

An Empirical Study of Online Shopping Behavior for Consumer Durable Products with Special Reference to Demographic Factors in Madhya Pradesh

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Abstract

In India and Madhya Pradesh, online shopping is the newest marketing tool. Electronic technology is being used by businesses to gain market share, while consumers are adopting it for online shopping. Nowadays, many forms of internet purchasing are integral aspects of their business operations. This study investigates the influence of demographic factors on consumer behavior towards online shopping for consumer durable products in Bhopal and Indore, Madhya Pradesh.

A structured questionnaire is used to gather data from, sample of 200 respondents is selected for the study from Bhopal and Indore. The core data is acquired using the questionnaire approach, and data is also collected by personally contacting consumers in all two major cities in Madhya Pradesh.

In this study, Statistical techniques, including independent samples t-tests and one-way ANOVA, is applied. The current study investigated probable disparities in gender, age, education, and income among customer groupings. The results demonstrate that there were no significant differences in consumer behavior across genders and ages, but there were differences between education and income levels, for consumer durable products. The study shows that consumers with higher levels of education and income levels significantly affect consumers propensity to purchase consumer durable products online. The findings demonstrate that customer education and income have a significant impact on their online purchasing behavior of consumer durable products. The study's findings can be significantly applied to future research in the field of online shopping.

Keywords: Various demographic factors, Consumer durable products, Gender, Age, Education Income, online shopping

Introduction: In the world of online purchasing, the Internet revolution and economic expansion have ushered in a paradigm shift. Nowadays, the internet has become a new trend and a new interface for business. The efficient use of the internet for commercial transactions is critical to the survival of businesses. Consumer preferences, education, and money have all increased in recent decades.

Consumers are eager to purchase products through the internet.

In India, online shopping has become one of the most popular ways of life for customers. Business houses have been able to reach the greatest number of customers for the least amount of money and gain a larger market share. The modern customer wants to spend more time with his or her family and has adopted a new lifestyle. He has made online buying a significant aspect of his life. E-marketing has numerous advantages over traditional marketing. Customers can use the Internet to gain access to worldwide markets. Customers have the option of purchasing from any market. Consumers in e-marketing have no physical or geographical boundaries. They can contact any firm by clicking on a link. E marketing has a wide range of applications. Marketers can sell goods and services to a variety of customers in various locations or marketplaces. Because the internet is a relatively new communication medium, the scope of e marketing is rapidly expanding.

Interactivity is one of the most significant qualities of electronic marketing. It facilitates communication between businesses and their customers. Consumers can compare products and services before submitting purchase requests to businesses. There is interaction on both sides, from consumers and businesses.

E-marketing is a two-way route of communication. Marketers can supply consumers with product information, graphics, videos, images, and other features. Immediacy: Internet access is available 24 hours a day, seven days a week, and 365 days a year. Consumers have convenience for purchasing from online store anytime, anywhere they need. In e-marketing, the consumer's purchasing is inclined toward completion.

Consumers get benefited from e-marketing, since it is less expensive than traditional marketing. In e-marketing, there are minimal transit costs associated, low storage costs, and middlemen or agencies. However, Marketers can adjust their methods in response to consumer preferences and desires with less money and effort. E-marketing, companies may increase revenues and consumers can be better satisfied because of all these things. The expense of e-marketing activities is rising every day. Markets are becoming more competitive in terms of pricing.

Urban centers like Bhopal and Indore are observing a surge in online durable purchases, influenced by increasing disposable incomes, rising aspirations, and an evolving digital infrastructure. However, challenges remain, including security threats from cyber criminals, digital privacy, lack of appropriate experience, and trust shortfalls.

This study provides more depth towards the relationships between the key demographic factors with the online purchase of consumer durable products in the rapidly growing urban markets.

Literature Review: The researcher can use a literature review to familiarize themselves with the studies related information and avoid unneeded and inadvertent replication of other researchers' studies. It will aid in the advancement of knowledge. The results of prior investigations are summarized in a literature review so that the researcher can utilize them as a data base for their findings. In the study of online consumer behavior, various demographic factors such as gender, age, income, and education are taken into account. **Vijayalakshmi, (2020)** studied on "Consumer Behavior towards Online Shopping in Devakottai Taluk-An exploratory study" and discussed that internet shopping has become another pattern of shopping these days and is rapidly turning into a significant piece of the way of life. 200 respondents from Devakottai Taluk were chosen by her. Data gathered by organized survey and found that clients of the web are expanded in India in ongoing time and clients are utilizing the web for

internet shopping yet for normal buy a large portion of client's best option is manual shopping. By considering different factors, for example, a significant expense for delivery, quality isn't as same as what the client requested and trouble of returning, clients lean toward customary strategy for shopping. The greater part of clients doesn't know about different pre and post administrations tear by this internet shopping organization. **Bag, Tiwari & Chan, (2019)** they focused on "Predicting the consumer's purchase intention of durable goods: and found that the results of this investigation can be advantageous to online business retailers and set up an effective quest stage for the clients to get the ideal strong products in a delightful structure. At long last, the affectability examination has likewise been performed to test the strength of the proposed model. **Jun & Park, (2016)** they made a study on "Consumer information search behavior and purchasing decisions: Empirical evidence from Korea", and discussed that Internet action by buyers embracing development or buying items has expanded particularly. To comprehend this wonder, our examination centers around the relationship between buy conduct and search action. Their results showed that the connection among deals and quest traffic is huger for buyer merchandise than for modern products; moreover, in the purchaser merchandise classification, search traffic is an especially solid indicator of deals on account of shopper strong products. These outcomes might act naturally obvious, certain in the meaning of every item classification. In any case, the introduced discoveries affirm that even among nondurable merchandise, search traffic can be a critical indicator of buys, contingent upon both cost and recurrence of buys. Interestingly, for solid merchandise, search traffic may not be emphatically demonstrative of real buys for new items, for which traffic basically reflects rising interest. **Dr. Sonal Kala and Rajesh Kumar Sharma, (2015)** According to them, online buying in India has a promising future. Consumers have grasped the complexities of internet shopping processes and have become accustomed to dealing with them. Cash on delivery is becoming more popular, as are flexible delivery times according to the preferences of customers. Demographic characteristics have an impact on internet purchasing in India, according to the findings. Factor of demographics Women's online purchasing is influenced by their gender, which determines their frequency of online shopping. **Dr. Gagandeep Nagra et al, (2013)** Time savings, money savings, easy transactions, easy comparison of items and services, and on-time delivery of goods are all factors that influence online purchasing. Her findings demonstrate that there is a link between age and online shopping, with the younger generation being more interested in online shopping and the older generation being less so. The results also reveal that highly educated consumers are more interested in online buying. The preference for internet purchasing among male consumers is 60%. Consumers believe that online shopping is simple for 38% of them. The majority of respondents, 92 percent, believe that online shopping saves them time, and 85 percent believe it saves them money. Consumers often believe that internet purchasing is less hazardous and that things are delivered on time. **Dr. Seema Agarwalet. al (2013)** in their study found that E-shopping is more convenient and time-saving than traditional shopping. Consumers agree that online purchasing is convenient in 65 percent of cases. Discounts and special deals in online purchasing are more appealing to young consumers aged 18 to 30. Consumers are apprehensive about sharing personal information, with 47 percent preferring to shop in stores and 32 percent preferring to shop online. Income, youth, and online shopping all have a positive correlation. In Rajasthan, both men and women use the internet on a regular basis. **Dr. Sanjay hooda and Sandeep aggarwal (2012)** their research looked on the online shopping habits of people in Jaipur. They claimed that the majority of respondents, regardless of gender, in the 18–30-year age range, find e-shopping more convenient and time saving, and chose credit cards as the most convenient means

of payment, followed by debit cards and cash payments. E-ticketing is the most popular service among customers, followed by e- booking and e-billing. They discovered that 68 percent of consumers regard buying in a store to be more convenient and easier, and that 32 percent prefer to purchase things through internet shopping. There is a considerable link between respondents' income, occupation, and purchase decisions. Higher-income individuals prefer to shop online because they do not have the time to travel to the market and spend 2-3 hours shopping. It has been noted that the youthful generation is attracted to company discounts and offers. The success of the online shopping style of business is largely due to technological advancements. Because of the growing use of the internet, online shopping is booming these days. Innovation refers to the use of cutting-edge technology and system changes to meet current customer demands. Customers are drawn to things for a variety of reasons. External elements such as the environment, geography, human characteristics, product attributes, branding, consumer happiness, and payment alternatives are among them. With the rapid advancement of technology and innovation in the field of online buying, the shopping pattern has shifted dramatically.

Research Objectives

1. To analyze the impact of gender on online shopping behavior for Consumer durable products.
2. To assess the influence of age on consumer behavior towards purchasing Consumer durable products online.
3. To evaluate the relationship between educational qualifications and online purchasing of Consumer durable products.
4. To study the effect of income levels on online shopping behavior for Consumer durable products.

Research Hypothesis

- H1. There is no significant effect of gender on consumer behavior towards online shopping of consumer durable products.
- H2. There is no significant effect of age on consumer behavior towards online shopping consumer durable products.
- H3. There is no significant effect of education on consumer behavior towards online shopping consumer durable products.
- H4. There is no significant effect of income on consumer behavior towards online shopping consumer durable products.

Research Methodology

An empirical study of online shopping behavior for consumer durable products with special reference to demographic factors in Bhopal and Indore, cities of Madhya Pradesh. These cities are the two major cities represented by their population and study scope. For data collection and analysis, structured questionnaire was administered and response were compiled, and bar graphs were prepared using Microsoft Excel. Analysis part including independent sample t-test and one way ANOVA were conducted using IBM SPSS statistics 25. The questionnaire included a sample size of 200 people from the two major cities in Madhya Pradesh mentioned above. The study uses stratified sampling, which divides the population into strata based on gender, age, education, and income.

Table 1 Sample size for questionnaire

Cities	No. of Respondents
Bhopal	125
Indore	75

Data Analysis

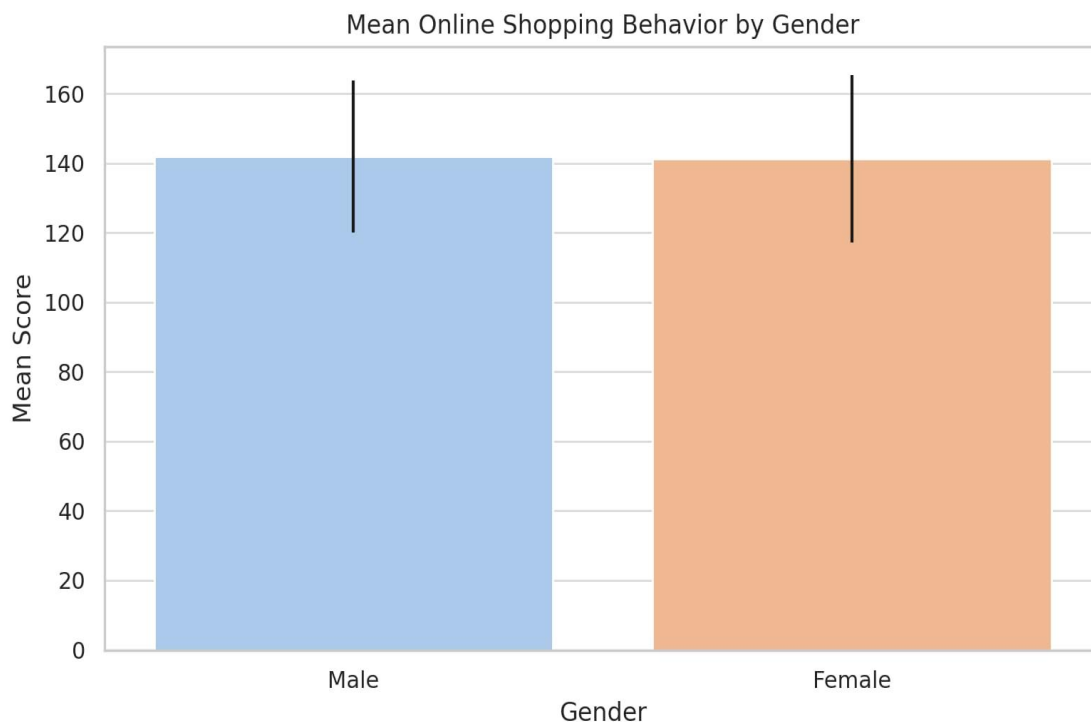
H1. There is no significant effect of gender on consumer behavior towards online shopping of Consumer durable products.

Table 2 Comparative result of effect of gender on consumer behavior towards online shopping

Gender	Number	Mean	SD	CR	level of Significance
Male	100	141.94	21.97	0.21	Not significance at 0.05
Female	100	141.26	24.08		

df = 198 Table value at .05 level of significant = 1.97

Table No. 2 shows that there is no significant difference from the statistical point of view of effect of gender on consumer behavior towards online shopping on Consumer durable products because the values of CR obtained are 0.21 at minimum value for 0.05 of significance on the df 198 is higher than that of 1.97.



The above bar graph highlights that both male and female respondents exhibit similar mean online shopping behavior. This supports the statistical finding that gender has no significant impact ($CR = 0.21 < 1.97$ at 0.05 level), affirming the null hypothesis.

Therefore, on the basis of the above results, it can be said that there was no significant effect of

gender on consumer behavior towards online shopping of Consumer durable products and it means both genders shown similarity in the online shopping behavior.

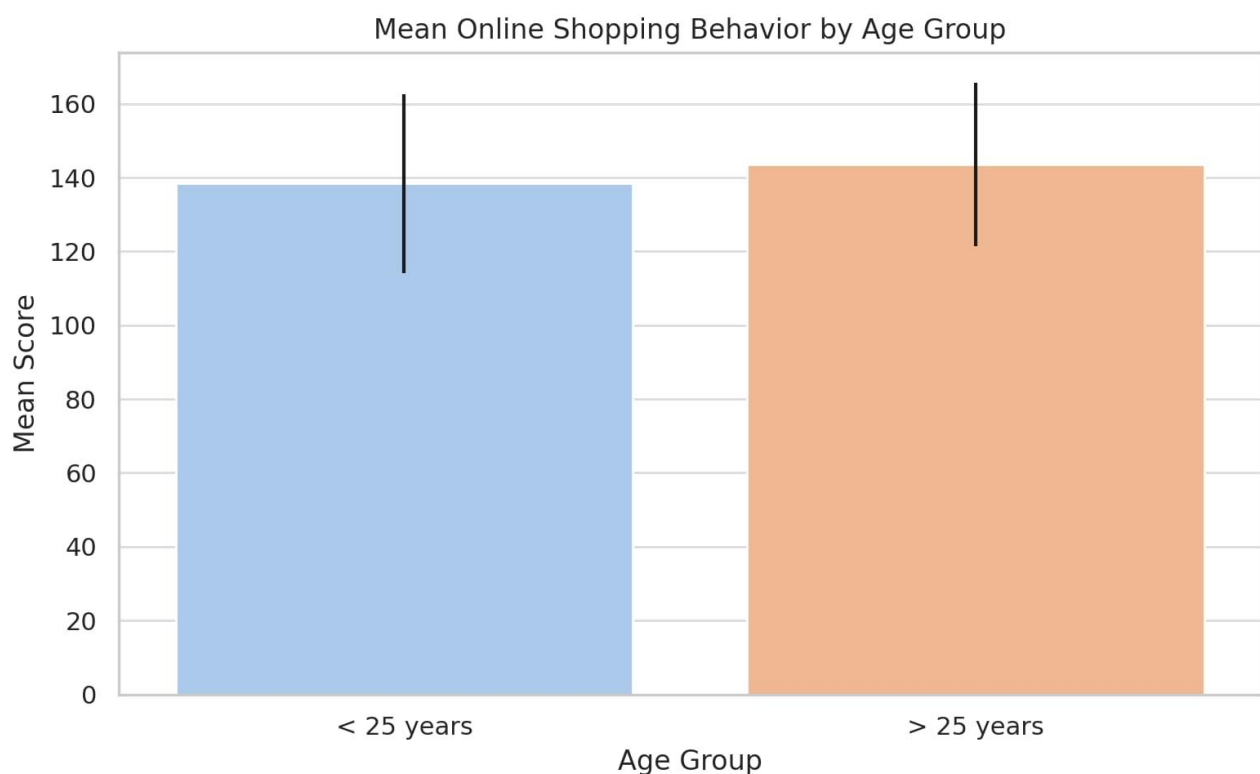
Thus, Null hypothesis 1 is accepted.

H2. There is no significant effect of age on Consumer durable products.

Table 3 Comparative result of effect of age on consumer behavior towards online shopping

Gender	Number	Mean	SD	CR	level of Significance
Below 25	75	138.36	24.16	1.55	Not significance at 0.05
Above 25	125	143.54	22.13		

df = 198 Table value at .05 level of significant = 1.97 Table No. 3 shows that there is no significant difference from the statistical point of view of effect of age on consumer behavior towards online shopping because the values of CR obtained are 1.55 at minimum value for 0.05 of significance on the df 198 is higher than that of 1.97.



The above bar graph depicts mean online shopping behavior among two age groups. It shows no significant difference in behavior between consumers below and above 25 years, supporting the acceptance of the null hypothesis ($CR = 1.55 < 1.97$ at 0.05 significance level).

Therefore, on the basis of the above results, it can be said that there was no significant effect of age on consumer behavior towards online shopping and it means both age group shown similarity in the online shopping behavior.

Thus, Null hypothesis 2 is accepted.

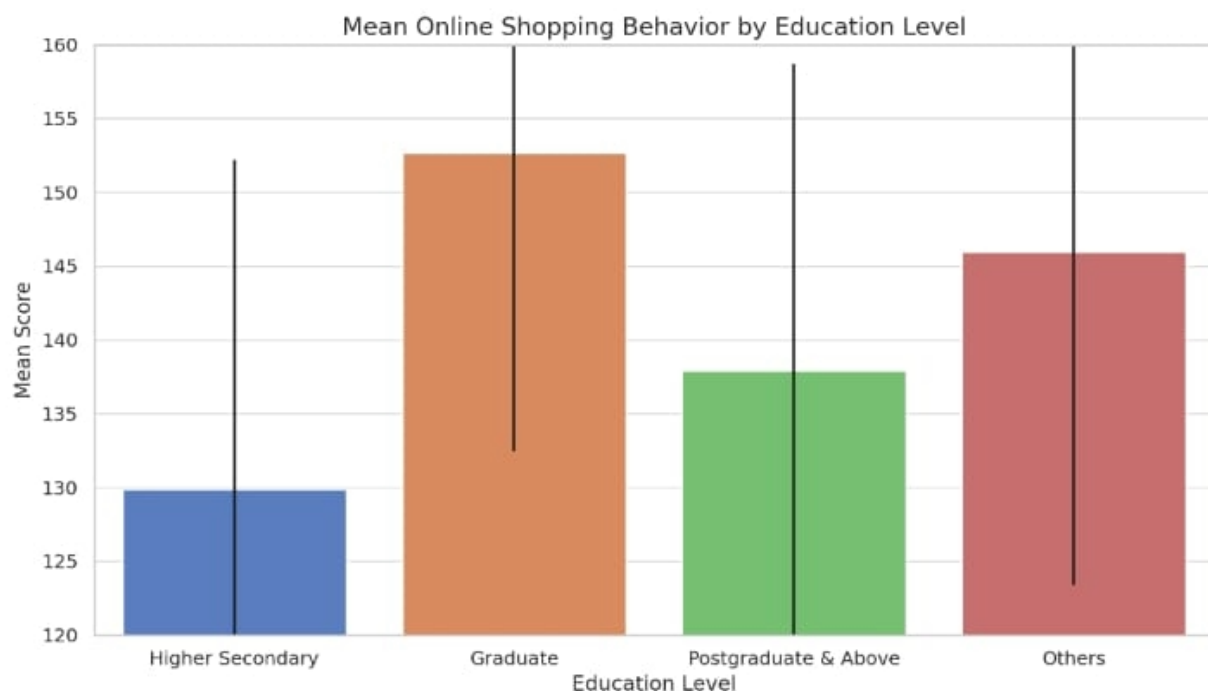
H3. There is no significant effect of education on consumer behavior towards online shopping Consumer durable products.

Table 4 Comparative result of effect of education on consumer behavior towards online shopping

Education	N	Mean of A.A.	S.D.
Higher secondary	50	129.88	22.32
Graduate level	50	152.64	20.21
PG level and above	50	137.92	20.76
Others	50	145.96	22.61
Total	200	141.6	22.99

Source	SS	df	MS	F value	P value
Between-treatments	14589.6	3	4863.2	10.52	<0.01
Within-treatments	90610.4	196	462.29		

df – 3, 196 Minimum values set for 0.01 level of significance 3.88 From the results shown in the above table, it is clear that there is a significant difference in the effect of education on consumer behavior towards online shopping from the statistical point of view. This is because the ‘F’ value obtained is 10.52 and is higher than the prescribed minimum value of 3.88 at 0.01 level of significance and at 3, 196 degrees of freedom.



The above bar graph illustrates variations in mean online shopping behavior across education levels. Consumers at the graduate level show the highest mean score, confirming a statistically significant difference ($F = 10.52 > 3.88$ at 0.01 level), and thus, the null hypothesis is rejected.

Therefore, based on above result, it can be concluded that there is a significant difference in the effect of education on consumer behavior towards online shopping. Furthermore, the results illustrates that the effect of education is likely on the consumers attitudes towards online purchasing. The education classification shows that there is dissimilarity in the consumers' behavior towards online shopping. Thus, null hypothesis 3 is rejected.

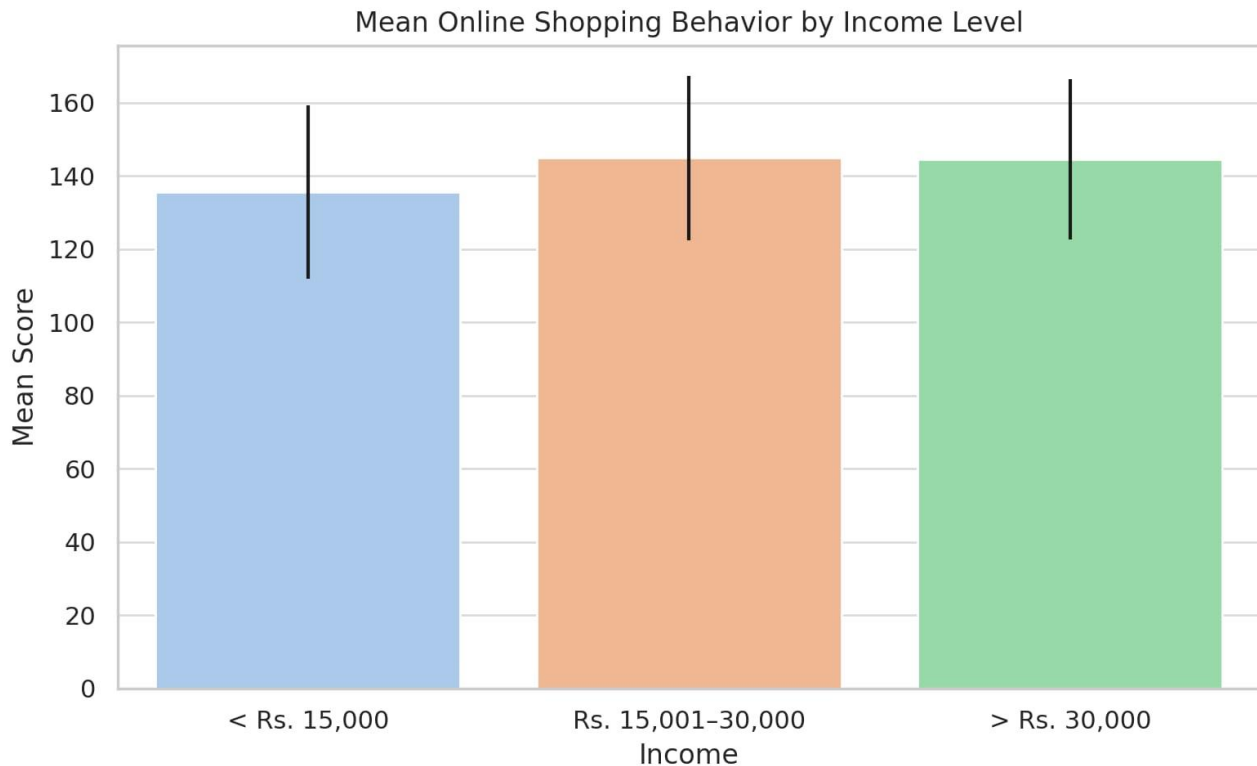
H4. There is no significant effect of income on consumer behavior towards online shopping Consumer durable products.

Table 5 Comparative result of effect of Income on consumer behavior towards online shopping

INCOME	N	Mean of A.A.	S.D.
Less than Rs.15,000	67	135.49	23.72
15001-30000	66	144.86	22.43
Above 30000	67	144.49	21.87
Total	200	141.6	22.99

Source	SS	df	MS	F value	P value
Between-treatments	3762.73	2	1881.36	3.65	<0.05
Within-treatments	101437.26	197	514.91		

df – 2, 197 Minimum values set for 0.05 level of significance 3.04 From the results shown in the above table, it is clear that there is a significant difference in the effect of income on consumer behavior towards online shopping of Consumer Durable products from the statistical point of view. This is because the 'F' value obtained is 3.65 and is higher than the prescribed minimum values of 3.04 at 0.05 level of significance and at 2,197 degrees of freedom.



The above bar graph shows that individuals with higher income levels have slightly higher mean scores for online shopping. This aligns with the statistical result ($F = 3.65 > 3.04$ at 0.05 level), indicating a significant difference and thus rejecting the null hypothesis.

Therefore, based on above result, it can be concluded that there is a significant difference in the effect of income on consumer behavior towards online shopping of Consumer durable products. Furthermore, the results illustrates that the effect of income is likely on the consumers attitudes towards online purchasing. The income classification shows that there is dissimilarity in the consumers' behavior towards online shopping. Thus, Null hypothesis 4 is rejected.

Conclusion

The findings of this study reveal that customers in Madhya Pradesh have sufficient computer knowledge and skills, are internet literate, and use internet services for online shopping. The aggregate findings show that respondents had a favorable opinion of internet purchasing. This explains why online purchasing is on the rise in Madhya Pradesh. Online shopping, on the other hand, is less common in different educational and income levels. The current study looked into probable disparities in gender, age, education, and income among customer groupings. The results demonstrate that there were no significant differences in consumer behavior across genders and ages, but there were differences between education and income levels. The study shows that consumers with higher levels of education and money have a more favorable attitude toward internet purchasing. The findings demonstrate that customer education and income have a significant impact on their online shopping behavior. Consumers appear to be concerned about the security and privacy of online purchases. It is clear that this particular issue looks to be a big stumbling block to Madhya Pradesh's willingness to make better use of internet commerce. This may be enough to explain why many Madhya Pradesh consumers are hesitant to shop online.

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