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# FINANCIAL LITERACY AND CREDIT CARD USAGE: WITH SPECIAL REFERENCE TO WEWALA WEST GN DIVISION, SRI LANKA

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#### **ABSTRACT**

Credit cards are a wide spreading modern payment instrument which is an important tool for producers and vendors in order to exist in the market and to uphold their strength in the present intense and competitive business world. Financial decision making is an integral part of daily life of people. Financial decision making and also the accuracy of those decisions depend on financial literacy. The main objective of this study is to identify whether there is a relationship between financial literacy and credit card usage. This study selected 300 households using simple random sampling technique from the 1442 households in the Wewala West GN division, in Colombo administrative district, Sri Lanka, which is the population of this study. Primary data were collected through a structured questionnaire. Validity analysis, frequency analysis, factor analysis, weighted average, Chi square test and independent sample t-test have been used for the analysis part of this study. The calculated financial literacy index is between 0 and 5.02. This study has found that credit card users have significantly high level of financial literacy rate. It has proven that, as shown in the previous literature in many countries, financial literacy rate is a considerable factor among other factors which affects the usage of credit cards.

**Key words:** Credit card usage, Financial literacy, Sri Lankan context.

#### 1.0 Introduction

Credit cards are a wide spreading modern payment instrument which is an important tool for producers and vendors in order to exist in the market and uphold their strength in the present intense and competitive business world. It is a tool for consumers to benefit from prestige, short-term cash credit, not needing to carry money, opportunity for installment shopping and late payment advantage (Akif, 2018).

Financial decision making is an integral part of daily life. Most of financial decisions are made as own decisions without the advice of financial specialists. Financial decision making and the accuracy of those decisions depend on financial literacy (Meir, Mugerman & Sade, 2016). The lack of financial literacy may lead to making poor financial choices that can have negative consequences on the financial well-being of an individual. As Ludlum et al. (2012) and Allgood (2013) note, financial literacy rate of individuals is a considerable factor among other factors which affect the usage of credit cards.

Accordingly, the problem of this study is to check whether the financial literacy rate of individuals influences having a credit card in the Sri Lankan context. The main objective of this study is to identify whether there is a relationship between financial literacy of individuals and credit card usage.

#### 2.0 Literature Review

#### 2.1 Financial literacy

Financial literacy is the education and understanding of various financial areas including topics related to managing personal finance, money and investing. This topic focuses on the ability to manage personal finance matters in an efficient manner, and it includes the knowledge of making appropriate decisions about personal finance (Investopedia, 2018a).

Financial literacy is a combination of awareness, knowledge, skills, attitudes and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being (Akinson & Messy, 2012). According to most research, financial literacy is a combination of financial knowledge, financial behavior and financial attitudes.

#### 2.1.1 Financial knowledge

Financial knowledge is some basic knowledge of key financial functions such as division, interest rate, compound interest, time value of money, risk and return, inflation, diversification etc. of financially literate person. It is the capability of how to manage money for different usage, including the monitoring of day to day financial matters in the market and making the right choices for "financially literate" people's needs (Akinson & Messy, 2012).

#### 2.1.2 Financial behavior

It can be defined as any human behavior that is relevant to money management. Common financial behaviors include cash, credit and saving behavior (IGI Global, 2018a). The way in which a person behaves will have a significant impact on their financial literacy. It is therefore important to capture evidence of behavior within a financial literacy measure.

#### 2.1.3 Financial attitudes

Individual characteristics that take the form of tendencies towards a financial practice or action are known as financial attitudes. It shows the inclination or likelihood of a person to undertake a behavior (IGI Global, 2018b).

#### 2.2 Financial literacy and credit card usage

As per the research done by Ludlum et al., in America students are suppressed in debt before graduation, often with little hope of paying off the debt before high fees and interest double the amount. American students lacked even basic financial knowledge of a common credit tool that many of them used daily. There are significant differences between students in their knowledge of credit cards and several demographic factors (Ludlum et al., 2012).

Allgood and Walstad (2013) show that the combination of the subjective assessment with the objective assessment of financial literacy provides a more comprehensive analysis of how financial literacy affects credit card behavior. This combined approach to assessment produced the largest estimates of the effects of financial literacy on credit card behavior.

## 3.0 Methodology

## 3.1 Research population and sample

Among total 1442 households in the Wewala West GN division, which is selected as the population, this study selected 300 households as the sample. Simple random sampling method is used for this study.

## 3.2 Data collecting and measuring variables

Primary data were collected through structured questionnaire which was designed in three main parts to collect qualitative data. The questionnaire used for this research was based on the OECD core questionnaire on financial literacy. The questionnaire designed for this study can gain all relevant data which are valuable for attaining study goals. The questionnaire used here comprises three parts: demographic data, financial literacy data and credit card usage data.

The data about financial literacy was used to get a weighted value for a component named financial literacy. For that, the questionnaire comprised 15 variables under three sub-categories: financial knowledge, financial behavior and financial attitudes. The researcher constructed the index for financial literacy by using weighted average method. The weight for each component is defined according to the component score coefficient matrix result of confirmatory factor analysis. Accordingly, the weighted average of financial literacy rate for each respondent was computed as follows:

$$\bar{X}_w = \frac{(0.405X_{1i} + 0.373X_{2i} + 0.407X_{3i})}{(0.405 + 0.373 + 0.407)}$$

Where,  $X_{1i}$ : financial knowledge score of i<sup>th</sup> person,  $X_{2i}$ : financial behavior score of i<sup>th</sup> person, and  $X_{3i}$ : financial attitude score of i<sup>th</sup> person.

Calculated financial literacy index is between 0 and 5.02.

#### 3.3 Data analysis method

This study mainly used validity analysis, frequency analysis, factor analysis, weighted average, Chi square test and independent sample t-test as the tools of analysis. SPSS V.21 was used for analysis purposes.

## 4.0 Analysis and discussion

After collecting relevant data, the study used the response rate and reliability analysis as a way to measure the validity of the gathered data. The first time responses response rate, which equals to 72%, is more than 50%. So the study concludes that the questionnaire method is appropriate for further analysis. Reliability analysis refers to the fact that a scale should consistently reflect the construct it is measuring. Standardized Cronbach's  $\alpha$  coefficient should be within 1 and 0 and here the value was 0.729. According to Field (2009), it is acceptable for further analysis.

## 4.1 Nature of the sample

According to the gathered data, one can identify different demographic features in the sample. They are briefly identified in Table 01.

Table 01: Nature of the sample

Demographic feature		Amount % of response s		Demograp	Demographic feature		Percenta ge
Gender	Male	107	49.5	Monthly	< 30	019	08.80
	Female	109	50.5	income	30 - 75	072	33.33
Marital	Married	208	96.3	(Rs.	75 – 100	880	40.74
Status	Single	800	03.7	Thousand s)	>100	037	17.13
Race	ce Sinhala 206 95.37 Level o	Level of	O/L	020	09.26		
	Tamil	004	01.85	education	A/L	076	35.19
	Muslim	002	00.93		Diploma	092	42.59
	Burger	000	00.00		Graduate	017	07.87
	Other	004	01.85		Post graduate	011	05.09
Age	21 - 35	- 35 098 45.37 Sector of job		Governme nt	052	24.07	
	36 - 50	061	28.24		Private	103	47.69
	51 - 60	039	18.06		Semi- governme nt	021	09.72
	>60 018 08.33	Self- employee	040	18.52			

Source: Author developed

## 4.3 Financial literacy rate and credit card usage

This study tries to test the hypothesis "There is no relationship between the category of financial literacy and the credit card usage" using independent Chi square test.

Table 02: Testing the relationship between the category of financial literacy and the credit card usage

	Null Hypothesis	t value	Sig. value	Decision
H <sub>0</sub> :	There is no relationship between the category of financial literacy and the	77.127	0.000	H <sub>0</sub> is rejected.
	credit card usage.			

Source: Author developed

According to Table 02, it can be concluded that there is a significant relationship between the category of financial literacy and credit card usage.

This study then tries to test the hypothesis "There is no difference in the mean of financial literacy between credit card users and non-users" using independent sample t-test.

Table 03: Testing the mean difference

	Null Hypothesis	t value	Sig. value	Decision
H <sub>0</sub> :	There is no difference in the mean of financial literacy between the credit card users and non- users.	-8.87	0.000	H <sub>0</sub> is rejected.

Source: Author developed

According to the Table 03, it can be concluded that there is a significant difference in the mean of financial literacy between the credit card users and non-users. As the main objective of this study, the researcher

has carried out multiple comparisons and checked the mean plot to reach conclusions.

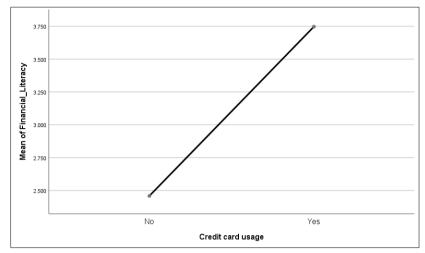


Figure 01: Mean plot of financial literacy rate

As per the Figure 01, this study finds that there is a relationship between credit card usage and financial literacy rate and that credit card users have significantly higher levels of financial literacy.

## 5.0 Conclusion and implications

The main objective of this study is to identify whether there is a relationship between financial literacy and credit card usage. As per achieving the objective of the research, it is found that there is a significant relationship between the category of financial literacy and credit card usage. Further, the researcher can conclude that there is a relationship between credit card usage and financial literacy rate and that credit card users have significantly higher levels of financial literacy. It has proven that, as seen in the previous literature in many countries, financial literacy rate is a considerable factor among other factors which affects the usage of credit cards.

#### References

Akif, M. (2018). The effect of credit card usage on consumer behavior. *International journal of Eurasia Social Sciences. 9*(32), 1099-1120.

Akinson, A. & Messy, F. (2012). Measuring financial literacy: Results of the OECD / International network on financial education Pilot study. *OECD Working papers on Finance, Insurance and private pensions, No 15.* http://dx.doi.org/10.1787/5k9csfs90fr4-en

Allgood, S., & Walstad, W. (2013). Financial Literacy and Credit Card Behaviors: A Cross-Sectional Analysis by Age. *Numeracy*. *6*(2), DOI: http://dx.doi.org/10.5038/1936-4660.6.2.3

Field, A. (2009). *Discovering Statistic using SPSS*. New Delhi: SAGE Publishers.

IGI Global. (2018a). *What is Financial Behavior*. Retrieved June 28, 2018 from https://www. igi-global.com/dictionary/financial-education-for-children-and-youth/47372

IGI Global. (2018b). *What is Financial Attitudes*. Retrieved June 28, 2018 from <a href="https://www.igi-global.com/dictionary/financial-literacy/58683">https://www.igi-global.com/dictionary/financial-literacy/58683</a>

Investopedia. (2018a). *Financial literacy*. Retrieved June 28, 2018 from <a href="https://www.investopedia.com/terms/f/financial-literacy.asp">https://www.investopedia.com/terms/f/financial-literacy.asp</a>

Ludlum, M., Tilker, K., Ritter, D., Cowart, T. W., Xu, W., & Smith, B. C. (2012). Financial Literacy and Credit Cards: A Multi-Campus Survey. *Accounting, Finance & Business Law Faculty Publications and Presentations. Paper 2.* Retrieved from <a href="http://hdl.handle.net/10950/597">http://hdl.handle.net/10950/597</a>.

Meir, A., Mugerman, Y. & Sade, O. (2016). Financial Literacy and Retirement Planning: Evidence from Israel. *Journal of Israel Economic review*, 14(1), 75-95 Retrieved from <a href="https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2889925">https://papers.ssrn.com/sol3/papers.cfm?abstract\_id=2889925</a>