

# ***Under the Presence of Digital Platforms, What Are the Gender Factors That Influence Consumers When They Purchase Secondhand Goods?***

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**Abstract.** This study explores gender factors that influence consumer behavior in the secondhand goods market on digital platforms. In the context of growing ecological awareness and circular economy, understanding these factors is essential to optimize online sales strategies. The study identifies five key factors: price sensitivity, trust in digital platforms, environmental awareness, the impact of social networks, and consumer utility. The results indicate that women tend to be more price-sensitive than men, have more confidence in digital platforms, and are more environmentally conscious. The messages underscore the importance of targeted marketing and designing platforms that meet gender-specific preferences, thus improving the efficiency of the secondhand goods market. By focusing on the intersection of gender dynamics and online secondhand shopping, this study fills a gap in the existing literature and provides valuable information for e-commerce businesses and sustainability advocates.

**Keywords:** Sharing economics, Digital platform, Gender differences, Secondhand good

## **1. Introduction**

In recent years, the eco-consciousness of consumers and the global strategies for preserving the environment has led to the rapid development of second-hand market.

The second-hand goods market plays a vital role in prolonging the use of a certain product through its re-sale, redistribution, recycling, renovating, new uses, which leads to the so-called circular economy and sustainable development [1] when the needs of consumers of different groups and social classes have been met. Meanwhile, numerous renowned websites worldwide act as digital platforms, facilitating the management and operation of the second-hand goods market. Studies reveal that in comparison to 2017 and 2018, for the multi-billion retail industry for second-hand goods – apparel, automobiles, furniture, smartphones – the next 5 years are projected to have a global revenue increase of 6.4% compound annual growth rate for second-hand furniture and an up to 15% surge in second-hand apparel. This development of the second-hand goods market is going

at a significantly higher rate than what’s predicted for newly manufactured products. Accordingly, a better understanding of factors that influence consumers' shopping decisions on second-hand goods is crucial for designing and managing effective websites and advertising strategies that can help businesses attract and retain online customers.

Although the number of Internet users is equally divided among the genders, more men than women engage in online shopping and make online purchases [2]. Gender difference in online shopping have been examined from various perspectives such as perceived risk of online buying [3], website usability and design [4], and technology acceptance [5]. While studies of online shopping motivation of different gendered customers are widespread in the literature, studies of gender differences in online second-hand goods market are scarce.

To fill the void, this study was conducted to investigate the relationship between potential gender factors and consumers' acceptance on secondhand goods with the context of emerging digital platforms.

## 2. Methodology and overview of literature

Firstly, before the analysis, we provide a rough definition of the key factors discussed in this article. The factors’ definitions are shown in Table 1:

Table 1. Definition and explanation of the 5 factors

Factors	Definition & Explanation
Economic factors-price sensitivity	This refers to the degree to which consumers are influenced by the price and value of a product or service. Highly price-sensitive consumers may prioritize cost-effective options that provide the best bang for their buck, while less price-sensitive consumers may be willing to pay more for products that offer additional features or perceived value.
Trust of digital platforms	This factor examines the level of trust consumers have in online or digital platforms, such as e-commerce websites, mobile apps, and social media. It considers consumers' willingness to take risks, such as providing personal information or making purchases through these digital channels. Trust in the security, reliability, and reputation of the platforms can influence consumer behavior.
Environmental awareness	This factor looks at the extent to which consumers consider the environmental impact and sustainability of their purchases. Environmentally conscious consumers may prioritize eco-friendly, sustainable, or ethically sourced products and services, even if they come at a higher cost.
Social media influence	This factor examines the impact of social media on consumer behavior. It considers how social media platforms, influencers, and peer recommendations can shape consumer preferences, purchasing decisions, and brand perceptions.
Consumer Utility	This factor explores the motivations and priorities of consumers when making purchasing decisions. Some consumers may focus on the practical value and functionality of a product, while others may place more emphasis on the symbolic or status value, such as brand recognition or alignment with the latest trends. This can influence the types of products and brands that consumers are drawn to.

### 2.1. Economical factor

A study conducted by Zimmer et al. [6] indicated that consumers exhibit significant sensitivity to product pricing. Supporting this finding, Ul Hassan et al. [7] highlighted in the context of Pakistan that consumers often compare the prices of similar products prior to forming their purchase intentions. The current essay examines consumer purchase intentions regarding hybrid vehicles (HVs) in Pakistan. Bhutto, Azhar, Ahmed, and Khuwaja employed Ajzen's Theory of Planned Behavior (TPB) as a foundational framework to analyze the factors affecting consumer decisions.

They introduced a moderating variable, personal social responsibility (PS), to enhance the theoretical framework.

Previous research has extensively explored the determinants of consumer purchase intentions for green products. For example, Prakash and Pathak [8] investigated the intention to buy eco-friendly packaged goods among young Indian consumers. Their findings revealed that factors such as environmental concern and perceived consumer effectiveness significantly influenced purchasing behavior. Similarly, Qi and Ploeger [9] expanded the theory of planned behavior to elucidate consumers' intentions toward purchasing green food in Qingdao, China.

Bhutto found that in developing nations like Pakistan, economic factors also significantly influence consumer behavior regarding green products such as HVs. According to the essay, price consciousness plays a vital role in purchase decisions, often taking precedence over environmental considerations. However, past literature has not adequately addressed how variations in price sensitivity among different consumer segments lead to distinct purchasing preferences. Consequently, this study posits the following hypothesis:

*H1: Women are more likely to accept secondhand goods because they exhibit greater price sensitivity than men.*

## 2.2. Price sensitivity of different gendered consumers

Price sensitivity refers to the reactions of consumers to fluctuations in price, whether increases or decreases [10]. Each consumer has a specific acceptable price range, which defines their perception of value. Price sensitivity is a critical factor in marketing decision-making [11], making it essential for evaluating consumer behavior.

Yulia [12] identified reasons why consumers still desire certain products that have lost functionality after initial use. She categorized these motivations into four drivers: economic, social, psychological, and ecological. The economic driver suggests that secondhand goods typically have lower prices, appealing to consumers seeking fair value. Additionally, secondhand markets help reduce alternative options and transaction costs.

Marie [13] investigated the influence of socio-demographic characteristics on consumer price sensitivity. The study, conducted in the Czech Republic, involved respondents primarily aged 25 to 54 years (63%), with families of two children (29%), partners (28%), and a majority (61%) holding master's or bachelor's degrees. The results indicated that age is a significant factor, revealing that younger consumers are generally less price-sensitive than older individuals. Furthermore, females tend to exhibit slightly higher price sensitivity than males, and households with more family members show increased price sensitivity.

Recent research has observed gender wage discrimination primarily in private, non-reporting firms [14]. This gender wage gap has considerably influenced women's shopping behavior. Consistent with prior findings that indicate women are more price-sensitive, these results suggest that the differences in price sensitivity between male and female consumers lead to distinct purchasing behaviors regarding secondhand goods.

## 2.3. Trust of digital platforms

In modern society, the rapid advancement of technology has made digital platforms ubiquitous in our lives. Various mobile applications are prime examples of this. Shopping platforms such as Amazon, eBay, Target, Taobao, and Walmart create virtual markets where people can freely choose and purchase goods. At the same time, social media platforms like Facebook, Twitter, Instagram,

and TikTok play a significant role in disseminating information and promoting communication, profoundly influencing how we interact and obtain information. These platforms not only facilitate the flow of social information and resources, making our daily lives more convenient but also provide numerous opportunities for new entrepreneurial ventures. Therefore, it can be concluded that digital platforms are a collective term for all internet tools, enhancing the convenience and connectivity of modern life and significantly changing our social interactions and information dissemination methods. Thus, we propose the following hypothesis:

*H2: Women are more likely to purchase second-hand goods through digital platforms because they tend to trust these platforms more than men do.*

A study focusing on Australian women found that women typically show higher interest in clothing on digital platforms, indicating that women have greater trust in the secondhand market on these platforms. "The other crucial part of the shopping experience is the social factor. The supportive attitudes of friends and family were mentioned as a factor of influence, either via social norms growing up, 'my family...have always shopped second hand', or through the approval of friends 'who like her style'. This understanding of secondhand shopping as a social activity reflects existing research that demonstrates that young women like to shop together and that they are more likely to purchase something when they do so. This shopping is important as both a social activity and a form of identity formation and exploration" [15]. This statement emphasizes that women often receive support from friends and family when purchasing second-hand goods. Women usually use shopping experiences as a significant "tool" for socializing, but men don't trust praise from family or friends to shop on digital platforms.

Shopping as a social activity often involves seeking better shopping experiences by asking others for recommendations, aiming to obtain higher quality goods at better prices. Therefore, when people buy used items on digital platforms' second-hand markets at lower prices and receive others' approval, it directly or indirectly increases their trust in secondhand platforms. The credibility of a platform is established through continuous attempts and the sharing of summarized experiences by people.

Under the influence of broader social environments, family, and social circles, women are more driven to shop and socialize, which may explain why women trust second-hand goods on digital platforms more than men do.

## 2.4. Environmental factor

Environmental awareness refers to the recognition and understanding of environmental issues and the commitment to engage in practices that promote sustainability [16]. This awareness influences consumer behavior significantly, especially concerning the purchase of products that are considered environmentally friendly or sustainable. Prakash and Pathak [17] and Qi and Ploeger [18] extend the theory of planned behavior (TPB) to include environmental concerns and perceived consumer effectiveness as significant predictors of purchasing eco-friendly products.

Marie [13] explores how socio-demographic factors, including gender, influence price sensitivity, and environmental awareness. The study finds that women are more sensitive to price and more likely to be motivated by environmental concerns. The reviewed literature suggests that women often exhibit higher levels of environmental concern and a greater propensity to engage in sustainable consumption compared to men. Thus, our hypothesis is:

*H3: Women are more likely than men to purchase second-hand goods due to higher environmental awareness and sustainability concerns women have.*

The study highlights that consumers' willingness to pay (WTP) for circular products increases when they are informed about the environmental benefits and when these claims are verified by a third party. While the research primarily focuses on the general consumer population, it does touch upon factors that can influence consumer behavior, including perceived quality and environmental virtues. Although it does not explicitly segregate findings by gender, the underlying principles can be extended to explore gender differences in environmental awareness and sustainability practices.

Previous research has established that women tend to have higher environmental awareness and are more likely to engage in behaviors that support environmental sustainability. This higher level of concern and commitment to environmental issues often translates into purchasing decisions that favor sustainable products, including second-hand goods. Women are generally more inclined to consider the environmental impact of their consumption choices and are more likely to highly value the products that reduced environmental footprint.

When consumers are informed of the environmental benefits of a recycled product, especially if those benefits are verified or supported by an authoritative third party, they are more willing to pay more for the proven product. This finding supports the idea that environmental awareness plays a crucial role in purchasing decisions. It is reasonable to assume that women are more sensitive to second-hand products that are environmentally friendly and, in particular, to products that have been certified as environmentally friendly.

Moreover, the increased WTP for products with third-party certification, as highlighted in the document, suggests that credibility and trust in environmental claims are important factors. Women, who often exhibit a greater concern for ethical and sustainable consumption, are likely to be more influenced by such certifications, further supporting their propensity to purchase second-hand goods.

The assumption that women are more likely than men to purchase second-hand goods due to higher environmental awareness and sustainability concerns is supported by the evidence and analysis provided. The previous research on the importance of environmental messaging and third-party verification aligns with the broader research on gender differences in environmental behavior, reinforcing the idea that women's heightened environmental awareness positively influences their purchasing decisions towards second-hand goods.

## 2.5. Social media influence

“However, there is also a possibility that platforms such as social networking services promote consumption through lowered transaction costs and also stimulating conspicuous consumption”. In digital platforms, buyers can reduce costs. For instance, selling on digital platforms eliminates the need for additional rental expenses, significantly easing the pressure on sellers. This substantially increases the flexibility for price adjustments.

In modern society, digital platforms are omnipresent in our daily lives. Mobile applications, including social media and shopping apps, are prime examples of digital platforms. This leads us to ask whether media on digital platforms influences market buying behavior and what are the key elements of the secondary market on these platforms?

“With regard to gender, recent studies have shown that women have stronger impulse buying tendencies and are more prone to making impulse purchases than men.”. This study examines how different patterns of social media use influence impulse shopping. Women are particularly susceptible to the emotional responses triggered by social media and have higher rates of impulse shopping. This quote emphasizes that women are more influenced by their emotional state when it comes to impulse purchases, which is a strong testament to the fact that women can be more

susceptible to verbal comments on outside social media, which can lead to a higher percentage of second-hand purchases through digital platforms.

*H4: Women are more likely to purchase secondhand goods through digital platforms because they are more influenced by social media than men are.*

Through the analysis above, we can see that products on digital platforms tend to be priced lower, and these social media are omnipresent in our lives. Numerous studies indicate that women are more influenced by social media when making decisions.

Based on our hypothesis, an article has mentioned data comparisons related to gender differences in social media use: “Results have also indicated that the influence of reviews and ratings, photos/videos and proposed transport mode on activity planning is gender dependent. Photos/videos influence more often both women ( $m=3.47$ ) and men ( $m=3.00$ ) than reviews and ratings ( $m=3.21$  for women and  $2.94$  for men)”. This statement emphasizes that gender is a significant factor in how social media content influences certain decisions. The data also shows that women generally rely on social media more than men. For example, women are more influenced by photos and videos on social media, with an average score of ( $m=3.47$ ), compared to men’s average of ( $m=3.00$ ). Both genders are influenced by social media, but the higher average for women indicates that social media content is particularly persuasive for them, making it a crucial factor in their decision-making process.

From the analysis above, we have demonstrated that social media are ubiquitous. The hypothesis that second-hand goods are more popular among women on digital platforms is well-founded, as women are more likely than men to be influenced by social media advertising campaigns and opinions to buy second-hand goods on digital platforms. This influence leads them to purchase these affordable second-hand goods to fulfill their emotional needs in daily life. Therefore, the hypothesis that women are more significantly influenced when purchasing second-hand goods through digital platforms is supported

### 3. Consumer utility

According to Bakewell C. and Mitchell V.W. [8], when studying the female consumer group of Generation Y, consumer utility will affect the consumption behavior, and consumption concept in the second-hand market was found by them. For female consumers in Generation Y, the preference for brand authenticity could play a significant role in consumer behavior. ‘They prefer brands that align with their personal values, such as sustainability, ethical practices, and social responsibility.’ said by Bakewell and Mitchell. The concept of the second-hand market fits in well with this point. The emergence of the second-hand market combines circular economy with sustainable development, which means that the second-hand market has certain advantages in both social and environmental aspects. Gaia Pretner\*, Nicole Darnall, Francesco Testa, and Fabio Iraldo said that ‘Regardless of their form, circular products – like other products that have positive environmental attributes – may improve consumers’ perceived value of the product.

Therefore, by analyzing the existing conclusions, we believe that consumers tend to show special preferences for such socially significant goods, which will influence consumer behavior significantly and make them prefer the second-hand market. Hence, our hypothesis is that:

*H5: Women are more likely to purchase second-hand goods through digital platforms because their consumer preferences often align with values such as brand authenticity, sustainability, and ethical practices more than men's preferences do.*

Besides, Consumers tend to be loyal to certain brands, especially in some luxury brands, which also could have an impact on consumers' decisions. For most situations, the male/female ratio is

very close in that segment. Fashion-brand-oriented consumers make a special effort to buy the very best quality, and consequently, their expectations and standards for the products are very high. Once they find a brand they like and it becomes their favorite, they stick to it and buy it over and over. However, faced with the high price of luxury goods, they prefer to buy second-hand luxury goods to meet their requirements for individuation and differentiation as well as the uniqueness of fashion. With the popularity of the concept of circular consumption and the gradual change of consumer mentality from the "conspicuous consumption" of identity to the recognition and appreciation of unique design, the second-hand trade of luxury goods will enter a period of rapid growth. At the same time, the forecast of second-hand luxury market development in Figure 1 also shows consumers' preferences for second-hand luxury goods, showing an increasing trend. Meanwhile, the proportion of male and female consumers in the second-hand luxury goods market is relatively similar, and the gap is not large. Overall, facing the expanding scale of the global second-hand luxury market, consumers' brand loyalty has an impact on second-hand consumption on digital platforms. At the same time, the influence of gender factors on this sort of goods is relatively small.

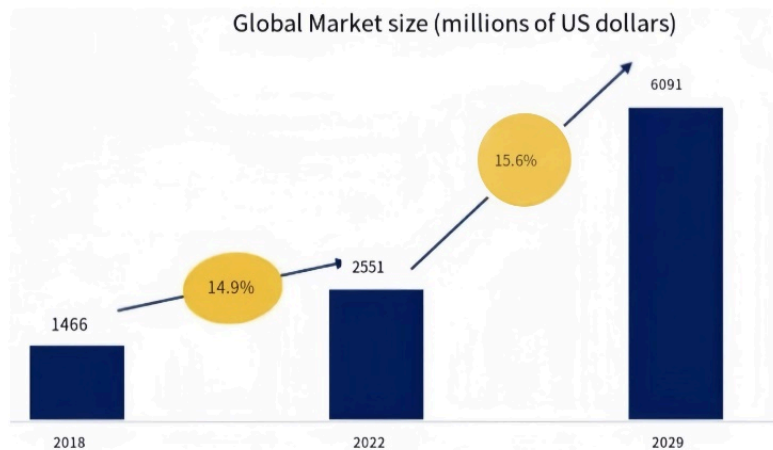


Figure 1. Global second-hand luxury goods sales services market report

Based on the above analysis and verification, we have summarized five hypotheses that have been proven to be reasonable. The hypotheses are listed in Table 2:

Table 2. Hypotheses based on 5 factors

Hypothesis
H1: Women are more likely to accept second-hand goods because they are more sensitive to price than men are.
H2: Women are more likely to purchase second-hand goods through digital platforms because they tend to trust these platforms more than men do.
H3: Women are more likely to purchase second-hand goods due to higher environmental awareness and sustainability concerns women have.
H4: Women are more likely to purchase second-hand goods through digital platforms because they are more influenced by social media than men are.
H5: Women are more likely to purchase second-hand goods through digital platforms because their consuming utility often align with values such as brand authenticity, sustainability, and ethical practices more than men's utility for online shopping.

## 4. Conclusion

In conclusion, our article has examined under the presence of digital platforms, the gender factors that influence consumers when they purchase secondhand goods. By analyzing recent research and case studies, we have found that gender factors like economic factors (price sensitivity), trust in digital platforms, environmental awareness, social media influence, and consuming preference could have an influence on consumer behavior in the secondhand market. Different from previous articles, this paper focuses on the secondary market in the digital economy. Faced with the expanding scale of online second-hand trading platforms, more and more consumers have begun to participate in second-hand trading and form new consumption habits and consumption patterns. In the process of literature review, we found that most of the articles on the influence of gender differences on consumer behavior are based on the primary market. Only part of the literature mentions the reasons why gender affects the consumption of second-hand goods but only focuses on one gender difference, so our literature has well filled the gap in this part. We extend the research to the secondary market and have a more diversified analysis of gender differences instead of just limiting it to a single gender factor. Therefore, we used predictive analytics. Based on the data and conclusions of previous articles, we divided the gender difference into five different factors and combined the unique nature of the secondary market and the difference in consumer behavior in the primary market to predict the trend in the secondhand market. Our research not only expands our understanding of the motivations in the second-hand goods market but also provides specific marketing recommendations for digital platforms and retailers. In particular, under the environmental dimension, the environmental and sustainability benefits of buying second-hand goods could be highlighted for female consumers. For male consumers, we can gradually guide them to pay attention to environmental issues while emphasizing economic advantages.

This research method brings us a more diversified analysis and conclusions, but at the same time, there are some limitations. To begin with, we could not get first-hand data from some second-hand platforms or conduct a large-scale questionnaire survey, which means that our research is relatively theoretical, and the results of theory and practice are few. Besides, due to time constraints and the limitation of references, our research depth is lacking so that we can conduct a comprehensive analysis of each factor. Further research in this field needs to look for some valid primary data to make the article more rigorous and improve credibility.

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