

## A STUDY OF PREFERENCE TOWARDS THE MOBILE WALLETS AMONG THE UNIVERSITY STUDENTS IN LUCKNOW CITY

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### ABSTRACT

*Few years back mobile wallet was something majority in India did not hear about but its use saw a huge leap in last couple of years with the surge of smart phones, high speed internet connectivity using 3G and 4G and the lucrative offers mobile wallets provide. This research paper is an attempt to study the preference towards mobile wallet among the students studying in various universities in Lucknow city.*

KEYWORDS: Lucknow, Mobile wallets, Students, University.

### INTRODUCTION

In today's world smart phone has become an important part of life. Number of smart phone users has increased dramatically as it has become more affordable. According to data released by TRAI (Telecom Regulatory Authority of India) there are around 300 million users of mobile phone in India. Besides providing the basic function of communication there are plenty of services a smart phone provides. These services includes entertainment (music, movies, games etc.), socialization (social networking applications like facebook, twitter and instant messaging services like whatsapp, messenger ),internet access services and even payment services. For using payment services on smart phones an application for the same is required to be installed in it. This application is called the digital wallet or electronic wallet or popularly mobile wallet. Its functions of keeping and paying the currency are same as of traditional leather wallet with the only difference of performing the same digitally and more number of parties directly or indirectly involved in performing the same on digital platform. For using mobile wallet service customer needs to register him with that mobile wallet and preload a certain amount of money in it which can be used for shopping, recharge, utility bill payments etc. Obviously it does not depend only on the smart phone and mobile wallet installed in it. The entire process of sending and receiving money requires a complex network of intermediaries including banks, payment gateways and mobile network operators. As per the "Master Circular-Policy Guidelines of Issuance and Operation of Prepaid Payment Instruments in India" published on RBI website Mobile wallets are one of the prepaid payment instruments other being smart cards, magnetic stripe cards etc. There are three types of mobile wallets-

**Open wallets-** Open wallets are part of Open System Payment Instruments and can be used for purchasing goods and services including financial services and also allow customers to withdraw cash at ATMs/BCs. Such type of wallets can only be jointly launched with a bank.

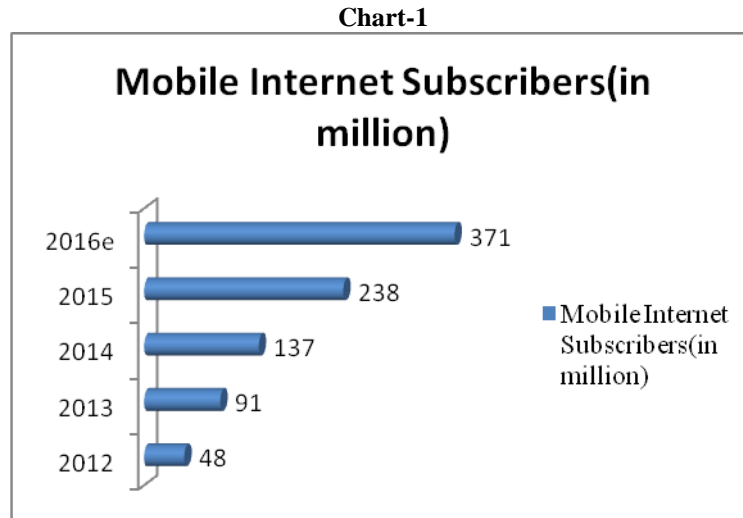
M-pesa by Vodafone is an example of such type of wallets.

**Closed wallets-** Closed wallets are the part of Closed System Payment Instruments which can be used for buying goods and services from the entity which issued that payment instrument. Example is- Amazon pay balance.

**Semi Closed wallets-** Such type of wallets are part of payment instruments which can be used for purchasing goods and services only from selected merchants. Cash withdrawal or redemption cannot be performed using semi closed wallets. Examples are-Paytm wallet, SBI Buddy ,Citrus wallet etc.

## INDIAN MOBILE WALLET MARKET: A SCENARIO

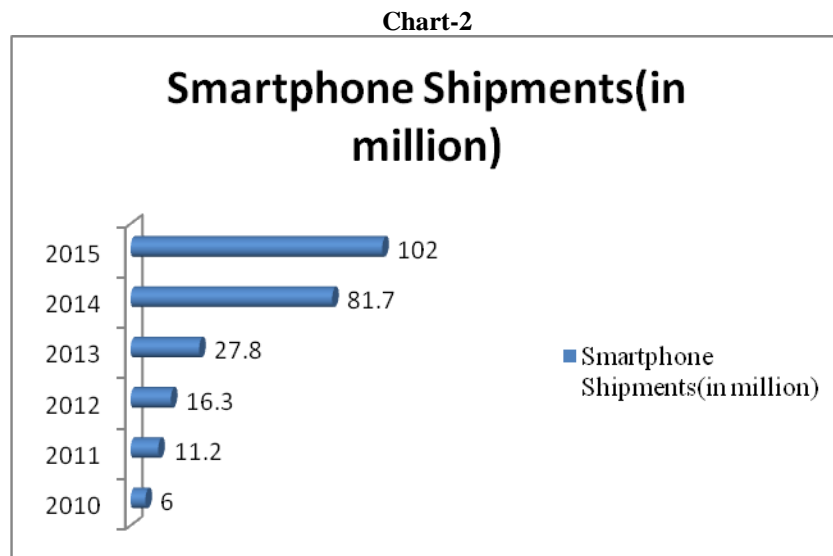
As per the statistics of Internet and mobile Association of India by the end of June 2016 there were around 371 million mobile internet subscribers in India. Due to tariff rates of 2G and 3G coming down and 4G hitting the Indian market, ASSOCHAM expects the mobile internet users to grow at a compound annual growth rate of 67% during the period 2016-2020.



Source: Internet and mobile Association of India (IMAI)

Note e= estimation  
Year ending June

According to International Data Association shipment of smart phones in India grew almost 6 times during the period of 2012 to 2016.

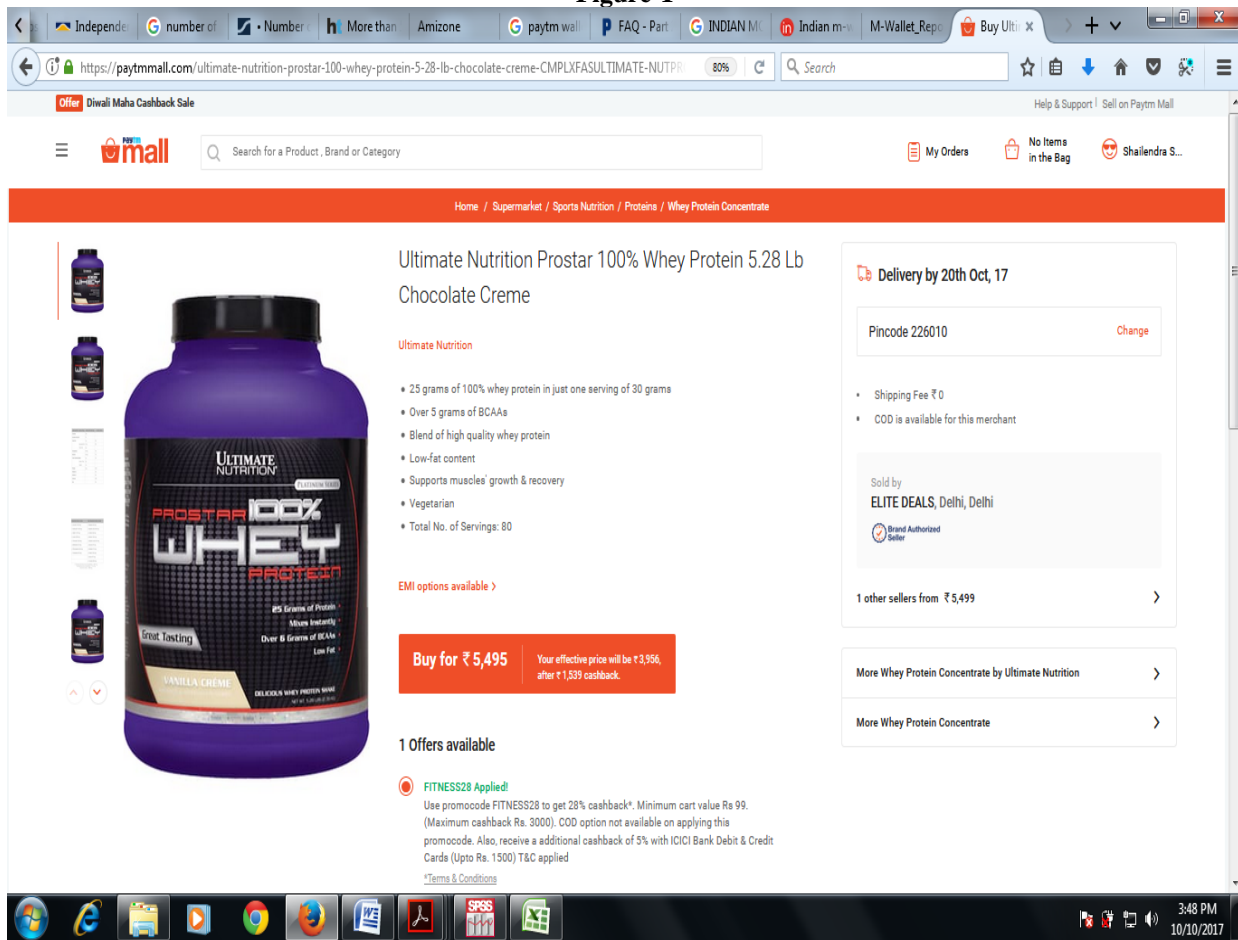


Source: International Data Corporation (IDC)

Majority of Indians have a tendency to save so they are getting attracted towards mobile wallets due to the cashbacks, discounts and coupons they provide to their customers which can be availed at online as well as offline stores. Paytm for example is giving a cashback of Rs.1539 on a product whose price is Rs. 5495 as on 10<sup>th</sup> October

2017. Anyone specially youth easily gets attracted with such types of offers and thus presents a huge market for m-wallet and the merchants associated with them

Figure-1



According to the estimates of Morgan Stanley mobile wallet transactions increased nine times within last two years and reached 9 billion dollars as of April 2017. It also said that greater adoption of digital payment tools such as mobile wallets, Unified Payment Interface (UPI), mobile banking and transactions through cards at point of sales terminals could affect the share of ATM withdrawals. According to a research study conducted by trade body ASSOCHAM and business consulting firm RNCOS mobile wallet market in India is expected to grow by 190 percent and will reach the level of 1512 Rs. by the year 2022. Drivers of this rapid expected growth are increasing usage and penetration of smart phones, mobile internet penetration with 3G/4G connectivity, increased presence of electronic commerce sector and higher disposable income in the hands of middle income group which forms a big and lucrative market. Following table shows the major mobile wallet players in India and their tie-up with major merchants.

**Table-1**

<b>Leading mobile wallets players and their tie-ups with merchants</b>	
<b>Mobile Wallet player</b>	<b>Merchant</b>
Paytm	Makemytrip, IRCTC, Paradise nutrition, Dominos, Zomato, Delhi Metro, UPPCL, APEPDCL ,Mahanagar Gas Mumbai,Ola cabs, Foodpanda, Bigbazar etc.
Mobikwik	Big Bazar, Shop clues, Pepper fry, Matra, Book my show, Café Coffee Day, Shop Clues etc.
ICICI pockets	Provogue, Dominos, McDonalds, Myntra, Bookmyshow, Makemytrip
Oxygen	ebay, KFC, Easy Cabs, go ibibo etc.
Free charge	IRCTC, Book my show, Mumbai Metro, Mahanagar Gas etc.

## **STATEMENT OF THE PROBLEM**

Mobile wallets are changing the traditional ways of making and receiving payments, doing shopping, paying bills etc. Students belong to Generation-F which wants fast food, fast fuel and facebook. This generation has grown up in a world with technology, connected with social media networks using their smart phones and tablets. Though lot of research work has been conducted on the use of mobile wallet minuscule amount of research has been done on the same with students as the respondents. This research study is a humble attempt in this direction to know the preference of students towards mobile wallets.

### **RESEARCH OBJECTIVES**

- To study the preference towards the usage of mobile wallets among the university students in Lucknow city.
- To find out the impact of various demographic variables on the opinion regarding the future of mobile wallets.
- To examine the factors influencing adoption of mobile wallets.
- To examine the factors refraining the usage of mobile wallets.

### **HYPOTHESIS**

There is no significant relationship between respondents' gender and the opinion regarding the future of mobile wallets.

There is no significant association between respondents' age and opinion regarding the future of mobile wallets.

There is no significant association between respondents' programme of study and opinion regarding the future of mobile wallets.

There is no significant association between respondents' type of stay and opinion regarding the future of mobile wallets.

There is no difference between the average monthly transaction amount of day scholars and hostellers.

Symbolically,

$$H_0: \mu_{\text{day scholars}} - \mu_{\text{hostellers}} = 0$$

$$H_a: \mu_{\text{day scholars}} - \mu_{\text{hostellers}} \neq 0$$

Where,  $\mu_1$  = average monthly transaction amount of day scholars

$\mu_2$  = average monthly transaction amount of hostellers.

### **RESEARCH METHODOLOGY**

**Population of the study:** Population of the study consisted of the students studying in undergraduate, postgraduate and Ph.D programmes of various universities in Lucknow city. The respondents were the users of the mobile wallets.

**Sample size:** Initial sample size of the study was 100 students using mobile wallets but 5 questionnaires were found invalid due to several reasons so the actual sample size reduced to 95.

**Sampling technique:** Since the sampling frame of the students using mobile wallets was not available purposive sampling was used.

**Data collection tools:** This research was basically based on primary data collected using a structured questionnaire administered to 100 respondents during a period of 1 month from 1<sup>st</sup> August to 31<sup>st</sup> August. Small amount of secondary data collected from various sources was also used.

**Data analysis tool:** Collected data was analyzed using SPSS software by using statistical tools like descriptive statistics, pie chart,  $\chi^2$  test etc.

## DATA ANALYSIS AND INTREPRETATION

**Table-2 Demographic profile of the students**

	Categories	Count	Percentage
Age	17-21	45	47.36%
	22-26	39	41.05%
	27-31	9	9.47%
	32 and above	2	2.1%
Gender	Male	63	66.31%
	Female	32	33.68%
Status	Day scholar	66	69.47%
	Hosteller	29	30.52%
Student of	UG	50	52.63%
	PG	42	44.21%
	Ph.D	3	3.1%

Source: primary data

47% of the respondents are in the age group of 17-21 years, 66% of the respondents are male, 69% of the respondents are day scholar and 52% of them are the students of undergraduate programmes.

**Table-3 Preference regarding usage of mobile wallets for purchasing goods/services**

Goods/Services	No. of respondents	Percentage
Books	15	10.52%
Cloths	10	8.42%
Movie tickets	14	14.73%
Railway/Bus reservation	8	8.42%
Recharge(Mobile/DTH)	22	23.15%
Transfer money	16	15.78%
Utility Bills	8	16.84%
Others	2	2.1%

Source: primary data

**Table-4 Factors influencing adoption of mobile wallets**

Adoption determinant	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
Instant Payments	0	0	0	12	83
Instant Refunds	3	7	0	44	39

One Stop Shop	1	8	2	43	41
Offers and rewards	2	1	9	37	46
Time and place independent purchases	0	0	1	2	92
Queue avoidance	2	0	0		93

Source: primary data

**Table-5 Factors refraining the usage of mobile wallets**

Refraining determinant	Strongly disagree	Disagree	Undecided	Agree	Strongly agree
Prefer to use other cashless payment options(credit cards/debit cards etc.)	0	10	12	31	42
Concerned about the security of mobile payments ( unauthorized use ,transaction error, etc.)	2	33	1	30	30
Complexity(complex sms formats, codes, registration procedure)	81	2	0	0	12
High cost of data access	15	38	1	20	21
Distrust(in merchant, telecom operator, financial intermediary)	17	38	3	19	18

Source: primary data

**Opinion regarding the future of mobile wallets**

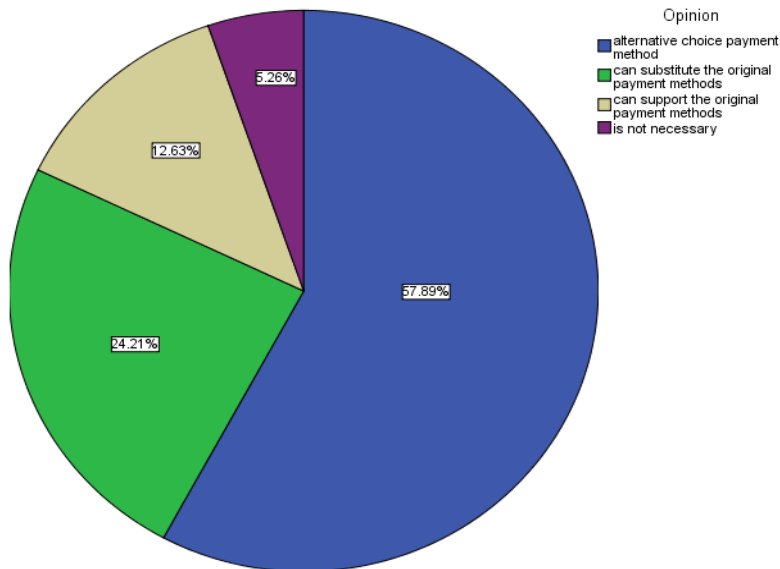
Respondents were asked about their opinion regarding the future of mobile wallets. More than half of the respondents (57.9%) agreed that mobile wallets will emerge as alternative choice payment methods while only 5.3% of them think they are not necessary.

**Table-6 opinion regarding the future of mobile wallets**

	Frequency	Percent
Valid alternative choice payment method	55	57.9
can substitute the original payment methods	23	24.2
can support the original payment methods	12	12.6
is not necessary	5	5.3
Total	95	100.0

Source: Primary data

**Chart-3 Pie chart showing the opinion of respondents regarding the future of mobile wallets**



Source: Primary data

**Hypothesis testing**

**Table-7 Male or Female \* Opinion Cross tabulation**

Count		Opinion				Total
		alternative choice payment method	can substitute the original payment methods	can support the original payment methods	is not necessary	
Male or Female	Male	40	16	5	2	63
	Female	15	7	7	3	32
Total		55	23	12	5	95

**Table-8 Chi-Square Test**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.935 <sup>a</sup>	3	.115
Likelihood Ratio	5.642	3	.130
Linear-by-Linear Association	4.873	1	.027
N of Valid Cases	95		

3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.68.

Source : Primary data

**Research hypothesis:** There is significant association between the gender of the students and the opinion regarding the mobile wallet.

**Null hypothesis:** There is no significant association between the gender of the students and the opinion regarding the mobile wallet.

**Finding:** Since p value(0.115) is greater than  $\alpha=.05$  so null hypothesis cannot be rejected and we can conclude that enough evidence does not exist to show that there is significant association between the gender and the overall opinion regarding the mobile wallet.

**Table-9 Age \* Opinion Cross tabulation**

Count		Opinion				Total
		alternative choice payment method	can substitute the original payment methods	can support the original payment methods	is not necessary	
Age	17-21	28	12	3	2	45
	22-26	20	10	7	2	39
	27-31	7	1	0	1	9
	Over 31	0	0	2	0	2
Total		55	23	12	5	95

**Table-10 Chi-Square Test**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	19.592 <sup>a</sup>	9	.021
Likelihood Ratio	15.302	9	.083
Linear-by-Linear Association	1.918	1	.166
N of Valid Cases	95		

10 cells (62.5%) have expected count less than 5. The minimum expected count is .11.

Source: Primary data

**Research hypothesis:** There is significant association between the age of the students and the opinion regarding the mobile wallet.

**Null hypothesis:** There is no significant association between the age of the students and the opinion regarding the mobile wallet.

**Finding :** Since the p value(0.021) is less than  $\alpha=.05$  so the null hypothesis is rejected and we can conclude that there is significant association between the age and the overall opinion regarding the mobile wallet.



**Table-11 Day scholar or hosteller \* Opinion Cross tabulation**

Count		Opinion				Total
		alternative choice payment method	can substitute the original payment methods	can support the original payment methods	is not necessary	
Day scholar or hosteller	Day scholar	40	16	10	2	68
	Hosteller	15	7	2	3	27
Total		55	23	12	5	95

**Table-12 Chi-Square Test**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.347 <sup>a</sup>	3	.341
Likelihood Ratio	3.143	3	.370
Linear-by-Linear Association	.364	1	.546
N of Valid Cases	95		

3 cells (37.5%) have expected count less than 5. The minimum expected count is 1.42.

Source: Primary data

**Research hypothesis:** There is significant association between the type of stay of students and the opinion regarding the mobile wallet.

**Null hypothesis:** There is no significant association between the type of stay of students and the opinion regarding the mobile wallet.

**Finding** value (0.341) is greater than  $\alpha=0.05$  we fail to reject the null hypothesis and thus there is no evidence to show that any significant association exists between the type of stay and opinion of the students regarding the mobile wallet.

**Table-13 UG or PG or Ph.d \* Opinion Crosstabulation**

Count		Opinion				Total
		alternative choice payment method	can substitute the original payment methods	can support the original payment methods	is not necessary	
UG or PG or Ph.d	UG	26	13	7	3	49
	PG	27	10	4	2	43
	Ph.D	2	0	1	0	3
Total		55	23	12	5	95

**Table-14 Chi-Square Test**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.026 <sup>a</sup>	6	.806
Likelihood Ratio	3.618	6	.728
Linear-by-Linear Association	.663	1	.416
N of Valid Cases	95		

6 cells (50.0%) have expected count less than 5. The minimum expected count is .16.

Source: Primary data

**Research hypothesis:** There is significant association between the programme of study and the opinion regarding the mobile wallet.

**Null hypothesis:** There is no significant association between the programme of study and the opinion regarding the mobile wallet.

**Findings:** P value is 0.806 so the null hypothesis cannot be rejected and thus no association has been found in the programme of study and the opinion of the student regarding the mobile wallet.

**Table-15 Day scholar or hosteller \* Monthly transaction amount via mobile wallet Crosstabulation**

Count		Monthly transaction amount via mobile wallet				Total
		< 500	501-1500	1501-2500	>2500	
Day scholar or hosteller	Day scholar	29	19	15	5	68
	Hosteller	7	6	11	3	27
Total		36	25	26	8	95

**Table-16 Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.455 <sup>a</sup>	3	.216
Likelihood Ratio	4.376	3	.224
Linear-by-Linear Association	3.574	1	.059
N of Valid Cases	95		

1 cells (12.5%) have expected count less than 5. The minimum expected count is 2.27.

Source: Primary data

**Hypothesis for testing the equality of average transaction amount of day scholars and hostellers-**

$H_0: \mu_{\text{day scholars}} - \mu_{\text{hostellers}} = 0$

$H_a: \mu_{\text{day scholars}} - \mu_{\text{hostellers}} \neq 0$

**Table-17 Group Statistics**

	Day scholar or hosteller	N	Mean	Std. Deviation	Std. Error Mean
Monthly transaction amount via mobile wallet	Day scholar	68	1.94	.976	.118
	Hosteller	27	2.37	1.006	.194

Source : primary data

**Finding:** value of the Levene’s test is  $0.545 > \alpha(0.05)$  so the variance in the transaction amount of day scholars is significantly not different from the variance in the transaction amount of hostellers. For “equal variances assumed” p value is  $0.058 > \alpha(0.05)$  so we fail to reject the null hypothesis and conclude that enough evidence doesn’t exist to show that average transaction amounts of day scholars and hostellers are not equal.

**Table-18 Independent Samples Test**

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Monthly transaction amount via mobile wallet	Equal variances assumed	.369	.545	-1.917	93	.058	-.429	.224	-.874	.015
	Equal variances not assumed			-1.892	46.537	.065	-.429	.227	-.886	.027

Source: primary data

**FINDINGS**

- a) Majority of the respondents prefer to use mobile wallet for doing recharge (23.15%) followed by paying bills (16.84%) and transferring money (15.78%)
- b) .Queue avoidance, time and place independent purchase and instant payments are the three important factors for the students to opt for mobile wallets.
- c) 44% of the respondents strongly agree that they prefer to use other cashless payments methods also,31.57% strongly agree that they are concerned about the safety.40% of them disagree that cost of data access is high and the same percentage(40%) of them have no problem in trusting the online merchant and intermediaries.
- d) Null hypothesis-there is no significant association between the gender of the respondent and the opinion regarding the future of mobile wallet fails to reject.
- e) Significant association has been found between the age of the respondents and the opinion regarding the future of mobile wallet.
- f) We fail to find any significant association between the programme of study and the opinion regarding the future of mobile wallet. Same is true in case of type of stay.
- g) No significant difference was found between the average amount spend via mobile wallets by day scholars and hostellers.

**LIMITATIONS**

The main limitations of this study are as follows-

- a) Since it was based on the primary data collected from the respondents who were selected by using purposive sampling. As such the study suffers from all the limitations of sampling in general and purposive sampling in particular.
- b) Findings of the research study do not have universal applicability due to small sample size and non inclusion of students studying in other institutions of higher education.
- c) Hawthorne effect was also a problem.
- d) More in-depth comparative studies can be conducted on different cashless payment options.
- e) For drawing policy implications studies on the cost-benefit analysis of mobile wallets can also be conducted which this study is lacking.

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