

Factors Related to Age Influencing Customer Buying Behavior Towards Online Shopping

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Abstract

Customers use their purchasing behavior to determine what they need, gather information, weigh their options, and ultimately decide what to buy. It is a sequence of decisions made by a buyer before they make a purchase, starting after they have shown a willingness to buy. The objective of research paper is to understand the influence of age factors on online shopping customers. The primary data is collected from five most populated cities (Ludhiana, Amritsar, Jalandhar, Patiala, Bathinda) of Punjab through self-structured questionnaire. The sample size is 1000 respondents and MANOVA is used to analyses the data. Results interpreted provides that age and buying behavior of customers are statically significant to each other. Thus we can say that age factors have an effect on buying behavior of online shopping customers

Keywords: Customer, Buying Behavior, Online Shopping, Demographic Factor.

1. Introduction

Every business aspires to be successful in the marketing arena. It is essential that managers recognize the behavior of their customers. There is a strong correlation between customer sentiments and marketing strategies and endeavors. The majority of organizations these days' focus on understanding customer behavior. Customers behavior encompasses the mental processes that customers go through in order to recognize their wants, determine how to meet those needs, and make judgments about what to buy. Customers behavior research aims to not only comprehend the topic of purchases but also to determine the frequency and motivations behind purchases. **Sharma, (2021)**

The study of customer's behavior focuses on how people choose to allocate their limited resources—time, money, and effort—to consumption-related goods. It includes an analysis of what they purchase, why they purchase it, when and where they purchase it, how frequently they purchase it, and how frequently they use it. Customers go through this process to determine what they need, gather data, weigh their options, and decide what to buy. Psychological and economic variables influence these acts, which in turn are impacted by environmental elements as social, cultural, and group values. **Kotler and Keller, (2012)** It is a sequence of decisions a buyer makes before committing to a purchase, which starts after the buyer has demonstrated a willingness to buy. The marketer makes an effort to sway each of these choices by providing information that might affect how the customer makes an assessment. **Ngantung, (2013)**

Online Shopping is a form of electronic commerce where by customers directly buy goods or services from a seller over the internet without an intermediary service. Online Shopping becomes more popular into people's daily life lot of people prefer online shopping to normal shopping. **Kavitha, (2017)**

Online shopping is easy and convenient for people to pick up the product they want using internet people just need to click the mouse to finish the whole shopping process. Online shopping makes shopping easy and life become easy too. There are various reasons of shifting the customers buying patterns towards online retail shop. The facility of comparing your product with competitive products on the basis of price, colour, size and quality is one of the biggest benefits of online shopping. **Santhi and Gopal, (2018)**

2. Review of Literature

Subalatha and Vijayashree (2023) Studied customer buying behavior towards online shopping. The research study analysed the factors affecting online shopping behavior of customers. The data was collected using secondary and primary sources. The primary data was gathered by using questionnaire from 96 respondents of Chennai. To analyse the data Cronbach's Alpha, KMO and Bartlett Test and One Way ANOVA was used. On their study they found that taste, price, product availability influences the buying behavior of customers.

Kapoor *et. al.* (2022) presented a research paper on customer buying behavior towards online shopping. This research paper explored the customer's attitude, customer's satisfaction level and factors affecting customer behavior towards online shopping. By using random sampling sample size is identified to collect the data. The data was collected from 154 respondents through structured questionnaire. The data was analysed using tables, graphs, chart, percentage and ANOVA etc. the study concluded that there was no significant difference among means of gender, age and occupation of respondents. The factors concluded named as time saving, product preference and free delivery.

Pathania and Bains (2021) conducted research study to identify the factors that prohibiting the customers from impulse online shopping decisions. The descriptive research study analysed the factors namely delay in delivery, customers control, product and price comparison, quality perception, family control and website quality. These all factors were discouraging the customer while making online shopping decisions.

Rani *et. al.* (2020) conducted study regarding customer perception towards online shopping with objectives to investigate determinants that encourage women customers towards online shopping and highlights the problems faced during online shopping. The primary data was collected through questionnaires with sample size of 108 respondents from Gurugram and published and unpublished sources was used to collect secondary data. The married women preferred online shopping as compare to unmarried women. Online shopping saves time, provide heavy discount & offers, return policy and variety of products. Online shoppers faced problems of Delay in delivery, wrong or bad product delivery, slow return policy etc.

Kanade and Kulkarni (2019) studied customer buying behavior of online and offline customers. The purpose of research study was explore the basic concepts and factors that influence online and offline customers buying behavior. The study was descriptive in nature. The secondary sources were used to collect the data from doctoral thesis, research paper and articles. The statistical techniques used were percentage, mean, median, mode, simple comparison, average variance, standard deviation, Pearson correlation coefficient, logistic regression, multiple regression analysis, independent T- test, paired T- test, one way ANNOVA and Chi square test. The study revealed the factors were ease of information, availability of help lines, availability of options, easy checkout, 24*7 availability, user friendly websites, web atmosphere, easy comparison etc. positively influence the buying decisions of customers. The factors namely trust, technology failure, privacy, security etc. were negatively influence the customer's buying decisions.

Rao Bhaskara *et. al.* (2018) Study concerned with the elements influencing the online purchasing habits of women. After investigation, it was shown that customers utilize online shopping more frequently when they visit websites with features and designs that give them helpful information and the ease of purchasing from home. Customers evaluated the usefulness of things they want to buy by reading internet reviews. The sample size for research was 300 respondents to collect the data through structured questionnaire. The study concluded the factors were ease of use and convenience, security, utility, time effectiveness, outbound logistics and feedback.

Kavitha (2017) Conducted a research study on customer buying behavior of online shopping. The objectives of study were to study the buying behavior of customers towards online shopping, problems faced by online shoppers and analysed satisfaction level of customers regards to online shopping. The data was collected from 100 respondents selected with random sampling techniques through structured interview schedule and from various books, journals, magazines and internet. The analysis was made by using percentage analysis and ranking method. The results revealed that male customers preferred online shopping, age group lies between 25-35 years most of them were post graduate. The factors revealed by research were convenience, time saving, wide variety, better price.

Ravikanth and Rao (2016) conducted study on buying behavior of electronic products in Andhra Pradesh with aim to analyse customer perception and opinions towards buying behavior with regards to electronic devices. Primary survey conducted to collect data through questionnaire and secondary data was gathered from annual reports, magazines, research reports, various books and latest updates. The survey conducted among 300 customers 150 from rural and 150 from urban customers from 3 districts of Andhra Pradesh. The study revealed factors that influence buying behavior like: size, color, weight, design, promotion etc.

3. Objectives of the study

To understand the influence of age factor on online shopping customers with regards to electronic gadgets.

4. Hypothesis of the study

H₁: There are significant differences between online shoppers of age groups (0-40 years and 41-60 and above years) in buying decision of electronic gadgets online.

5. Research Methodology

Research Design: This research is analytical in nature. Analytical in the terms that data collected is analyzed using technical tools. So research design is analytical.

Sample Design: The research area for study is salaried people and entrepreneurs from five most populated cities (Ludhiana, Amritsar, Jalandhar, Patiala, Bathinda) of Punjab that has been chosen on basis of 2011 and 2022 census. The Primary data is collected through a structured questionnaire. The sample size for study is 1000 respondents from Punjab.

6. Data Analysis and interpretation

In order to understand the influences of age factor of customers in their buying decision with regards to electronic gadgets, Multivariate Analysis of Variance (MANOVA) has been applied. MANOVA has been employed as in the present study, there are six dependent variables (Influence of Virtual communities, Festive Offers and privacy, perceived ease of use, Credence, Diverse Options and Simplicity and Satisfaction) and independent variable (age) to test the statistical significance of the effect of this independent variable on a set of such dependent variables

Consequently, in order to identify differences between young online shoppers of age groups (0-40 years and 41-60 and above years) with respect to their buying decision of electronic gadgets online (Influence of Virtual communities, Festive Offers and privacy, Perceived ease of use, Credence, Diverse Options and Simplicity and Satisfaction). For the aforesaid purpose, following hypotheses have been framed

H₁: There are significant differences between online shoppers of age groups (0-40 years and 41-60 and above years) in buying decision of electronic gadgets online.

In order to justify this hypothesis MANOVA has been used. In which age is independent variable and buying decisions of electronic gadgets has been taken as dependent variable.

Assumptions of MANOVA

Box's M test is required to check equality of variance covariance matrices of dependent variables across the groups. It has been tested before applying MANOVA and it arrives at 269.404 with F value = 4.229 ($p = 0.000$), which is significant at 1 per cent level of significance. Thus, this assumption of homogeneity of variance across groups of buying decision of electronic gadgets online has not been satisfied. **Hair et. al, (2010)** states that in such a situation, MANOVA can be conducted, if the sample size is large and cell sizes are approximately equal (i.e. if the largest group size is divided by the smallest group size and the value is less than 1.5). The present study has been accompanied with sufficiently large sample ($N = 1000$) and almost equal cell sizes across groups (i.e. the ratio of gender: highest group = 542 and lowest group = 458 is 1.18 and of age: highest group = 502 and lowest group = 498 is 1.00). Since these values are less than 1.5, MANOVA can be employed. Another assumption is to check the inter-correlation between dependent variables is required and it is checked through Bartlett's Test of Sphericity (Approx. Chi Square = 516.027, $df = 15$, $sig. = 0.000$) which validates the use of MANOVA.

Table 1 provides a summary of group profiles (means and standard deviations (S.D.)) for each of the dimensions of buying decision of electronic gadgets online across age of online shoppers. The results of multivariate and univariate tests are given in Tables 2 and 3 respectively.

Table No 1 Mean and Standard Deviation Table

Dimensions of buying decision of electronic gadgets online	Age 0-40 years (N= 502)				Age 41-60 and above years (N =498)				Total (N = 1000)			
	Males N = 241		Females N = 261		Males N= 301		Females N= 197		Total Males N= 542		Total Females N= 458	
	Mean	S. D.	Mean	S. D.	Mean	S.D.	Mean	S. D.	Mean	S. D.	Mean	S. D.
1.Influence of virtual communities	3.97	0.76	3.98	0.71	4.05	0.67	4.20	0.64	3.97	0.74	4.11	0.66
2. Festive offers and privacy	4.05	0.92	4.00	0.83	4.16	0.67	4.32	0.60	4.03	0.87	4.22	0.65
3. Perceived ease of use	3.97	0.81	4.01	0.75	4.03	0.86	4.13	0.68	3.99	0.78	4.07	0.80
4. Credence	4.02	0.83	3.89	0.78	4.10	0.69	4.14	0.71	3.95	0.81	4.12	0.70
5. Diverse options	3.98	0.78	3.96	0.82	4.11	0.70	4.07	0.69	3.97	0.80	4.09	0.69
6. Simplicity & Satisfaction	4.04	0.78	4.10	0.81	4.27	0.70	4.19	0.63	4.07	0.79	4.24	0.67

Source: Primary Data Using Structured Questionnaire

Table 1 shows the total mean score differences: Influence of Virtual communities (3.97 males, 4.11 females); Festive offers and privacy (4.03 males, 4.22 females); Perceived ease of use (3.99 males, 4.07 females); Credence (3.95 males, 4.12 females); Diverse Options (3.97 males, 4.09 females); and Simplicity and Satisfaction (4.07 males, 4.24 females). It reflects that female online shoppers report greater use of all factors affecting their buying behavior of online shopping with regards to electronic gadgets than their male counterparts.

Table 2 Summary of Multivariate test

Effect	Wilks' lamda	F	df	Error df	Sig.	Observed power
Age	0.967	5.550	6	991	0.00*	0.997

*Significant at 1% level.

Table 2 reveals that multivariate statistic for MANOVA is statistically significant for age (Wilks's $\lambda = 0.967$, $F(6, 989) = 5.550$, $p < 0.00$).

The results of univariate tests of group differences in factors affecting buying behavior of online shoppers with regards to electronic gadgets for age of online shoppers have been examined through F-ratio as shown in Table 3. The results in this regard are presented hereafter.

Hypothesis	Independent variable	Dependent Variables	Sum of Squares	df	Mean Square	F	Sig.	Observed Power	Result
H1	AGE	Influence of Virtual communities	5.644	1	5.644	11.622	.001***	0.926	Accepted
		Festive offers and privacy	10.929	1	10.929	18.524	.000***	0.990	Accepted
		Perceived ease of use	1.845	1	1.845	2.967	.085*	0.406	Accepted
		Credence	6.668	1	6.668	11.702	.001***	0.928	Accepted
		Diverse Options	3.217	1	3.217	5.722	.017**	0.666	Accepted
		Simplicity and Satisfaction	6.421	1	6.421	11.793	.001***	0.929	Accepted

***Significant at 1 per cent, **Significant at 5 per cent *Significant at 10 per cent

Differences by age of online shoppers

It indicates that factors affecting buying behavior of online shoppers towards electronic gadgets—Influence of Virtual communities, Festive Offers and privacy, Perceived ease of use, Credence, Diverse Options and Simplicity and Satisfaction differ significantly across age categories ($p < 0.001$, $p < 0.000$, $p < 0.085$, $p < 0.001$, $p < 0.017$, and $p < 0.001$ respectively).

Hence it can be seen from above mentioned results that hypothesis H1 is totally accepted.

7. Conclusion

The impact of age factor on customer buying behavior with regards to electronic gadgets is tested using MANOVA. Identified factors of buying behavior using factor analysis are: Influence of virtual communities, Festive offers and Privacy, perceived ease of use, Credence, Diverse options, Simplicity and Satisfaction along with demographic factor is age. Thus the hypothesis is accepted and we can say that age have an effect on buying behavior of online shopping customers of electronic gadgets.

References

1. Bhaskara Rao M., Hymavathi L., and Rao M., (2018). Factors Affecting Female Consumer's Online Buying Behavior. *Academy of Marketing Studies Journal*. 22(2). pp. 1-20.
2. Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E., (2010). *Multivariate Data Analysis*. 7th Edition, Pearson, New York.
3. Kanade V., and Kulkarni P., (2019). Review of Literature: Online and Offline Consumer Buying Behavior. *International Journal of Research and Analytical Reviews*. 6(1). pp. 146-153.
4. Kapoor G., Gupta A., and Dhawan E., (2022). Consumer Buying Behaviour towards Online Shopping: An Empirical Study with reference to Lucknow City, India. *International Journal of Applied Research*. 8(4). pp. 29-36.
5. Kavitha, T. (2017). "Customer Buying Behavior of Online Shopping- A study," *International Journal of Research in Management & Business Studies (IJRMBS)*. 4(3), pp.38-41.
6. Kotler, P. and Keller, K., (2012). *Marketing Management* (14th edition), London: Pearson Education. pp. 123-131. "Chap"- 5.
7. Ngantung, V., (2013), "Determinant Factors of Product Attributes To Consumer Buying Behavior of Motorcycles," *Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*. 1(4), pp. 697–707.
8. Pathania A., and Bains A., (2021). A Review Study on Inhibiting Factors of Impulse Buying Behavior of Online Shopping Customers. *International Journal of Information Technology*. 11(2). pp 39-42.
9. Rani K., (2020). Customer Perception Towards Online Shopping: A Study of Gurugram. *International Journal of Scientific and Technology Research*. 9(3). pp 578-582.
10. Ravikanth M., and Rao V., (2016). Buying Behavior of Electronic Products in Andhra Pradesh- A Study of Selected Electronic Consumer Product. *International Journal of Recent Research Aspects*. 3(2). pp. 101-106
11. Santhi, V., and Gopal Nanda, L., (2018), "The Consumer Behavior towards Online Shopping in Coimbatore city- An Exploratory Study," *International Journal of Applied Mathematics*. 120(5), pp. 1459-1488.
12. Sharma T., (2021), "The relationship between Impulse Buying Behavior and Personality Traits among Indian Consumers," *The International Journal of Indian Psychology*. 9(2), pp. 580-590.
13. Subalatha T., and Vijayashree P., (2023). Consumer Buying Behavior Towards Online Shopping: An Empirical Study of Chennai City. *European Chemical Bulletin*. 12(6). pp. 282-294.