



CONSUMER BEHAVIOUR IN E-COMMERCE: AN ANALYTICAL PERSPECTIVE ON PREFERENCES AND SATISFACTION

¹Nishi Tuli, ²Ajaypal Singh and ²Sunit Sharma

¹Ch. Ishwar Singh Kanya Mahavidyalaya Dhand Dadwana, Kaithal, Haryana, India-136120

²Department of Commerce, I.B. (PG) College, Panipat, Haryana, India – 132103

Abstract: This paper investigates the consumer behaviour in the Panipat district of Haryana state in India e-commerce market. The focusing areas of study are demographics, platform preferences, product types, payment methods, buying frequency, and satisfaction levels of consumers using online platforms. It analyses the impact of demographic factors on purchasing decisions. The study reveals that youth and, educated consumers are more aware with the online shopping. The consumers show diverse preferences towards various e-commerce platforms like Amazon, Flipkart etc. based on user experience and product variety. Payment methods, including debit cards followed by cash-on-delivery, are more commonly used in online transactions. Buying frequency highlights that the females prefer monthly shopping, while males show a balanced distribution. There is no significant relation between gender and type of products purchased and consumer satisfaction. The study provides the valuable insights to understand the consumer behaviour towards e-commerce.

Keywords: *E-commerce, consumer behaviour, buying frequency, payment method, satisfaction*

1 INTRODUCTION

A notable expansion has been recorded in e-commerce market in the last decade. It is certainly due to the technological advancements, increasing internet facility, and changing consumer behaviour. Now a days, online shopping becomes a popular mode of commerce and effected the purchasing decision of consumer across diverse demographics. In this era of business competition, it is critical to understand the consumer preferences and satisfaction in e-commerce. This study is performed to analyse the essential aspects of consumer behaviour in the e-commerce market. It includes the impact of various factors on e-commerce like demographics, platform preferences, product types, payment methods, buying frequency, and overall satisfaction. Consumer behaviour specially of young people is influenced by demographic factors such as age, gender, and occupation. Studies have shown that young people, particularly those aged 20-25 years, are among the frequent online shoppers (Kansra & Rajiva, 2005). Walke, 2015 analysed that the Indian consumers prefer cheap and best option while making online purchase. Consumers prefer the offers and discount on a product irrespective of the augmentation in the income levels of individuals. Wang, 2021 found that the female consumers usually prefer platforms providing a wide range of products with more emphasis on product quality than price. While young and middle-aged men pay more emphasis on product quality and customer support after purchase. Hence, to enhance the overall customer outreach, the companies can use a mixed approach of satisfying the needs of customers from both the genders by offering the desired quality, price and support. Makkonen et. al., 2021 found that the people have preferences to pay by invoice in online shopping are more likely to return product frequently. Additionally, the study showed that many retailers are gender and age biased with respect to the low return rate. Karpagam & Bharathi, (2022) conducted a survey “to study on customers behaviour and satisfaction towards online shopping with special reference to working women.” The study concluded that the negative responses with respect to online shopping are minimal, and the customers are highly satisfied with the service quality provided by various online platforms with Flipkart being given top priority among the existing options. Shrivastava & Yadav, 2023 pointed out that for hassle-free shopping experience Companies should provide detailed product information, easy payment options and comparison of

similar products. Also, the brand images and way of promotion also influence the buyers' decision. Li et. al., 2024 found that males are having higher involvement during the collaboratively shopping for utilitarian products, while involvement of females is more during the collaborative purchase of hedonic products. Tripathi, 2024 highlighted that the cost effectiveness such as offers and discounts of products are key factors affecting the online purchasing behaviour. The study pointed out that consumers are satisfied with the offers and discount provided by the online shopping platforms. The consumer also likes the recommendation and customisation algorithms of these platforms. Various e-commerce platforms, like Amazon, Flipkart, Myntra, etc. cater to the needs of the diverse inclinations of consumers. Bruma et. al., 2024 observed that the consumers prefer the bank transfer while purchasing in bulk and to pay the higher amount. The study also demonstrates that the frequency of online purchasing is governed by the various socio-demographic and economic factors like income, education, gender, and size of family.

2 OBJECTIVES OF THE STUDY

1. To study the impact of demographic factors in the e-commerce market.
2. To study the preferences of various online platforms.
3. To study the gender preferences of product type, payment method, buying frequency.
4. To study the overall satisfaction level of the consumers.

3 METHODS OF ANALYSIS

This study is based on the primary and secondary data, and the primary data was collected through a structured questionnaire and direct interaction with the respondents. Secondary data was obtained from the various published resources like journal, books, reports etc. A total of 151 responses were received of having diverse backgrounds in the Panipat district of Haryana, India. The collected data was analysed using PSPP software. Inferential statistics, such as Chi-Square tests, are applied to explore associations between categorical variables, such as gender and payment methods, buying frequency, product type, and satisfaction levels.

4 RESULTS AND DISCUSSION

The age distribution (Table 1) shows that the 27–30 years group forms the largest proportion (35.8%), followed closely by the 19–22 years group (30.5%). The 23–26 years group accounts for 27.8%, while the youngest group, aged 15–18 years, constitutes only 6.0%. These results suggest that most respondents are in the young adult phase, from 19 to 30 years. This could reflect the target audience of the research, indicating that young adults are more active in the context of this study. Additionally, the small representation of the youngest age group might signify limited engagement from minors due to economic or social factors.

Table 1 Age of the Respondents

Age Range	Frequency	Percent
15–18 Years	9	6.0%
19–22 Years	46	30.5%
23–26 Years	42	27.8%
27–30 Years	54	35.8%
Total	151	100.0%

Table 2 Education Level of the Respondents

Education Level	Frequency	Percent
High School	52	34.4%
Undergraduate	52	34.4%
Postgraduate	47	31.1%
Total	151	100.0%

Respondents are evenly distributed across educational attainment levels (Table 2). High School and Undergraduate participants each account for 34.4% of the total sample, while Postgraduates make up 31.1%. This balance implies that the study includes individuals from diverse educational backgrounds. The relatively high proportion of Postgraduates suggests a well-educated sample, which

could influence decision-making processes, preferences, and engagement levels in various activities examined in the study.

Educational attainment may also correlate with certain behavioural patterns, such as platform preference or satisfaction levels.

Table 3 Platform used by the Respondents

Platform	Frequency	Percent
Amazon	37	24.5%
Flipkart	33	21.9%
Myntra	40	26.5%
Snapdeal	41	27.2%
Total	151	100.0%

Among e-commerce platforms (Table 3), Snapdeal (27.2%) and Myntra (26.5%) emerge as the most preferred choices, while Amazon (24.5%) and Flipkart (21.9%) follow closely. This near-equitable distribution suggests a highly competitive market where no single platform dominates the preferences of respondents. The popularity of Snapdeal and Myntra may reflect their marketing strategies, product ranges, or localized outreach. Notably, the balanced preferences among platforms indicate that customers value different features, such as pricing, variety, or delivery efficiency.

Table 4 Product Type

Product Type	Frequency	Percent
Books	40	26.5%
Clothing	35	23.2%
Electronics	33	21.9%
Groceries	43	28.5%
Total	151	100.0%

The data shown in Table 4 reveals that Groceries are the most frequently purchased product category (28.5%), followed by Books (26.5%), Clothing (23.2%), and Electronics (21.9%). The dominance of Groceries reflects a demand for essential items, which aligns with basic consumer needs. Books ranking second suggests a significant interest in leisure or educational activities. The lower ranking of Electronics may indicate infrequent purchasing cycles for such items, as they are generally considered high-investment products.

Most respondents shop monthly (37.1%), followed by daily shoppers (35.8%) and weekly shoppers (27.2%) as shown in Table 5. This highlights the prevalence of periodic shopping behaviours, likely influenced by budgeting or the need for bulk purchases. Daily shopping trends might reflect impulsive or necessity-driven buying behaviours, whereas monthly purchasing may be linked to planned expenditure patterns.

Table 5 Buying Frequency

Buying Frequency	Frequency	Percent
Daily	54	35.8%
Weekly	41	27.2%
Monthly	56	37.1%
Total	151	100.0%

As shown in Table 6, Debit card is the most used payment method (31.1%), followed by Cash on Delivery (25.8%), Credit Cards (23.2%), and Net Banking (19.9%). This preference for debit cards could be attributed to convenience, familiarity, and direct fund

transfers. The significant use of Cash on Delivery indicates trust issues with online payments or a preference for flexible payment options. The lower usage of Net Banking reflects its limited accessibility or slower adoption compared to other methods.

Table 6 Payment Methods

Payment Method	Frequency	Percent
Cash on Delivery	39	25.8%
Credit Card	35	23.2%
Debit Card	47	31.1%
Net Banking	30	19.9%
Total	151	100.0%

Table 7 Overall Satisfaction

Satisfaction Level	Frequency	Percent
Dissatisfied	33	21.9%
Neutral	39	25.8%
Satisfied	47	31.1%
Very Satisfied	32	21.2%
Total	151	100.0%

Satisfaction levels of the respondents reveal that 31.1% of respondents are satisfied, while 21.2% are very satisfied (Table 7). Neutral responses account for 25.8%, and 21.9% of respondents are dissatisfied. These findings suggest that over half of the participants hold a positive outlook on their e-commerce experiences. However, the relatively high percentage of neutral and dissatisfied respondents highlights areas requiring improvement, such as product quality, service efficiency, or customer support.

Delivery time satisfaction shows a mixed response (Table 8). While 27.8% are satisfied and 17.9% are very satisfied, 25.2% are dissatisfied, and 29.1% remain neutral. These results suggest delivery efficiency as a critical area for improvement. Companies may need to prioritize logistical enhancements to reduce delivery delays and address customer concerns, which could improve overall satisfaction.

Table 8 Delivery Time Satisfaction

Delivery Time Satisfaction	Frequency	Percent
Dissatisfied	38	25.2%
Neutral	44	29.1%
Satisfied	42	27.8%
Very Satisfied	27	17.9%
Total	151	100.0%

Table 9 Gender and Payment Method

Gender	Payment Method				
	Cash on Delivery	Credit Card	Debit card	Net Banking	Total
Female	22	25	19	13	79
Male	17	10	28	17	72
Total	39	35	47	30	151

Table 10 Chi-Square of Gender and Payment Method

	Value	df	Asymptotic Sig. (2-tailed)
--	-------	----	----------------------------

Pearson Chi-Square	9.02	3	.029
--------------------	------	---	------

The analysis shows (Table 9) that female respondents prefer Credit Cards, whereas males predominantly use Debit Cards. The Chi-Square test (Table 10) indicates a significant relationship between gender and payment methods ($p = 0.029 < 0.05$). This could reflect gender-based differences in financial practices, with females possibly preferring credit-based payments for flexibility, while males incline toward debit cards for immediate transactions.

Table 11 Gender and Buying Frequency

Gender	Buying Frequency			
	Daily	Weekly	Monthly	Total
Female	25	19	35	79
Male	29	22	21	72
Total	54	41	56	151

Table 12 Chi Square of Gender and Buying Frequency

	Value	df	Asymptotic Sig. (2-tailed)
Pearson Chi-Square	3.70	2	.157

Females are more inclined toward monthly shopping (Table 11), while males show a balanced distribution across daily, weekly, and monthly buying frequencies. The Chi-Square test ($p = 0.157 > 0.05$) indicates no significant association between gender and buying frequency (Table 12). These trends suggest that while shopping frequencies differ marginally by gender, they may be more influenced by individual habits or external factors like income and time availability.

As can be seen from Table 13, females show a preference for Books and Groceries, whereas males Favor Electronics. The Chi-Square test ($p = 0.337 > 0.05$) does not reveal any significant relationship between gender and product type (Table 14). This implies that while preferences align with traditional trends, they are not strongly determined by gender alone.

Table 13 Gender and Product Type

Gender	Product Type				
	Books	Clothing	Electronics	Groceries	Total
Female	24	18	13	24	79
Male	16	17	20	19	72
Total	40	35	33	43	151

Table 14 Chi Square of Gender and Product Type

	Value	df	Asymptotic Sig. (2-tailed)
Pearson Chi-Square	3.38	3	.337

Table 15 Gender and Overall Satisfaction

Gender	Overall Satisfaction				
	Dissatisfied	Neutral	Satisfied	Very Satisfied	Total
Female	22	20	22	15	79
Male	11	19	25	17	72
Total	33	39	47	32	151

Table 16 Chi Square of Gender and Overall Satisfaction

	Value	df	Asymptotic Sig. (2-tailed)
Pearson Chi-Square	3.69	3	.297

Satisfaction levels differ slightly between genders, with females exhibiting higher dissatisfaction and lower satisfaction compared to males. However, the Chi-Square test ($p = 0.297 > 0.05$) indicates no significant association between gender and overall satisfaction. This suggests that satisfaction levels are influenced more by individual experiences than gender.

5 CONCLUSION

This study highlights the various key insights related to e-commerce behaviours and satisfaction levels. A diverse consumer behaviour was noted about preferences for online platforms and product types, emphasizing groceries as essential purchases. Debit cards and Cash on Delivery were found to be mostly used payment methods showing the preferences for convenience and flexibility. The consumer satisfaction level is found to be moderately high, with the considerable dissatisfaction regarding delivery times and overall experiences. No significant association was found between gender and shopping frequency, product type, and satisfaction except with payment preferences. These findings highlight the need for marketing strategies to enhance consumer satisfaction, such as to improve delivery efficiency and more payment options.

6 REFERENCES

1. Brumă, I. S., Cautisanu, C., Tanasă, L., Ulman, S. R., Gâlea, M., & Jelea, A. R. (2024). Does the payment method matter in online shopping behaviour? Study on the Romanian market of vegetables during the pandemic crisis. *Agricultural Economics/Zemědělská Ekonomika*, 70(1).
2. Kansra, P., & Rajiva, D. (2005). *A Study of Perception of Young People Towards Online Shopping in Punjab*.
3. Karpagam, N., & Bharathi, T. (2022). A Study on Customers Behaviour and Satisfaction towards Online Shopping with Special Reference to Working Women in Vellore District, Tamilnadu.
4. Li, J., Yen, D. C., Zhang, P., & Liu, X. (2024). Collaborative online shopping: customer satisfaction and the influence of product type, gender and involvement. *Aslib Journal of Information Management*.
5. Makkonen, M., Frank, L., & Kemppainen, T. (2021). The effects of consumer demographics and payment method preference on product return frequency and reasons in online shopping.
6. Shrivastava, J., & Yadav, M. (2023). A Study on Consumer Perception towards Online Shopping and its Impact: With Special Reference to Gwalior City. *vol, 11*, 183-192.
7. Tripathi, D. (2024). To Assess the Relationship Between Perception and Impact of Online Shopping Amongst Students of Higher Education in Prayagraj. *Educational Administration: Theory and Practice*, 30(4), 1251-1259.
8. Walke, S. G. (2015). A Study of Consumer Behavior of Online Shoppers towards e-Stores with Especial Reference to Pune.
9. Wang, Y. (2021, December). Research on e-commerce platform of online shopping consumers. In *2021 3rd International Conference on Economic Management and Cultural Industry (ICEMCI 2021)* (pp. 3031-3035). Atlantis Press.