



## The Usage Patterns of Credit/Debit Card across Various Demographics

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### ABSTRACT

The purpose of this study was to assess the usage patterns of credit/debit card across various demographic characteristics and to check their association with various factors like card usage preferences, financial conditions, controlling budget and shortage of money. A close-ended questionnaire was used to record demographic information and responses to assess the comparative use of debit/credit card in urban and rural areas of Lahore and Kasur. Estimated sample size was 225 consumers. After cleaning of data, final sample analyzed was consisted of 200 subjects. The empirical analysis was done through SPSS. Result shows that gender, occupation, area and income play a significant role in the different usage patterns of the credit/debit cards at the time of purchase.

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## 1. Introduction

The lack of research in the field of payment mode effects on point of purchase behavior has witnessed. This deficiency may be due to insignificant differences among expense systems and also the differences did not disturb purchase behavior (Hirschman, 1979). Till 2006, little or no change was observed in the situation (Schreft, 2006). Meanwhile lots of studies observed the effect of credit card usage compared to cash and showed that credit card use increases the overall amount spent per transaction compared to cash, (Feinberg, 1986; Hirschman, 1979; Kosse, 2013; McCall & Belmont, 1996; McCall, Trombetta, & Gipe, 2004; Prelec & Loewenstein, 1998; Prelec & Simester, 2001; Raghuram & Srivastava, 2008; Soman, 2001, 2003; van der Crujssen & van der Horst, 2019). Khandelwal, Kolte, Veer, and Sharma (2022) suggest that the reason of increased usage is a drop in the inability or non-awareness about the electronic payment methods, due to extensive marketing by banking sector. Few studies reported that consumers felt inconvenience while dealing in cash transactions (Prelec & Loewenstein, 1998; Raghuram & Srivastava, 2008; Soman, 2003; Thomas, Desai, & Seenivasan, 2011; Zellermyer, 1996).

The payment mode physiognomies may also be a contributing factor behind decrease in cash payments at end of transactions (Swiecka, Terefenko, & Paprotny, 2021). Soman (2001, 2003) found that amount spent per transaction rises the use of cards. Gourville and Soman (1998) and Thaler (1985, 1999) clarify this is cost effect of pseudo-sunk. Klee (2004) and Thomas et al. (2011) using a hypermarket panel data, equated the buying of non-healthy food items, through three payment modes cash, smart debit card and credit card and concluded that the buying of non-healthy products positively associates with smart debit card and credit card use and negatively associates with cash. Cash is time and place dependent to a great

extent and has started losing significance specifically after Covid-19 as more digital transactions are taking place (Wisniewski, Polasik, Kotkowski, & Moro, 2021).

The goal of this study is to check the level of use of credit/debit card in comparison to cash, across gender, occupations, geographic area and income. According to State Bank of Pakistan, 2022 a large shift in the transaction method has been observed and users are predominantly shifting to credit/debit cards. However, this shift is not uniform and varying levels are seen across different cities and towns. Furthermore, the study highlights the reasons due to which usage may differ amongst gender, area, occupation and income indicated through the card preference, financial condition, budget constraints and shortage of money. Results show that gender, occupation, area and income play a significant role at the time of purchase.

## 2. Methodology

The study used a cross-sectional design. The duration of data collection was May-December 2021. The data was collected from outskirts of Kasur (rural area) and Lahore city (urban area). As this study specifically focuses on transactions for grocery shopping, the consumers at the point of payment (billing counter) were accessed for data collection, using convenient sampling. Two renowned grocery stores each from Lahore and Kasur were randomly selected from the list of the stores available online. A close-ended questionnaire was developed for assessing the usage characteristics of debit/credit cards. Estimated sample size was 225 consumers. A final sample of 200 consumers was analyzed for results after data cleaning. Results were entered and analyzed through SPSS.

## 3. Results

Table 1 shows the distribution of 200 respondents by gender, income, occupation and area. Respondents were categorized on basis of income, occupation and geographic area. 60% respondents were from urban area and 40% respondents were taken from rural area.

**Table 1: Demographical characteristics of study respondents**

Characteristics		F	%	Characteristics		F	%
Gender	Male	108	54	Area	Urban	120	60
	Female	92	46		Rural	80	40
Income	Below 50000	90	45	Occupation	Business Man	114	57
	At least 50000	110	55		Job holder	86	43

Table 2 shows the association between various factors like card preferences, financial conditions, controlling budget and shortage of money on the basis of variables of gender, occupation, income, and area of Purchase. The results show that men prefer to use debit/credit cards for online shopping, grocery and hoteling/ dining out ( $p=0.011$ ). Men also try to reflect status and use it more often due to convenience and thereby use it more often at point of billing whereas women showed lesser preference for using credit/ debit card for all these activities.

**Table 2: Association of various factors according to demographic characteristics**

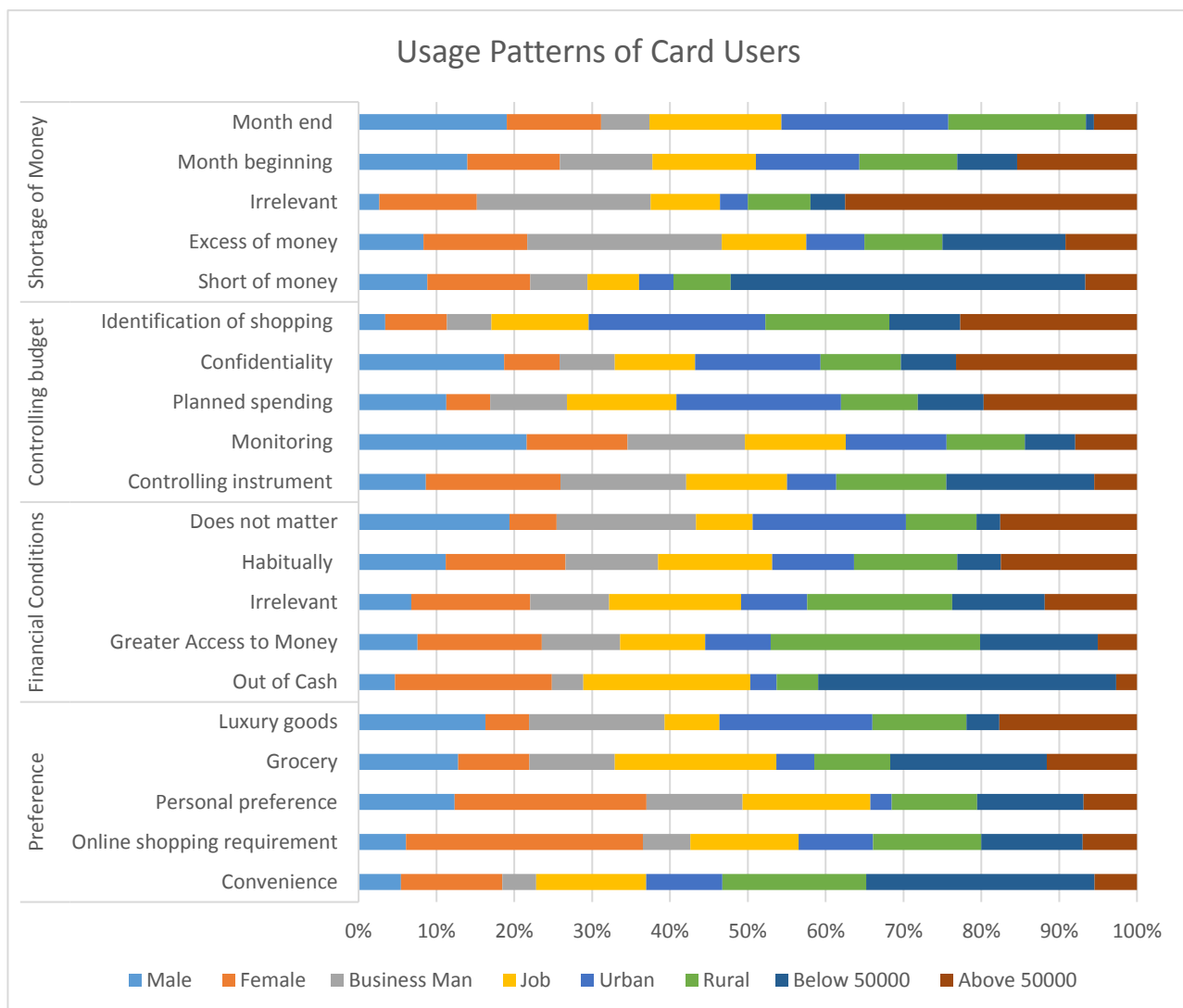
Variables	Demographic Characteristics							
	Gender		Occupation		Area		Income	
	Chi-Square	P-Value	Chi-Square	P-Value	Chi-Square	P-Value	Chi-Square	P-Value
Card Preferences	13.10	0.011*	11.92	0.018*	16.11	0.003*	44.37	0.001*
Financial Conditions	17.86	.001*	2.46	0.651	6.64	0.156	94.69	0.001*
Controlling Budget	3.616	0.460	5.13	0.27	4.85	0.304	2.25	0.691
Shortage of Money	14.39	0.006	7.41	0.12	4.45	0.35	88.36	0.001*

The results also showed that the usage of card depends upon the financial conditions. The lesser the financial stability or access to money, greater is the probability of using cards at billing cards. This tendency again is statistically significant more for men in comparison to

women ( $p=0.001$ ). The usage of credit/debit cards for budget control and shortage of money was insignificant for both men and women ( $p=0.460$  and  $p=0.006$  respectively), suggesting that in general cards are not used for these purposes. In terms of occupation, it was observed that business man use debit/credit card more than job holder at the time of purchase. It was assessed that frequency of usage in business man is high and their association was statistically significant ( $p=0.018$ ). It was interesting to note that the use of card depends on the financial conditions of the user. The respondents highlighted that they use credit/debit more often when they are financially not very sound and are struggling, especially at the end of month for job holders having association ( $p=0.651$ ). This insignificant means businessman and job holders both use card when they feel they are not strong financially.

The businessmen stated that use credit/debit more often when they have excess of money. In this study also observed occupation wise that the use of card cannot control the budget their association was statistically insignificant ( $p=0.27$ ) means business man and job holders both strongly disagree that use of card cannot control the budget. In case of shortage of money or excess of money the responses are same of business man and job holders they used the card at the time of purchase their association was statistically insignificant ( $p=0.12$ ). Table 3 and Figure 1 shows the Demographic split of usage patterns of credit/debit cards across study variables. In terms of gender the results show that men use credit/debit cards mostly for luxury goods (58%) followed by grocery shopping (21%), compared to women who mostly use it for online shopping (35%) followed by luxury goods (20%) specially electronics.

**Figure 1: Usage Patterns According to Demographic Attributes and Usage Variables**



Moreover, most men stated that it does not matter what financial condition they have, they use credit/debit card when needed (64%) whereas as women stated that they use credit/debit more often when they are out of cash (30%) or habitually (22%). When asked about controlling budgets the results showed that women predominantly use it as a budget controlling instrument whereas men use it for controlling (20%), monitoring (20%) and also confidentiality purposes (29%). The results also showed that both men and women mostly use/debit at the end of the month when they start feeling tight on cash (55%) and (35%) respectively. The same was observable for rural and urban areas (62 % and 51%) respectively.

**Table 3: Demographic split of usage patterns of credit/debit cards across study variables**

Variables and Items	Gender		Occupation		Area		Income	
	Male	Female	Business Man	Job	Urban	Rural	Below 50000	Above 50000
<b>Card Preferences</b>								
Convenience	5	12	4	13	9	17	27	5
Online shopping requirement	7	35	7	16	11	16	15	8
Personal preference	9	18	9	12	2	8	10	5
Grocery	21	15	18	34	8	16	33	19
Luxury goods	58	20	62	25	70	43	15	63
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Financial Conditions</b>								
Out of Cash	7	30	6	32	5	8	57	4
Greater Access to Money	9	19	12	13	10	32	18	6
Irrelevant	4	9	6	10	5	11	7	7
Habitually	16	22	17	21	15	19	8	25
Does not matter	64	20	59	24	65	30	10	58
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Controlling Budget</b>								
Controlling instrument	30	60	56	45	22	49	66	19
Monitoring	30	18	21	18	18	14	9	11
Planned spending	8	4	7	10	15	7	6	14
Confidentiality	29	11	11	16	25	16	11	36
Identification of shopping	3	7	5	11	20	14	8	20
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Shortage Money</b>								
Short of money	12	18	10	9	6	10	62	9
Excess of money	10	16	30	13	9	12	19	11
Irrelevant	3	14	25	10	4	9	5	42
Month beginning	20	17	17	19	19	18	11	22
Month end	55	35	18	49	62	51	3	16
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

In terms of geographic area, it was observed that in urban areas debit/credit card was used mostly for luxury goods (70%) than rural area (43%) at the time of purchase. The users in urban areas predominantly feel that use of credit cards is becoming a part of life and the financial condition does not matter (65%) whereas in rural areas 32% people use credit/debit cards when they have an extra excess to money. People in rural areas use credit/debit cards

as a controlling instrument (49%) whereas in urban areas the reason is mostly identification and confidentiality (25% and 20%).

In terms of occupation the results show that credit/ debit cards are mostly used for luxury goods (62%) by business men whereas it is mostly used for grocery (34%) by users who are doing jobs. Moreover, most businessmen said that the financial condition does not matter (59%) for the usage of credit/debit cards but for the job holders, running out of cash (32%) was the main reason for using credit/cards and specially at the end of the month. The results showed that businessmen either feel that shortage of money is irrelevant (25%) to use credit/debit cards or they use it when they gave excess of money (30%). On the other hand the shortage of money at the month end (49%) was a major concern for job holders and used credit/debit more often at that time.

The results showed that for users having monthly income below Rs. 50000 the usage was mainly for grocery and convenience (33% and 27%). They used credit/debit cards when they were out of cash (57%) and as a controlling instrument (66%) and when they were short of money (62%). In contrast the results show that for users having monthly income of more than Rs. 50000, the use of credit/debit card was mostly for luxury goods (63%), the financial condition did not matter (58%) and mostly used cards habitually (25%). The shortage of money was irrelevant (42%) and many did luxury shopping at month start (22%).

#### 4. Conclusion

The study is a major contribution, discussing the varying usage pattern of Pakistani credit/debit card holders according to their demographic attributes on factors like card preferences, financial conditions, controlling budget and shortage of money. The survey results showed that gender, occupation, area and income all play a significant role at the point of purchase (stores) and reflect varying buying habits of the users in detail. As this sector is growing and cash-less economy is on the rise, this serves as a gap filling study about the behavioral patterns of card users, which can help anchor more such studies in the Pakistani banking sector.

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