

IMPACT OF FAMILY INCOME ON THE EXTENT OF ONLINE SHOPPING AND PAYMENTS - A CASE STUDY OF YOUNGSTERS IN AHMEDABAD

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Abstract

The online shopping and digital payments in India had picked up slowly since demonetization in 2016. However, they gathered a real momentum during the lockdowns of 2020 following the Covid-19 pandemic. The online payments and shopping initially became popular only in the city areas and among the age group of 35 years to 60 years. However, by the year 2022, online transactions had become almost universal in India reaching all the regions and age groups.

In this context, the current research attempts to study the patterns of online payments among the youngsters in Ahmedabad. The research tries to examine the most popular modes of digital payments for online shopping which the youngsters of Ahmedabad city use. It also tries to identify the most common purposes for which the youngsters of the city use online modes of payments.

The main purpose of the research is to understand the relationship between the income levels of the families of youngsters and the online shopping expenses. Further the paper strives to understand the impact of income on frequency of online transactions.

To comprehend the patterns of online shopping and online payments among the youngsters of Ahmedabad, the primary data was collected through google forms. A total of 227 respondents aged between 16 years to 21 years gave their responses to the questionnaire.

For understanding the relationship between monthly family income and online expenses on shopping, the correlation analysis was used. The information collected through google form was processed through SPSS software to derive the inferences. Another statistical tool called χ^2 (Chi-Square) test of independence was used to find out whether there is a relationship between the monthly family income and frequency of online transactions.

The study showed that there is a significant positive relation between the monthly family income and the monthly online shopping expenses. The youth belonging to the higher income families tends to do more online shopping and transactions as compared to the youth belonging to the lower income families. However, there is no significant relationship between monthly family income and frequency of online transactions. This means that the level of family income has no impact on the frequency of online transactions.

Keywords: Online Shopping, Online payments, Digital Transactions, Digital Payments, Family income

I. INTRODUCTION:

The objective of this study is to understand the relationship between the family income and the extent of online shopping and payments among the youngsters in the city of Ahmedabad. Here, online shopping (payment) is interpreted as any purchase (payment) that uses internet facility as an intermediary. (It is to be noted that many 'online (digital) transactions' do not constitute 'online shopping' because these 'online payments' are made by the buyer at the counter of 'bricks & mortar shops' for off-line purchases. However, for the purpose of the current study, any digital payment for the product by the buyer is considered 'online-shopping' as the primary focus is on the use of digital payments for any kind of shopping or purchase.)

The study uses both descriptive as well as analytical methods. A lot of interesting and relevant information about online shopping and payments by the youngsters is described systematically in words, graphs and charts.

Using the primary data, the study investigates about the most popular modes of online payments used for shopping by the respondents, the effect of Covid-19 pandemic on online payment and shopping habits, most common categories of online purchases, the major reasons for preferring online shopping etc.

The study further analyses the correlation between the family-income levels and total value of online purchases. It also tries to find out the impact of income on the frequency of online transactions during the month.

The results of this study indicate that switching to online shopping significantly affects the total expenses of the target group. The Covid-19 pandemic has played a huge role in encouraging online shopping and modes of payments. There is a strong positive correlation between levels of family income and total value of online shopping and payments. However, there is no impact of income on the frequency of online transactions.

II. METHODOLOGY:

II. A. Objectives of the Study

The current study aims at understanding the relation between income and online shopping (payments) among the youngsters in the city of Ahmedabad.

Following are the main objectives of the study.

1. To find out the total percentage of respondents using online modes of Payments
2. To find out the most preferred mode of online payment among the respondents
3. To find out the most popular mode of E-wallet among the respondents
4. To study the impact of Covid-19 pandemic on the usage of online payments and online shopping the impact of Covid-19 pandemic on the usage of online payments and online shopping
5. To find out the monthly expenses of the respondents making online shopping and using online payments
6. To identify the most common products on which the respondents are spending the most
7. To understand the perceptions of respondents regarding the impact of online payments on their total spendings
8. To understand the most common reasons among the respondents for preference towards online shopping and modes of payment
9. To understand the most common reasons among the respondents for not using online mode of payment
10. To understand the relationship between the income levels and online shopping expenses
11. To understand the impact of income on frequency of online transactions

II. B. Collection of Data

In order to understand the patterns of online shopping and online payments among the youngsters of Ahmedabad, the primary data was collected through google forms. A total of 227 respondents aged between 16 years to 21 years gave their responses to the questionnaire.

II. C. Hypotheses of the Study

- i. There is no significant relationship between the income levels and online shopping expenses
- ii. There is no significant impact of income on the frequency of online transactions

II.D. Statistical tools

In order to understand the relationship between monthly family income and online expenses on shopping, the correlation analysis was used. The information collected through google form was processed through SPSS software to derive the inferences. Another statistical tool called χ^2 (Chi-Square) test of independence was used to find out whether there is a relationship between the monthly family income and frequency of online transactions.

III. FINDINGS OF THE STUDY

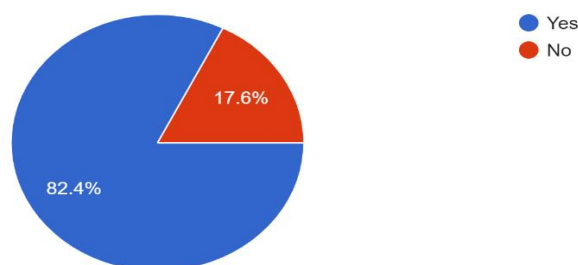
1. Total number of respondents using online modes of payment:

India's digital payment volume has climbed at an average annual rate of about 50 percent over the past five years. Increased awareness, government policies, smart phone proliferation, internet expansion, improved technology etc are responsible for enormous increase in online transactions in India. The same trend was reflected in the current study as well.

Out of the total 227 respondents, 187 (82.4%) respondents used online modes of payment for buying and shopping whereas 40 (17.6%) respondents did not make online payments.

Do you use online payment?

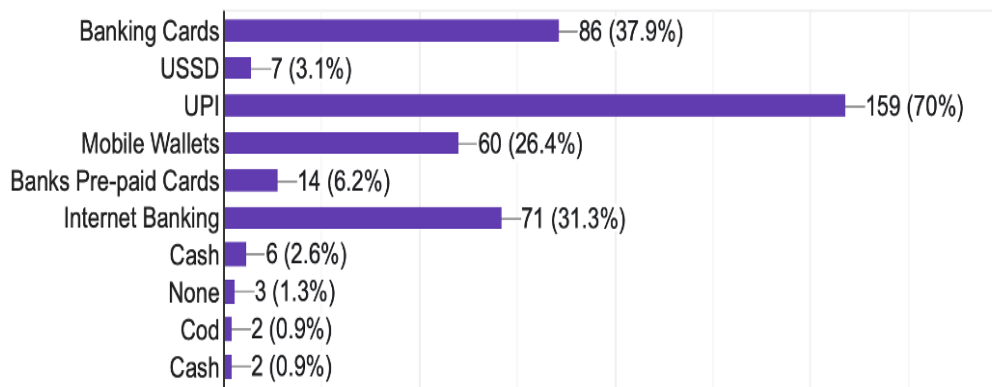
227 responses



2. The most preferred mode of online payment among the respondents
As per the graph below, most of the respondents preferred “UPI” as a mode of online payment. A total of 159 students out of 227 (70%) chose it. The next most preferred were “banking cards” with a total of 86 respondents (37.9%) choosing it, followed by “internet banking” (31.3%) and “mobile wallets” (26.4%).

Which mode of online payment do you use?

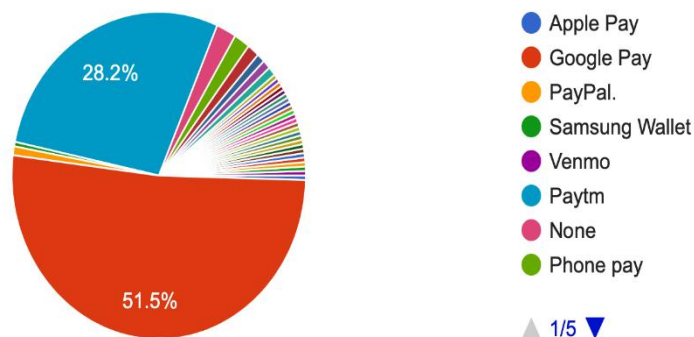
227 responses



3. The most popular mode of e-wallet among the respondents
117 of the 227 respondents (51.5%) preferred using “Google pay” over all other E-wallets making it the most preferred amongst the youth of Ahmedabad. This was followed by “Paytm” at (28.2%).

Which mode of E-Wallet do you use?

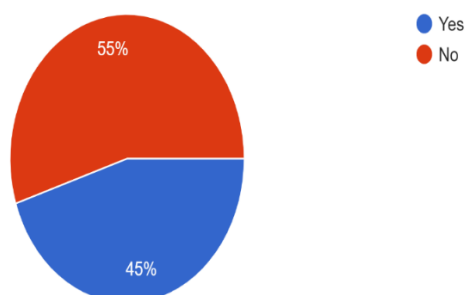
227 responses



4. The impact of Covid-19 pandemic on the usage of online payments and online shopping
Most of the respondents did not use online modes of payment before the pandemic. This result is supported by the collected data and the pie chart shown below which says that 55% that is 125 out of 227 of the respondents did not use online payment before the onset of COVID. A possible reason for this could be that the youth got more accustomed to using online payments during the lockdowns. Further there was a need to avoid contact during covid, reducing the use of cash.

Did you use online mode of payment before the Covid - 19 pandemic?

229 responses

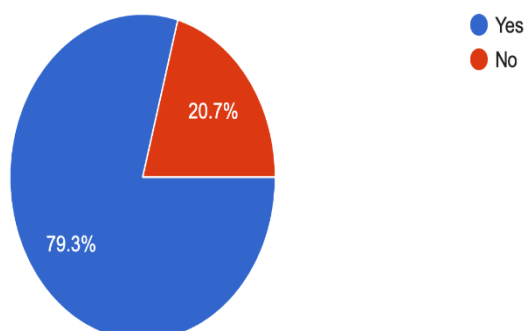


5. Did the Pandemic Increase Your Online Transactions?

79.3% of the respondents felt that the quantum of their online transactions has increased since the onset of the covid-19 pandemic.

If in the above question you have answered yes, then do you feel that your usage of online payment has increased after the pandemic?

193 responses

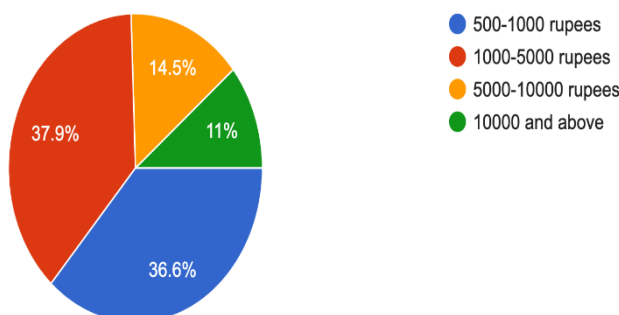


6. The monthly expenses of the respondents doing online shopping and using online payments

36.6 % of the youngsters spent between Rs. 500 to Rs. 1000. 37.9% of them spent between Rs. 1000 to Rs. 5000. Those who spent between Rs. 5000 to Rs.10000 were 14.5% whereas 11% spent above Rs. 10000. This means that a large majority (74.5%) of the young people spent upto Rs. 5000 for online shopping. It is quite possible that online transactions of higher (above Rs. 5000) denominations are mostly performed by parents.

Your *individual* average monthly expense? (please select the figure where your approximate answer lies)

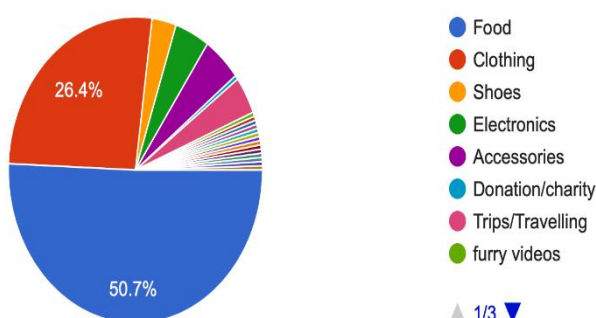
227 responses



7. The most common products on which the respondents are spending the most
A staggering 50.7% of the young respondents (115 out of 227) made highest online transactions for buying 'food' items. This was followed by 'clothing' on which 26.4% (60 out of 227) of the respondents spent the most while shopping online.

In which category do you feel you spend most?

227 responses



8. The most common reasons among the respondents for preference towards online shopping and digital modes of payment

The most common reasons why respondents prefer online shopping modes of payment is because they feel that it is much easier to use, as carrying cash everywhere becomes too tedious. Not only does it become tedious but it also feels unsafe to carry large amounts which could be easily stored in one's online payment apps.

Most common Responses in favour of digital payments and online shopping include:

1. Convenience and Time Saving
2. Greater Safety as no risk of money getting stolen
3. The payments can be made in real time (fast payments)
4. Helps avoiding infections caused due to the physical touch of the currency and coins
5. Allows buying products at the most competitive prices from vendors across the country and world.
6. Exact Payments even in decimals can be made and hence there is no need to worry about the 'change'.

9. The most common reasons among the respondents for not using online mode of payment

However, there are certain respondents who did not use online modes of payment or preferred cash over online transactions. They felt that cash is handier and it did not require long transaction time like waiting for OTP or entering bank details. They also felt that cash helped them keep better track of how much money is spent and where.

The main reasons given by the respondents for not using digital payments and doing online shopping were:

1. They cannot get first-hand feel of the product and so are unsure about the quality of the goods

2. Sometimes Online transactions fail and a lot of time is taken for the money to get refunded in the account
3. There is a psychological fear of unsecure payment links resulting in frauds
4. The ease of online payments and online shopping leads to over-spending and tendency to buy even those products which are actually not required

10. Relationship between Family Income and Online shopping and Digital Payments:

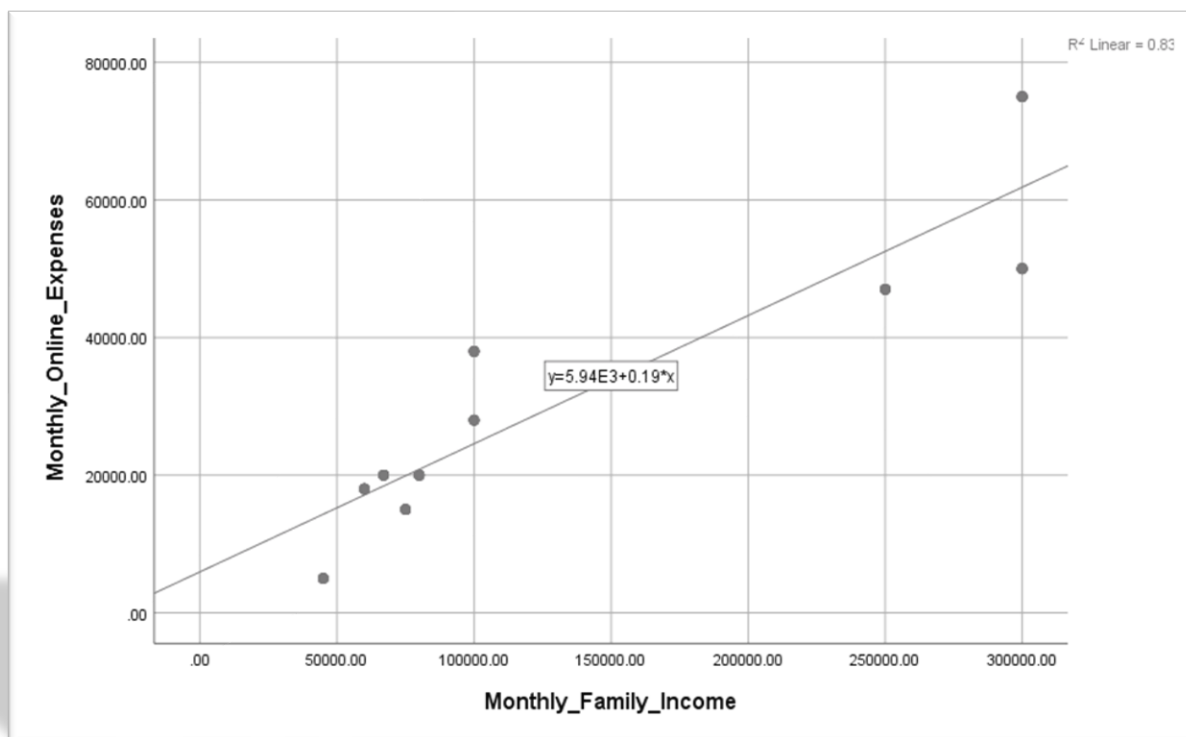
One of the main objectives of this study is to find out whether there is any correlation between family income of the respondents and the quantum of their digital payments and online shopping. The data on monthly family incomes of the respondents and the corresponding amount of their (major) digital transactions was collected through a structured questionnaire. In order to understand the relationship between monthly family income and online expenses on shopping, the correlation analysis was used. The information was collected through google form and was processed through SPSS software to derive the inferences. Following are the results of the test.

RESULTS OF CORRELATION ANALYSIS:

Correlation between Income and Online Shopping Expenses			
		Monthly Family Income	Monthly Online Expenses
Monthly Family Income	Pearson Correlation	1	.914**
	Sig. (2-tailed)		.001
	N	227	227
Monthly Online Expenses	Pearson Correlation	.914**	1
	Sig. (2-tailed)	.001	
	N	227	227

** . Correlation is significant at the 0.01 level (2-tailed).

Since $p \leq 0.01$, the test is significant ($p=0.001$). There is a significant positive relation between the monthly family income and the monthly online shopping expenses. Thus, the null-hypothesis that there is no relation between family income and monthly shopping expenses stands rejected.



The above graph shows the relationship between the monthly family income of the youngsters and their individual monthly online shopping expenses. The positive slope of the curve confirms that there is a positive relationship between the income and online expenses.

This means that the youth belonging to the higher income families tends to do more online shopping and transactions as compared to the youth belonging to the lower income families.

11. Impact of Family Income on the Frequency of Online Transactions:

The second important objective of this study is to find out the effect of family income of the respondents on the frequency of online shopping and transactions. Another statistical tool called χ^2 (Chi-Square) test of independence was used to find out whether there is a relationship between the monthly family income and frequency of online transactions.

All the respondents were classified in to three monthly-income ranges.

1. ≤ 50000 per month
2. 50000 to 100000 per month
3. ≥ 100000 per month

The frequencies of online transactions were also classified in to three categories

1. 1 to 10 transactions a month
2. 11 to 20 transactions
3. More than 20 transactions

100 respondents each belonged to first- and second-income ranges whereas 27 belonged to the third. Around 80% respondents in all the three income ranges made between 11 to 20 online transactions per month. Once again, the SPSS software was used to calculate the value of chi-square.

RESULTS OF CHI SQUARE ANALYSIS

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Monthly Family Income * Monthly Online Transactions	227	100.0%	0	0.0%	227	100.0%

Monthly Family Income * Monthly Online Transactions Crosstabulation						
			No. of Monthly Online Transactions			Total
			1 to 10	11-20	>20	
Monthly Family Income	≤ 50000	Count	10	80	10	100
		Expected Count	9.3	81.1	9.7	100.0
		% within Monthly Family Income	10.0%	80.0%	10.0%	100.0%
	50000-100000	Count	8	82	10	100
		Expected Count	9.3	81.1	9.7	100.0
		% within Monthly Family Income	8.0%	82.0%	10.0%	100.0%
	>100000	Count	3	22	2	27
		Expected Count	2.5	21.9	2.6	27.0
		% within Monthly Family Income	11.1%	81.5%	7.4%	100.0%
Total		Count	21	184	22	227
		Expected Count	21.0	184.0	22.0	227.0
		% within Monthly Family Income	9.3%	81.1%	9.7%	100.0%

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	.521 ^a	4	.971
Likelihood Ratio	.534	4	.970
Linear-by-Linear Association	.023	1	.879
N of Valid Cases	227		

a. 2 cells (22.2%) have expected count less than 5. The minimum expected count is 2.50.

Since $p > .05$, the test is not significant. There is no significant relationship between monthly family income and frequency of online transactions ($\chi^2 = .527$), $p = .971$.

This means that the level of family income has no impact on the frequency of online transactions. Around 80% of young respondents make 11 to 20 online transactions in a month irrespective of the income range they belong to.

The monetary value of these transactions varies directly with the level of income as seen from the correlation analysis, but not the number of transactions. This implies that those belonging to lower incomes must be conducting approximately same number of online transactions but of relatively smaller denominations as compared to those who belong to high incomes. This proves that the digital modes of payments have become quite popular in all income groups.

III. SUMMARY

The current study strives to find out the impact of family income on the extent of online shopping and digital payments with respect to youngsters of Ahmedabad. The study is based on primary data. The study found that 84.2 % of the young respondents used online modes of payment and did online shopping. UPI was the most preferred mode of digital payment. Similarly, Google Pay was the most popular e-wallet followed by Paytm. The Covid-19 pandemic proved to be a major factor enhancing the use of digital modes of payments. 55% of the young respondents didn't make online transactions and do online shopping before the onset of the pandemic. 79.3% of the respondents felt that the amount of their online transactions has increased since Covid-19. A large majority (74.5%) of the young respondents spent maximum upto Rs. 5000 for online shopping. 50.7% of the young respondents surveyed made highest online transactions for buying 'food' items. This was followed by 'clothing' on which 26.4% of the respondents spent the most while shopping online. Those who preferred digital payments and online shopping provided six reasons for their digital preferences. They found online payments much more convenient and time saving. There was greater safety in online transactions as there was no risk of money getting stolen. The payments could be made in real time (fast payments). Digital payments helped avoiding infections caused due to the physical touch of the currency and coins especially during these times of contagious diseases. Besides, it allows buying products at the most competitive prices from vendors across the country and world. Last but not the least, exact payments even in decimals can be made and hence there is no need to worry about the 'change.'

Those who preferred offline (cash) transactions, had the following reasons for their preferred mode. They didn't prefer online shopping as they could not get first-hand feel of the product and so they remained unsure about the quality of the goods. Sometimes online transactions fail and a lot of time is taken for the money to get refunded in the account. Besides, there was a psychological fear of unsecured payment links resulting in frauds. The ease of online payments and online shopping lead to over-spending and tendency to buy even those products which are not required.

The study further showed that there is a significant positive relation between the monthly family income and the monthly online shopping expenses. The youth belonging to the higher income families tends to do more online shopping and transactions as compared to the youth belonging to the lower income families. However, there is no significant relationship between monthly family income and frequency of online transactions. This means that the level of family income has no impact on the frequency of online transactions.

REFERENCES

- [1] Tan Owee Kowang, Fatinsyakila binti Abdul Aziz, Ong Choon Hee, Goh Chin Fei, Lim Kim Yew, Mohd Saiful Izwaan Bin Saadon, Choi Sang Long "E-Wallet Acceptance among Undergraduates in Malaysia" TEST Engineering and Management Journal, May - June 2020, Page No. 12990 - 12998
- [2] Shafeer P S, "Usage of Digital Financial Services Among Youth From College Campuses In Kerala", IJRAR June 2019, Volume 6, Issue 2
- [3] Lakshmirani A S and Shanmugapriya B, "Study on Youth Perception of Digital Payment Mode", Conference Proceedings, Emerging Trends in Banking, Insurance and International Trade, July 2022
- [4] Minh Anh Dao Tran & Thanh Ngan Duong, "The Adoption of e-wallet among youngsters in Vietnam: An Exploratory Study", Research Coach in Social Sciences, October-November, 2022