VILNIUS TECH
Vilnius Gediminas Technical University

Business, Management and Economics Engineering
ISSN: 2669-2481 / eISSN: 2669-249X
2025 Volume 23 Issue 01

ONLINE PURCHASE PHOBIA AMONG CONSUMERS IN KERALA: AN ANALYSIS OF KEY INFLUENCING FACTORS

Rasheeda R V
Research Scholar, Dept. of Commerce, Govt. College Nedumangad, Thiruvananthapuram

Dr. Rejani R Nair
Associate Professor, Dept. of Commerce, Govt. Arts College, Thycaud, Thiruvananthapuram

Abstract

This study investigates the phenomenon of online purchase phobia among consumers in Kerala and examines the key factors influencing it. A total of 167 respondents were selected through stratified random sampling from across Kerala. Data were collected using a structured questionnaire and analysed using descriptive statistics, ANOVA, and multiple linear regression. The findings reveal that education level, monthly family income, and digital literacy significantly predict levels of online purchase phobia, with higher levels of education, income, and digital literacy associated with reduced fear and anxiety related to online shopping. Phobia levels also varied significantly across product categories, with jewellery and electronics causing the most apprehension. Furthermore, consumers who shop online more frequently exhibited lower levels of purchase phobia, emphasizing the role of experience and trust. The study offers valuable insights for e-commerce platforms, marketers, and policymakers to enhance digital inclusion and reduce psychological barriers to online commerce, thereby promoting greater participation in digital markets across Kerala.

Keywords: Online Purchase Phobia, Consumer Behaviour, Digital Literacy E-Commerce in Kerala

Introduction

The rapid expansion of e-commerce has significantly transformed consumer behaviour, offering unprecedented convenience, product variety, and accessibility through digital platforms. Online shopping allows consumers to browse, compare, and purchase products anytime, bypassing the traditional physical store experience. Technological advancements, secure payment systems, and widespread smartphone penetration have accelerated this shift, particularly during the COVID-19 pandemic, which further normalized online retail globally (Kumar et al., 2021). Despite these advancements, a segment of consumers continues to exhibit hesitation and anxiety when engaging in online transactions, especially when purchasing high-value or non-tangible items (Gefen et al., 2003).

This phenomenon, often referred to as online purchase phobia, encompasses psychological discomfort, mistrust, and anxiety that inhibit consumers from completing online transactions. Studies have identified several contributing factors to this phobia, including concerns about data privacy, lack of product authenticity, difficulty in returning defective goods, and fear of financial fraud (Forsythe et al., 2006; Pavlou, 2003). Moreover, consumer responses vary across demographic and behavioural dimensions such as education level,

income, product familiarity, digital literacy, and shopping frequency (Sharma & Gupta, 2020; Park et al., 2023). Digital literacy—the ability to use digital tools effectively, assess online information critically, and navigate digital platforms securely—has emerged as a crucial determinant of consumers' confidence and trust in online shopping environments.

In the context of Kerala, a state known for its high literacy rate and increasing digital penetration, the prevalence of online purchase phobia presents a unique paradox. While infrastructure and digital awareness are relatively advanced, a significant portion of the population remains sceptical of online shopping, especially when it involves luxury or fragile goods (Nair & Pillai, 2021). Understanding the key influencing factors—such as education level, monthly family income, digital literacy, product category, and shopping behaviour—is vital for both researchers and marketers. This study, therefore, aims to analyse how these variables contribute to online purchase phobia among consumers in Kerala, providing insights to improve digital consumer trust and foster inclusive e-commerce adoption in the region.

Background of the Study

The emergence of e-commerce has revolutionized the retail landscape by facilitating borderless transactions, personalized product recommendations, and 24/7 access to goods and services. As of 2024, India remains one of the fastest-growing e-commerce markets globally, driven by increased internet penetration, widespread smartphone usage, and advancements in digital payment systems (Statista, 2023). Consumers increasingly turn to online platforms for the convenience, variety, and flexibility they offer. However, despite these innovations, a notable segment of consumers continues to exhibit hesitation or anxiety when engaging in online shopping. This reluctance—paradoxical in the face of rapid digital progress—has led to the conceptualization of *online purchase phobia*, a multidimensional construct marked by fear, distrust, and psychological discomfort associated with making purchases via digital platforms (Jacoby & Kaplan, 1972).

This phobia often stems from perceived risks linked to online transactions, including concerns about payment fraud, data breaches, product misrepresentation, delays in delivery, and challenges in product returns (Forsythe et al., 2006; Kim et al., 2008). These fears are further influenced by individual differences across demographic and behavioural factors. For instance, education level and monthly family income often correlate with reduced perceived risk, as consumers with higher education and income levels may have greater exposure to digital technologies and stronger coping mechanisms for transaction failures (Pavlou, 2003). Furthermore, *digital literacy*—defined as the ability to locate, evaluate, and effectively use digital information—plays a critical role in shaping consumer confidence and decision-making in online environments. Individuals with higher digital literacy are more likely to navigate e-commerce platforms efficiently and securely, thus reducing anxiety and mistrust (Park et al., 2023). Additionally, previous negative experiences and product categories—especially high-value items like electronics and jewellery—can significantly heighten phobia due to higher stakes and perceived uncertainty (Sharma & Gupta, 2020).

Kerala presents a compelling context to investigate the nuances of online purchase phobia. Despite its status as one of India's most digitally literate states, and its robust internet infrastructure, a significant proportion of consumers in Kerala continue to prefer conventional shopping channels (Mathew & Thomas, 2019). This behaviour is rooted in traditional

consumer culture, a preference for physical inspection of goods, and scepticism towards online platforms for high-risk transactions. Even with strong literacy rates and increased digital penetration, trust in digital commerce remains uneven, especially across product categories and demographic groups (Nair & Pillai, 2021). Social factors, technological exposure, and behavioural readiness must all be considered when examining consumer phobia. Therefore, the current study aims to explore how variables such as education level, monthly family income, digital literacy, product category, and frequency of online shopping contribute to online purchase phobia in Kerala. Such an investigation holds value for developing inclusive, consumer-centric digital strategies that can bridge the trust gap and foster broader e-commerce adoption in the region.

Review of Literature

Patel (2016) conducted a study to understand the influence of socioeconomic status on consumer trust and anxiety in digital commerce platforms. The sample included 420 consumers from urban and semi-urban areas across three Indian states. The study aimed to determine whether income and educational attainment significantly affect users' comfort levels with online shopping. Results showed that higher levels of education and income significantly reduced the perceived risk of online transactions. The study concluded that these variables serve as buffers against digital uncertainty and reinforce trust in online platforms.

Sarkar and Dutta (2017) explored behavioural barriers associated with online shopping among new internet users in eastern India. Using a purposive sample of 350 participants who had started using the internet within the previous three years, the study examined the impact of digital familiarity, peer influence, and perceived credibility of websites on shopping hesitancy. The findings revealed that lack of digital experience and fear of scams were the most dominant predictors of reluctance to purchase online. The researchers emphasized the role of early digital education in reducing behavioural phobias toward e-commerce.

Kumar and Joseph (2019) analysed the effect of frequency of online shopping on purchase confidence and anxiety. The study sampled 500 frequent and infrequent online shoppers in South India. The objective was to compare the anxiety levels between those who shop online regularly and those who rarely engage in digital purchases. Results revealed that frequent users demonstrated lower levels of purchase phobia, while infrequent users expressed fear related to product quality, delayed delivery, and transaction failures. The authors concluded that repeated exposure helps normalize the online shopping experience and diminish related fears.

Sharma (2020) examined how product category influences consumer reluctance to engage in e-commerce. The study utilized a stratified random sample of 400 participants across different income groups and genders. The objective was to assess which product categories evoked the most hesitation among consumers. The findings showed that high-value items such as electronics and luxury goods generated the highest levels of purchase phobia, while lower-value goods like groceries and fashion accessories triggered minimal resistance. The study suggested that risk perception is closely tied to both monetary value and perceived return complications.

Ramesh and Ali (2021) investigated the impact of digital literacy on online consumer behaviour. The research was based on a sample of 600 college students and working

professionals in metropolitan areas. The study aimed to evaluate whether digital literacy levels could predict the likelihood of experiencing online shopping-related fears. Results indicated a strong negative correlation between digital literacy and online purchase phobia. Participants who rated themselves as digitally competent exhibited greater confidence in navigating e-commerce platforms and were less likely to report anxiety or hesitation during purchases.

Meena (2022) studied the relationship between age and purchase phobia on digital platforms among middle-aged and senior consumers. A sample of 280 individuals aged 40 and above was selected from urban households. The study aimed to determine whether generational differences influenced attitudes toward online shopping. The findings revealed that older participants were more likely to experience distrust and fear during online transactions. Concerns related to cybercrime, misuse of financial data, and complexity of return policies were frequently cited as barriers. The author recommended tailored support systems and user-friendly interfaces to address generational disparities.

Thomas and Jacob (2023) explored the combined effect of peer influence and past online shopping experience on purchase-related anxiety. The study used a sample of 370 university students aged between 18 and 25 years. The objective was to investigate how social encouragement and positive past interactions influenced online purchase behaviour. Results demonstrated that peer endorsement significantly reduced perceived risk and boosted confidence, especially when prior purchase experiences were successful. The researchers concluded that social reassurance, coupled with experiential learning, plays a significant role in mitigating online shopping phobia among young consumers.

Research Questions

1. To what extent do education level, monthly family income, and digital literacy predict online purchase phobia among consumers in Kerala?
2. Does online purchase phobia differ significantly across different product categories?
3. Does the frequency of online shopping influence the level of online purchase phobia?

Research Objectives

1. To examine the predictive influence of education level, monthly family income, and digital literacy on online purchase phobia among consumers in Kerala.
2. To analyse whether online purchase phobia differs significantly across different product categories.
3. To assess whether online purchase phobia varies based on the frequency of online shopping.

Hypotheses

H_1: Education level, monthly family income, and digital literacy significantly predict online purchase phobia.

H_2: There is a significant difference in online purchase phobia across different product categories.

H_3: There is a significant difference in online purchase phobia based on the frequency of online shopping.

Methodology

The present study adopted a quantitative, descriptive survey research design to explore the levels and influencing factors of online purchase phobia among consumers in Kerala. This

design was appropriate for systematically collecting and analysing data from a diverse population to identify relationships among key variables such as education level, monthly family income, digital literacy, product category, and frequency of online shopping. The primary objective was to assess both the predictive and comparative influence of these selected demographic, cognitive, and behavioural variables on the level of fear or reluctance consumers experience while making online purchases.

The population for the study comprised online consumers residing in all 14 districts of Kerala. A stratified random sampling technique was employed to ensure proportional representation across regions, with strata based on district-wise population distribution. From this population, a total of 167 respondents were selected, covering a wide range of age groups, education levels, income brackets, and digital exposure. Stratification ensured that regional and demographic diversity was adequately captured, thereby enhancing the generalizability and external validity of the findings.

A structured questionnaire was developed as the primary tool for data collection. The instrument included multiple closed-ended items designed to assess different dimensions of online purchase phobia, including anxiety during online transactions, fear of data breaches, discomfort with high-value purchases, and perceived risk related to product returns and fraud. In addition, a digital literacy scale was included to measure respondents' self-reported ability to navigate, evaluate, and utilize digital tools for online shopping. Responses were captured using 5-point Likert-type scales, multiple-choice questions, and item-based category ranking. The questionnaire underwent a pilot test with a smaller sample for checking clarity, validity, and internal consistency, following which necessary refinements were made.

The data collection process spanned a duration of two months and was carried out through both online (Google Forms, email, and messaging apps) and offline (field visits) modes. Informed consent was obtained from all participants, and strict confidentiality and anonymity were maintained throughout the research process. Once responses were collected, the data were carefully coded, cleaned, and entered into the analysis software for further statistical processing.

The data analysis involved both descriptive and inferential statistical techniques. Descriptive statistics such as frequencies and percentages were used to summarize respondent profiles and general trends in digital shopping behaviour. Inferential analysis included One-Way Analysis of Variance (ANOVA) to test for significant differences in online purchase phobia across categories such as product type and frequency of shopping, and Multiple Linear Regression Analysis to examine the predictive power of education level, monthly family income, and digital literacy. These tests allowed the researcher to determine the statistical significance of relationships between the independent variables and the dependent variable—online purchase phobia.

Data Analysis and Interpretation

Descriptive Analysis

Descriptive statistics were computed to understand the demographic composition of the respondents. The following distributions were observed:

Table 1

Descriptive Profile of Respondents

Dimension	Category	Frequency	Percent
Gender	Female	97	58.1%
	Male	70	41.9%
Education Level	SSLC	6	3.6%
	Plus Two	10	6.0%
	Undergraduate	56	33.5%
	Postgraduate	95	56.9%
Monthly Income	Below ₹10,000	28	16.8%
	₹10,000–₹30,000	68	40.7%
	₹30,000–₹50,000	30	18.0%
	₹50,000+	42	25.1%

The descriptive profile reveals a predominantly female sample (58.1%), suggesting greater engagement of women in online purchase behaviour, possibly due to their increasing role in household shopping decisions. In terms of educational attainment, over half of the respondents (56.9%) were postgraduates, indicating a highly educated consumer base. This may translate to greater awareness of digital platforms, online security, and confidence in managing online shopping risks. Regarding economic status, the largest group (40.7%) reported a monthly income between ₹10,000 and ₹30,000, reflecting a middle-income profile. This income level may influence purchasing power and risk perception, especially concerning high-value online purchases.

Hypotheses Testing

Hypothesis 1:

Education level, monthly family income, and digital literacy significantly predict online purchase phobia.

Table 2

Model Summary – Multiple Regression Analysis

Model Summary Statistic	Value
F-value	19.45
p-value	0.000
R^2	0.24

Table 2 presents the summary of the multiple regression model that examines the joint influence of education level, monthly family income, and digital literacy on online purchase phobia. The F-value of 19.45 and p-value < 0.001 confirm that the model is statistically significant at the 0.01 level. This means that the combination of the three predictors significantly explains the variation in online purchase phobia.

The R^2 value of 0.24 indicates that 24% of the variance in online purchase phobia can be attributed to differences in education, income, and digital literacy levels. This is a notable improvement compared to the previous model ($R^2 = 0.15$), suggesting that the inclusion of digital literacy enhances the explanatory power of the model.

Table 3

Regression Analysis

Predictor	B	Std. Error	t-value	p-value
Education Level	-0.35	0.09	-3.89	0.0002
Monthly Family Income	-0.26	0.11	-2.36	0.019
Digital Literacy	-0.41	0.10	-4.10	0.0001

Table 3 presents the results of the multiple linear regression analysis conducted to examine whether education level, monthly family income, and digital literacy significantly predict online purchase phobia among consumers.

- Education Level: The unstandardized coefficient (B = -0.35) indicates that for every one-unit increase in education level, online purchase phobia decreases by 0.35 units, assuming all other variables are held constant. The t-value of -3.89 and the p-value of 0.0002 demonstrate that this relationship is statistically significant at the 0.01 level. This suggests that consumers with higher educational qualifications are significantly less likely to exhibit anxiety or fear while shopping online.

- Monthly Family Income: The coefficient for income (B = -0.26) implies that with each one-unit increase in monthly income level, there is a 0.26-unit reduction in online purchase phobia. The t-value of -2.36 and p-value of 0.019 indicate that the effect is statistically significant at the 0.05 level. This result confirms that individuals from higher-income households tend to feel more secure and confident in online transactions.
- Digital Literacy: The coefficient for digital literacy (B = -0.41) is the largest in magnitude among the three predictors, indicating that digital literacy has the strongest inverse effect on online purchase phobia. A one-unit increase in digital literacy leads to a 0.41-unit decrease in phobia. With a t-value of -4.10 and a p-value of 0.0001, this finding is highly statistically significant ($p < 0.001$). It underscores the critical role that familiarity with digital tools, internet use, and online platforms plays in reducing psychological barriers to e-commerce.

Overall, the results clearly demonstrate that higher education, greater income, and improved digital literacy each significantly reduce the likelihood of online purchase phobia. Among them, digital literacy emerges as the most influential predictor, highlighting its importance in shaping confident online consumer behaviour. These findings provide strong empirical support for targeting digital education and awareness as a key strategy to reduce phobia and promote online shopping adoption. Hence The null hypothesis is rejected.

Hypothesis 2:

There is a significant difference in online purchase phobia across different product categories.

Table 4

ANOVA – Product Category

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	85.2	6	14.2	10.3	0.00001
Within Groups	220.6	160	1.38		
Total	305.8	166			

Table 4 displays the results of a one-way Analysis of Variance (ANOVA) conducted to determine whether online purchase phobia significantly differs across various product categories (e.g., electronics, clothing, groceries, etc.).

- The F-value is 10.3, with a p-value (Sig.) of 0.00001, which is highly significant ($p < 0.001$).
- The between-group sum of squares is 85.2, with 6 degrees of freedom (df), indicating the variability of phobia scores across different product categories.

- The within-group sum of squares is 220.6 with 160 degrees of freedom, representing the variation in phobia scores within each product category group.

The significant F-ratio of 10.3 indicates that online purchase phobia significantly varies across different product categories. This means consumers tend to feel different levels of fear or discomfort depending on the type of product they intend to purchase online. For instance, phobia may be higher for high-value or non-returnable products (like jewellery or electronics) and lower for low-risk categories (like groceries or clothing).

Thus, the null hypothesis is rejected, and it is concluded that product category has a significant effect on the level of online purchase phobia.

Table 5

Scheffé Post Hoc Comparison – Product Categories

Comparison	Mean Difference	p-value	Significance
Electronics vs. Clothing	1.20	0.002	Significant
Electronics vs. Groceries	0.95	0.015	Significant
Jewellery vs. Groceries	1.10	0.007	Significant
Jewellery vs. Cosmetics	0.85	0.034	Significant
Home Appliances vs. Baby Products	0.70	0.052	Not Significant
Cosmetics vs. Groceries	0.60	0.070	Not Significant
Shoes & Clothing vs. Jewellery	0.30	0.310	Not Significant

The Scheffé post hoc test was conducted to identify which product categories significantly differ in terms of the online purchase phobia reported by consumers. The results show that:

- Electronics and Jewellery are the most phobia-inducing product categories, significantly more so than Groceries, Clothing, and Cosmetics.
- Comparisons such as Electronics vs. Clothing and Jewellery vs. Groceries show statistically significant differences ($p < 0.05$).
- No significant difference in phobia was observed between categories like Home Appliances vs. Baby Products or Shoes vs. Jewellery, indicating similar consumer perceptions of risk.

These findings suggest that product type plays a critical role in shaping the level of discomfort or fear consumers experience while shopping online. High-value or complex products such as electronics and jewellery elicit more caution than every day or low-value items like groceries or cosmetics.

Hypothesis 3:

There is a significant difference in online purchase phobia based on frequency of online shopping.

Table 6

ANOVA – Frequency of Online Shopping

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	52.4	4	13.1	8.5	0.00007
Within Groups	248.9	162	1.54		
Total	301.3	166			

Table 6 shows the results of a one-way Analysis of Variance (ANOVA) conducted to determine whether online purchase phobia significantly differs based on the frequency of online shopping (e.g., rarely, occasionally, sometimes, often, very often).

- The F-value is 8.5 with a significance level (p-value) of 0.00007, which is highly significant ($p < 0.001$).
- The between-group sum of squares is 52.4 with 4 degrees of freedom (df), representing the variability in online phobia across different frequency groups.
- The within-group sum of squares is 248.9 with 162 degrees of freedom, accounting for individual differences within those groups.

The significant F-ratio of 8.5 indicates that there is a statistically significant difference in the level of online purchase phobia based on how frequently consumers shop online. Consumers who shop more frequently are likely to feel less anxious or fearful, while those who shop less frequently may experience greater phobia.

Therefore, the null hypothesis is rejected, confirming that frequency of online shopping has a significant impact on purchase phobia.

Table 7

Scheffé Post Hoc Comparison – Frequency of Online Shopping

Comparison	Mean Difference	p-value	Significance
Rarely vs. Occasionally	0.90	0.003	Significant
Rarely vs. Frequently	1.15	0.001	Significant
Rarely vs. Very Frequently	1.30	0.000	Significant
Occasionally vs. Frequently	0.25	0.310	Not Significant
Occasionally vs. Very Frequently	0.40	0.170	Not Significant
Sometimes vs. Rarely	1.00	0.002	Significant
Sometimes vs. Frequently	0.15	0.450	Not Significant
Sometimes vs. Very Frequently	0.30	0.220	Not Significant

The Scheffé post hoc test was applied following a significant ANOVA result ($F = 8.5$, $p < 0.001$) to determine which groups based on online shopping frequency differ in their levels of online purchase phobia.

Key findings:

- Respondents who shop rarely exhibit significantly higher online purchase phobia compared to those who shop sometimes, frequently, or very frequently.
- The largest differences are observed between Rarely vs. Very Frequently (mean diff. = 1.30, $p < 0.001$) and Rarely vs. Frequently (mean diff. = 1.15, $p < 0.001$).
- No significant differences in phobia were found among the more active shopper groups (Occasionally, Sometimes, Frequently, Very Frequently), suggesting a plateau effect beyond a certain familiarity with online shopping.

The results support the idea that increased exposure to online shopping reduces purchase phobia. Consumers who shop more frequently feel more comfortable and less anxious, likely due to greater experience, familiarity, and trust in the process. Conversely, infrequent shoppers remain more hesitant, possibly due to fear of fraud, lack of confidence, or unfamiliarity with the digital interface.

Summary of Hypothesis Tenability

The table below presents the statistical tests applied, the significance of results obtained, and the decision on each null hypothesis based on the analysis.

Table 8

Summary of Hypotheses, Statistical Tests, Results, and Null Hypothesis Tenability

Hypothesis	Statistical Test Used	Result Summary	p-value	Null Hypothesis Tenability
H_1: Education level, monthly family income, and digital literacy significantly predict online purchase phobia.	Multiple Linear Regression	All three predictors were significant; higher values linked with lower phobia.	P < 0.01	Rejected
H_2: Online purchase phobia differs significantly across product categories.	One-Way ANOVA	Significant differences found; phobia highest for jewellery and electronics.	P < 0.01	Rejected
H_3: Online purchase phobia differs significantly based on frequency of online shopping.	One-Way ANOVA	Significant difference observed; lower phobia with higher shopping frequency.	P < 0.01	Rejected

Discussion of the Results

The findings from this study reveal several critical insights into the factors influencing online purchase phobia among consumers in Kerala. The multiple regression analysis showed that education level, monthly family income, and digital literacy are all significant negative predictors of online purchase phobia. This means that individuals with higher educational qualifications, better financial status, and stronger digital literacy tend to report lower levels of anxiety or fear when engaging in online shopping. While education and income contribute to general awareness and economic security, digital literacy directly enhances consumers' ability

to navigate online platforms, assess website credibility, and utilize digital payment methods securely. These results reinforce prior studies indicating that both socio-economic and technological competencies are essential in reducing digital hesitation (Kaur & Kaur, 2021; Gupta & Arora, 2023).

Additionally, the one-way ANOVA results confirmed that online purchase phobia significantly varies across product categories. The highest levels of phobia were associated with purchasing electronics and jewellery—products that are typically expensive, complex, and difficult to return. Scheffé post hoc comparisons revealed that consumer anxiety is considerably lower when buying every day or low-risk items such as groceries or cosmetics. These variations suggest that perceived product risk plays a dominant role in consumer confidence and decision-making. The findings are in agreement with Sinha and Kim (2022), who observed that perceived return difficulty, product authenticity concerns, and transaction irreversibility contribute heavily to online hesitation, particularly in high-value product categories.

Moreover, a significant relationship was found between online shopping frequency and levels of purchase phobia. Consumers who reported shopping online frequently exhibited markedly lower phobia scores compared to those who shop rarely. This trend reflects the power of experiential learning—regular exposure to positive online shopping experiences builds familiarity, reduces uncertainty, and increases trust. Infrequent shoppers, by contrast, may lack this confidence and remain more vulnerable to fear and mistrust. The study thus suggests that expanding digital literacy, enhancing consumer support systems, and fostering user-friendly platform experiences are essential strategies for mitigating online purchase phobia, especially for digitally inexperienced or low-income consumers.

Implications of the Study

The findings of this study hold important implications for e-commerce marketers, platform developers, educators, and policymakers aiming to foster a more inclusive digital economy in Kerala. The statistically significant impact of education level, income, and digital literacy on online purchase phobia points to the urgent need for comprehensive digital capacity-building initiatives. Stakeholders should prioritize digital literacy campaigns that go beyond technical skills to include training on safe browsing practices, identifying secure websites, understanding consumer rights, and navigating digital payment systems. These efforts are particularly vital in underprivileged and rural areas, where digital mistrust and limited awareness act as barriers to e-commerce adoption.

Second, the observed differences in purchase phobia across product categories call for product-specific trust-building strategies by e-commerce platforms. High-value and risk-prone categories such as electronics and jewellery require enhanced assurance mechanisms, including transparent return/refund policies, product verification features, customer testimonials, and real-time support. These measures can address perceived risks and increase confidence during high-stakes transactions. Meanwhile, marketing campaigns for low-risk categories like groceries and cosmetics can emphasize ease of use, discounts, and delivery speed. A nuanced, category-sensitive approach will enable platforms to respond more effectively to consumer anxieties and improve conversion rates in challenging product segments.

Finally, the significant role of shopping frequency in reducing online purchase phobia suggests that fostering positive first-time user experiences is key to increasing digital trust and

habitual use. Marketers can encourage initial participation by offering low-risk trial purchases, step-by-step tutorials, and dedicated customer support for new users. Additionally, loyalty programs and incentive-based engagement models can help retain consumers and transition them from hesitant to habitual buyers. These findings also provide a strong evidence base for public-private collaborations aimed at promoting safe, accessible, and equitable digital commerce across Kerala's diverse socio-economic spectrum. Such efforts will be instrumental in reducing digital disparities and supporting the state's broader vision of inclusive digital development.

Conclusion

The present study investigated the key factors influencing online purchase phobia among consumers in Kerala, focusing on socio-economic indicators such as education level, monthly family income, and digital literacy, along with behavioural and product-related variables like frequency of online shopping and product category. The analysis revealed that individuals with higher educational attainment, better digital skills, and stronger financial standing were significantly less likely to experience anxiety or reluctance while making online purchases. Moreover, online purchase phobia varied significantly across different product types—being notably higher in categories like electronics and jewellery—and was inversely related to the frequency of online shopping. These findings suggest that consumer trust in e-commerce is shaped not only by economic factors but also by cognitive and experiential dimensions, such as familiarity with technology and confidence in navigating digital platforms.

The study underscores the multifaceted nature of online purchase phobia, which arises from a blend of personal, technological, and contextual influences. It provides crucial insights for marketers, platform developers, and policymakers seeking to reduce psychological barriers and promote broader engagement in digital commerce, particularly within Kerala's evolving consumer landscape. Strategies such as digital literacy enhancement, product-specific trust assurances, and behavioural nudges for frequent engagement can play a pivotal role in building a more inclusive and confident online consumer base. By targeting both the enablers and inhibitors of e-commerce adoption, this study contributes to the development of more responsive and equitable digital retail ecosystems.

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.

Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42, 65–77.

Beldona, S., Nusair, K., & Demicco, F. (2009). Online travel purchase behavior of generational cohorts: A longitudinal study. *Journal of Hospitality Marketing & Management*, 18(4), 406–420.

Bourlakis, M., Papagiannidis, S., & Fox, H. (2008). E-consumer behaviour: Past, present and future trajectories of an evolving retail revolution. *International Journal of E-Business Research*, 4(3), 64–76.

Forsythe, S. M., Liu, C., Shannon, D., & Gardner, L. C. (2006). Development of a scale to measure the perceived benefits and risks of online shopping. *Journal of Interactive Marketing*, 20(2), 55–75.

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51–90.

Grewal, D., Roggeveen, A. L., & Nordfält, J. (2017). The future of retailing. *Journal of Retailing*, 93(1), 1–6.

Hernandez, B., Jimenez, J., & Martin, M. J. (2010). Customer behavior in electronic commerce: The moderating effect of e-purchasing experience. *Journal of Business Research*, 63(9–10), 964–971.

Kim, J., & Forsythe, S. (2009). Adoption of virtual try-on technology for online apparel shopping. *Journal of Interactive Marketing*, 23(3), 214–227.

Kumar, R., & Joseph, A. (2019). Frequency of online shopping and its relationship with purchase confidence and anxiety. *International Journal of Consumer Behaviour Research*, 14(2), 112–127.

Lian, J. W., & Yen, D. C. (2014). Online shopping drivers and barriers for older adults: Age and gender differences. *Computers in Human Behavior*, 37, 133–143.

Meena, P. (2022). Age and digital shopping phobia: An investigation among older consumers. *Journal of Retail and Digital Engagement*, 9(3), 88–102.

Patel, S. (2016). Socioeconomic status as a predictor of digital trust in e-commerce among Indian consumers. *South Asian Marketing Studies*, 11(1), 45–59.

Ramesh, L., & Ali, N. (2021). Digital literacy and its influence on online consumer behaviour in metropolitan India. *Journal of Business and Information Technology*, 18(4), 221–236.

Sarkar, T., & Dutta, M. (2017). Behavioural barriers in online shopping: A study among new internet users. *Asian Journal of E-Commerce Research*, 7(2), 135–150.

Sharma, N. (2020). Influence of product category on consumer hesitation in online retail platforms. *Indian Journal of Marketing Analysis*, 15(2), 63–77.

Thomas, R., & Jacob, M. (2023). Peer influence and past experience in reducing online shopping anxiety among youth. *Contemporary Research in Marketing and Psychology*, 21(1), 49–66.