Anusandhanvallari
Vol 2026, No.1
November 2026
ISSN 2229-3388

Changing Consumer Preferences and Online Purchasing: An Analysis of Post-Pandemic Shopping Behaviour in Madurai District

Durga Devi G[1] & Dr Geetha V[2]

[1]Research Scholar PG and Research Department of Commerce Mannar Thirumalai Naicker College (Autonomous) Madurai

[2]Assistant Professor PG and Research Department of Commerce Mannar Thirumalai Naicker College (Autonomous) Madurai

Abstract: The COVID-19 pandemic brought significant changes in consumer shopping behaviour, encouraging greater adoption of online shopping. This study examines the influence of perceived benefits and attitude towards online shopping on consumers' intention to use online shopping in Madurai District. A descriptive research design was adopted, and data were collected from 165 respondents through purposive sampling using a structured questionnaire. Descriptive statistics and multiple regression analysis were employed. The findings reveal that perceived benefits ($\beta = 0.252$, $p < 0.001$) and attitude towards online shopping ($\beta = 0.615$, $p < 0.001$) significantly and positively predict online shopping intention, explaining 46.6% of its variance. Attitude emerged as the stronger predictor. The study highlights the importance of fostering positive consumer attitudes and communicating perceived benefits to encourage continued online shopping adoption.

Keywords: Consumer Behaviour, COVID-19, Perceived Benefits, Online Shopping Attitude, Purchase Intention

1 Introduction

The rapid advancement of digital technologies and the expansion of electronic commerce have fundamentally transformed consumer buying behaviour across the world. Online shopping has emerged as an alternative to conventional retailing by offering consumers greater convenience, accessibility, product variety, price transparency, and flexibility in purchasing decisions. Traditionally, consumers relied on physical retail outlets, where purchasing decisions were influenced by direct product examination, personal interaction with sellers, immediate product availability, and established relationships with local retailers. However, the increasing adoption of internet-enabled devices, digital payment systems, and e-commerce platforms has gradually altered these conventional shopping practices. The outbreak of the coronavirus disease (COVID-19) pandemic further accelerated this transformation by creating circumstances in which consumers were compelled to reconsider their established purchasing habits. Cetină et al. (2022) observed that digital technologies had already reshaped consumer purchasing processes before the pandemic, while the restrictions associated with COVID-19 substantially influenced consumers' attitudes, perceived benefits, and intentions to continue shopping online. Similarly, Roy and Datta (2023), in their comprehensive review of consumer buying behaviour before, during, and after COVID-19, identified convenience, payment methods, and promotional offers as important factors shaping consumer preferences across online and offline retail channels.

Before the COVID-19 pandemic, traditional retail shopping remained an important purchasing channel because it enabled consumers to physically inspect products, assess their quality, negotiate prices where applicable, and obtain goods immediately. Physical stores also facilitated interpersonal communication, direct customer service, and a sense of familiarity and trust between buyers and sellers. Although online shopping offered advantages such as home delivery, product comparisons, and access to multiple brands, concerns regarding product authenticity, payment security, delivery delays, return procedures, and the inability to examine products directly could discourage consumers from adopting digital purchasing channels. Alam (2022) highlighted the differences between online and offline shopping preferences, particularly the importance of product characteristics,

convenience, personal service, and the ability to inspect goods before purchase. These distinctions suggest that consumer preferences for different shopping channels are shaped not only by technological accessibility but also by perceptions of value, risk, service quality, and the overall purchasing experience.

The COVID-19 pandemic represented a significant turning point in consumer shopping behaviour, as restrictions on mobility, temporary closures of physical retail establishments, and concerns about interpersonal contact increased the importance of alternative purchasing channels. During the pandemic, online shopping became an important means of obtaining essential products while reducing the need to visit crowded marketplaces. Consumers increasingly relied on digital platforms for groceries, household necessities, personal care products, medicines, and other commodities. Joshi et al. (2021), in their study of consumer behaviour during the pandemic, reported a shift from traditional offline shopping towards online purchasing, with consumers placing greater emphasis on essential commodities, including groceries, vegetables, toiletries, and medicines. Their findings indicated that changing circumstances influenced not only the choice of shopping channel but also the categories of products purchased. Likewise, Jamunadevi et al. (2021), in an empirical study involving 307 respondents, examined changes in consumer online purchasing behaviour during COVID-19 and identified the relevance of free shipping, promotional benefits, payment options, product variety, and return facilities in shaping online purchase decisions.

The pandemic also altered the economic and psychological considerations associated with consumer purchasing behaviour. Uncertainty regarding employment, household income, product availability, and future economic conditions encouraged consumers to reconsider their expenditure patterns and purchasing priorities. Deshmukh (2021), in a study involving 200 respondents from Jalgaon City, Maharashtra, reported that 94% of respondents experienced a reduction in expenditure during the pandemic. This finding illustrates the importance of economic circumstances in understanding changes in consumer buying behaviour. In addition, Medimpudi et al. (2021), in a study of medicine purchasing through online pharmacies and retail outlets in Andhra Pradesh, found that the pandemic increased awareness of online pharmacies and encouraged some consumers to adopt online medicine purchasing. However, their findings also demonstrated the continuing relevance of local retail pharmacies, suggesting that the adoption of online shopping did not necessarily eliminate consumers' preferences for physical stores.

Beyond accessibility and economic considerations, consumer attitudes, perceived benefits, and emotional experiences play an important role in determining online shopping behaviour. Cetină et al. (2022), using data from 338 online shoppers, demonstrated relationships among perceived benefits, consumer attitudes, loyalty, and intentions to continue using online shopping platforms. Their findings suggest that the continuation of online purchasing depends on consumers' evaluations of their experiences and the advantages associated with digital retailing. Miş (2022), in a study involving 203 participants in Northern Cyprus, found that emotional responses, particularly pleasure and arousal, influenced attitudes towards online purchasing, while positive attitudes were associated with future purchasing intentions. These studies indicate that online shopping is not merely a functional alternative to conventional retailing but also involves psychological evaluations, satisfaction, and behavioural intentions that may influence continued usage.

The growing importance of customer experience and service quality has further contributed to changes in online shopping preferences. Consumers purchasing through digital platforms generally evaluate several service-related attributes, including the ease of placing orders, availability of payment options, product information, delivery reliability, customer support, and the effectiveness of return and refund procedures. Heyns and Kilbourn (2022), in their study of young consumers in South Africa, observed that online shopping behaviour either remained unchanged or increased for most respondents during the pandemic. Their findings further revealed that order fulfilment and delivery-related service quality were particularly important to young online consumers. Similarly, Puri and Kathar (2022), in their study of working women in Aurangabad City, Maharashtra, highlighted the

importance of product availability, selection, price comparisons, customer reviews, and convenience in influencing online shopping behaviour. These findings suggest that consumers' continued engagement with e-commerce platforms may depend on their ability to deliver reliable and satisfactory purchasing experiences.

An important question emerging from the pandemic-induced expansion of e-commerce concerns the extent to which changes in shopping behaviour have continued after the relaxation of COVID-19 restrictions. Tinonetsana and Msosa (2023), in their qualitative investigation of consumer behavioural trends during and after the pandemic, found that although online shopping increased during COVID-19 because of health concerns and convenience, participants subsequently demonstrated a return towards physical stores. The study also identified a growing emphasis on value-based purchasing and recommended the integration of online and offline retail channels. This finding highlights the possibility that post-pandemic shopping behaviour may involve continued online purchasing, renewed offline preferences, or a combination of both channels rather than a complete transition from traditional retailing to digital commerce.

In the Indian context, understanding post-pandemic consumer behaviour is particularly relevant because shopping preferences are likely to vary across geographical locations, socioeconomic categories, age groups, occupations, and levels of digital familiarity. While existing studies have examined consumer buying behaviour in locations such as Pune, Jalgaon, Aurangabad, and Andhra Pradesh, their findings cannot automatically be generalised to every district or consumer segment. Madurai District, Tamil Nadu, provides a relevant geographical setting for examining the interaction between established offline shopping practices and the increasing availability of online purchasing alternatives. Consumers may evaluate online and offline shopping differently depending on factors such as income, education, occupation, product preferences, perceived convenience, digital payment familiarity, delivery accessibility, trust, and previous purchasing experiences. Examining these factors at the district level can provide a more context-specific understanding of how consumer shopping behaviour has evolved in the post-pandemic period.

Despite the growing body of literature on COVID-19 and online consumer behaviour, an important distinction remains between studies investigating shopping practices during the pandemic and those examining the sustainability of behavioural changes after the pandemic. Much of the evidence presented by Joshi et al. (2021), Jamunadevi et al. (2021), and Puri and Kathar (2022) relates to consumer responses during periods of pandemic-related disruption. In contrast, Roy and Datta (2023) and Tinonetsana and Msosa (2023) emphasised the need to consider consumer behaviour across different pandemic phases and to understand the relationship between online and offline purchasing preferences. The reviewed literature provides useful evidence regarding consumer shopping preferences and their determinants; however, these studies do not directly establish the nature and extent of post-pandemic changes among consumers in Madurai District.

Against this background, the present study, seeks to examine changes in consumer shopping preferences and purchasing practices across the pre-pandemic and post-pandemic periods. Specifically, the study aims to investigate variations in preferred shopping channels, frequency of online purchases, product categories purchased, spending patterns, and the factors influencing online shopping adoption and continuance. By examining various dimensions within the local context of Madurai District, the study is intended to contribute to the understanding of post-pandemic consumer behaviour and provide useful insights for retailers, e-commerce businesses, marketers, and other stakeholders seeking to develop consumer-oriented strategies in an increasingly integrated retail environment.

2 Review of Literature

2.1 Perceived Benefits of Online Shopping

Perceived benefits, including convenience, time savings, competitive prices, product variety, and home delivery, significantly influence consumers' online purchasing behaviour. Pham et al. (2020) found that COVID-19

awareness influenced consumers' perceived benefits of online shopping in Vietnam. Similarly, Cetină et al. (2022) established that perceived benefits played an important role in shaping consumer attitudes and continuance intentions. Jamunadevi et al. (2021) highlighted the importance of free shipping, promotional offers, and flexible payment options in influencing online purchases during the pandemic.

2.2 Attitude Towards Online Shopping

Attitude towards online shopping reflects consumers' positive or negative evaluations of purchasing through digital platforms. Cetină et al. (2022) identified consumer attitude as an important factor in explaining online shopping continuance. Miș (2022) found that positive emotional experiences influenced favourable attitudes, which subsequently strengthened future purchasing intentions. Khatoon et al. (2024) reported that perceived benefits positively influenced attitudes towards online shopping among Indian consumers, highlighting the importance of convenience and usefulness in shaping consumer perceptions.

2.3 Intention to Use Online Shopping

Intention to use online shopping refers to consumers' willingness to purchase products through digital platforms in the future. Cetină et al. (2022) demonstrated that perceived benefits and attitudes were important in explaining online shopping continuance intention. Khatoon et al. (2024) found that perceived benefits and favourable consumer attitudes positively influenced behavioural intentions towards online shopping. However, Tinonetsana and Msosa (2023) observed that some consumers returned to physical stores after the pandemic, indicating that increased online shopping adoption during COVID-19 may not necessarily result in sustained online purchasing behaviour.

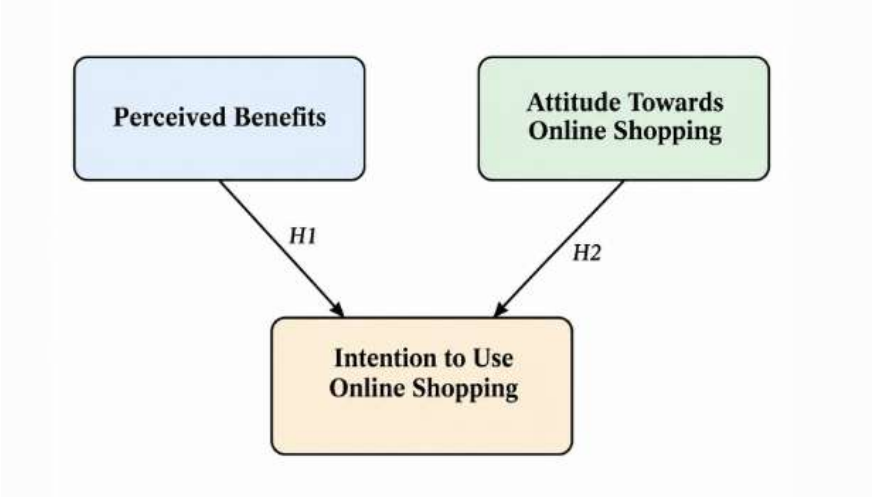
2.4 Research Gap

Previous studies have established relationships among perceived benefits, consumer attitudes, and online shopping intentions during and after COVID-19. However, the reviewed studies provide limited evidence specific to consumers in Madurai District. Therefore, the present study examines the influence of perceived benefits on intention to use online shopping, with attitude towards online shopping as a mediating variable, in the post-pandemic context.

Based on the above discussions the following hypothesis are formulated

H1: Attitude Towards Online Shopping significantly and positively influences Intention to Use Online Shopping

H2 Perceived Benefits significantly and positively influences Intention to Use Online Shopping



3 Research Methodology

3.1 Research Design

The present study adopted a descriptive research design to examine post-pandemic changes in consumer shopping behaviour in Madurai District, Tamil Nadu. The study focused on three variables: perceived benefits, attitude towards online shopping, and intention to use online shopping. A quantitative research approach was employed to investigate the relationships between these variables.

3.2 Sampling Technique and Sample Size

The study employed a non-probability purposive sampling technique to select respondents with experience or familiarity in online shopping. A total of 165 respondents from Madurai District constituted the sample for the study. Purposive sampling was considered appropriate for obtaining responses from consumers capable of providing relevant information about online shopping behaviour in the post-COVID-19 period.

3.3 Data Collection

Primary data were collected using a structured questionnaire administered to the selected respondents. The questionnaire consisted of two sections. The first section collected demographic information, while the second section measured perceived benefits, attitude towards online shopping, and intention to use online shopping. Responses to the measurement items were recorded using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

3.4 Measurement of Variables

The measurement scales were adapted from established studies to ensure their relevance to the research objectives.

- Perceived Benefits: Measurement items were adapted from Mehrolia et al. (2020).
- Attitude Towards Online Shopping: Measurement items were adapted from Hernandez et al. (2009) and McLean et al. (2020).
- Intention to Use Online Shopping: Measurement items were adapted from Hernandez et al. (2009) and Wang et al. (2019).

The items were contextualised to examine online shopping behaviour among consumers in Madurai District following the COVID-19 pandemic.

4 Analysis and findings

This section presents the analysis and interpretation of data relating to consumers' online shopping behaviour in Madurai District in the post-COVID-19 context. The study focuses on examining the influence of perceived benefits and attitude towards online shopping on consumers' intention to use online shopping. A structured questionnaire was used to collect responses from 165 respondents selected through purposive sampling. The collected data were analysed using descriptive and inferential statistical techniques

4.1 Percentage Analysis

Table 1 presents the demographic profile of 165 respondents. Regarding gender, female respondents constituted the majority (61.2%), while males accounted for 38.8%. In terms of age, most respondents were aged up to 30 years (55.8%), followed by those aged 30–40 years (35.2%) and above 40 years (9.1%). Concerning educational qualifications, degree holders represented the largest proportion (37.0%), followed by diploma/ITI holders (23.6%) and respondents with other qualifications (21.8%). Regarding marital status, 58.2% were married, while

41.8% were unmarried. In terms of employment, 39.4% were unemployed, 34.5% were employed full-time, and 26.1% were employed part-time.

Table 1 Demographic Profile of Respondents

Characteristics	Respondents	Frequency (n)	Percentage (%)
Gender	Male	64	38.8
	Female	101	61.2
Age	Up to 30 years	92	55.8
	30–40 years	58	35.2
	Above 40 years	15	9.1
Educational Qualification	Up to High School	12	7.3
	Diploma / ITI	39	23.6
	Degree	61	37.0
	PG Degree	17	10.3
	Others	36	21.8
Marital Status	Married	96	58.2
	Unmarried	69	41.8
Employment Status	Full-time employed	57	34.5
	Part-time employed	43	26.1
	Not employed	65	39.4

4.2 Regression Analysis

Table 1 presents the results of multiple regression analysis examining the influence of perceived benefits and attitude towards online shopping on consumers' intention to use online shopping. The results indicate a moderately strong relationship between the predictors and the dependent variable ($R = 0.682$). The R^2 value of 0.466 reveals that perceived benefits and attitude towards online shopping collectively explain 46.6% of the variance in consumers' intention to use online shopping. The adjusted R^2 value of 0.459 further indicates that the model maintains reasonable explanatory power after accounting for the number of predictors. The standard error of the estimate (0.30670) reflects the average magnitude of prediction errors. Overall, the findings suggest that perceived benefits and attitude towards online shopping are important factors in explaining consumers' online shopping intentions. Table 2 presents the individual contributions of perceived benefits and attitude towards online shopping in predicting consumers' intention to use online shopping. The regression model is statistically significant ($F = 70.558$, $p < 0.001$), indicating that the predictors collectively contribute to explaining online shopping intention. Perceived benefits have a positive and statistically significant influence on intention to use online shopping ($B = 0.170$, $\beta = 0.252$, $t = 4.372$, $p < 0.001$). This suggests that consumers who perceive greater benefits from online shopping tend to report stronger intentions to use it. Similarly, attitude towards online shopping demonstrates a positive and statistically significant influence on intention ($B = 0.463$, $\beta = 0.615$, $t = 10.675$, $p < 0.001$). The

higher standardized beta coefficient indicates that attitude towards online shopping is a stronger predictor of intention than perceived benefits, after controlling for the other predictor.

Overall, the findings establish that both perceived benefits and attitude towards online shopping significantly and positively predict consumers' intention to use online shopping. However, attitude emerges as the more influential predictor, highlighting the importance of favourable consumer attitudes in strengthening online shopping intentions. These findings suggest that improving consumers' perceptions of online shopping benefits and fostering positive attitudes may contribute to greater adoption of online shopping.

Table 1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.682[a]	.466	.459	.30670
a. Predictors: (Constant), Perceived Benefits, Attitude Towards Online Shopping				

Table 2 Regression Co-efficientts

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.592	.230		6.919	.000
	Perceived Benefits	.170	.039	.252	4.372	.000
	Attitude Towards Online Shopping	.463	.043	.615	10.675	.000
a. Dependent Variable: Intention to use Online Shopping						
F = 70.558 (.000)						

Conclusion

The study examined the influence of perceived benefits and attitude towards online shopping on consumers' intention to use online shopping in Madurai District in the post-COVID-19 context. The findings reveal that both perceived benefits and attitude towards online shopping are positively and significantly associated with consumers' online shopping intentions. The regression model explains 46.6% of the variation in online shopping intention, indicating the relevance of these factors in understanding consumer behaviour.

Among the predictors, attitude towards online shopping demonstrates a stronger relationship with purchase intention than perceived benefits. This suggests that favourable consumer attitudes play an important role in encouraging the continued use of online shopping platforms. The findings also indicate that perceived benefits contribute positively to online shopping intentions.

The study suggests that online retailers should focus on improving consumers' shopping experiences, strengthening trust, enhancing convenience, and communicating the benefits of digital shopping to encourage favourable attitudes. However, the use of purposive sampling and the geographical restriction to Madurai District

limit the generalisability of the findings. Future studies may consider larger and more diverse samples and additional factors influencing online shopping behaviour. Overall, the study contributes to understanding the factors associated with consumers' online shopping intentions in the post-pandemic environment.

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