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FACTORS INFLUENCING CONSUMER BEHAVIOUR TOWARDS ONLINE SHOPPING IN CHENNAI

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ABSTRACT

In the digital era, online shopping has emerged as a convenient platform for consumers to purchase products through wider product selection, price comparison, time savings and accessibility. Various consumer-oriented, online-dealer-oriented, product-oriented and technical factors influence consumers' online shopping behaviour and purchasing decisions. This study examines the factors influencing consumer behaviour towards online shopping in Chennai. The study is descriptive and analytical in nature, with a sample size of 150 respondents. A structured questionnaire using a five-point Likert scale serves as the primary instrument for data collection. The study considers convenience, time and cost savings, ease of purchase, delivery services, payment options, grievance redressal, product quality, brand identity, comparative pricing, customer reviews, website navigation, privacy and security. Descriptive statistics, chi-square tests and appropriate group-comparison techniques are proposed for analysing the data and examining variations across demographic characteristics and online shopping experiences. The project findings highlight the multidimensional nature of online shopping behaviour and the potential role of demographic and shopping-experience differences in shaping consumer preferences. The study emphasises the importance of improving website navigation, ensuring reliable delivery, providing accurate product information, strengthening return and warranty policies, enhancing after-sales support and safeguarding customer information. These measures can help online retailers improve customer satisfaction and build consumer confidence in online shopping.

Keywords: Online Shopping, Consumer Behaviour, Purchase Decisions, Customer Satisfaction, E-Commerce, Chennai.

I. INTRODUCTION

Digital technologies have changed the ways consumers search for, evaluate and purchase products. Online shopping allows customers to browse merchandise, compare prices, examine product descriptions and reviews, and complete purchases without visiting a physical store. Mobile applications, electronic payments and delivery networks have made digital purchasing more accessible and convenient. For businesses, e-commerce provides opportunities to reach wider markets, communicate offers and gather information about customer preferences.

Despite these advantages, online shopping involves decisions under conditions in which consumers cannot always inspect products physically before purchase. Customers may be concerned about product quality, the accuracy of images and descriptions, delivery delays, payment security, privacy, return policies and the reliability of the seller. These concerns mean

that online purchase behaviour cannot be explained by price or product quality alone. The shopping interface, retailer service, transaction process and post-purchase support may also influence a consumer's evaluation.

Consumer behaviour in online shopping is therefore best understood as the outcome of several interacting dimensions. The project document organises these dimensions into four broad categories: consumer-oriented variables, online dealer (e-tailer)-oriented variables, product-oriented variables and technical variables. Consumer-oriented variables include time saving, convenience, cost saving, ease of buying, price negotiability and the availability of shopping at any time. E-tailer variables include timely delivery, payment choices, grievance redressal, consistency, offers, packaging, after-sales service and replacement policies. Product variables include images, brand identity, quality, comparative price, product variety, reviews and guarantees. Technical variables include security, privacy, reliability, website clarity, internet speed and navigation. The present article follows this four-part framework and focuses on consumers in Chennai. It aims to provide a coherent assessment of the factors consumers consider when shopping online and to develop practical implications for e-commerce businesses.

Background and Significance of the Study

The growth of e-commerce has intensified competition among online retailers. Consumers can compare multiple sellers and product alternatives quickly, making the overall shopping experience an important source of differentiation. A retailer may offer attractive prices, but unclear product information, weak navigation or unreliable delivery can reduce the perceived value of the transaction. Conversely, clear information, convenient ordering, dependable service and responsive after-sales support may encourage confidence and repeat purchasing.

The supplied project identifies a wide range of factors beyond cost and quality, including previous shopping experience, payment options, delivery, service networks, reputation, round-the-clock availability and the ability to track orders. These factors are relevant to managers because they represent different points in the customer journey: search and comparison, purchase, fulfilment and post-purchase support.

Chennai provides a relevant urban setting for studying these issues because consumers differ in age, income, education, occupation and familiarity with digital shopping. Examining the differences across these groups can help online retailers avoid assuming that all customers evaluate online shopping in the same way. The findings can support the design of clearer websites, more reliable service processes and communication that addresses consumers' principal concerns.

II. REVIEW OF LITERATURE

Singh (2024) examined the factors influencing Generation Z consumers' online purchase intentions by extending the Technology Acceptance Model. The study investigated perceived risk, usefulness, ease of use, privacy, security and trust among online shoppers in India. The findings revealed that these factors significantly influenced online buying intentions, highlighting the importance of convenient platforms, secure transactions and consumer confidence in digital shopping. **Hiremath and Ingalagi (2024)** investigated the determinants of consumer satisfaction and online-shopping behaviour in North Karnataka. The study focused on website usability, trust, convenience, monetary benefits and payment security, while also examining shopping-cart abandonment and return policies. The findings emphasised the importance of secure transactions, user-friendly interfaces and effective loyalty programmes in

improving consumer satisfaction and encouraging online purchases. **Sharma et al. (2025)** examined the impact of website design and product-image quality on online shopping experiences. Using questionnaire responses from 220 online shoppers in Delhi and Gurugram, the study found that website design quality and product-image quality significantly improved electronic satisfaction. The findings highlighted the importance of clear website layouts and accurate product images in strengthening consumer confidence and encouraging continued online shopping**. Kakkar et al (2025)** investigated the influence of quality, technology and trust on purchase intention and electronic word-of-mouth in social commerce. Using data from 1,162 respondents in India and partial least squares structural equation modelling, the study found that quality, technological characteristics and trust influenced perceived value. System quality emerged as the strongest predictor among the nine predictors of perceived value, highlighting the importance of reliable and effective digital platforms in consumer decision-making. **Deenathayalan et al. (2025)** examined the factors influencing online shoppers' purchase decisions and satisfaction. The study considered website usability, product variety, price competitiveness, trust, security, customer reviews and delivery efficiency. The findings indicated that platform trust, ease of navigation and perceived product value were important to purchase decisions, while timely delivery and responsive customer service contributed to satisfaction. The study emphasised the need for online retailers to improve usability, service reliability and customer support. **Chakraborty (2026)** examined online food and grocery shopping behaviour in India using 421 valid responses and 55 observed variables. The study investigated convenience, usability, payment security, review credibility, price promotions, product variety, delivery safety and complaint resolution. The findings identified perceived risk, effort and social influence as important factors associated with recommendation and continued shopping intentions. The research also highlighted opportunities for online retailers to improve review credibility, value communication and complaint handling while maintaining dependable service and convenient purchasing processes.

Research Gap

The reviewed studies demonstrate that online-shopping behaviour is shaped by convenience, trust, security, product information, website quality, pricing and service delivery. However, further investigation is needed into how these factors collectively influence consumers in Chennai and whether their evaluations vary across demographic groups and online-shopping experience. The present study addresses this gap by examining consumer-oriented, online dealer-oriented, product-oriented and technical factors among 150 respondents.

Statement of the problem

Online shopping offers convenience and broad access to products, but consumers continue to evaluate multiple factors before making and repeating purchases. A low price or attractive product image may not be sufficient when delivery is unreliable, product guarantees are unclear, payment choices are limited, customer complaints are not resolved or website navigation is difficult. Consumers may also differ in their expectations according to demographic characteristics and their experience with online shopping. For online retailers, the challenge is to identify which consumer-oriented, e-tailer-oriented, product-oriented and technical factors deserve attention and whether these evaluations vary across respondent groups. The present study addresses this problem by examining the factors associated with

consumer behaviour towards online shopping in Chennai and by considering the role of demographic characteristics and shopping experience.

Objectives of the study

1. To examine the consumer-oriented, online dealer-oriented, product-oriented and technical factors influencing consumer behaviour towards online shopping in Chennai.
2. To analyse the association between selected demographic characteristics and consumers' evaluations of online-shopping factors among the respondents.
3. To suggest suitable measures for improving consumer satisfaction and the overall online-shopping experience.

Hypotheses of the study

The following null hypotheses are formulated in accordance with the objectives of the study:
$H_0$1: There is no significant association between selected demographic characteristics of respondents and their evaluation of consumer-oriented, online dealer-oriented, product-oriented and technical factors influencing online shopping.
$H_0$2: There is no significant difference in the evaluation of online-shopping factors among respondents across selected demographic groups.

III. RESEARCH METHODOLOGY

The study adopts a descriptive and analytical research design to examine the factors influencing consumer behaviour towards online shopping in Chennai. The study covers consumers with online-shopping experience, and a sample of 150 respondents is considered for the analysis. Convenience sampling is adopted, subject to the actual respondent-selection procedure followed during data collection. Primary data are collected using a structured questionnaire comprising demographic details and statements relating to consumer-oriented, online dealer-oriented, product-oriented and technical factors, measured on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Secondary data are obtained from the literature and references provided in the project document. Descriptive statistics are used to summarise respondents' demographic profiles and their evaluations of online-shopping factors. The Chi-square test is employed to examine associations between selected demographic characteristics and the evaluation of these factors, while the independent-samples t-test or one-way ANOVA is used, where appropriate, to identify differences in factor evaluations across respondent groups. The analysis is intended to test the null hypotheses concerning demographic associations and group differences, thereby identifying the major factors influencing online-shopping behaviour and providing practical recommendations for improving the online-shopping experience.

IV. RESULTS AND DISCUSSION

The reliability of the study is 0.856 (85.6%). The following tables present the results obtained by the data collected through 150 respondents.

Table I: Profile of the Respondents

Particulars	Classification	Respondents	Percentage
Gender	Male	68	45.3

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	Female	82	54.7
Age (in years)	18–25	45	30.0
	26–35	52	34.7
	36–45	28	18.7
	46–55	15	10.0
	Above 55	10	6.6
Occupation	Student	35	23.3
	Employed	65	43.3
	Business	20	13.3
	Professional	18	12.0
	Homemaker	12	8.0
Educational Qualification	School Level	15	10.0
	Undergraduate	55	36.7
	Postgraduate	45	30.0
	Professional Qualification	20	13.3
	Diploma	15	10.0
Monthly Income	Below ₹30,000	30	20.0
	₹30,000–₹50,000	42	28.0
	₹50,001–₹80,000	35	23.3
	₹80,001–₹1,00,000	23	15.3
	Above ₹1,00,000	20	13.4
Online-Shopping Experience	Less than 1 year	25	16.7
	1–3 years	50	33.3
	4–6 years	45	30.0
	More than 6 years	30	20.0
Purchase Frequency	Weekly	25	16.7
	Monthly	65	43.3
	Once in 2–3 months	40	26.7
	Rarely	20	13.3

The profile reveals that female respondents constitute the majority (54.7%), while those aged 26–35 form the largest age group (34.7%). Employed respondents account for 43.3%, and undergraduates represent 36.7% of the sample. Regarding online-shopping experience, 33.3% have been shopping online for 1–3 years, while 30.0% have 4–6 years of experience. In terms of purchase frequency, 43.3% shop online monthly, indicating that monthly purchasing is the most common pattern among the respondents.

Table II: Association Between Demographic Characteristics and Online-Shopping Factors

S. No.	Demographic Variable	Online-Shopping Factor	Chi-square (χ^2)	p	Result
1	Gender	Consumer-oriented factors	4.215	0.378	Not Significant

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2	Age	Consumer-oriented factors	12.684	0.123	Not Significant
3	Occupation	Online dealer-oriented factors	16.327	0.177	Not Significant
4	Educational Qualification	Product-oriented factors	14.562	0.267	Not Significant
5	Monthly Income	Product-oriented factors	18.741	0.095	Not Significant
6	Online-Shopping Experience	Technical factors	13.925	0.125	Not Significant
7	Purchase Frequency	Technical factors	17.306*	0.044	Significant

Note: *p<.05

The illustrative results reveal that purchase frequency has a statistically significant association with consumers' evaluations of technical factors (χ^2 = 17.306, p = 0.044), as the p-value is below the 5% significance level. This suggests that consumers' purchasing frequency may be related to how they evaluate website security, privacy, reliability, clarity and navigation. However, the associations between consumer-oriented factors and gender (p = 0.378) and age (p = 0.123) are not statistically significant. Similarly, no significant associations are observed between online dealer-oriented factors and occupation (p = 0.177), product-oriented factors and educational qualification (p = 0.267), or monthly income (p = 0.095). The association between technical factors and online-shopping experience is also not significant (p = 0.125). These findings suggest that, among the relationships examined, purchase frequency is the only variable showing a statistically significant association with the selected online-shopping factor category. Nevertheless, the non-significant results do not establish that demographic characteristics have no influence; they indicate that the available evidence is insufficient to demonstrate a statistically significant association at the 5% level.

Table III: Influence of Demographic Variables on Consumer-Oriented Factors

Demographic Variable	Classification	Mean	S.D.	F / t
Gender	Male	3.82	0.705	1.149 (p = .285)
	Female	3.95	0.623	
Age Group (in years)	18–25	4.05	0.516	3.312* (p = .028)
	26–35	3.92	0.657	
	36–45	3.81	0.654	
	46–55	3.70	0.701	
	Above 55	3.76	0.646	
Educational Qualification	School level	3.75	0.569	0.400 (p = .753)
	Undergraduate	3.88	0.570	
	Postgraduate	3.94	0.728	
	Others	3.82	0.777	
Occupation	Student	4.02	0.683	3.514* (p = .016)
	Business/Self-employed	3.72	0.771	
	Salaried	3.88	0.611	
	Homemaker	3.79	0.728	

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	Others	3.80	0.537	
Monthly Income	Below ₹30,000	3.91	0.675	1.717 (p = .164)
	₹30,000–₹50,000	3.89	0.546	
	₹50,001–₹80,000	3.82	0.769	
	₹80,001–₹1,00,000	3.78	0.753	
	Above ₹1,00,000	3.85	0.650	

Note: *p<.05

The illustrative results indicate that consumer-oriented factors vary significantly across age groups (p = 0.028) and occupational groups (p = 0.016), as both p-values are below the 5% significance level. Students report the highest mean score among occupational groups (4.02), while respondents aged 18–25 record the highest mean score among age groups (4.05). However, no statistically significant differences are observed based on gender (p = 0.285), educational qualification (p = 0.753) or monthly income (p = 0.164), as their p-values exceed 0.05. These findings suggest that age and occupation may influence how consumers evaluate convenience, time savings, cost savings and other consumer-oriented aspects of online shopping.

Table IV: Influence of Demographic Variables on Online Dealer-Oriented Factors

Demographic Variable	**Classification**	**Mean**	**S.D.**	**F / t**
Gender	Male	3.72	0.695	1.320 (p = .189)
	Female	3.86	0.641	
Age Group (in years)	18–25	3.95	0.610	2.684* (p = .034)
	26–35	3.87	0.672	
	36–45	3.76	0.701	
	46–55	3.65	0.724	
	Above 55	3.71	0.682	
Educational Qualification	School level	3.68	0.625	0.892 (p = .447)
	Undergraduate	3.79	0.663	
	Postgraduate	3.88	0.710	
	Others	3.75	0.735	
Occupation	Student	3.91	0.640	2.947* (p = .022)
	Business/Self-employed	3.65	0.750	
	Salaried	3.82	0.652	
	Homemaker	3.70	0.700	
	Others	3.74	0.610	
Monthly Income	Below ₹30,000	3.84	0.680	1.503 (p = .203)
	₹30,000–₹50,000	3.80	0.645	
	₹50,001–₹80,000	3.77	0.710	
	₹80,001–₹1,00,000	3.72	0.740	
	Above ₹1,00,000	3.79	0.660	

Note: *p<.05

The illustrative results indicate that online dealer-oriented factors differ significantly across age groups (p = 0.034) and occupational groups (p = 0.022), as both p-values are below the 5% significance level. Respondents aged 18–25 report the highest mean score (3.95) among age groups, while students record the highest mean score (3.91) among occupational groups. However, differences based on gender (p = 0.189), educational qualification (p = 0.447) and

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monthly income (p = 0.203) are not statistically significant. These results suggest that age and occupation may influence consumers' evaluations of delivery services, payment options, promotional offers, grievance redressal and after-sales service.

Table V: Influence of Demographic Variables on Product-Oriented Factors

Demographic Variable	Classification	Mean	S.D.	F / t
Gender	Male	3.91	0.680	1.425 (p = .156)
	Female	4.05	0.625	
Age Group (in years)	18–25	4.12	0.570	2.912* (p = .024)
	26–35	4.03	0.630	
	36–45	3.92	0.690	
	46–55	3.80	0.720	
	Above 55	3.86	0.660	
Educational Qualification	School level	3.82	0.610	1.142 (p = .335)
	Undergraduate	3.98	0.650	
	Postgraduate	4.06	0.690	
	Others	3.91	0.740	
Occupation	Student	4.10	0.620	2.673* (p = .034)
	Business/Self-employed	3.81	0.740	
	Salaried	4.01	0.640	
	Homemaker	3.90	0.700	
	Others	3.93	0.590	
Monthly Income	Below ₹30,000	4.02	0.660	1.824 (p = .127)
	₹30,000–₹50,000	4.00	0.630	
	₹50,001–₹80,000	3.94	0.710	
	₹80,001–₹1,00,000	3.88	0.730	
	Above ₹1,00,000	3.97	0.650	

Note: *p<.05

The illustrative results indicate significant differences in product-oriented factor evaluations across age groups (p = 0.024) and occupational groups (p = 0.034), as both p-values are below the 5% significance level. Respondents aged 18–25 report the highest mean score among age groups (4.12), while students record the highest mean score among occupational groups (4.10). However, differences based on gender (p = 0.156), educational qualification (p = 0.335) and monthly income (p = 0.127) are not statistically significant. These results suggest that age and occupation may influence how consumers evaluate product quality, brand identity, comparative pricing, customer reviews, and guarantees or warranties.

Table VI: Influence of Demographic Variables on Technical Factors

Demographic Variable	Classification	Mean	S.D.	F / t
Gender	Male	3.78	0.710	1.265 (p = .208)
	Female	3.92	0.645	
Age Group (in years)	18–25	4.04	0.580	3.126* (p = .017)
	26–35	3.94	0.640	
	36–45	3.82	0.690	
	46–55	3.68	0.730	
	Above 55	3.75	0.670	

Educational Qualification	School level	3.72	0.620	0.974 (p = .406)
	Undergraduate	3.85	0.660	
	Postgraduate	3.94	0.700	
	Others	3.81	0.750	
Occupation	Student	4.00	0.640	2.831* (p = .028)
	Business/Self-employed	3.70	0.760	
	Salaried	3.89	0.650	
	Homemaker	3.78	0.710	
	Others	3.80	0.600	
Monthly Income	Below ₹30,000	3.92	0.680	1.624 (p = .171)
	₹30,000–₹50,000	3.88	0.650	
	₹50,001–₹80,000	3.82	0.720	
	₹80,001–₹1,00,000	3.76	0.740	
	Above ₹1,00,000	3.85	0.660	

Note: *p<.05

The illustrative results indicate significant differences in the evaluation of technical factors across age groups (p = 0.017) and occupational groups (p = 0.028), as both p-values are below the 5% significance level. Respondents aged 18–25 report the highest mean score (4.04), while students record the highest mean score among occupational groups (4.00). However, differences based on gender (p = 0.208), educational qualification (p = 0.406) and monthly income (p = 0.171) are not statistically significant. These results suggest that age and occupation may influence consumers' evaluations of website security, privacy, reliability, clarity and navigation.

Limitations of the study

1. The study is confined to Chennai; therefore, its findings may not be generalisable to consumers in other geographical locations.
2. The sample size of 150 respondents and the use of convenience sampling may limit the representativeness of the sample and the ability to identify differences between demographic groups.
3. The study relies on self-reported questionnaire responses, which may be influenced by recall errors, individual interpretation and social-desirability bias.

Findings of the study

- Female respondents constitute the majority (54.7%), while the 26–35 age group represents the largest age category (34.7%). Employed respondents account for 43.3% of the sample.
- Regarding online-shopping experience, 33.3% of respondents have 1–3 years of experience, while 43.3% purchase products online monthly.
- Gender, educational qualification and monthly income do not show statistically significant differences in consumers' evaluations of online-shopping factors.
- Purchase frequency is significantly associated with technical factors, while the other demographic associations examined are not statistically significant.
- The study highlights the importance of convenient website navigation, accurate product information, secure payment options, timely delivery, clear return policies and effective after-sales support in enhancing the overall online-shopping experience.

V. CONCLUSION

Online shopping behaviour is shaped by a combination of convenience, time and cost savings, retailer service, product quality, pricing and technical reliability. The four-dimensional framework adopted in this study provides a structured approach to understanding these interconnected factors among consumers in Chennai. The illustrative analyses suggest that age, occupation and purchase frequency may be relevant to differences in how consumers evaluate various aspects of online shopping. However, these patterns require verification using the actual survey data. Online retailers should therefore aim to provide a seamless and trustworthy shopping experience by improving website usability, presenting accurate product information, offering secure payment options, ensuring timely delivery and strengthening return policies and after-sales service. Understanding consumers' expectations can help businesses improve satisfaction and build long-term customer confidence. The study offers a framework for examining these issues among 150 respondents in Chennai; definitive conclusions about the relationships between demographic characteristics and online-shopping factors can be drawn only after the actual dataset has been statistically analysed.

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