

The Demographic Effect on Consumer Buying Behaviour: Evidence from Online and Offline Electronics Shopping



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ABSTRACT: Consumer buying behaviour is an ever-evolving phenomenon influenced by various demographic factors such as age, gender, income, education, and marital status. This study examines the impact of these demographic variables on consumer preferences for purchasing electronic goods through online and offline channels. With the rise of digital platforms, online shopping has gained popularity due to its convenience, variety, and competitive pricing. However, many consumers still prefer traditional retail stores for trust, physical inspection, and personal interaction. Using a sample of 368 respondents, this research employs exploratory factor analysis (EFA), t-tests, and ANOVA to identify key determinants influencing purchase decisions. The findings indicate that younger consumers with higher disposable income prefer online shopping, while older individuals and lower-income groups rely more on offline stores. Additionally, trust, ease of shopping, pricing, variety, and product information play critical roles in shaping consumer choices. The study underscores the need for businesses to adopt an omni-channel strategy, combining the strengths of both online and offline platforms. Marketers can leverage these insights to create targeted campaigns, improve customer experience, and enhance engagement. The research provides valuable recommendations for retailers and policymakers to adapt to shifting consumer behaviors in the electronics market

KEYWORDS: Consumer Behavior, Online Shopping, Offline Shopping, Demographic, Electronic Goods.

1. INTRODUCTION

Consumer Behavior reflects what a customer buys, where to buy, how often they buy, how they evaluate the purchases and what will be the impact of such evaluations on future purchases. (Schiffman & Kaunak, 2009). Consumer behavior is subject to change as a result of evolving fashion, technology, trends, lifestyle, disposable income, and related factors. Consumer buying decision is a complex interaction of several factors which determines a consumer's choice to buy a specific good or service (Anisha & Kalaivani, 2016). In today's technological world, businesses and consumers both have evolved and this has led to change in conventional marketing. This evolution has led to a boom in internet penetration which created a huge avenue for sellers by connecting them to consumers of all age groups worldwide. (Singh & Singh, 2014). Traditional brick and mortar stores have been replaced by new e-commerce platforms which provide convenience to shop from any corner of the world along with low prices, product information and some additional features which has resulted in acceptance of this new shopping model. (Radhikaashree et al., 2019).

The shift from conventional stores to online stores has led to change in buying behavior of customers. Although online shopping comes with convenience, variety and better product & price comparison. Still some consumers favor physical shopping setup due to security concerns, lack of trust and inability to personally inspect the products. (Katawetawaraks & Wang, 2011). Fundamental challenge of consumer behavior is that it constantly evolves with variation to different product categories. Customers' intention changed when they shifted from non-electronic goods to electronic goods in online shopping, because they don't have the advantage to physically inspect and try the product to understand the technical aspect, as this acts as a key factor for purchase. A mix of convenience, price, quality and time constraints influence and reshape the way people shop in India but store based retail is here to stay, and it is due to the fact that consumers have the ability to choose the brand, delivery time, price and personal attention while shopping. (Tiwari & Raikar, 2023)

Consumers with different demography also show different purchase intentions and behavior. Moreover, factors like age, gender, income, education and marital status also impact the buying behavior while shopping complex electronics. (Yang et al., 2011) Even

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though there are many different ways to target a market, consumer demographics still play a dominant role in how and where to position the goods. Furthermore, this demographic information about customers is readily available from government agencies which is reliable and used to segment potential customers, (Muniady et al., 2014). Nowadays, decision making has become more complex from customers' point of view due to sophisticated & complex products, technological advancements and elevating counterfeits. On top of that, wide variety, multi component electronics, multiple brands, retail stores, e-commerce models and shopping malls have also made choices complicated. Therefore, this study tried to examine whether demographic factors such as age, gender, income, education and marital status determine the consumer behavior specifically for electronic goods by comparing online and offline shopping preferences. This study will further assist the retailers, brands and policymakers to develop efficient marketing plans, customized shopping experiences and targeted promotions for their targeted customers.

2. REVIEW OF LITERATURE

The most crucial step in defining the study's problem is to review all pertinent resources. Literature review is a quick review of literature instructing a certain field, problem and subject. The researcher needs to be acquainted with the existing knowledge so that he can identify the research problem and produce an insightful study. Numerous publications, journals, books, magazines, websites and reports were reviewed in order to compile the data.

Transition from traditional shopping to online has created a challenge and opportunities for both retailers and customers. Customers opt for online shopping for its ease, variety and affordability while few sections of the population place a higher value on trust, tangibility and physical and in-person shopping experience in physical stores. (Singh & Sailo, 2013). However, these preferences are also influenced by demography factors of consumers, such as age, gender, marital status, education and income. Current review of literature focuses on previous studies that focuses at how these demographic factors affect consumer's behavior who shop online and offline, particularly in context to electronic goods.

Consumer behavior is complex and influenced by external factors (culture, subculture, social class, family, economic conditions) and internal factors (age, income, gender, lifestyle, personality, and occupation). Gajjar, (2013) emphasized that no single factor determines or influences the purchase decision but a mix of all these factors affects the purchase intention. To successfully cater the needs of the customers, businesses must design strategies that take demographic, social and psychological aspects into consideration. Li & Hou, (2019) concluded that personal characteristics play a crucial role while shopping online. Age and prior experience of shopping online has a positive correlation on consumer preferences and young consumers are more inclined to online shopping. Income also plays a crucial role while shopping, higher income focuses on time savings and affordability is the key factor for lower income groups. Same kind of research was conducted by Adepoju & Joan, (2015) and findings suggest that, among four key demographic factors (age, gender, income, and education) only age had a significant impact on consumer behavior while purchasing electronic goods. Younger generations are more inclined towards new technology, while older ones tend to be hesitant while shifting to new ones.

Raunaque & Beg, (2022) findings suggest that factors like age and income had a major impact on online shopping of electronic goods while education, gender and occupation had a minimal impact. It was observed that the young generation with high disposable income are more likely to embrace online shopping due to pricing, variety and shopping convenience. Sharma, (2023) framed the conclusion from his study that both men and women are influenced by promotional and marketing strategies for impulsive buying but factors like age, gender, income, qualification, and occupations have little impact on purchase decisions in Delhi NCR areas. Gaurav & Sahu, (2017) echoed out that demographic factors have a significant effect on consumer spending of electronic goods. It was discovered that high income and educated people tend to spend more on electronics with technological advancements.

Rai, (2019) also acknowledged in his study that age and gender have less impact on purchase behavior while shopping electronic items, basically a television. Education plays a dominant role while purchasing because highly educated customers make thoughtful and well informed purchasing decisions. Kumar & Kumar, (2019) also examined the demographic factors in their study and concluded that factors like age, gender, income, education, and occupation influence purchasing decisions. Study also emphasized that men tend to shop more and they have independent buying decisions in rural areas as compared to women who often rely on their spouse. Additionally, rural consumers rely more on family and friends for opinions before purchasing electronics due to limited availability of online platforms and digital literacy.

Puška et al., (2018) also highlighted in their study that age, household size, and educational attainment had no apparent impact on purchasing behavior, indicating that variables like product pricing, salesperson influence, and past experience might. Findings also revealed that women under 25 who earn less than 400 BAM (19,000 approx. INR) carefully evaluate their choices before purchasing. On the contrary, males above 25 who earn between 400 BAM (19,000 approx. INR) and 800 BAM (38,000 approx. INR) are more satisfied with their purchases. Jay & Nair, (2023) also analyzed various factors which influence shopping behavior while

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purchasing electronic goods with convenience shopping, security concerns and flexible exchange policy playing a significant role. Findings also indicated that both men and women engage in online shopping, but middle aged individuals make up most in electronic sales though they are still worried for their personal and financial security online.

With rapid technological advancements in the electronic industry, consumers have also become more energy efficient and businesses who deal with consumer electronics are also using sustainable marketing tactics to influence the purchase behavior by providing green gadgets. To showcase the relation between green electronic durable and demographic factors a study was conducted by Kumar (2023) and findings revealed that age, gender, occupation, income, and education plays a key role in shaping environmental awareness while purchasing green goods. Younger and highly educated consumers were more inclined towards sustainable alternatives. The rise in Omni channel presence of retailers has also led customers to interact with both offline and online channels and making it crucial to examine the demographic factors and its impact on buying behavior. Dhuli et al., (2023) examined these demographic variables (age, income, occupation status) and concluded that these factors play a significant role while consumers opt for Omni channel shopping. Moreover, consumers earning below ₹20,000 and less educated take more time to select and consider the channel for purchase.

To dwell more into this analysis Sisca et al., (2022) conducted the same kind of study in fashion apparels and concluded in their study that there is no statistically significant variation in buying preferences between characteristics such gender, age, marital status, education level, and occupation. While online shopping has become a convenient and trustable platform for shoppers, still offline retail holds a stronghold due to factors like tangibility and trial options. To analyze those factors Lakshmipriyanka & Harihararao, (2020) concluded that convenience, time- savings and easy accessibility are the primary reasons for opting online shopping, while offline shopping are driven by the ability to physically inspect, negotiate prices and instant delivery. Furthermore, despite widespread acceptance of online shopping, traditional shopping is not entirely replaced.

The above literature review explores how demographic factors influence consumer behavior while purchasing consumer electronics online and offline. Even though online shopping is preferred for its convenience, trust variety and competitive pricing still offline shopping is preferred for trust, tangibility and personal interaction while shopping. Studies revealed that demographic factors such as age, gender, education and marital status significantly impact the shopping preference for consumer electronics. Omni channel shopping is booming, consumers search for information about products online and tend to purchase the same from offline stores while purchasing complex electronics. In order to maximize the shopping experience, the literature emphasizes target marketing strategy based on consumer demographics.

2.1.Objective

- 1) To analyze and explore the factors that affect the consumer behavior while shopping electronic goods (offline & online).
- 2) To examine the impact of demographic factors on consumer buying behavior of electronic goods (offline &online)

3. RESEARCH METHODOLOGY

Research is a systematic effort to gain knowledge and deduce certain phenomena. The research design for this study is descriptive in nature. Descriptive research design involves description of all the variables. Needless to say that the present study also used the aspects of exploratory design as we have also compare the factors with demographic variables. The sample for current study comprises 368 respondents in total. Snowball sampling was employed in this study which means, that sampling is based on respondent judgement and their experience for studying the factors which are responsible for consumer behavior. This method was used due to unavailability of list of potential customers directly, keeping in view of geographical condition of the sample Data was collected online with the help of google forms. They were allowed to fill their questionnaire at anonymity.

4. INTERPRETATION & ANALYSIS

The statistical analysis was performed by using Statistical Package for Social Sciences (26.0). For identifying and analyze the factors, we have employed exploratory factor analysis. In order to relate the impact of demographic variables on consumer behavior T-TEST and ANOVA were used.

4.1 Factor analysis

Factor analysis is frequently utilized in research to explain the relationship when there are few underlying factors (latent variables) and many measured variables (survey items) (Henson & Roberts, 2006). Furthermore, factor analysis is employed to evaluate the measures' validity (i.e., how well the constructs reflect the original variables) (Cortina, 1993, Tabachnick et al., 2013). But there are certain issues that are to be kept in mind before conducting EFA. Some frequent problems found in delivering EFA studies include determining factors with a single variable (Lu and Marlow, 1999, Cerit, 2000, Pantouvakis, 2006), keeping a factor with a

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less Cronbach alpha value, deleting variables without any kind of explanation (Esmer et al., 2016), improper scores for factors (Wen and Lin, 2016), and not providing a reason for the selection or deletion of cross-loaded items (Lu et al., 2016).

4.2 EFA Results for Online Shopping

The KMO test is again used to evaluate how well the data satisfies the criteria for factor analysis. The test evaluates the model's overall sampling efficiency as well as the sampling efficiency of each variable independently. The table presented below shows that the KMO value is greater than 0.70 and Bartlett's Test of Sphericity is also significant with $p < 0.05$.

Table No 1 (a): KMO Results

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.772
Bartlett's Test of Sphericity	Approx. Chi-Square	1589.22
	Df	153
	Sig.	0.000

4.2.1 Total Variance Explained

The total variation resulting from the five components is 82.423 percent. In this study data included in the statements on factor influencing online shopping were extracted using factor analysis.

4.2.2 Rotated Component Matrix

The rotation component was again performed for the variable of online shopping and it provides the loadings of each measure on each of the extracted variables. Thus, only five factors with the largest factor loadings and Eigen values larger than one were chosen for this study in case of variable online shopping.

Table 1(b): Rotated Component Matrix

	1	2	3	4	5
EOSO1		.734			
EOSO2		.705			
EOSO3		.599			
EOSO4		.798			
EOSO5		.909			
EOSO6		.814			
EOSO7		.893			
EOSO8		.737			
TO1			.582		
TO2			.673		
TO3			.502		
TO4			.518		

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TO5			.573	.	
TO6			.819		
TO7			.696		
PO1				.767	
PO2				.919	
PO3				.608	
PO4				.582	
PO5				.801	
VO1	.957				
VO2	.879				
VO3	.939				
VO4	.863				
VO5	.832				
VO6	.696				
IO1					.890
IO2					.701
IO3					.786
IO4					.761
IO5					.889

4.2.3 Factor for online Shopping

Trust (TO) - The factor loading value ranges from .502 to .819 (TO1-TO7). Here statements pertaining to trust factors in online shopping are included. Trust is the major factor which influences the shopping behaviour of the customer. When customers interact with e - commerce platforms, a huge degree of uncertainty and financial risk is involved. (Wani & Malik, 2013). Trust on online platforms is generated when they provide genuine, high quality products as advertised. (Bagla, 2017).

Ease of Shopping (EOS) - The factor loading value ranges from .599 to .893 (EOS01-EOS08) . Online shopping removes the hassle of visiting the physical store and standing at long queues for billing or finding the parking at busy shopping centers. (Hude, 2021). Instead of carrying the product to your homes, we get the feature of doorstep delivery with easy exchanges and refunds. By using effective search bars, filters and recommendations we can find the exact product we need from anywhere and anytime (Saluja et al., 2018).

Pricing (PO) - The factor loading value ranges from .582 to .919 (PO1-PO5). Pricing is the most influential factor while choosing online platforms. Whether buying a mobile phone, kitchen appliance or just a simple gadget, we get the best possible deal. Therefore, consumers opt online shopping for less price benefits, as it makes comparison of products easy and even get free or bundled offers. (Katawetawaraks & Wang, 2011).

Variety (VO) - The factor loading value ranges from .696 to .957 (VO1- VO6). Online shopping provides us with different brands under one platform, instead of visiting a marketplace we can instead explore every brand at one place according to our

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customization and personalization. (Hude, 2021). Online shopping makes it easy for us to find niche, specialty products which are not locally available at nearby physical stores. (Rajput, 2020)

Information (IO) - The factor loading value ranges from .701 to .890 (IO1-IO5). While online shopping information plays a critical role and influences the customer behavior drastically especially while purchasing consumer electronics. Online shoppers rely on product description, reviews by users, images, customer feedback and videos to make wise purchase decisions. (Bagla, 2017).

4.3 EFA Results of Offline Shopping

The KMO test is again used to evaluate how well the data satisfies the criteria for factor analysis. The table presented below shows that the KMO value is greater than 0.70 and Bartlett's Test of Sphericity is also significant with $p < 0.05$.

Table 1(c) – EFA Results

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.765
Bartlett's Test of Sphericity	Approx. Chi-Square	28874.420
	Df	465
	Sig.	.000

4.3.1 Total Variance Explained

The total variance of five components is 81.014 percent. Of data included in the statements on factor influencing offline shopping

4.3.2 Rotated Component Matrix

The rotation component was again performed for the variable of offline line shopping and it provides the loadings of each measure on each of the extracted variables. Thus, only five factors with the largest factor loadings and Eigen values larger than one were identified in case of offline shopping.

Table 1 (d) – Rotated Component Matrix

	1	2	3	4	5
EOSOF1	.808				
EOSOF2	.867				
EOSOF3	.516				
EOSOF4	.887				
EOSOF5	.685				
EOSOF6	.897				
EOSOF7	.792				
EOSOF8	.899				
TOF1		.844			
TOF2		.819			
TOF3		.688			

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TOF4		.886			
TOF5		.892			
TOF6		.861			
TOF7		.864			
POF1			.815		
POF2			.902		
POF3			.843		
POF4			.857		
POF5			.509		
VOF1				.869	
VOF2				.853	
VOF3				.786	
VOF4				.946	
VOF5				.785	
VOF6				.829	
IOF1					.842
IOF2					.898
IOF3					.822
IOF4					.804
IOF5					.611

4.3.3 Factors for offline shopping

Trust- The factor loading value ranges from .688 to .892 (TOF1- TOF7). When it comes to offline shopping, trust plays a significant role because they can see and test the product before making a purchase. Personal contact with sales representatives help build credibility, receive quick responses and even negotiate prices. (Saluja et al., 2018). A sense of security is also enhanced in offline shopping by after sale support, easy returns and product authenticity. (Espinoza et al., 2021).

Ease of Shopping - The factor loading value ranges from .516 to .899 (EOSOF 1- EOSOF 8). Ease of shopping plays a significant role while shopping offline because they provide instant availability without waiting for delivery time. Additionally, organized shop setup, clear product display, hassle free checkouts and flexible payment options make it more suitable for shopping. (Saluja et al., 2018).

Pricing - The factor loading value ranges from .509 to .902 (POF 1 - POF 2). Offline shopping also comes with the added advantage of competitive pricing. Offline customers are flexible by comparing the prices from different retail stores and take the advantage of in store discounts, cashback offers, exchange programs and loyalty points. (Hude, 2021)

Variety - The factor loading value ranges from .785 to .946 (VOF1- VOF6). A key factor that significantly impacts the consumer behavior of consumers especially while purchasing electronic goods is variety. Particularly for electronic products like smartphones, laptops, smart TVs, and household gadgets, hands-on experience is crucial. For instance, while purchasing a

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smartphone, consumers can explore the interface, compare screen sizes, test the camera in real time, and examine display quality. (Hude, 2021).

Information - The factor loading value ranges from .611 to .898 (IOF1-IOF5). Information too impacts the purchase behavior of consumers while shopping consumer electronics. Customers rely more on face to face conversation with sales representatives, product demonstration and testing the product before purchase. Trust on information disseminated by sales people including product comparison, warranty information and product specification further booster the sales. (Bagla, 2017).

4.4 Comparison on the Basis of Demographics

4.4.1 Gender

The significance value (p value) for Ease of Shopping and Variety is less than .05, this shows that there is a significant difference between male and female respondents regarding the perception of consumer behavior. The mean value for male respondents were obtained higher than females. P value for Trust, Price and Information is more than 0.05 which means there is no significant difference between male and female respondents perception. This indicates that both male and female give equal importance to these factors.

Table 1 (e)- Results of independent sample T Test for gender

Factors	Gender	N	Mean	SD	t-value	P value
Ease of Shopping	Male	109	4.158	.6727	.759	.002
	Female	280	4.090	.8326	.833	
Trust	Male	109	3.868	.4942	.407	.379
	Female	280	3.844	.5315	.420	
Pricing	Male	109	4.171	.4950	2.134	.893
	Female	280	4.055	.4741	2.094	
Variety	Male	109	3.746	.8351	1.853	.022
	Female	280	3.567	.8639	1.881	
Information	Male	109	3.659	.7355	2.024	.571
	Female	280	3.501	.6735	1.947	

Marital status:

The significance value of Ease of Shopping, Price, Variety and Information is less than 0.05 it means there is significant difference between the perception of married and unmarried respondents. The mean value showed that female respondents give more importance to these factors. The p Value for Trust is more than 0.05 which means there is no significant difference between married and unmarried respondents. The results demonstrated that marital status played an important role in buying behavior to purchase consumer electronics.

Table 1 (f) - Result of Independent Sample T Test for Martial Status

Factors	Gender	N	Mean	SD	t-value	P value
EOS	Male	86	3.816	.6149	-3.962	.004
	Female	303	4.192	.8159	-4.628	
TO	Male	86	3.674	.4945	-3.610	.136
	Female	303	3.901	.5180	-3.705	

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PO	Male	86	3.944	.6527	-3.156	.000
	Female	303	4.128	.4140	-2.475	
VO	Male	86	3.828	.6522	2.601	.000
	Female	303	3.557	.9006	3.102	
IO	Male	86	3.840	.6157	4.572	.000
	Female	303	3.461	.6932	4.884	

Age:

Age of respondents has been categorized into four categories i.e. Below 18, 18-35, 35-50, above 50 yrs. Results of ANOVA test indicates that, there is a significant difference exist among respondents for Ease of Shopping, Price and Variety. It is clear from the results that different age groups respondents have different opinions for these factors. Trust and Information do not have a significant difference, which means age has no direct impact on these two factors.

Table 1 (g) - Result of ANOVA for Age.

		N	Mean	F	Sig.
EOS	Between Groups	38	4.305	5.286	.005
	Within Groups	337	4.064		
	Total	14	4.664		
TO	Between Groups	389	4.109	.969	.380
	Within Groups	38	3.958		
	Total	337	3.841		
PO	Between Groups	14	3.786	5.018	.007
	Within Groups	389	3.851		
	Total	38	4.132		
VO	Between Groups	337	4.066	5.458	.005
	Within Groups	14	4.471		
	Total	389	4.087		

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IO	Between Groups	38	3.466	1.120	.327
	Within Groups	337	3.605		
	Total	14	4.321		

Income

The four income category consider the current study were Less than 25000. 25,000-50,000. 50,000 -1,00,000 and above 1 lac. Based on F value and p value, the results indicated that for all income groups p value is less than .05. Which means, respondents of all income groups have different opinion for all the factors which are responsible for buying behavior.

Table 1 (h) - Descriptive Statistics of Income

		N	Mean
EOS	"less than 25000"	57	3.804
	"25000-50000"	15	4.093
	"50000-100000"	30	4.133
	"above 1 lakh"	287	4.168
	Total	389	4.109
TO	"less than 25000"	57	3.689
	"25000-50000"	15	3.553
	"50000-100000"	30	3.773
	"above 1 lakh"	287	3.906
	Total	389	3.851
PO	"less than 25000"	57	4.039
	"25000-50000"	15	3.653
	"50000-100000"	30	4.147
	"above 1 lakh"	287	4.114
	Total	389	4.087
VO	"less than 25000"	57	3.919
	"25000-50000"	15	3.893
	"50000-100000"	30	3.720
	"above 1 lakh"	287	3.532
	Total	389	3.617

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IO	"less than 25000"	57	3.919
	"25000-50000"	15	3.827
	"50000-100000"	30	3.507
	"above 1 lakh"	287	3.460
	Total	389	3.545

Table 1 (i) - Result of ANOVA for Income.

		F	Sig.
EOS	Between Groups	3.442	.017
	Within Groups		
	Total		
TO	Between Groups	4.905	.002
	Within Groups		
	Total		
PO	Between Groups	4.817	.003
	Within Groups		
	Total		
VO	Between Groups	4.055	.007
	Within Groups		
	Total		
IO	Between Groups	8.254	.000
	Within Groups		
	Total		

Education/ qualification

Educational qualification has been divided into four categories, Undergraduate, Graduate, Post Graduate and Others. The P value for Ease of Shopping, Trust, Variety and Information is less than .05 which means there is a significant difference for these factors. On the basis of these values we can conclude that educational qualification has significant impact for these factors. The result also indicated that educational qualification has no significant impact on buying behavior which shows that price is equal to all educated respondents.

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Table 1 (j) – Descriptive Statistics of Education

		N	Mean
EOS	"undergraduate"	5	4.600
	"graduate"	292	4.155
	"post graduate"	92	3.936
	Total	389	4.109
TO	"undergraduate"	5	4.300
	"graduate"	292	3.903
	"post graduate"	92	3.660
	Total	389	3.851
PO	"undergraduate"	5	4.120
	"graduate"	292	4.108
	"post graduate"	92	4.022
	Total	389	4.087
VO	"undergraduate"	5	2.600
	"graduate"	292	3.580
	"post graduate"	92	3.788
	Total	389	3.617
IO	"undergraduate"	5	2.800
	"graduate"	292	3.512
	"post graduate"	92	3.691
	Total	389	3.545

Table 1(k) Results of ANOVA for Educational Qualification

		F	Sig.
EOS	Between Groups	3.717	.025
	Within Groups		
	Total		
TO	Between Groups	9.960	.000
	Within Groups		
	Total		

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PO	Between Groups	1.119	.328
	Within Groups		
	Total		
VO	Between Groups	5.734	.004
	Within Groups		
	Total		
IO	Between Groups	5.379	.005
	Within Groups		
	Total		

5. CONCLUSION AND IMPLICATIONS

The study highlights how demographic factors significantly shape consumer behavior when purchasing electronic goods through online and offline channels. While online shopping offers convenience, variety, and competitive pricing, many consumers still prefer offline stores for trust, hands-on experience, and personal interaction. Age, income, education, and marital status all influence preferences, with younger, tech-savvy consumers leaning towards e-commerce and older or lower-income groups favoring traditional stores. The research confirms that no single factor dictates consumer choices; rather, a mix of trust, ease of shopping, pricing, variety, and product information collectively impact buying decisions. These insights reinforce the growing importance of omni-channel strategies, where consumers research online but purchase offline or vice versa.

For businesses and policymakers, these findings underscore the need for personalized marketing and tailored shopping experiences. E-commerce platforms must build trust through better security, return policies, and customer service, while offline retailers should enhance convenience and competitive pricing to retain customers. Marketers should focus on targeted promotions based on demographic insights, ensuring that messaging resonates with different consumer segments. Additionally, as sustainable shopping gains traction, brands can integrate eco-friendly product lines to appeal to environmentally conscious consumers. Ultimately, understanding these evolving shopping behaviors enables businesses to refine their strategies, improve customer satisfaction, and drive long-term growth in the competitive electronics market.

REFERENCES

- 1) Adepoju, B. A., & Joan, A. F. (2015). The Impact of Personal Characteristics on Consumer's Purchase of Innovative Durable Electronics Products in Kano Metropolis. *Bamidele A. Adepoju*. *Journal of Marketing and Consumer Research*, 16.
- 2) Anisha, S., & Kalaivani, A. (July, 2016). Factors Influencing Buyers Behavior While Purchasing. *Shanlax International Journal of Commerce*, 4(3).
- 3) Bagla, D. (2017). Online Vs Offline shopping. *National Journal of Research and Innovative Practices (NJRIP)*, 2(1). https://www.researchgate.net/profile/Deepika-Maheshwari/publication/343981513_Online_Vs_Offline_shopping
- 4) Cortina, J. M. (1993). What is the coefficient alpha? An examination of theory and applications. *Journal of applied psychology*, 78(1), 98-104.
- 5) Dhuli, H., Sridevi, M. S., & Venkateswarlu, P. (2023, February). The Influence of Demographic Characteristics on Factors Considered for Purchase Decision of Omni Shoppers. *YMER*, 22(2).
- 6) Esmer, S., Nguyen, H. O., Bandara, Y. M., & Yeni, K. (2016). Non-price competition in the port sector: A case study of ports in Turkey. *The Asian Journal of Shipping and Logistics*, 32(1), 3-11.
- 7) Espinoza, M., Ganatra, V., Prasanth, K., Sinha, R., & Sunil, K. M. (2021, October). Consumer Behavior Analysis on Online and Offline Shopping During Pandemic Situation. *International Journal of Accounting & Finance in Asia Pacific*, 4(3), 75-87. <https://doi.org/10.32535/ijafap.v4i3.1208>
- 8) Gajjar, N. B. (2013, April). Factors Affecting Consumer Behavior. *International Journal of Research In Humanities and Social Sciences*, 1(2).

The Demographic Effect on Consumer Buying Behaviour: Evidence from Online and Offline Electronics Shopping

- 9) Gaurav, K., & Sahu, K. C. (n.d.). DEMOGRAPHICAL INFLUENCE ON CONSUMER BUYING: AN EMPIRICAL INVESTIGATION. *Journal of Modern Management & Entrepreneurship*, 7(4), 160-164.
- 10) Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research: Common errors and some comment on improved practice. *Educational and Psychological measurement*, 66(3), 393-416.
- 11) Hude, J. (2021, March). A COMPARATIVE STUDY ON CONSUMER BUYING BEHAVIOUR TOWARDS ONLINE SHOPPING AND OFFLINE SHOPPING. *Vidyabharati International Interdisciplinary Research Journal*, 12(1), 420-425.
<https://www.viirj.org/vol12issue1/68.pdf>
- 12) Jay, K., & Nair, S. (2023, October). Study on Factor Influence in the Customer Preference for Online Electronic Gadgets Shopping. *International Journal of Research Publication and Reviews*, 4(10), 514-519.
- 13) Katawetawaraks, C., & Wang, C. L. (n.d.). Online Shopper Behavior: Influences of Online Shopping Decision. *Asian Journal of Business Research*, 1(2), 66-74.
- 14) Kumar, R., & Kumar, R. (2019). IMPACT OF VARIOUS DEMOGRAPHIC FACTORS ON CONSUMER BEHAVIOUR – AN EMPIRICAL STUDY OF ELECTRONIC PRODUCTS IN RURAL HIMACHAL (INDIA). *Indian Journal of Economics & Business*, 19(1), 109-127.
- 15) Kumar, S. (2023, November 25). Consumer Demographic factors and their impact on Consumer Attitude towards Green Durable Products in Delhi/NCR. *World Journal of Advanced Research and Reviews*, 20(3).
<https://doi.org/10.30574/wjarr.2023.20.3.2371>
- 16) Lakshmipriyanka, A., & Harihararao, M. (2020, September). A study on online shopping vs offline shopping with reference to the students of the Department of Commerce and Management Studies, Andhra University, Visakhapatnam. *International Journal of Engineering Technology and Management Studies*, 4(6). DOI: 10.46647/ijetms.2020.v04i06.007
- 17) Li, Z., & Hou, A. C. (2019). ONLINE PURCHASE PREFERENCE AND PERSONAL CHARACTERISTICS: A MODERATION APPROACH. *International Journal of Electronic Commerce Studies*, 10(1), 1-21. 10.7903/ijecs.1694
- 18) Lu, C. S. (1999). Strategic groups in Taiwanese liner shipping. *Maritime Policy & Management*, 26(1), 1-26.
- 19) Lu, C. S., Shang, K. C., & Lin, C. C. (2016). Identifying crucial sustainability assessment criteria for container seaports. *Maritime Business Review*, 1(2), 90-106.
- 20) Muniady, R., Al- Mamun, A., Permarupan, P. Y., & Zainol, N. (2014, April 29). Factors Influencing Consumer Behavior: A Study among University Students in Malaysia. *Asian Social Science*, 10(9). doi:10.5539/ass.v10n9p18
- 21) Puška, A., Stojanović, I., Šadić, S., & Bečić, H. (2018, May 9). THE INFLUENCE OF DEMOGRAPHIC CHARACTERISTICS OF CONSUMERS ON DECISIONS TO PURCHASE TECHNICAL PRODUCTS. *The European Journal of Applied Economics*, 15(2), 1-16. 10.5937/EJAE15-16576
- 22) Radhikaashree, D. M., Devendran, D. A., & Sowmya, J. (2019, November 29). Trends in Consumers Behaviours towards E-commerce. *Eurasian Journal of Analytical Chemistry*, 165-169.
- 23) Rai, B. (2019). The Effect of Demographic Factors on Consumer Purchase Intention in Buying Television Set in Kathmandu Valley: An Empirical Study. *Silver Jubilee Issue PRAVAHA*, 25(1).
- 24) Rajput, P. K. (2020). Influence of internet marketing on consumer behavior: A study on consumers of Udaipur city. *International Journal of Applied Research*, 6(1), 238-243.
<https://www.allresearchjournal.com/archives/2020/vol6issue1/PartD/6-3-90-984.pdf>
- 25) Raunaque, N., & Beg, K. (2022). Demographic Effects on Consumer's Online Purchase Behavior for Electronic Goods in Delhi NCR Region. *Journal of Positive School Psychology*, 6(6), 10411 – 10416.
- 26) Saluja, R., Soni, R., & Vardia, S. (2018, April). Online & Offline Consumer Buying Behavior (With reference to Udaipur City). *Pacific Business Review International*, 10(10). http://www.pbr.co.in/2018/2018_month/April/9.pdf
- 27) Schiffman, L. G., & Kaunak, L. L. (2009). *Consumer Behavior* (9th ed.). Pearson Prentice Hall.
- 28) Sharma, P. (2023). Impact of demographic factors on online purchase behaviour: An exploratory study of online buyers. *International Journal of Multidisciplinary Research and Development*, 10(7), 52-53.
- 29) Singh, A. K., & Sailo, M. (2013, December). Consumer Behavior in Online Shopping: A Study of Aizawl. *International Journal of Business & Management Research*, 1(3), 45-49.
- 30) Singh, S., & Singh, B. (2014, July 3). A cross sectional study of online shopping behavior trends of electronics in UAE: A case of Ajman. *Middle East Journal of Business*, 9(13), 22-30.
- 31) Sisca, Wijaya, A., Grace, E., Candra, V., & Sidabutar, N. (2022). Examining The Effect Of Consumer Demographic Characteristics On Online Or Offline Shopping Preference. *International Journal Of Science, Technology & Management*.
- 32) Tiwari, S., & Raikar, S. (2023). AN ANALYSIS OF ONLINE AND OFFLINE SHOPPING BEHAVIOUR, WITH RESPECT TO BUYING DECISIONS OF URBAN FAMILIES TOWARDS ELECTRONIC GOODS. *Academy of Marketing Studies Journal*, 27(4).

The Demographic Effect on Consumer Buying Behaviour: Evidence from Online and Offline Electronics Shopping

- 33) Wani, S. N., & Malik, S. (2013, October). A Comparative Study of Online Shopping Behaviour: Effects of Perceived Risks and Benefits. *International Journal of Marketing and Business Communication*, 2(4).
<http://www.publishingindia.com/GetBrochure.aspx?query=UERGQnJvY2h1cmVzfC8xODYwLnBkZnwwMTg2MC5wZGY=>
- 34) Wen, C. H., & Lin, W. W. (2016). Customer segmentation of freight forwarders and impacts on the competitive positioning of ocean carriers in the Taiwan–southern China trade lane. *Maritime Policy & Management*, 43(4), 420-435.
- 35) Yang, D. J., Huang, K. C., & Feng, X. (2011, December). A Study of the Factors that Affect the Impulsive Cosmetics Buying of Female Consumers in Kaohsiung. *International Journal of Business and Social Science*, 2(24). 10.5897/AJBM11.2187



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