Reward Point Accumulation Behaviour of Credit Card Users in Pune City

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ABSTRACT

Credit card use is ubiquitous. The credit cardholders’ behaviour of accumulating reward points and its effect is studied. The credit card users are categorised into government employees, private sector employees, and the self-employed. The socio-economic factors like age, gender, education, marital status, family size, occupation, monthly income, and number of credit cards owned affect the reward point accumulation behaviour of credit card holders. Frequency of credit card use has a positive effect on reward point accumulation, but duration of credit card use does not affect reward point accumulation. The card transaction amount is more for the accumulators than the non-accumulators of reward points. Cardholders’ behaviour of accumulating reward points leads to increasing purchases, including conspicuous consumption and possibly leading them into a debt trap, if they fail to make full payment of their credit card bill. The issuers of credit cards have a scope to widen their customer base by changing their marketing strategies so as to motivate the cardholders to accumulate reward points.

KEYWORDS

Accumulators, Convenience Users, Credit Card Transaction, Debt Trap, Loyalty Program, Non-Accumulators, Revolvers, Reward Points

INTRODUCTION

Information and technological progress has assisted the pace of financial sector growth. The electronic payment system has enabled the consumers to have more transactions conveniently. Though currency or cash, is the most accepted medium of payment in all economies, it is now found that due to convenience of use (no need to carry cash), the card based payment system is on the rise. The card based payments or use of plastic money includes both credit card and debit card. Among the two, credit card allows the consumers to buy now and pay later. The use of credit card has seen a growing trend across the world. In 2017, credit card transaction volumes grew by 11% globally (World Payments Report, 2019). It has become an indispensable payment and credit instrument.

With increased sources of personal income, easy availability of credit, changing markets, and availability of a variety of goods and services for consumption, there is changing consumer behaviour. Consumers are attracted towards purchase by various offers like discounts, buy one get one free or if using cards then giving reward points which the consumers can accumulate and redeem at a later date.
After a retailer switched from a conventional Loyalty Program (LP) to the Item-based Loyalty Program (IBLP), consumers became more responsive to reward point promotions than to price discounts of the same monetary value and exhibited stronger cumulative reward point effects (Zhang & Breugelmans 2012). This has changed the spending behaviour of the consumers. Credit cards, an unsecured loan and a revolving line of credit issued by a financial institution to its customer have become ubiquitous in present-day society. It has become a part of consumer culture. The easy availability of credit cards has given increased opportunities to consumers for credit purchases. This many a time also leads to consumerism. Excessive spending is a multiplication of intended excessive spending and the effect of available credit card limits on excessive spending (Turan, Ugur & Barlas 2013).

In today’s market-driven economy, consumers’ purchase transactions depend not only on the income of the consumer but factors like availability of credit and convenient modes of transaction plus various attractive offers with every transaction. Reward point is one such factor that has led to increased purchase transactions in today’s market.

A reward point system uses the existing infrastructure of the credit card network, where a cardholder makes a purchase at a merchant using the credit card. The user is awarded reward points from the merchant, based on the purchases. These points are stored in an account associated with the merchant and the user by a member bank of the credit card network. The user may redeem the reward points earned from the transaction with the merchant later or may aggregate those reward points with those of other merchants into a reward point exchange account as per the system and then redeem the aggregated reward points for goods or services from any approved merchant on the network. The cardholders aware of the reward points try to accumulate them so that they are benefitted. Some purchases are made just to get the reward points, leading to increased expenditure for cardholders and if the cardholder is not a convenience user (one who makes full payment of monthly credit card transaction), he or she may fall into a debt trap. In 2017 the consumer credit (revolving) outstanding was $1,017.2 billion (Federal Reserve G.19 March 2021). In India, the number of credit cards outstanding was 29.84 million in 2016-17 (Reserve Bank of India, 2017). Household debt, measured as per credit card outstanding has been rising in the country. The outstanding per credit card stood at Rs. 8,668/- as of February 2016, a rise of 15.5% year-on-year (Ethiraj, 2016).

This study focuses on credit card use and the reward point accumulation behaviour of the employed and the self-employed in Pune city. Pune is the second-largest city in industrially developed Maharashtra State in India. The city is known as ‘the Oxford of the East’ and also the cultural capital of Maharashtra State. It is now one of the fastest-growing IT and industrial hubs of the state. The population of Pune with an average literacy rate of 89.56% as per the district handbook of census 2011, is continuously growing. This is due to the influx of population from across the country due to the availability of jobs in software and manufacturing industries, and for education.

This paper reveals the socio-economic factors that affect the reward point accumulation of credit card users. The age, gender, educational qualification, marital status, family size, nature of occupation, monthly income, and credit card usage pattern i.e. duration and frequency of card use is analyzed. The effect of accumulating reward points on monthly card transactions and the repayment behaviour of the reward point accumulators and non-accumulators are other parameters analyzed in this paper.

Objectives

To understand the socio-economic factors affecting the reward point accumulation of credit cardholders in Pune city.

To compare the credit card usage pattern of reward point accumulators and non-accumulators among the different types of employees and the self-employed.

To find out the difference between reward point accumulators’ and non-accumulators’ monthly credit card transaction and their repayment behaviour.
BACKGROUND

Research on reward points and customer loyalty (i.e. frequency of card use and the credit card monthly expenditure) is done across the world. Issuers of the credit card by giving reward points and loyalty programs, motivate the credit cardholders to increase the card-based transactions. Various research scholars have studied factors affecting the use of credit cards and reward point accumulation. A well-developed credit card market with well-informed credit cardholders make use of the reward point programs. Customers participate in reward programs to get economic benefits like discounts, emotional benefits like a sense of belonging, prestige, or recognition (Gruen, 1994; Yi & Jeon 2003). In a study conducted by O’Brien and Jones (1995), there are five factors – cash value, redemption choice, aspirational value, relevance, and convenience that affect customer loyalty. Banerji and Farooqi (2017) used these five factors for their study and found that ‘convenience’ is the most important dimension for a credit card reward program.

The effects of loyalty programs on attitudes and behaviours have been found to change according to customer’s characteristics. Customer’s reactions to loyalty programs appeared to be dependent on usage levels, demographics, shopping orientations, variety seeking, and price sensitivity (Demoulin and Zidda, 2009; Leenheer & Bijmolt, 2008; Meyer-Waarden 2007).

In a credit card market, where the cardholders are still not aware of the reward point programs, its accumulation is low. Low customer awareness about point-based reward programs and low redemption rates is studied by Liu & Brock (2009). This study shows the strong correlation between lack of awareness about the reward-point program and the low level of interest among customers toward the program. Income as a factor in using reward cards in the US was studied by Turner (2012). It was found that now-a-days percentage of cardholders with reward cards is high even in low-income group, but as income increases, the number of reward cardholders are more.

A study on credit card use in India discussed the role of supplementary services and reward points as factors affecting the use of credit cards (Liu, Brock, Singh, Chu, & Sy-Changco, 2012). This study indicates that customers’ involvement is not only low but also does not affect their loyalty. But the frequency of card use and the number of credit cards showed a significant positive effect.

Credit card purchasing behaviour due to the influence of reward points was done by Liu et al. (2012). According to Saad et al. (2013), in Northern Malaysia majority of credit card users for loyalty programs are young. A study on joint analysis of indicators for loyalty, i.e. the value of purchases and the frequency of purchases, is done by Quoquab et al. (2014). The result was significant because both indicators reveal two different aspects needed for measuring loyalty i.e. the number of purchases and financial resources allocated to the provider of a service.

According to Khare (2016), in recent years, the credit card market in India has shown positive growth. Her study attempts to understand the applicability of money attitude and compulsive scale on Indian consumers. The findings reveal that compulsive buying behaviour is influenced by money attitudes of power and price sensitivity. According to Akana (2019), in a discussion paper on insights from the Visa payment panel study, credit card ownership, usage, and balances are highly concentrated on rewards-based credit card products.

As per the issuing bank’s reward program, the cardholder earns certain reward points for every purchase made using the credit card. Reward points’ value varies depending on the type of card and the transaction amount. The reward points accumulated can be redeemed later for making the payment of annual fees for the use of credit cards, get gift vouchers, air miles, or get cashback.

The rate of earning reward points differs from one issuing bank to the other. Following are reward points given on credit cards by some major banks in India:

- **Axis Bank**: The eDGE reward points that can be earned are 1 reward point on every Rs.100/- spent and 2 reward points per Rs.200/- spent internationally on a commercial card. In the case of the pride signature card, it is 8 reward points per Rs.200/- spent and 100 bonus points every month if the monthly card transaction amount is Rs.5000/-.
Citibank: Customer can earn 1 reward point on every Rs.125/- spent anywhere on the Citi Rewards Credit Card. It is also possible for the customer to earn 10 reward points on every Rs.125/- spent at Apparel & Department Stores up to Rs.7,000/- per statement month. Another attraction to accumulate reward points is to earn 300 bonus rewards points on minimum spend of Rs.30,000/- in a month.

HDFC Bank: On purchases through Platinum Times card, the cardholder can earn 3 reward points for every Rs.150/- spent. The customer can earn 10 reward points on every Rs.150/- spent on dining on weekdays. In the case of the Titanium Times card, the cardholder earns 2 reward points for every Rs.150/- spent and 5 reward points for every Rs.150/- spent on dining on weekdays.

ICICI Bank: Cardholder can earn 2 payback points on every Rs.100/- spent (except fuel) using ICICI Bank Coral Contactless Card and ICICI Platinum Chip Card-Visa. On ICICI Bank Sapphiro Mastercard, the cardholder can earn 2 payback points on every Rs.100/- domestic spend and 4 payback points on every Rs.100/- on international spend.

State Bank of India (SBI): SBI Signature and Platinum cardholders can earn 2 rewards points for every Rs.100/- spent and earn 10 rewards points for every Rs.100/- spent on departmental store purchases, international transactions, and dining. SimplySAVE and Gold & More cardholders can earn 1 reward point for every Rs.100/- spent on purchase transactions and earn 10 rewards points for every Rs.100/- spent on departmental store purchases, grocery shopping, movies, and dining.

METHODOLOGY

Due to the increasing use of credit card and specifically to get the benefit of reward points, the credit cardholders’ monthly card transaction increases and this may lead to the cardholder falling in a debt trap if they are revolvers of credit. This study aims to find out two aspects: first, whether socio-economic factors affect the reward point accumulation among different types of employees working in government and private organizations, and those who are self-employed; and second, the effect of reward accumulation on monthly card transaction and the repayment behaviour of cardholders.

This descriptive research work is a comparative study of reward point accumulation behaviour of credit card users from different sectors in the city of Pune. It is based on the primary data collected for the author’s doctoral work. Information is also collected from secondary sources like journals, working/discussion papers, reports, and internet articles. The quantitative method is used to analyse data. A questionnaire was used to collect primary data from employees working in various government/semi-government organizations like National Chemical Laboratory (NCL), Pune, Indian Institute of Tropical Meteorology (IITM), Pune, Savitribai Phule Pune University, Pune, Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune and various colleges in Pune city. Respondents also included people working in private firms and the self-employed in Pune city. Self-employed respondents included businessmen, doctors, lawyers, chartered accountants, consultants, and agents/brokers.

A random sampling method was used to collect data as it is an unbiased approach to collect responses from a large group. Each individual in the large population has the same probability of being selected and hence was used to collect data from the three groups namely the government employees, private sector employees and the self-employed. Around 700 questionnaires were distributed randomly to various types of employees and self-employed in Pune city. But only about 673 questionnaires were returned. From these 673, the actual sample taken was 668 as the rest of the questionnaires were either incomplete or the data given were not reliable. The number of credit card users in the studied sample was 320 and among these 292 were aware of reward points. Hence for this paper, the sample size is 292. The data collection was done from May 2016 to March 2017.

The questionnaire used was divided into three sections. The first section included questions regarding respondent’s personal information, the second section was to get the economic data and the third section was for the credit card usage pattern of the cardholders. For this paper, some of the
socio-economic factors like age, gender, education, occupation, monthly income, and credit card usage parameters like the number of credit cards, duration, frequency, monthly credit card transaction, credit card bill payment are included.

MS Excel statistical functions are used for statistical analysis. Hypothesis testing is done using Chi-square test. An alpha level of .05 is taken for all statistical tests.

**H1:** Socio-economic factors affect the reward point accumulation of credit cardholders in Pune city.  
**H2:** Credit card usage parameters are not the same for the reward point accumulators and non-accumulators.  
**H3:** Monthly credit card bill payment behaviour is not the same for accumulators and non-accumulators of reward points.

**Limitations of the Study**
This is a descriptive study and hence its limitations.

**Limitations of Random Sampling**
There are data inadequacies, as in some questions there were no responses given, thus increasing the possibility of error and bias.

As the study is based only on the data from Pune city, to get a conclusive result, the study should be extended to other cities.

**RESULTS**
The first section is the findings on comparison of socio-economic factors among those who accumulate reward points (accumulators) and those who do not accumulate reward points (non-accumulators). The second section shows the result of the credit card usage pattern of accumulators and non-accumulators among government and private sector employees and the self-employed. The third section describes the effect of reward point accumulation on the monthly transaction amount and the repayment behaviour of accumulators and non-accumulators across the various types of employees.

As per the author’s primary data, of the 668 sample population, 320 respondents were credit card users in Pune city. Among these, 292 i.e. 91% were aware of reward points attached to the purchases through credit card transactions and 28(9%) were not aware of the reward points they could earn when the credit card is used. Details of awareness about reward points are given in Table 1.

Awareness of reward points on credit card use among credit card users is similar across all types of employees in the city.

This is proved by the chi-square test $p = 0.935942948$ more than 0.05 is insignificant at 2df. It means there is no significant difference between the cardholders regarding awareness of reward points.

|                      | Yes  | No  | Total |
|----------------------|------|-----|-------|
| **Government Employees** | 81(92) | 7(8) | 88    |
| **Private Sector Employees** | 105(91) | 10(9) | 115   |
| **Self-employed** | 106(91) | 11(9) | 117   |
| **Total** | 292(91) | 28(9) | 320   |

Source: Author’s Data  
Note: Figures in brackets are the percentages of row total
Figure 1 shows that 182(62%) accumulate reward points and 110(38%) don’t accumulate reward points.

Table 2 reveals that, among the 182(62%) of the cardholders who accumulate reward points, 76(72%) are private-sector employees. This is followed by 54(67%) of government employees and only 52(49%) of the self-employed accumulating reward points.

Among the 110(38%) cardholders who do not accumulate reward points, it is mostly the self-employed 54(51%) who do not accumulate reward points. Then 27(33%) of government employees and 29(28%) of private-sector employees do not accumulate reward points.

Chi-square test $p = 0.001415814$, less than 0.05, is significant, and hence it is accepted that there is a difference in reward point accumulation behaviour among the government and private-sector employees and the self-employed.

**Socio-Economic Factors Affecting Reward Point Accumulation**

Findings of socio-economic factors that affect reward point accumulation like age, gender, educational qualification, marital status, family size, and monthly income are described in this section.

- **Age:** Table 3 shows the age difference of accumulators and non- accumulators of reward points. Most of the cardholders are in the 30 to 40 years age group. In this group 63% are accumulators. The average age of accumulators of reward points is 39 years. The data indicate that younger cardholders are mostly accumulators.
Table 3. Age of Credit Cardholders

| Age Group           | Accumulators | Non-accumulators | Total |
|---------------------|--------------|------------------|-------|
| Less than 30 years  | 38(76)       | 12(24)           | 50    |
| 30 to 40 years      | 67(63)       | 40(37)           | 107   |
| 40 to 50 years      | 49(56)       | 39(44)           | 88    |
| 50 to 60 years      | 24(62)       | 15(38)           | 39    |
| More than 60 years  | 4(50)        | 4(50)            | 8     |
| Total               | 182          | 110              | 292   |

Source: Author’s Data
Note: Figures in brackets are the percentage of row total

- **Gender**: Table 4 shows the gender-wise distribution of accumulators and non-accumulators. More males are using credit cards. Among males, 145(64%) and among females 37(55%) are accumulators. The number of male accumulators of reward points is more than females.

- **Educational qualification**: Data in table 5 shows the educational qualification of credit cardholders. For more clarity, graduate and post-graduate degree courses are categorised into the professional course (like Medicine, Engineering, Management, Law, etc.) and the non-professional course (Arts, Science, Commerce, etc.). The result show that most of the cardholders have a post-graduate (professional) degree. It is seen that among the accumulators 82(45%) are post-graduate (professional) degree holders.

Table 4. Gender-wise distribution of Credit Cardholders

| Gender | Accumulators | Non-accumulators | Total |
|--------|--------------|------------------|-------|
| Male   | 145(64)      | 80(36)           | 225   |
| Female | 37(55)       | 30(45)           | 67    |
| Total  | 182          | 110              | 292   |

Source: Author’s Data
Note: Figures in brackets are the percentage of row total

Table 5. Educational qualifications

| Qualification                  | Accumulators | Non-accumulators | Total |
|--------------------------------|--------------|------------------|-------|
| HSC / 12th Grade               | 5(3)         | 8(7)             | 9     |
| Graduate (Professional)        | 44(24)       | 20(18)           | 64    |
| Graduate (Non-Professional)    | 13(7)        | 17(15)           | 30    |
| Post-graduate (Professional)   | 82(45)       | 35(32)           | 117   |
| Post-graduate (Non-Professional)| 27(15)      | 19(17)           | 46    |
| Doctorate                      | 11(6)        | 11(10)           | 22    |
| Total                          | 182          | 110              | 292   |

Source: Author’s Data
Note: Figures in brackets are the percentage of column total
- **Marital Status**: Table 6 shows the credit cardholders’ marital status. It is found that most of the cardholders are married. Among the accumulators, 149(82%) are married, and 33(18%) are unmarried.

It is noted that the percentage distribution of non-accumulators among unmarried and married are similar to the accumulators. There is no much significant difference in the marital status of accumulators and non-accumulators.

- **Family Size**: Table 7 shows the family size of the number of family members of credit cardholders. It was found that most of the credit card holders have a family with 3 to 4 members. Among the accumulators of reward points, 120(66%) have a family with 3 to 4 members and among non-accumulators, 57(53%) have 3 to 4 member-family. Results indicate that credit cardholders with 5 or more member-family, only 27% are accumulators whereas, 43% are non-accumulators.

- **Monthly income**: Figure 2 shows the monthly income of accumulators and non-accumulators. It was found that there are no credit cardholders with monthly income less than Rs.10,000/-. In the monthly income group of Rs.10,000/- to Rs.20,000/-, mostly 8(57%) are non-accumulators. But those having monthly income above Rs.20,000/- are mostly accumulating reward points. It is inferred that in the monthly income groups of Rs.20,000/- and more, the number of reward point accumulators are more than the non-accumulators.

The average monthly income of accumulators of reward point is Rs.66,676/- and for non-accumulators, it is Rs.61,682/-. Table 8 shows the data of monthly income of accumulators according to the type of employees. It is the private sector employees who are mostly accumulators. Across all income groups, the number of employees working in the private sector is mostly the accumulators of reward points. But only in

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**Table 6. Marital Status**

|            | Accumulators | Non-accumulators | Total |
|------------|--------------|------------------|-------|
| Unmarried  | 33(18)       | 12(11)           | 45    |
| Married    | 149(82)      | 97(88)           | 246   |
| Divorce/Sep| 0            | 1(1)             | 1     |
| **Total**  | 182          | 110              | 292   |

Source: Author’s Data  
Note: Figures in brackets are the percentage of column total

**Table 7. Family Size**

|          | Accumulators | Non-accumulators | Total |
|----------|--------------|------------------|-------|
| 2        | 8(4)         | 4(4)             | 12    |
| 3 to 4   | 120(66)      | 57(53)           | 177   |
| 5 or more| 50(27)       | 47(43)           | 97    |
| No response | 4(2)     | 2(2)             | 6     |
| **Total**| 182          | 110              | 292   |

Source: Author’s Data  
Note: Figures in brackets are the percentage of column total
the income group of Rs.50,000/- to Rs.1,00,000/- the self-employed 30(41%) is more followed by private-sector employees 23(31%) and government employees 21(28%).

**Credit Card Usage Pattern**

This section includes the number of cards used, duration, frequency of credit card used, monthly credit card transaction, and repayment behaviour.

- **Number of credit cards owned:** Figure 3 shows the number of credit cards owned by the accumulators and non-accumulators. About 65% of credit card users who are aware of reward points own one card. Among these 106 (56%) are accumulators.

  Those having 2 to 3 credit cards, about 70(73%) of them are accumulators of reward points. About 4(80%) cardholders owning 4 to 5 cards and all those who own more than 5 credit cards are accumulators. The average number of credit cards owned by accumulators is 2.

  Data in table 9 indicates that among those who own one credit card, it is the government employees 40% who are mostly the accumulators. Among those with 2 to 3 cards, it is the private sector employees 53% who are mostly the accumulators. In the case of those with 4 to 5 cards, it is the self-employed 75% who are accumulating reward points.
Duration of credit card use: Figure 4 shows the duration of credit card use by the respondents in Pune city. It is noted that 152(52%) are using the card for more than 5 years. In this group 99(65%) are accumulators. It can be inferred from figure 4, that as the duration of credit card use increases, the number of accumulators is more than the non-accumulators.

Data in table 10 reveals that private-sector employees lead as the accumulators across different durations. But among those using the cards for more than 5 years, the distribution of respondents is more or less the same. It is 30% for government employees, 36% for private-sector employees and 33% for self-employed.

Frequency of credit card use: Figure 5 shows the frequency of credit card use in a month by the credit cardholders. It shows that most of the credit card holders 38% are using the card about 3 to 4 times a month. In this group, 72(65%) are accumulators of reward points and 39(35%) are non-accumulators. Figure 4 indicates that more the frequency of card use the number of accumulators is more than the non-accumulators.
Figure 4. Duration of Credit Card Use (Source: Author’s Data)

![Bar chart showing duration of credit card use]  

Table 10. Duration of Credit Card Use by Accumulators

| Duration      | Government Employees | Private Sector Employees | Self Employed | Total |
|---------------|----------------------|--------------------------|---------------|-------|
| Less than 1 year | 7(35)                | 10(50)                   | 3(15)         | 20    |
| 2 years       | 7(35)                | 8(40)                    | 5(25)         | 20    |
| 2 to 5 years  | 10(23)               | 22(51)                   | 11(26)        | 43    |
| More than 5 years | 30(30)             | 36(36)                   | 33(33)        | 99    |
| Total         | 54                   | 76                       | 52            | 182   |

Source: Primary Data  
Note: Figures in brackets are the percentage of row total

Figure 5. Frequency of Credit Card Use in a month (Source: Author’s Data)

![Bar chart showing frequency of credit card use]  

Frequency of Credit Card Use in a Month

- Accumulators
- Non-acumulators
Table 11 shows the frequency of credit card use in a month, across different types of employees who accumulate reward points.

It is inferred from table 11 that, the highest number of accumulators of reward points, uses the card 3 to 4 times a month. Among these, 30(42%) are government employees, 23(32%) are private-sector employees and self-employed are 19(26%).

Another finding is that about 75% of private-sector employees who are accumulators, use credit card more than 15 times a month.

**Effects of Reward Point Accumulation**

This section analyses the effects of reward point accumulation on credit card users’ monthly card transactions and repayment behaviour.

- **Monthly credit card transaction amount:** Figure 6 shows the monthly credit card transaction amount of the accumulators and non-accumulators. It can be seen that about 104(33%) of cardholders have monthly card transaction amount between Rs.10,000/- to Rs.20,000/-. In this group, 68(62%) are accumulators and the rest 36(38%) are non-accumulators. It can be noted

| Frequency of card use in a month | Government Employees | Private Sector Employees | Self Employed | Total |
|----------------------------------|----------------------|--------------------------|---------------|-------|
| Occasionally                     | 3(23)                | 7(54)                    | 3(23)         | 13    |
| 1-2 times                        | 6(20)                | 9(30)                    | 15(50)        | 30    |
| 3-4 times                        | 30(42)               | 23(32)                   | 19(26)        | 72    |
| 6-10 times                       | 11(28)               | 17(44)                   | 11(28)        | 39    |
| 11-15 times                      | 1(8)                 | 8(67)                    | 3(25)         | 12    |
| More than 15 times               | 3(19)                | 12(75)                   | 1(6)          | 16    |
| Total                            | 54                   | 76                       | 52            | 182   |

Source: Author’s Data

Note: Figures in brackets are the percentage of row total

**Figure 6. Monthly Credit Card Transaction Amount (Source: Author’s Data)**
that there are more accumulators than non-accumulators as the monthly credit card transaction amount increases. Thus, it is inferred that for cardholders who accumulate reward points, the monthly card transaction amount is more compared to those who do not accumulate reward points.

The average monthly credit card transaction amount is Rs.22744/- for accumulators and Rs.18277/- for non-accumulators of reward points in Pune city. This proves the difference in the transaction amount of the accumulators and non-accumulators of reward points.

Table 12 shows the monthly credit card transaction amount of different types of employees who are accumulators. It is found that most of the accumulators 68(37%) have monthly card transaction amount between Rs10,000/- to Rs.20,000/-. In this category, self-employed 27(40%) are more than the government sector employees 24(35%) and private sector employees 17(25%). But with the increasing amount of monthly card transactions, more number of accumulators are private-sector employees.

- **Monthly credit card bill payment:** Of the accumulators and non-accumulators is shown in figure 7. Both the accumulators and non-accumulators of reward points 232(79%) are making bill payments in full. It can be noted that whether convenience users i.e. those who make full payment or make part-payment or roll-over (only minimum balance is paid), the distribution of accumulators and non-accumulators are similar. It is around 60% of accumulators and about 40% of non-accumulators for the three types of repayment behaviour.

Table 13 shows the credit card repayment behaviour of different types of employees who are the accumulators of reward points. Results show that 142(78%) make full payment of their credit card bill in every billing period. It is seen that the accumulators who are government employees, mostly make full payment of their credit card bill or make part-payment but they never roll over. But in the case of private-sector employees and self-employed, some accumulators are convenience users but some make part-payment and some roll over.

**Hypothesis Test Results**

The hypotheses test was done using $\chi^2$, with an alpha level of .05.

| Table 12. Monthly Credit Card Transaction Amount of Accumulators |
|---------------------------------------------------------------|
| Less than Rs.5000/-  | Government Employees | Private Sector Employees | Self Employed | Total |
|----------------------|----------------------|--------------------------|---------------|-------|
| Rs.5000/- to Rs.10000/- | 1(50)               | 1(50)                    | 0             | 2     |
| Rs.10000/- to Rs.20000/- | 13(52)              | 7(28)                    | 5(20)         | 25    |
| Rs.20000/- to Rs.30000/- | 24(35)              | 17(25)                   | 27(40)        | 68    |
| Rs.30000/- to Rs.40000/- | 11(27)              | 21(51)                   | 9(22)         | 41    |
| Rs.40000/- to Rs.50000/- | 1(7)                | 7(47)                    | 7(47)         | 15    |
| More than Rs.50000/-   | 2(29)                | 4(57)                    | 1(14)         | 7     |
| No Response           | 1(13)                | 5(63)                    | 2(25)         | 8     |
| Total                 | 54                   | 76                       | 52            | 182   |

Source: Author’s Data

Note: Figures in brackets are the percentage of row total
In this study, it is found that among the 320 credit cardholders as per the studied sample, in Pune city, 292 (91%) are aware of reward points that can be earned by making purchases through credit cards. Among these 182 (62%) of the cardholders accumulate reward points. It is mostly the private sector employees 76 (72%) who accumulate reward points. This is followed by 54 (67%) of government employees and only 52 (49%) of the self-employed accumulate reward points. It can be concluded that government employees with a regular income scale and various social security measures in place are not bothered about reward points and their benefits. Whereas in the private sector with no job security they are always concerned about maintaining their living standards for which they are ready to take any given opportunity. In the case of self-employed, it can be due to lack of awareness. This shows reward point accumulation behaviour differs in the three groups. As per the study done by Liu & Brock (2009), there is low customer awareness about point-based reward programs and low redemption rates in China. With changing consumption and transaction pattern over the years, it can be inferred that more people are reward point accumulators now.

Socio-economic factors like age, gender, education, and family size affect the accumulation of reward points. The result of this study shows that accumulators are in the age group of 30 to 40 years. Inline, a study done by Saad et.al. (2013), found that in Northern Malaysia majority of credit card users for loyalty programs are in the age between 31 to 40 years old. Marital status does not show any effect on reward point accumulation. More males who are professional degree holders and
a family size of three to four members are accumulators. As per the author’s research work, it was found that among the credit card holders 77% were males and 23% were females. More males use a credit card in most parts of the world. In the studies done by White (1975) and Adcock et al. (1977), males use credit cards more. Gender affects credit card use, wherein it appears that men in India are more likely to own and use a credit card (Khare et al. 2012). Similar studies done by Demoulin and Zidda, (2009); Leenheer & Bijmolt (2007); Liu, (2007) shows that customer’s reactions to loyalty programs appeared to be dependent on demographics i.e. age and gender, usage i.e. duration and frequency of credit card use. A study done by Matthew Tingchi Liu & James L. Brock (2009) shows that factors that affect the reward points redemption are awareness of the reward-point program, the attractiveness of incentives, duration of credit card use, and frequency of credit card use.

The study found that the more the number of credit cards owned, reward point accumulators are more. Cardholders with different types of cards, get the benefit of earning reward points differently as in the case of Axis bank’s eDGE reward points, pride signature card, or State Bank of India’s platinum signature card. The frequency of credit card use and the number of reward point accumulators are positively related. This has a positive effect on credit card transactions. A similar finding on the frequency of card use and the numbers of reward card showing significant positive effects on credit card purchasing behaviour due to the influence of reward points was done by Liu et al. (2012).

| Table 14. Hypothesis Test Results |
|-----------------------------------|
| **H0** Socio-economic condition of the cardholders does not affect the reward point accumulation of credit card users in Pune city. |
| **H1** Socio-economic factors affect the reward point accumulation of credit card users in Pune city. |
| Parameters | $\chi^2$ test | p value | Test Result |
|-----------|---------------|--------|-------------|
| a | Age | 6.10026E-13 | $\chi^2$ test | p < 0.05 | Rejected Null Hypothesis |
| b | Gender | 1.18989E-15 | | Marital status does not affect reward point accumulation |
| c | Educational qualifications | 1.7459E-38 | | |
| d | Marital status | 0.116491 | | |
| e | Family size | 0 | | |
| f | Monthly income | 0 | | |
| g | Occupation | 0.001415814 | | |
| **H0** | Credit card usage parameters are same for the reward point accumulators and non-accumulators. |
| **H2** | Credit card usage parameters are not same for the reward point accumulators and non-accumulators. |
| Parameters | $\chi^2$ test | p value | Test Result |
|-----------|---------------|--------|-------------|
| a | Number of credit cards owned | 0 | Regarding number of cards owned, frequency of card use and monthly card transaction $p < 0.05$ |
| b | Duration of credit card use | 1 | It means these factors affect the reward point accumulation |
| c | Frequency of credit card use | 0 | But for duration of credit card use $p > 0.05$, means duration of card use is similar for reward point accumulators and non-accumulators. |
| d | Monthly credit card transaction | 0 | |
| **H0** | Monthly credit card bill payment behaviour is same for accumulators and non-accumulators of reward points. |
| **H3** | Monthly credit card bill payment behaviour is not same for accumulators and non-accumulators of reward points. |
| Monthly credit card bill payment | 0.611469 | $p > 0.05$ | Accept the Null Hypothesis |
Monthly income is another factor studied in this research. It is found that among those who earn a monthly income less than Rs.20,000/- there are more non-accumulators. But as monthly income increases the number of accumulators is more. Across all income groups, the number of private-sector employees accumulating reward points is more. In a similar study, according to Turner (2012), in the US, even within the group earning less than $20,000 annually, 70% carry a rewards card. But it is also found that higher the annual income, percentage of people with reward cards is more.

Another finding is that the average monthly credit card transaction amount is more among the accumulators than non-accumulators. The average monthly credit card transaction amount is Rs.22744/- for accumulators and Rs.18277/- for non-accumulators of reward points. Among the different types of employees, more number of self-employed have monthly credit card transaction amount between Rs10,000/- to Rs.20,000/-, followed by the government employees and then the private-sector employees. The study reveals that higher the monthly credit card transaction amount, more number of accumulators are private-sector employees. A finding in line, as per the MasterCard rewards study (2011) the average amount spent monthly was $333 on non-rewards credit cards and $800 for rewards credit cardholders. A study done by Tom Akana, (2019), found that 80 percent of credit card spending was on rewards cards.

Regarding monthly credit card bill payments, both the accumulators and non-accumulators of reward points 232(79%) are making bill payments in full. Results of this study indicate that, among the accumulators, government employees never roll over the payment but the private sector employees and the self-employed make either part-payment or roll-over. For getting the benefits of reward points, if the private-sector employees and the self-employed increase the monthly card transactions and continue to roll over the monthly card payment then they may fall in a debt trap.

CONCLUSION

Increasing incomes, changing markets, easy availability of credit and changing payment pattern using cards and specifically credit cards has resulted in changing consumption behaviour. To capture the market the producers, the merchants, issuers of credit cards, or the banks, attract consumers by offering discounts or giving reward points on their purchases. Accumulating reward points and later redeeming them has become a part of consumer culture. Pune, a city in Maharashtra state in India is known as an ‘industrial-hub’ and an ‘educational-hub’ where you find people from different parts of India and the world. This city is a good market for the credit card industry.

Hence, this study about the reward point accumulation behaviour of credit card users i.e. government, private, and the self-employed, reveals that though 91% of them are aware of reward points only 62% of these are accumulating reward points. Socio-economic factors like age, gender, and education affect the reward point accumulation. It is found that with higher monthly income there is more number of accumulators. Duration of credit card use is not a factor affecting reward point accumulation. The frequency of card use has a positive effect on accumulators. The average monthly credit card transaction amount is more for the accumulators. Monthly credit card bill payment is mostly done in full by both accumulators and non-accumulators. Overall it is found that the private-sector employees are mostly the accumulators of reward points.

It is suggested that the banks or issuers of credit card and merchant establishments have scope to increase their sales if they can include the 38% of credit cardholders who are not accumulating reward points. By providing more information about reward points, how they can be redeemed, and their benefit, the customer base can be widened. As far as cardholders are concerned, they should be fully aware of the outcome of reward point accumulation because this can lead to conspicuous consumption and thereby increased card transaction amount. If cardholders are revolvers of credit, they may fall into a debt trap.
REFERENCES

Akana, T. (2019). Consumer payment preferences and the impact of technology and regulation: insights from Visa payment panel study. Discussion Paper, Federal Reserve Bank of Philadelphia, Consumer Finance Institute. 10.21799/frbp.dp

Banerji, R., & Farooqi, R. (2017). Important Factors of Credit Card Reward Program - A Consumers’ Perspective in New Economy. GD Goenka Business Review, 2(2), 20–27. doi:10.2139/issn.3039327

Demoulin, N. T. M., & Zidda, P. (2009). Drivers of customers’ adoption and adoption timing of a new loyalty card in the grocery retail market. Journal of Retailing, 85(1), 391–405. doi:10.1016/j.jretai.2009.05.007

Gruen, T. W. (1994). Exploring Consumer Behavior With Respect to Memberships. In AP - Asia Pacific Advances in Consumer Research (vol. 1, pp. 265-272). Association for Consumer Research.

Ethiraj, G. (2016). 9 Reasons India’s Rising Credit-Card Debt Should Worry You. www.indiaspend.com/cover-story/9-reasons-indias-rising-credit-card-debt-should-worry-you-66363

John, S. (2018). Use of Credit Card and its Effect on Spending Behaviour of the Employees in Pune City [Unpublished doctoral dissertation]. Savitribai Phule Pune University, Pune, Maharashtra, India.

Khare, A. (2016). Money attitudes, credit card and compulsive buying behaviour: a study on Indian consumers. International Journal of Business Competition and Growth, 5(1/2/3), 49–71. 10.1504/IJBCG.2016.079935

Khare, A., Khare, A., & Singh, S. (2012). Factors affecting credit card use in India. Asia Pacific Journal of Marketing and Logistics, 24(2), 236–256. doi:10.1108/13555851211218048

Leenheer, J., & Bijmolt, T. H. A. (2008). Which retailers adopt a loyalty program? An empirical study. Journal of Retailing and Consumer Services, 15(6), 429–442. doi:10.1016/j.jretconser.2007.11.005

Liu, M., & Brock, J. (2009). Antecedents of Redemption of Reward Points: Credit Card Market in China and International Comparison. Journal of International Consumer Marketing, 22(1), 33–45. doi:10.1080/08961530902844923

Liu, M., Brock, J., Singh, R., & Sy-Changco, J. (2012). What drives Indian consumer credit card loyalty? The perspective of involvement in reward programmes. International Review of Retail, Distribution and Consumer Research, 22(4), 365–383. doi:10.1080/09593969.2012.690776

Liu, Y. (2007). The Long-Term Impact of Loyalty Programs on Consumer Purchase Behavior and Loyalty. Journal of Marketing, 71(4), 19–35. doi:10.1509/jmkg.71.4.019

Mansfield, P. M. (2007). The effects of loyalty programs on customer lifetime duration and share of wallet. Journal of Retailing, 83(2), 223–236. doi:10.1016/j.jretai.2007.01.002

O’Brien, L., & Jones, C. (1995). Do Rewards Really Create Loyalty? Harvard Business Review, 28(May-June), 75–82. doi:10.1016/0024-6301(95)94312-M

Quoquab, F., Yasin, N. M., & Dardak, A. R. (2014). A qualitative inquiry of multi-brand loyalty: Some propositions and implications for mobile phone service providers. Asia Pacific Journal of Marketing and Logistics, 26(2), 250-271. 10.1108/APJML-02-2013-0023

Saad, R., Ishak, H., & Johari, N. (2013). The impact of demographic factors toward customer loyalty: a study on credit card users. Elixir Marketing Management, 55, 13078-13084. https://www.elixirpublishers.com

Turan, Ö., Ugur, D., & Barlas, Y. (2013). Dynamics of Consumerism and Credit Card Debt under the Influence of Advertising. https://proceedings.systemdynamics.org/2013/proceed/papers/P1301.pdf

Turner, M. (2012). Credit card rewards: Contest, history and value. A white paper on credit card rewards, PERC. https://www.perc.net/wp-content/uploads/2013/12/WP-2-Layout.pdf

World Payments Report. (2019). https://www.capgemini.com/es-es/wp-content/uploads/sites/16/2019/09/World-Payments-Report-WPR-2019.pdf

Yi, Y., & Jeon, H. (2003). Effects of Loyalty Programs on Value Perception, Program Loyalty, and Brand Loyalty. Journal of the Academy of Marketing Science, 31(3), 229–240. doi:10.1177/0092070030301003002

Zhang, J., & Breugelmans, E. (2012). The Impact of an Item-Based Loyalty Program on Consumer Purchase Behaviour. JMR, Journal of Marketing Research, 49(1), 50–65. doi:10.1509/jmr.09.0211
ENDNOTES

1 This paper is based on the author's doctoral research work on the study of socio-economic characteristics that affect the use of credit card by the individuals working in government and private sectors, and the self-employed (business, doctors, lawyers, chartered accountants, consultants, and agents/brokers) in Pune, a city in Maharashtra, India. The study included the credit card usage pattern of different groups of employees in the city like the duration and frequency of credit card use, credit limit, awareness and accumulation of reward points, the purpose of credit card use, monthly card transaction, and repayment behaviour of the credit card user. It was a comparative study of spending and savings behaviour patterns of credit cardholders working in government and private organizations and the self-employed.

2 It is a carefully crafted loyalty program by Axis Bank that allows customers to earn points for every relationship they have with the Bank – Savings and Current Account, Credit and Debit Cards, and across all other retail products like Axis Direct, Forex, and NRI.

3 Pride signature card is a tri-coloured personalised card that comes with a host of benefits. This includes contributing to the Defence Welfare Association with every transaction made, complimentary lounge access, delightful dining experience, waiver on the surcharge, earn eDGE reward points, and more.