflict of interest/Competing interests

Availability of data and material

The data that support the findings of this study were collected by the author through primary research and are not publicly available. The dataset can be obtained from the corresponding author upon reasonable request.

Code Availability

The computer program results are shared through the tables in the manuscript.

Authors' Contributions

Ana Budimir: conceptualization, data collection and analysis, writing – original draft preparation.
Blaženka Knežević, PhD: methodology, writing – reviewing and editing, validation.

Appendix - Example of Interview Questions

CANDIDATE NUMBER (M/F):		
Age: **Status** a) Student b) Employed c) Unemployed d) Other	**Disposable Monthly Income:** a) under 970 b) 971–1.133 c) 1.134–2.000 d) more than 2.000	**In your opinion, how frequently do you purchase clothing online?** a) Often (multiple times per month) b) Occasionally (a few times per year) c) Rarely (once or twice a year) d) Never

Questions	Answers	Note
• How often do you use the Internet to search/browse information about clothing? Do you always find all the information you want/need? • When shopping online, do you usually find all the information necessary to make a purchasing decision?		Pre-purchase phase
• Describe a specific situation in which you first searched the Internet and then went to a store to buy clothes. Emphasize in particular why you acted that way. • Have you ever done things differently? So, you went to a store, browsed and tried on clothes, and then bought them online? • Based on your estimation, what do you do more often? Why?		Showrooming or Webrooming
• Do you typically shop with multiple retailers, or do you tend to be loyal to a single retailer? What factors would motivate you to change your preferred retailer? • What factors are most important to you when deciding where to buy clothing? (Consider aspects such as price, quality, availability of well-known brands, colors, designs, and trends.) Please briefly explain your reasoning.		Purchase phase
• Do you tend to shop more often in the online stores of fashion retailers that also have physical stores (e.g., Zara, H&M) or in online-only stores (e.g., Zalando, AboutYou)?		Purchase phase Pure-play e-retailer or omnichannel retailer
• Have you ever returned clothing purchased online? • If yes, what was the reason for the return? Did you encounter any challenges or concerns during the process? If so, what were they?		Post-purchase phase
• What are the primary reasons that influence your decision to purchase clothing online? Example time-saving, 24/7 availability, price comparison etc. Please briefly explain your reasoning.		Performance Expectancy

• What improvements would you suggest for websites or online stores to encourage more frequent clothing purchases? • What specific aspects of the online shopping experience would you recommend enhancing or simplifying to make it more convenient for you? Please describe it.		Effort Expectancy
• How do social media platforms influence your decision-making process in terms of gathering information, browsing, or purchasing clothing? • Have you ever made an unplanned clothing purchase based on information or promotions encountered online or through social media? What factors led to that decision? • Additionally, have you ever visited a fashion retailer's website following a recommendation from friends or family? Did you ultimately make a purchase, or did you only browse for information?		Social influence
• With the increasing use of artificial intelligence in retail, how do you perceive its potential impact on the clothing shopping experience? Do you have any concerns regarding the possible negative effects of AI on online shopping behavior?		Facilitating Conditions
• Do you find the process of searching for clothing information online enjoyable or engaging? • What specific elements of the online search process make it appealing to you?		Hedonic motivation
• How often do you utilize the web or social media to compare prices among different online clothing retailers? • If a significant price difference is found, would you be willing to switch from your preferred retailer? • Do you use any tools or applications to assist with price comparison?		Price Value
• Do you consider online shopping to be a habitual behavior for you? Can you identify a particular moment when this shift in your shopping habits occurred?		Habit
• In your opinion, does e-commerce in clothing have a positive or negative impact on environmental sustainability? Please justify your position, and if possible, provide concrete examples to illustrate these effects.		Sustainability
OBSERVATIONS AND COMMENTS		

Note: clothing = appare

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