

CREDIT CARD USAGE AMONG EMPLOYEES IN THE COLOMBO DISTRICT, SRI LANKA DURING POST COVID – 19

D. P. S. De Zoysa¹ and R. M. K. G. U. Rathnayaka²

¹Faculty of Graduate Studies, University of Sri Jayewardenepura;

²Department of Social Statistics, University of Sri Jayewardenepura

piyumidezoysa95@gmail.com

Abstract

In the modern world, credit cards have emerged as a prominent cashless transaction method powered by technological advancement and its inherent convenience. As Sri Lanka's commercial hub, Colombo suffered significant consequences from the COVID-19 pandemic in the early part of 2020. It is possible that subject to gender differences and cultural norms, the pandemic's aftermath had varying effects on the economy, consumer behavior, and societal dynamics. Therefore, the objective of this study is to investigate how gender affects the use of credit cards by employees in the Colombo district after the COVID-19 pandemic. Employing two-stage cluster sampling 500 respondents were selected for the sample. SPSS-26 analyzed data collected through a Google Form questionnaire. Gender plays the independent variable while credit card usage was the dependent variable. An Independent two-sampled t-test was executed to scrutinize the influence of gender on credit card usage of employees. The results unveil that females display a more consistent usage pattern compared to males in the Colombo district after the COVID-19 period. Furthermore, the impact of gender on credit card usage among employees exhibits temporal and geographical variation. Notably, there is a significant difference between the credit card usage of males and females. This study recommends further exploration into the influence of gender on credit card usage among employees residing in rural areas. It would offer valuable insights for credit card service providers, merchants, policymakers, and individuals keen on comprehending the usage pattern of credit card users.

Keywords: Colombo District, Credit Cards, Gender Differences, Employee usage, post-COVID-19, Societal Dynamics

Introduction

In recent years, using credit cards for cashless transactions has become highly prevalent. Increasing numbers of individuals are choosing credit cards as their preferred method of payment due to the convenience provided by credit cards. Employees who are increasingly attracted to credit cards due to their variety of features and benefits are a noteworthy segment of this trend. Credit card service providers issue credit cards

by introducing new features and facilities to their customers. As per the records of the Central Bank of Sri Lanka (CBSL) by the end of the third quarter of 2022, 14 licensed commercial banks and three licensed finance companies had been licensed to engage in credit card issuing (CBSL, 2021). Moreover, as a part of marketing strategies some credit card issuers tended to offer gender base rewards to their customers (Musinski, 2020)

Gender is a complicated and comprehensive idea that greatly impacts how social structures, cultural norms, and personal identities are shaped. The academic disciplines of gender studies, sociology, and psychology all have a keen interest in gender equality, gender disparity, etc. Therefore, researchers need to look into how gender affect on use credit card usage. By examining the potential impact of gender on credit card usage trends, this study hopes to identify any variances or discrepancies that may exist in the field of credit cards. According to the highlights of the Labor Force Survey report, it has recorded a 96.3% male employment rate while 92.1% female employment rate compared to the male and female labor force in Sri Lanka (*Sri Lanka Labour Force Survey - Annual Report 2021*, 2021, p. 15).

Face-to-face interaction was a major problem during the COVID-19 period. The contactless payment technique reduces the risk of virus transmission through surface contact and physical touch. Therefore, credit cards are the convenient and secure payment method for e-commerce transactions allowing people to shop from the comfort and safety from homes. Additionally, credit card service providers offer rewards and incentives for credit card holders with the intension of increasing the client base. At the same time, cardholders also looking to maximum benefits during uncertain times. In Sri Lanka, the Colombo district was one of the highly threatened areas by COVID-19. As a result, the use of credit cards was more popular than before among people during the COVID-19 and post COVID-19 period. Due to the security, convenience, rewards and incentives etc. cardholders used to continue the use of credit card. Therefore, the researcher concerned on examining the impact of gender on credit card usage among employees in the Colombo district during the post-Covid-19 period.

Literature Review

As an Asian country, in India, gender differences exist related to credit card use. Males are more likely to have credit cards than females and convenience attribute can increase the use and adoption of credit cards (Khare et al., 2012). But during the post COVID-19 period it was founded that the ease of using credit card and value that associated to using credit card are not related in India (Gupta, 2022). In Malaysia, credit card usage does not exhibit any gender disparity. However, when it comes to unplanned purchases, female credit card users tend to display a relatively lower level of discipline in terms of credit spending (Hussin et al., 2013). Furthermore, by 2016 female executives in Sri Lanka, preference for security improvement of the credit card transactions (Perera et al., 2016), Married females mostly do their transactions with credit card in an Urban area of Kottawa (Perera et al., 2018). A research done to identify the credit card ownership and usage practices in Sri Lanka revealed females tend to pay medical expenses more than males using credit cards (Wickramasinghe & Gurugamage, 2009), and similar research done in Turkey also founded gender is also statistically significant factor on credit card ownership (Yayar & Karaca, 2012). But, by 2017 a survey done focusing the urbanized consumers in Kandy Municipal council in Sri Lanka reveled gender, age, education, race and income are insignificant factors to having a credit card (Kuruppuge et al., 2019). In 2014 Atienza founded the type of commodities purchased with credit card is influenced by gender in Philippines (Atienza, 2014). Though there were some gender differences in debt maintenance, but both strongly agreed that such debt would not negatively impact attaining their life's goals during the COVID-19 pandemic (Smith, 2022). As confirmed by (Irvy et al., 2022) cashless payments such as credit cards and debit cards has a significant positive impact on economic growth

in Indonesia indicating the use of cashless transactions in a situation like COVID-19 pandemic (Irvy et al., 2022).

Reviewed literature shows how gender is influence on the credit card ownership, purchasing patterns as a socio-economic factor. And also, how cashless transaction is important in different situations in the world. In early 2020, world health organization (WHO) declared new pandemic COVID COVID-19 which was affected the daily routines of human beings (Xiao et al., 2022). For instance, single young women in Japan have demonstrated an increased tendency toward online consumption throughout the COVID-19 pandemic. The gender gap in purchasing has also been decreasing in a number of retail industries, including drug stores, grocery stores, and department shops, where previously women made up the majority of the consumer base. (Fujiwara, 2022). Not only during the COVID-19 outbreak but also after the COVID-19 outbreak it is very important to concern about the payment methods, and buying behavior of individuals. As a result of it a study based on the empirical data collected from Canada, Germany and USA found because of the convenience, efficiency and security some females are tend to continue the online shopping through cashless transaction methods such as credit cards and debit cards (Shaw et al., 2022). These outcomes might have varied according to gender, since males and females may have responded with the pandemic's effects differently as a result of existing gender inequities and cultural norms.

Objective

Understanding the influence of gender on post COVID-19 credit card usage among employees in the Colombo district, Sri Lanka is crucial due to the significant impact of the pandemic on financial behaviors and decision-making. Investigating gender-specific variations in credit card usage can contribute to the literature on

gender and finance, providing insights into post-pandemic financial behaviors. Additionally, identifying any gender disparities in credit card usage can inform targeted strategies for financial institutions, policymakers, and researchers to promote inclusivity and empowerment. This study will contribute to knowledge on post COVID-19 financial behaviors, gender influences, and the importance of addressing gender disparities in credit card usage among employees in the Colombo district, Sri Lanka. Therefore, the research question would be what is the influence of gender on post COVID-19 credit card usage among employees in the Colombo district, Sri Lanka? The objective of this study is to examine the influence of gender on post COVID-19 credit card usage among employees in the Colombo district, Sri Lanka.

Methodology

Employees were shifted to work from home (WFH) during the COVID-19 outbreak. During that time there were less face-to-face interactions. Because of that most of the employees who earns permanent monthly income, moves towards the cashless transaction methods like as credit cards since it gives later repayment facility. Colombo district was highly COVID-19 influenced area in Sri Lanka (*COVID-19 Dashboard – Presidential Secretariat of Sri Lanka*, 2022). Therefore, the researcher selected few urbanized areas in Colombo district to collect data for this study.

The primary data for this study was collected using a Google form questionnaire was distributed among nearly 500 respondents. A two-stage cluster sampling technique was employed to select respondents from the Colombo district. Since the credit card users in the Colombo is the population of this study and 13 Divisional Secretariats (DS's) in the Colombo district considering as the clusters, randomly selected two DSs representing 10% of the DSs as

the primary sample unit (PSU). The selected PSUs are Colombo DS and Dehiwala DS. Both DSs comprised with 50 Grama Niladhari Division (GNSD's). Select five GNDs from the selected GNDs as secondary sample units (SSU). The survey was conducted after a pandemic with less face-to-face interaction period. Therefore, the researcher took the detailed contact list of households in the selected GNDs from the GN officer as the sample frame for this study. In the earliest months of 2023, data was collected using a Google Form questionnaire, which was distributed among respondents via Email and WhatsApp contacts. The reporting unit of this study was credit card-using employees in the households. In the questionnaire first question was a direct question ‘Are you a credit card user?’ which has two answers ‘Yes’ or ‘No’. If the answer is ‘Yes’ that questionnaires were filtered for further study and if the answer is ‘No’ that questionnaires were ignored. After the data editing process 428 responses were eligible for further analysis.

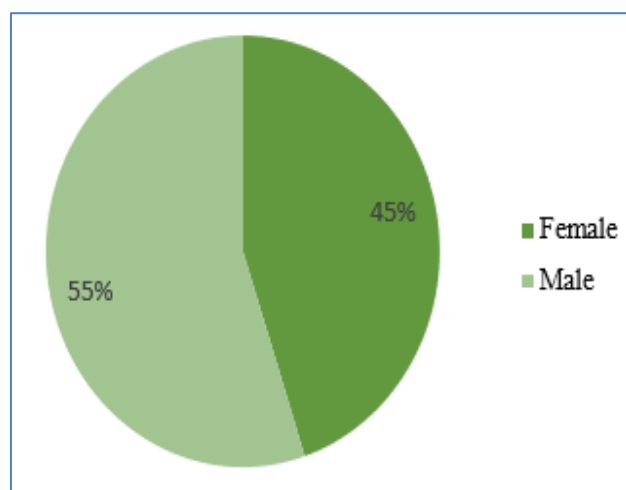
The independent variable of the study was gender, consisting of two categories: male and female. The dependent variable, credit card usage, was measured using a 10-point Likert scale, with responses ranging from 1 (indicating "strongly disagree") to 10 (indicating "strongly agree"). A composite index was constructed using the Likert scale statements to assess the level of credit card usage among employees. The reliability of the Likert scale statements was evaluated using Cronbach's Alpha, which yielded a value of 0.792, indicating satisfactory reliability. The validity of the data was assessed using the Kaiser-Meyer-Olkin (KMO) measure, which produced a value of 0.698, indicating acceptable validity. In addition to the main variables, the researcher also included marital status, living area, occupation and work place organization to obtain an overview of the sample. After the data editing process, a total of 428

responses were available for further analysis. The data analysis was conducted using SPSS-26, a statistical software package. To examine the impact of gender on credit card usage, an independent two-sample t-test was performed.

Results

The survey achieved a response rate of approximately 85%. Figure 1 displays the distribution of respondents, with 223 individuals (52%) identified as male and 205 individuals (48%) identified as female employees who utilize credit cards for their daily transactions in the selected sample of 428 participants.

Figure 1: Gender Composition of Respondents



Source: Survey Data

Table 1 provides an overview of the sample population categorized by gender. According to the table, approximately 75% of males and 64% of females in the selected sample are married, while 25% of males and 36% of females are unmarried. Living area of the respondents were considered as Urban, Sub-urban and Rural in the questionnaire. But after collected data the responses recorded for the semi-urban areas were considerably in a lower level with compare to the other two types of living areas. Therefore, for the further studies the researcher had merged two semi-urban area with urban area. Among those who use credit cards, 58% of males reside in

urban areas compared to rural areas, whereas the majority of females (43%) reside in rural areas within the Colombo district. Additionally, the Table 1 reveals that 32% of females and 33% of males who use credit cards belong to the professional occupation category within the studied sample. Furthermore, 25% of males and 40% of females holding executive-level positions are credit card users. As per the Table 1, 61% of

males and 37% of females in government sector use credit cards while 55% females and 25% males in private sector use credit cards in their daily transactions. With compared to the government and private sector employees, the credit card usage of self-employees is considerably in lower level for both male (10%) and females (9%).

Table 1: Overview of sample by gender

Variable	Categories	Male		Female	
		Frequency	%	Frequency	%
Marital status	Married	168	75	132	64
	Unmarried	55	25	73	36
Living area	Urban	129	58	97	47
	Rural	94	42	108	53
Occupation	Executive level	56	25	82	40
	Professionals	73	33	65	32
	Technical & Associate professionals	62	28	42	20
	Others	32	14	16	8
Work place organization	Government	136	61	75	37
	Private	65	29	112	55
	Self-employee	22	10	18	9

Source: Survey Data

Table 2 presents a summary of the dependent variable, credit card usage, categorized by gender. The average credit card usage for males is reported as 11.36 with a standard deviation of 3.43, while for females, the average usage is recorded as 10.63 with a standard deviation of 2.95. The distribution of credit card usage for both males and females approximates a normal distribution. Males exhibit a higher mean usage of 24.83 compared to females with a mean usage of 21.25. However, the minimum recorded usage is greater for females at 5.9 compared to males at 5.36. The coefficient of variation indicates that female employees demonstrate a higher level of consistency in credit card usage compared to male employees.

Table 2: Summary Results of Credit Card Usage by Gender

Dependent variable	Summary Measurement	Male	Female
Credit Card Usage	Mean	11.36	10.63
	Standard deviation	3.43	2.95
	Skewness	0.09	0.136
	Kurtosis	1.115	1.356
	Minimum	5.36	5.9
	Maximum	24.82	21.25
	Coefficient of variation	30.19%	27.75%

Source: Survey Data

A two-sample independent t-test was conducted to examine the influence of gender on credit card usage. The summarized results of the t-test are presented in Table 3.

Table 3: Results of independent two sample t-test

	Levene's Test for Equality of Variances		t-test for Equality of Means	
	F	Sig.	t	Sig. (2-tailed)
Equal variances assumed	5.030	.026	6.425	0.000
Equal variances not assumed			4.097	0.007

Source: Survey Data

According to Table 3, Levene’s test is significant which indicates that the variance between two groups male and female are not equal at 5% level of significance. Furthermore, the results of two sample t-test implies that there is a significant mean difference of the credit card usage among male and female employees ($t = 4.097 / p = 0.007$) irrespective of the variance.

The study findings reveal a shift in credit card usage patterns among married individuals in the Colombo district. In 2023, married males (36.19%) exhibit a higher likelihood of using credit cards compared to females (27.75%), whereas a previous study by Perera et al., (2018) reported that married females primarily conducted transactions using credit cards. The urbanized area of Colombo plays a significant role in these dynamics. Gender is observed to be a significant factor influencing credit card usage among employees in the Colombo district by 2023. This finding differs from the results of Kuruppuge et al., (2017) regarding the insignificance of gender as a factor in credit card ownership among consumers in the Kandy municipal council. The disparity can be attributed to the COVID-19 period, during which face-to-face interactions were limited due to lockdowns. Consequently, individuals shifted towards payment methods that allowed transactions from their locations, resulting in increased credit card usage among employees working from home. Concurrently, credit card service providers introduced new features and facilities to expand their market share.

Consequently, males showed an increased tendency to use credit cards after the COVID-19 period. Descriptive data indicates a higher prevalence of credit card usage among female employees who are in executive level in the Colombo district, aligning with the findings of Perera et al. (2016) concerning female executives in Sri Lanka. The results highlight the changing impact of gender on credit card usage among employees, influenced by time and geographical location.

Conclusion and Recommendations

The researcher conducted a survey to gain insights into credit card usage among employees, particularly concerning gender differences. The research findings underscore a noteworthy trend in the credit card usage patterns among individuals in the Colombo district, revealing that females exhibited a higher level of consistency in their credit card usage compared to their male counterparts in the post-COVID-19 period. This observation suggests that gender dynamics play a crucial role in shaping financial behaviors, particularly in response to external economic shocks such as the pandemic.

Furthermore, the study established a significant correlation between gender and credit card usage among employees in the Colombo district following the post-COVID-19 period. This implies that gender-based factors, possibly influenced by societal norms or financial decision-making dynamics, contribute to variations in credit card usage habits.

In light of these findings, it is recommended to delve deeper into the impact of gender on credit card usage among employees residing in rural areas. This additional research would provide a more comprehensive understanding of how the ongoing transformation of credit card usage in their daily lives, delving into the evolving consumer behavior and societal dynamics that shape these financial practices.

References

- Atienza, R. P. (2014). Credit Card Usage Pattern in Ozamiz City, Philippines. *Journal of Multidisciplinary Studies*, 3(1). <https://doi.org/10.7828/jmnds.v3i1.626>
- CBSL. (2021). *Economic Outlook and Policy Measures*. https://www.cbsl.gov.lk/sites/default/files/Payments_Bulletin_3Q2022_e.pdf
- COVID-19 Dashboard – Presidential Secretariat of Sri Lanka. (2022). <https://www.presidentsoffice.gov.lk/index.php/covid-19-dashboard/>
- Fujiwara, K. (2022). *How the COVID-19 Pandemic Changed Consumer Lifestyle: Evidence from High-Frequency Panel Data in Japan*. 10.
- Gupta, H. (2022). *Project Dissertation Report on Factors affecting credit card use in India post covid- 19*.
- Hussin, S. R., Kassim, S., & Jamal, N. (2013). *Credit Card Holders in Malaysia: Customer Characteristics and Credit Card Usage*. 7(I).
- Irvy, G., Rohima, S., & Mardalena, M. (2022). The Impact of Cashless Payment on Indonesian Economy: Before and During Covid-19 Pandemic. *Jurnal Ekonomi Pembangunan*, 20(1), Article 1. <https://doi.org/10.29259/jep.v20i1.17898>
- 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. <https://doi.org/10.1108/13555851211218048>
- Kuruppuge, R. H., Gamage, S. K. N., & Nedelea, A.-M. (2019). *CREDIT CARDS AS A DETERMINANT OF SOCIAL CAPITAL: A STUDY OF RATIONAL BEHAVIOUR OF URBANISED CONSUMERS*. 6(1).
- Musinski, B. (2020). How Credit Cards Are Accommodating Transgender Identity. *US News & World Report*. <https://money.usnews.com/credit-cards/articles/how-credit-cards-are-accommodating-transgender-identity>
- Perera, C., Dayanga, S. L. K., & Jayasuriya, N. (2016). Factors Affecting Credit Card Debts: A Study among Executives in Sri Lanka. *International Journal of Science and Research (IJSR)*, 5(7), 1495–1504. <https://doi.org/10.21275/v5i7.ART2016446>
- Perera, E. B. N., Samarakoon, S. J. M. N. G., & Adikaram, G. A. C. R. (2018). Factors Affecting the Usage of Credit Cards. *Fourth Annual Student Research Session on Social Sciences and Languages*.
- Shaw, N., Eschenbrenner, B., & Baier, D. (2022). Online shopping continuance after COVID-19: A comparison of Canada, Germany and the United States. *Journal of Retailing and Consumer Services*, 69, 103100. <https://doi.org/10.1016/j.jretconser.2022.103100>
- Smith, A. D. (2022). Exploratory study of credit-card indebtedness during the COVID-19 pandemic. *International Journal of Electronic Finance*, 11(3), 236–268. <https://doi.org/10.1504/IJEF.2022.124477>
- Sri Lanka Labour Force Survey—Annual Report 2021. (2021). Department of Census and Statistics. <http://www.statistics.gov.lk/LabourForce/StaticInformation/AnnualReports/2021>
- Wickramasinghe, V., & Gurugamage, A. (2009). Consumer credit card ownership and usage practices: Empirical evidence from Sri Lanka. *International Journal of Consumer Studies*, 33(4), 436–447. <https://doi.org/10.1111/j.1470-6431.2009.00779.x>
- Xiao, H., Zhang, Z., & Zhang, L. (2022). A diary study of impulsive buying during the COVID-19 pandemic. *Current Psychology*, 41(8), 5745–5757. <https://doi.org/10.1007/s12144-020-01220-2>
- Yayar, R., & Karaca, S. S. (2012). *Identifying the Factors Affecting the Consumer Credit Card Ownership: Empirical Evidence from Turkey*. VII(2(20)).

