The Impact of Financial Literacy on E-Banking Usage among University Undergraduates

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Abstract: Financial literacy is essential today since it helps them achieve financial stability by developing healthy spending habits and making suitable investments for future needs. Accordingly, many studies have been conducted to determine the financial literacy on e-banking usage among bank customers in global context. The undergraduates are developing financial habits and making decisions affecting their long-term financial well-being. Therefore, this study aims to investigate the impact of financial literacy on e-banking usage by management undergraduates in state universities in Sri Lanka. The study identified four variables, financial knowledge, financial behaviour, financial attitude, saving, as the proxy for financial literacy. The study employed a quantitative approach with probability sampling drawing a sample of 345 management undergraduates in the state universities and collecting the data using structured questionnaires among the management undergraduates in Sri Lanka. The data was analyzed using descriptive statistics, correlation, and regression analyses. The study finds that financial knowledge, behaviour, and attitude significantly impact the e-banking usage. However, the study also finds no impact of saving variable in the e-banking usage. The study also highlights implications for educational policy, advising partnerships between financial institutions and universities to introduce hands on programs that strengthen students' practical use of financial literacy.

Keywords: *E-Banking, Financial Attitude**,** Financial Behavior, Financial Literacy, Saving*

01. Introduction

In today's digital age, the rapid growth of electronic banking technologies has led to a surge in customer adoption. The broad selection of available products has further driven consumers to embrace these digital banking solutions. Consumers can choose from a wide range of digital financial instruments in today's complicated financial markets, but in order to maximize their long-term financial well-being, they must possess the necessary knowledge and skill set to assess their options and make the best decisions (Anyfantaki & Andreou, 2019). E-banking serves as a platform which helps in delivering banking services and strategic tools which could lead to business development (Jain, 2023). It allows customers to save time, money, and effort by offering convenient access to their accounts. Whether using a desktop, smartphone, or laptop, customers can manage their finances from anywhere with ease. Today, electronic banking services are available in all banks, each offering a range of unique products. This service streamlines banking transactions, making them more convenient and faster for customers (Munari & Susanti, 2021).

These days, having a solid understanding of finance has become essential for people. In addition to taking care of their immediate needs, people also need to make plans for the future. It is essential for them to be financially literate in order to make smart financial decisions. The majority of people view financial literacy as having knowledge and comprehension of financial concepts and risks, as well as the abilities, drive, and self-assurance to apply this knowledge and comprehension to make wise decisions in a variety of financial contexts, enhance the financial well-being of individuals and society, and permit participation in economic activities (Nano & Istrofor, 2017).

The impact of financial literacy on e-banking usage based on undergraduates in Sri Lanka has lack of investigations in Sri Lankan context. Moreover, many research studies are carried out on the effect of financial literacy on e-banking in global context and those research studies cannot be generalized to the Sri Lankan context (Akbar et al., 2021; Anyfantaki & Andreou, 2019; Anuar et al., 2023; Bhushan & Medury, 2014; Chinasa & Wosowei, 2023; Munari & Susanti, 2021) and not adequate sample was taken place for the study. Therefore, the researcher will conduct to measure the impact of financial literacy on e-banking usage among undergraduates in Sri Lanka. This Research will fill that gap.

Thus, this research aims to address these questions by conducting a comprehensive investigation into the impact of financial literacy on e-banking usage among undergraduates in Sri Lanka. The rest of this article covers the literature review, research design and methodology, results and discussion, followed by the conclusion.

02. Review of Literature

Ghane et al. (2019) studied the impact on financial literacy of bank customers on the use of electronic banking throughout the period of 2017 by using 380 sample size. The study has indicated that a positive and significant impact of financial literacy and its components on the use of electronic banking. Further, the study highlighted that business literacy and savings also has a significant impact on use of e-banking.

Chinasa and Wosowei (2023) studied that financial literacy and mobile banking in the South region of Nigeria and its implication for inclusive finance by using 300 sample size. The research has been indicated that financial

literacy had a positive effect on mobile banking and it has been concluded that there is a high level of financial literacy among respondents in the region.

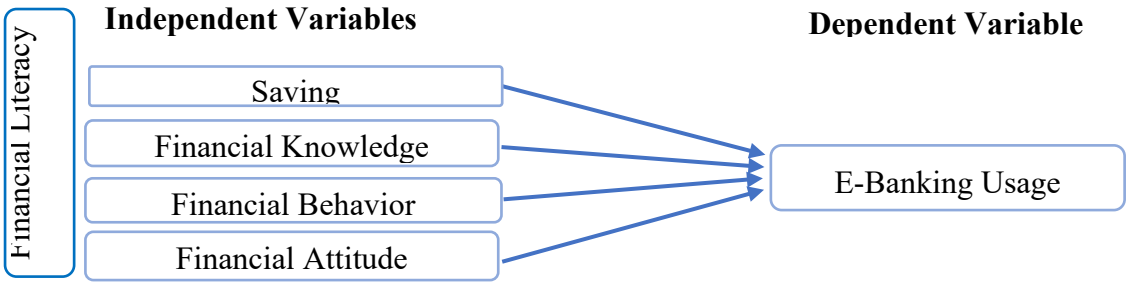
Muthia et al. (2022) tested that whether risk tolerance can moderate the relationship between financial literacy on Internet banking behavior during Covid-19 using 133 respondents. The findings indicated that financial literacy positively influences internet banking usage, suggesting that banks can promote greater internet banking adoption by enhancing financial literacy. Yates S. R. (2020) studied that factors associated with electronic banking adoption in 2016 and found that adoption of Electronic banking would increase income, education and consumer's financial knowledge.

Hanifah et al. (2022) examined the influence of financial knowledge, attitudes, and behavioral literacy on the intention to use mobile banking among 100 management students who are customers of Bank BCA, BNI, BRI, and Mandiri. The data were analyzed using correlation tests, multiple linear regression, and the coefficient of determination test. The results revealed that financial knowledge literacy did not impact the intention to use mobile banking. Additionally, financial attitude literacy did not influence this intention, whereas financial behavior literacy positively affected the intention to use mobile banking. Simultaneously, together of the variables of financial knowledge, attitude, and behavior literacy positively affected intention in using mobile banking. Danes and Hira (1990) have showed at people's financial knowledge, Financial attitudes, and credit card-related behaviours and they discovered that those who supported using credit cards for installment purchases had a higher likelihood of doing so overall and of accruing finance charges as well.

03. Research Design and Methodology

This research utilizes a deductive approach and adopts a quantitative methodology, focusing on management undergraduates enrolled in state universities across Sri Lanka. The target population comprises approximately 21,026 undergraduates, as estimated from the University Grant Commission's student allocation handbook over the past four years. The researcher chose the sample using a random sampling method. The sample size is 379 management undergraduates from state universities in Sri Lanka. This study used primary data to collect data for the study. The questionnaire was developed based on existing literature and distributed via a Google form. Each measure was assessed using a five-point Likert scale, where 1 indicated "strongly disagree," 2 indicated "disagree," 3 indicated "neutral," 4 indicated "agree," and 5 indicated "strongly agree." In gathering primary data from respondents, 400 number of questionnaires were distributed to the management undergraduates through e-mails, WhatsApp and other social media and the total number of questionnaires received was 345. There was no any missing value because all questions in the questionnaire were required question in Google form. In this research, financial literacy was the independent variable. Financial literacy, the independent variable, was determined by variables such as savings, financial knowledge, financial behaviour and financial attitude. The dependent variable of the research was the e-banking usage. The conceptual framework (Figure 1) for the study has been developed as follows.

Figure 1*: Conceptual framework*



Based on the conceptual framework, the researcher formulated the following hypotheses to achieve the objectives of the study.

H_1: There is a significant impact of financial literacy on e-banking usage among management undergraduates in Sri Lanka.

H_2: There is a significant impact of savings on e-banking usage among management undergraduates in Sri Lanka.

H_3: There is a significant impact of financial knowledge on e-banking usage among management undergraduates in Sri Lanka.

H_4: There is a significant impact of financial behavior on e-banking usage among management undergraduates in Sri Lanka.

H_5: There is a significant impact of financial attitude on e-banking usage among management undergraduates in Sri Lanka.

Talking about a research project is the most effective way to explain data analysis and result interpretation. The researcher used the Statistical Package for the Social Sciences (SPSS) 25.0 version to analyze the statistical data obtained from the questionnaire. The study employed reliability and validity tests, descriptive statistical analysis, correlation analysis, and multiple regression analysis techniques to examine the survey data from the sample.

Regression Equation,

$$\mathbf{EBU} = \propto + \boldsymbol{\beta 1 SA} + \boldsymbol{\beta 2 FK} + \boldsymbol{\beta 3 FA} + \boldsymbol{\beta 4 FB} + \boldsymbol{\varepsilon}$$

EBU - E-banking Usage (Dependent Variable)

SA - Savings

FK – Financial Knowledge

FA – Financial Attitude

FB - Financial Behavior

$\propto$ – Intercept (constant value)

ε - Error Term

β – Beta Value

From equation: EBU refers the e-banking usage; $\propto$ represents the intercept values; ß1, ß2, ß3 and ß4 are coefficients of explanatory variables to be estimated savings, financial knowledge, financial attitude and financial behaviour respectively and $\boldsymbol{\varepsilon}$ is the error term assumed to be normally and independently distributed with zero mean.

04. Results and Discussion

4.1 Reliability Test

Table 1: *Reliability Test*

Variable	Cornbrash's Alpha Value	No: of Questions	Decision
SA	0.802	5	Accepted
FK	0.797	5	Accepted
FB	0.767	5	Accepted
FA	0.790	5	Accepted
EBU	0.776	5	Accepted

According to the criteria, all of the data variables have surpassed the level of 0.7, and the whole data set from the survey can be used for future study analysis. No items have been eliminated as a result because doing so would not appreciably improve Cronbach's Alpha. Consequently, it can be said that the questionnaire is reliable and consistency, given that all the values surpass the recommended threshold of 0.7.

4.2 Validity Test

Table 2: *Validity Test*

Variable	KMO	Sig. value of Bartlett's test
SA	0.816	0.000
FK	0. 823	0.000
FB	0.803	0.000
FA	0.795	0.000
EBU	0.819	0.000

The KMO measure is used to assess the adequacy of the data for conducting a factor analysis. In this table, each variable has an associated KMO value higher than the minimum value (0.5). The significance value (Sig. value) for each variable is shown in the second column next to the KMO values. The low p-values (all 0.000) suggest that there is a significant relationship among the variables being analyzed.

4.3 Descriptive Analysis

Table 3: *Descriptive Analysis*

Variable	Mean	Std. Deviation
SA	4.2951	0.611
FK	4.2580	0.631
FB	4.2400	0.628
FA	4.3055	0.616
EBU	4.2899	0.606

In order to determine the extent of the independent and dependent variables, descriptive research was conducted. Accordingly, Financial behaviour is represented of the lowest mean level of 4.240 and the financial attitude is

represented of the highest mean level of 4.305. Financial knowledge is represented the highest standard deviation of 0.631 indicating greater variability compared to the other variables and the e-banking usage is represented the lowest value of 0.606.

4.4 Correlation Analysis

In statistics, the term "correlation" refers to both the strength and the direction of a linear relationship between an independent variable and a dependent variable. Correlation also includes the coefficient, which is a component of correlation.

Table 4: *Correlation Analysis*

	SA	FK	FB	FA	EBU
SA	1				
FK	0.272**	1			
FB	0.535**	0.340**	1	.	
FA	0.547**	0.354**	0.650**	1	.
EBU	0.313**	0.658**	0.405**	0.415**	1

**. Correlation is significant at the 0.01 level (2-tailed).

N= 345

Sig. (2 tailed) =0.000

The table above shows the correlation coefficients for all significant dimensions at the 0.01 level. According to the table, savings, Financial Behaviour and financial attitude have a moderate positive relationship on e-banking usage with correlation coefficients of 0.313,0.405 and 0.415 respectively. Further, Financial knowledge has the strong positive relationship on e-banking usage with correlation coefficients of 0.658 respectively. Also, it indicates a 0.000 significant value where $p<0.01$ for all the dimensions. Thus, it can be concluded that there is a significant and strong/ moderate positive relationship between e-banking usage each variable, with the results individually supporting the established hypotheses.

4.5 Multicollinearity Analysis

Table 5: *Multicollinearity Analysis*

Variable	Tolerance	Variance Inflation Factor (VIF)
SA	0.642	1.557
FK	0.851	1.176
FB	0.522	1.914
FA	0.509	1.965

The variance inflation factor (VIF) test was performed for each variable in the regression model to assess potential collinearity among the independent variables. The table above indicates that all tolerance levels exceed 1, and VIF values are below 5, revealing no issues of multicollinearity within the multiple regression model used to predict e-banking usage.

4.6 Regression Analysis

Model Summary

Table 6: *Model Summary*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.693[a]	0.480	0.474	0.439	1.606

The R^2 number indicates how much of the variance in the dependent variable (e-banking usage) can be explained by the independent variables. According to the above table test of R square ($R^{2)}$ value is 0.480. It means that 48% variance of e-banking usage is explained by Savings, Financial Knowledge, Financial Behavior and Financial Attitude. The adjusted R-squared is employed to account for extraneous independent variables. A significant difference between R-squared and adjusted R-squared suggests the presence of unnecessary variables. In this case, an adjusted R-squared of 47% indicates that there is not a large gap between R-squared and adjusted R-squared. This demonstrates that the model is well-fitted and appropriate for the analysis. The Durbin-Watson statistic of 1.606 in the regression analysis indicates a moderate positive autocorrelation in the residuals, suggesting some dependency between the residuals from one observation to the next.

4.7 ANOVA

Table 7: *ANOVA Table*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	60.805	4	15.201	78.536	0.000[b]
	Residual	65.809	340	0.194		
	Total	126.614	344			

ANOVA assesses the significance of the overall model and evaluates its ability to predict the dependent variable. The ANOVA table indicates that the significance level of the regression line is less than 0.05 (0.000 < 0.05). This suggests that the regression line is sufficiently strong to explain the influence of independent variables on e-banking usage. As the ANOVA result is highly significant, all independent variables jointly influence e-banking usage. Therefore, the model is significant and more appropriate together.

4.8 Coefficient

Table 8: *Analysis of Coefficients*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.135	0.202		5.613	0.000
	SA	0.026	0.044	0.029	0.586	0.558
	FK	0.492	0.037	0.567	13.32	0.000
	FB	0.113	0.052	0.117	2.158	0.032
	FA	0.121	0.054	0.123	2.244	0.025

The data findings analyzed also show that taking all other independent variables at zero e-banking usage will be 1.135. The regression analysis assesses the influence of different financial literacy components on e-banking usage. Among the independent variables, Savings has a positive but insignificant effect on e-banking usage (B = 0.026, p =.0.558). Financial Knowledge has the Beta value of 0.492 and p value is 0.000. Because of it is less than the 0.05 (0.000 < 0.05), there is a significant impact of Financial Knowledge on e-banking usage. Financial Behavior has the Beta value of 0.113 and p value is 0.032. Because of it is less than the 0.05 (0.032 < 0.05), there is a significant impact of financial behaviour on e-banking usage. Further financial attitude has the Beta value of 0.121 and p value is 0.025. Because of it is less than the 0.05 (0.025 < 0.05), there is a significant impact of financial attitude on e-Banking usage.

$$\mathbf{EBU} = \propto + \boldsymbol{\beta 1 BLS} + \boldsymbol{\beta 2 FK} + \boldsymbol{\beta 3 FB} + \boldsymbol{\beta 4 FA} + \boldsymbol{\varepsilon}$$

$$EBU = 1.135 + 0.26BLS + 0.492FK + 0.113FB + 0.121FA + \varepsilon$$

The regression equation, $EBU = 1.135 + 0.26X_1 + 0.492X_2 + 0.113X_3 + 0.121X_4 + \varepsilon$, suggests a model where EBU represents the dependent variable and SA, FK, FB, FA are independent variables impacting EUB. FK, FB, and positively impact on EBU, with coefficients indicating that a 1% change in each of these variables increases EBU by 0.26%, 0.492%, 0.113%, and 0.121%, respectively. The constant term (1.135) is the intercept, or the value of EBU when all independent variables are zero. The term ε denotes the error term, capturing unexplained factors affecting EBU outside the included variables.

Table 9: *Coefficients for financial Literacy*

	Unstandardized Coefficients		**Standardized Coefficients**		
Model	**B**	**Std. Error**	**Beta**	**t**	**Sig.**
(Constant)	1.102	.226		4.865	.000
FL	.037	.003	.608	14.175	.000

According to the above table, financial literacy has a positive and significant impact on e-banking usage. The table indicates that the overall financial literacy has the beta value of 0.037. That means FL positively impact on EBU, with coefficients indicating that a 1% change in EBU by 0.037. The significance value of Financial literacy is 0.000. It is lower than the 0.05Additionally, R^2 value is 0.480. It means that 48% variance of e-banking usage is explained by financial literacy. That means financial literacy is significantly impact on e-banking usage.

4.9 Result Discussion

According to the findings in related literature, it has been established that these four variables influence e-banking usage. The following studies serve as comparable investigations for this research.

H_1: There is a significant impact of financial literacy on e-banking usage among management undergraduates in Sri Lanka.

According to the regression results the Sig. value for accessing financial literacy is 0.000, which is lower than 0.05, indicating a statistically significant effect. The coefficient (Beta) is 0.37, which indicates a positive relationship. Therefore, first hypothesis (H_1) is supported. Similar research findings also can be gathered to prove that, such as Ghane et al. (2019) have indicated that there is a significant impact on financial literacy on

e-banking usage on their research. Also, the findings of Muthia et al. (2022), Chinasa and Wosowei, (2023) have been highlighted that financial literacy has a significant effect on internet banking usage.

H_2**:** There is a significant impact of savings on e-banking usage among management undergraduates in Sri Lanka.

According to the regression results, the Sig. value for savings is 0.558, which is higher than 0.05, indicating a statistically insignificant effect. The standardized coefficient (Beta) is 0.026, which indicates a positive relationship. Therefore, third hypothesis (H_3) is unsupported.

H_3**:** There is a significant impact of financial knowledge on e-banking usage among management undergraduates in Sri Lanka.

According to the regression results, the Sig. value for Financial Knowledge is 0.000, which is less than 0.05, indicating a statistically significant effect. The standardized coefficient (Beta) is 0.492, which indicates a positive relationship. This means that better to Financial Knowledge leads to better Use of E-Banking. Therefore, third hypothesis (H_3) is supported. This finding supports the findings of Yates S. R. (2020) who indicated that adoption of E-banking would increase with financial knowledge.

H_4**:** There is a significant impact of financial behavior on e-banking usage among management undergraduates in Sri Lanka.

According to the regression analysis the Sig. value for Financial Behavior is 0.032, which is less than 0.05, indicating a statistically significant effect. The standardized coefficient (Beta) is 0.113, which indicates a positive relationship. This means that better to Financial Behavior leads to better Use of E-Banking. Therefore, the fourth hypothesis (H_4) is supported. This result aligns with the findings of Hanifah et al. (2022), who examined the impact of financial knowledge, attitudes, and behavior literacy on the intention to use mobile banking. Their study indicated that financial behavior positively influences the intention to use mobile banking.

H_5**:** There is a significant impact of financial attitude on e-banking usage among management undergraduates in Sri Lanka.

According to the regression analysis the Sig. value for Financial Attitude is 0.025, which is less than 0.05, indicating a statistically significant effect. The standardized coefficient (Beta) is 0.121, which indicates a positive relationship. This means that better to Financial Behavior leads to better Use of E-Banking. Therefore, fifth hypothesis (H_5) is supported. This finding supports the findings of Danes and Hira (1990) have showed at people's financial knowledge, Financial attitudes, and credit card-related behaviours and they discovered that those who supported using credit cards for installment purchases had a higher likelihood of doing so overall and of accruing finance charges as well.

05. Conclusion

This research was conducted to find the impact of financial literacy on Use of E-banking reference to the management undergraduates in State University of Sri Lanka. Financial literacy is one of the key factors of business success. Therefore, it is a very important concept for the undergraduates. Data were analyzed by using sample size of 345 undergraduates was meticulously selected from the expansive populations of management undergraduates spanning across state universities in Sri Lanka such as the University of Colombo, University of Sri Jayewardenepura, Rajarata University of Sri Lanka, Wayamba University of Sri Lanka, University of Jaffna, University of Peradeniya, and University of Ruhuna, University of Kelaniya, University of Moratuwa and Uni-

versity of Sabaragamuwa. The study's findings clearly show that financial literacy plays an important role in e-banking use, with a strong positive link between the two. It also shows that students' savings, financial knowledge, financial behavior, and financial attitudes have a meaningful and positive effect on how they use e-banking. According to the findings of this study, all variables were significant when considering the correlation analysis. Although in regression analysis all hypotheses were accepted except the Savings. According to the R square ($R^{2)}$ value which is 0.480. It means that 48% variance of e-banking usage is explained by Savings, Financial Knowledge, Financial Behavior and Financial Attitude. Finally, the findings of this study indicated that financial literacy has a significant impact on Use of E- Banking. Increasing financial literacy of undergraduates can significantly enhance the adoption and effective e-banking services. Educated users are more likely to understand and trust digital banking platforms, which can lead to greater financial inclusion and more efficient personal financial management. Higher financial literacy also increases users' confidence in utilizing e-banking, helping them recognize and avoid potential fraud and cybersecurity threats. As financial literacy programs promote better financial management and encourage the shift from traditional banking to digital methods, banks can benefit from reduced operational costs and improved customer relationships.

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