



AN ANALYSIS OF CREDIT CARD USERS' USAGE PATTERNS

D. Sinduja* & S. Kasthuri Meena**

* Ph.D Research Scholar, Department of Commerce, Government Arts College, Race Course, Coimbatore, Tamil Nadu, India

** Associate Professor, Department of Commerce, Government Arts College, Race Course, Coimbatore, Tamil Nadu, India

Cite This Article: D. Sinduja & S. Kasthuri Meena, "An Analysis of Credit Card Users' Usage Patterns", International Journal of Multidisciplinary Research and Modern Education, Volume 11, Issue 2, July -

December, Page Number 159-163, 2025.

Copy Right: © Crystal Pen Publication, 2025 (All Rights Reserved). This is an Open Access Article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

DOI: <https://doi.org/10.5281/zenodo.17556139>

Abstract:

Credit cards are becoming more widely available and used due to global financial services improvements. People from all economic backgrounds now use credit cards, making them a universal financial commodity. Around the world, credit cards are a very common financial product that is a part of everyday life for consumers. Depending on their needs, customers utilize credit cards for a variety of payments. Since each person uses credit cards differently, this study looks at the gender-based credit card usage trends and customer satisfaction. Compared to paying with cash, using a credit card is easier, and Consequently, impair impulse control. 100 different credit card users were given a self-completed questionnaire to complete in order to get the primary data for the survey, which was carried out in Ooty. Convenient sampling was used to choose the sample of 100 respondents.

Key Words: Credit card, Customer Satisfaction, Usage Pattern.

1. Introduction:

A credit card is a metal or plastic card that allows the holder to borrow money for purchases and is issued by banks, credit unions, or other financial organizations. You are effectively taking out a short-term debt when you use a credit card, which you agree to repay, usually once a month. Your credit limit, or the most amount you can borrow at any one time, is a feature of credit cards. The use of credit cards for both payments and revolving credit has increased during the last few decades. In many retail establishments in previous decades, credit cards an open-end revolving credit replaced instalment purchases. A credit card is an extension of credit that enables a person to pay their bills or make purchases (Priya T P et al., 2020). The monthly interest rate on credit cards is determined by the total amount owed on the card each year. Recently, banks have promoted credit card services as a means to gain a competitive advantage. As a result, consumer perception of credit cards is reflected in consumer rationality. Declines in the caliber of Bank business will decline as a result of credit cards. Therefore, it becomes essential for banks to have a deeper understanding of the consumer behaviour of credit card users. (Rinku Elizabeth Chandy et al., 2022).

2. History:

Early in the 20th century, credit cards were invented as a way for affluent people to avoid carrying cash. In the 1950s, the Diners Club introduced the first widely used credit card system, enabling its members to make payments at a variety of eateries and establishments. With the invention of Visa and MasterCard in the 1960s, this idea quickly advanced, turning credit cards into a widely used payment mechanism that is accepted everywhere. Their use has significantly increased over time due to technological advancements like internet purchasing and electronic transactions.

Early in the 1980s, credit cards made their debut in India, signalling a dramatic shift away from conventional lending methods and toward contemporary financial services. India adopted credit cards comparatively later than the rest of the world, where they first appeared in the 1950s. Because of the cautious banking practices, the lack of advanced technology, and the public's mistrust of "borrowing" culture, the first phase wasn't immediately successful. Foreign banks were the initial participants. A major milestone in banking history was reached in 1980 when the Central Bank of India launched Central card, the country's first credit card. The introduction of Andhra Bank's Visa-branded credit card in 1981, however, led to a greater level of acceptance. These changes paved the way for a financial revolution that would make credit cards an essential component of the Indian economy. Consumer spending would rise as a result, supporting the expansion of the retail and e-commerce industries.

3. Operation:

- **Taking Out a Loan:** By using a credit card to make a purchase, you are borrowing money from the company that issued the card. Paying this amount back is necessary to prevent interest charges, and it normally happens within a billing cycle.
- **Rates of Interest:** Interest will be charged on the leftover amount if you don't pay off your debt in full before the deadline. Depending on the card and the issuer, interest rates can differ significantly.
- **Minimum Sums Due:** The smallest amount you can pay to maintain the good standing of your account is the minimum payment amount that appears on credit card statements. However, because of interest fees, making simply the bare minimal payment can result in debt accumulation.

4. Statement of the Problem:

Once credit cards entered the financial industry, people's attitudes around money have evolved. The way that people view money has drastically changed as a result of credit cards. Back then, only the wealthy used credit cards, and their use was restricted to a few places. Today, middle-class individuals in both urban and rural areas have a different way of life and a wider viewpoint on credit card use. However, this has resulted in a number of issues, such as credit card fraud, which includes cybercrime, incorrect payments that cause financial difficulties, pressure tactics employed by bank representatives etc. Thus, the purpose of this study is to examine how consumers use credit cards and the variables that affect their purchasing patterns. The degree of customer happiness and preference, as well as the cardholders' issues and expectations, are also investigated.

4. Objective of the Study:

- To examine the respondents usage patterns
- To research the various traits faced among different respondents.
- To determine which characteristics please credit cardholders.

5. Research Methodology:

5.1 Area of Study:

Surveys were conducted in Ooty.

5.2 Sampling Size:

The size of the sample is 100

5.3 Type of Sampling:

Convenient sampling was used for the study

5.4 Data Collection:

Both primary and secondary data are included. A well-structured questionnaire was used to gather primary data, while a variety of journals, magazines, books, and websites were used to gather secondary data.

- Primary Data: This study is primarily based on primary data gathered via a well-structured questionnaire given to credit card customers in Ooty in order to investigate their usage patterns and levels of satisfaction. The researcher used a Google Form to distribute the questionnaire to acquaintances, and neighbours who fit the target criteria in order to gather primary data. Each respondent completed the questionnaire independently.
- Secondary Data: In addition to being useful in research design, secondary data always offers a baseline against which primary research findings can be compared. The secondary data came from magazines, books, articles, webpages, research papers, and journals.

5.5 Analytical Tools:

The Chi-square tests were used to examine the relationship between satisfaction Level of the respondents and various traits faced by the respondents. Anova was also utilized to investigate the customers income level and credit card usage patterns. F test were used to find the relationship between income level of the respondents and their credit card usage pattern.

6. Review of Literature:

Chennappa D (2009), made a study on the “Satisfaction of the Credit card Holder of the Public, Private and Foreign Sector Banks”. He identified that, the payment system to have undergone drastic change starting from barter system of payment to metal coins, paper currency and now the plastic money which is preferred by the people of developed and developing countries. Some of the private and public sector banks also showed interest in investing in the credit card business. The study observed that the majority of credit card holders are in the age bracket of 26 35 years and 85-71 percent of the respondents belong to six banks (Viz., ICICI, SBI, CITI bank, HDFC, HSBC and Stand chart) He concluded that the credit cards are gaining relevance to facilitate industrial, commercial and agricultural transactions and also the participants will have a very bright future

Cicek and Demirdelen (2010), “To evaluate credit card users”, card preferences examined the academicians’ credit card choice and according to the study findings, the effective elements on Card preferences are “Withdrawal of Salaries from the Same Bank” and “Prestige of the Bank”. With the study it is also determined that female academicians prefer to use credit cards because of reducing cash risk and associate professors, research assistants choose credit cards as a payment instrument due to the instalment option.

7. Research Hypothesis:

The following research hypothesis are farmed and evolved for this study:

- Null Hypothesis (Ho): There is no significant association between Satisfaction Level of the Respondents and various traits faced by the respondents.
- Alternate Hypothesis (H1): There is a significant association between Satisfaction Level of the Respondents and various traits faced by the respondents.
- Null Hypothesis (Ho): There is no significant difference between the gender and the credit card usage pattern
- Alternate Hypothesis (H1): There is a significant difference between the gender and the credit card usage pattern
- Null Hypothesis (Ho): There is no significant difference between the income of the level respondents and the credit card usage pattern
- Alternate Hypothesis (H1): There is a significant difference between the income level of the respondents and the credit card usage pattern

8. Analysis of Data:

The primary data collected from the users have been analysed using the following statistical tools. Factor analysis has been used to understand the Satisfaction Level of Respondents and various traits, gender and the credit card usage pattern, income and the credit card usage pattern. Chi-square has been used to study the significant difference between gender and the credit card usage pattern. Correlation has been used to study the relationship between satisfaction Level of Respondents and various traits faced by the respondents. ANOVA were used to test the significant difference between income level and the respondents credit card usage pattern.

Chi Square:

Satisfaction Level/Traits	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Total
High Interest Rate	50	25	20	2	3	100
High Penalty Charge	53	23	17	3	4	100
Low Grace Period	28	35	29	5	3	100
No Customer Support	16	17	49	9	9	100

Increased Burden Due to Different Charges	28	38	24	5	5	100
Total	175	138	139	24	24	500

Any statistical test's static value that indicates how the data values are compared to the actual observed data is called a chi-square. Applying the chi-square statistic to a sizable sample of independent variables whether they are mutually exclusive or random will yield its value. Once its value has been determined, use the chi-square test on the provided data to test the hypothesis and compute the sample size and number of variables in the data to compare the size of any differences between the expected and actual values.

Factor	D.F	Calculated Value	P	Significance
Traits faced by the respondents	16	74.074	1.909	Significant at 1% level

Interpretation:

According to the table, the majority of 50 respondents firmly believe that credit card interest rates are excessive. 53 respondents, or a larger percentage, strongly agreed that credit card penalties are exorbitant. Regarding the low grace period, the majority of 29 respondents have no opinion. Regarding the no customer service, a maximum of 49 responders are neutral. 38 respondents of a larger percentage, concur that using a credit card is burdensome because of various fees. Table also indicates the results of χ^2 test. The test statistic χ^2 (0.05, 16) is 74.074 has a p value of 1.909. Since the calculated chi- square value is significant, the null hypothesis is of no association between traits faced by the respondents and satisfaction level.

ANOVA:

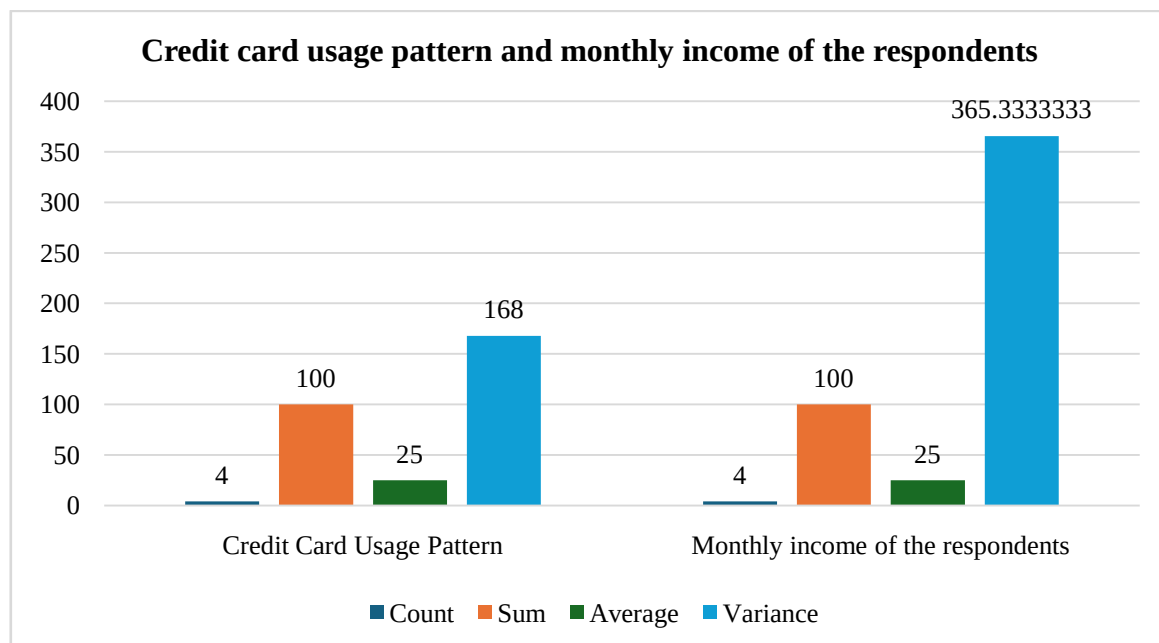
Analysis of Variance, or ANOVA, is a parametric statistical method used to determine if the means of three or more groups differ significantly from one another. By comparing groups samples according to their distinct means, it examines the effects of different factors. ANOVA compares the alternative hypothesis that at least one group mean differs with the null hypothesis, which states that all group means are equal.

Anova Single factor Summary:

Groups	Count	Sum	Average	Variance
Credit Card Usage Pattern	4	100	25	168
Monthly income of the respondents	4	100	25	365.3333

ANOVA:

Source of Variation	SS	df	MS	F	P-Value	F Critical
Between Groups	0	1	0	0	1	5.987378
Within Groups	1600	6	266.6667			
Total	1600	7				



Interpretation:

The credit card usage pattern and the income level of the respondents were compared using One- Way ANOVA test. The F calculated value is less than the F critical value. Hence we will accept the null hypothesis. There is no significant difference between the credit card usage pattern and monthly income of the respondents.

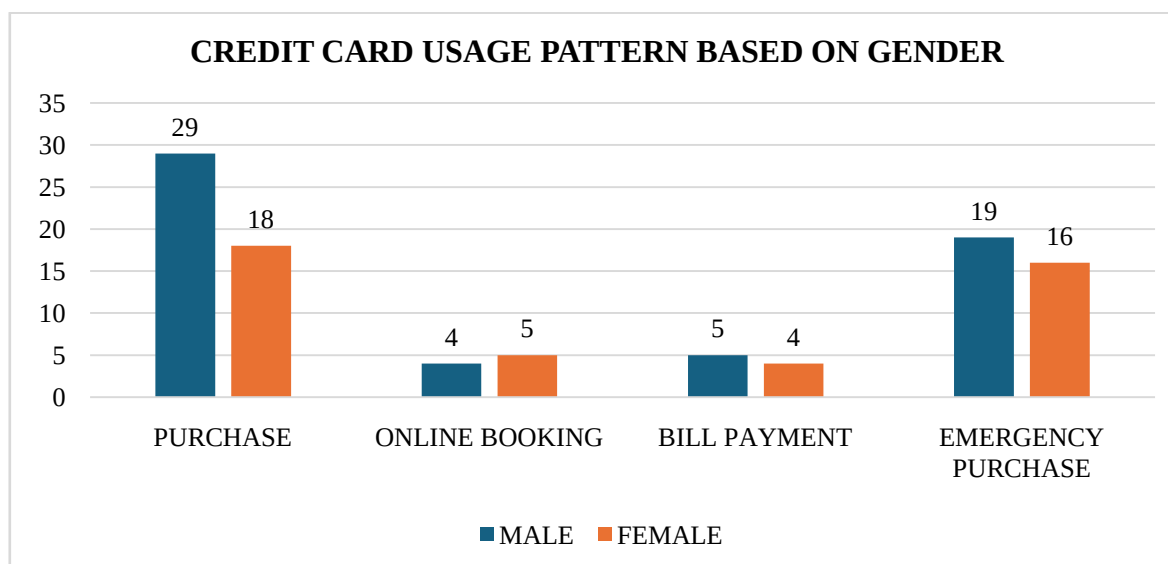
F Test:

For hypothesis testing, the F test is a statistical test that determines whether or not the variances of two populations or samples are equal.

Credit Card Usage Pattern	Male	Female
Purchase	29	18
Online Booking	4	5
Bill Payment	5	4
Emergency Purchase	19	16

F-Test Two-Sample for Variances:

	Variable 1	Variable 2
Mean	14.25	10.75
Variance	143.5833333	52.91666667
Observations	4	4
df	3	3
F	2.713385827	
P(F<=f) one-tail	0.2170425	
F Critical one-tail	9.276628153	



Interpretation:

The credit card usage pattern based on the gender were studied using F test. The F calculated value is less than F critical value. Hence, we will accept the null hypothesis. There is no significant difference between the credit card usage pattern and gender.

9. Findings:

- The majority 57% of the respondents are male how use credit card for various purpose
- 50% of the response strongly agree that credit card is charged with high interest rate
- The majority 37% of the respondents income level is up to 25000
- The majority of 47% of the respondents use credit card for purchasing
- More number of married respondents use credit card as compared to unmarried respondents.
- Majority 60% of the respondents agree that credit card is preferred over other mode due to its safety.
- The test statistic $\chi^2 (0.05, 16)$ is 74.074 has a p value of 1.909. Since the calculated chi- square value is significant, the null hypothesis is of no association between traits faced by the respondents and satisfaction level.
- The credit card usage pattern and the income level of the respondents were compared using One- Way ANOVA test. The F calculated value is less than the F critical value. Hence, we will accept the null hypothesis. There is no significant difference between the credit card usage pattern and monthly income of the response.
- The F calculated value is less than F critical value. Hence, we will accept the null hypothesis. There is no significant difference between the credit card usage pattern and gender.

10. Suggestions:

- Interest rates on credit cards are extremely expensive, banks should take action to lower them. Since credit limits vary depending on the use of various cards, interest rates should be determined by the cardholders spending.
- By increasing transaction transparency and streamlining the process, banks can draw in more clients.
- Banks ought to foster a trusting environment for all credit card transactions.
- Regular surveys may be conducted by banks to gather feedback from clients regarding the ease and simplicity of operations.
- Resolving cardholder complaints should receive more attention as this would help to keep current cardholders and build their trust.
- The credit card holder should pay at least the minimum amount required each month to ensure the smooth operation of the card and should be truthful and honest in returning the balances on time to prevent financial obstacles.

11. Conclusion:

Plastic money is another name for credit cards. Because it makes currency conversion and spending tracking possible, it has become essential. It provides a convenient and safe substitute for cash. The study main objective is to know the customer satisfaction level, various traits faced by the customer and the credit card usage pattern. For this purpose the sample of 100 were collected from the respondents using the convenient sampling. Chi square, ANOVA and F test were used to analyse the data. Plastic cards are a status symbol for many people. In addition to being convenient, it offers the ability to settle credit card debt in

instalments, protecting users against pickpockets and unexpected expenditures. Having a credit card is incredibly beneficial during difficult times. Without a question, the credit card system will become the most effective way for consumers to borrow money in the future.

References:

1. Chennappa D (2009), "Satisfaction of the Credit card Holder of the Public, Private and Foreign Sector Banks", European Journal of Management, International Academy of Business and Economics, Vol.9, Issue .3, ISSN.1555 4015.
2. Cicek, R., Demirdelen, K (2010). To evaluate credit card users' card preferences A research on the subject: Nigde University academics example Yonetime, Management: Istanbul University, Journal of Institute of Business Economics, 66, 1-20.
3. Priya T P University of Madras (2020) Customers Usage Behaviour and Satisfaction Towards Credit Card A Study With Reference To Credit Cardholders In Chennai - <http://hdl.handle.net/10603/348107>
4. Rinku Elizabeth Chandy et al., (2022) Mahatma Gandhi University A study on the customer perception and satisfaction for credit cards of public and private sector banks in Kerala<http://hdl.handle.net/10603/597658>
5. Kanakarathnam S (2007) An Analysis of Spending Habits of Credit Card Holders A Study With Reference To Credit Card Users Of Thiruvallur District Of Tamil Nadu<http://hdl.handle.net/10603/183681>