DIGITAL FINANCIAL LITERACY AND IT'S IMPACT ON INVESTMENT CHOICES OF MANAGEMENT UNDERGRADUATES: EMPIRICAL EVIDENCE FROM GOVERNMENT UNIVERSITIES IN SRI LANKA

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ABSTRACT

Against the backdrop of Sri Lanka's economic challenges, this study focuses on the digital financial literacy and investment choices of Generation Z management undergraduates in government universities. Acknowledging the unique financial landscape and the pressing need for economic resilience, the research aims to assess the impact of digital financial literacy on the investment decisions of this specific demographic. By addressing the intersection of Generation Z, digital financial literacy, and investment choices, the study endeavors to provide valuable insights for tailored financial education initiatives amidst the broader economic context and challenges faced by Sri Lanka.The research employed a quantitative survey-based approach to investigate the subject. The researcher conducted an in-depth analysis using a deductive approach and collected data on the number of students in the Faculty of Management, categorized by both year and university. A sample of 200 undergraduates from Sri Lankan government universities was selected for the study. The data analysis was carried out utilizing the partial least squares regression method, facilitated by the Smart PLS 4.0 software.The model's reliability and validity were initially established through composite reliability, convergent validity, and discriminant validity. The study's findings reveal a significant association between digital financial literacy and prospective investment choices among undergraduates. Notably, when presented with various investment options, students exhibited a pronounced preference for financial assets over alternative choices.This research enriches the expanding body of knowledge on digital financial literacy in the context of a developing nation like Sri Lanka. In an era of rapid technological advancement, the study underscores the emergence of digital platforms empowering Generation Z to engage in prudent financial practices, facilitating informed and effective decision-making in the realm of finance.

Keywords: Digital Financial literacy, Investment Choices, Sri Lanka

1. INTRODUCTION

In Sri Lanka, most of the investment decisions has changed since 2019, because of the bankruptcy situation (CBSL, 2023). This research aims to identify what is the impact of digital financial literacy on the investment choices of management undergraduate in near future, who are the next generation to develop Sri Lankan economy. Therefore, we mainly focus on generation Z to identify knowledge of digital financial literacy and investment choices of management undergraduates in Government universities in Sri Lanka. Researchers defined Generation Z in different ways. The Collins Dictionary defines Generation Z as "members of the generation of people born between the mid-1990s and mid-2010s who are seen as confident users of new technology"(Collins English Dictionary, 2023). Nowadays, most of the investment choices are digitalized in Sri Lanka. Therefore, Generation Z peoples need to better understand digital financial literacy. Therefore, this research identifies the digital financial literacy knowledge of management undergraduates based on basic knowledge and skills of financial literacy concepts and digital financial services (DFS).

5.1 Background of the Study

Now Sri Lanka faces the worst economic crisis which started in 2019. The causes for the ongoing economic crisis are impact of Covid 19 pandemic, Easter attack in 2019, ban of continuous money printing, depletion of foreign exchange and high inflation rate. As a result, Sri Lanka is declared as Bankrupt Country in the world. Furthermore, the Inflation rate will huge impact on investment decisions, because interest rates will vary according to the high inflation rate. When comparing other countries like USA, and EU, Sri Lanka has generated the highest inflation rate since 1960. The inflation rate in Sri Lanka moved between-1.5% to 49.7% over the past 62 years. (1960-2022). Data basis: International Monetary Fund, World Bank, and OECD inflation CPI indicator. (worlddata.info, 2022). As a developing country, Generation Z investment decisions are much more important.

The OECD INFF has defined financial literacy as follows; "A combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing." (OECD- INFE, 2011). In Sri Lanka, CBSL define "Financial literacy was defined as the combination of knowledge, attitudes and behavior necessary to make informed financial decisions and achieve financial wellbeing. Within the element of behavior, the necessary skills for making wise financial decisions were also considered" (CBSL, Published 25 October 2022). Simply, digital financial literacy defines basic knowledge and skills and awareness about financial matters in the context of digital platforms. There is no standardized definition of digital financial literacy. This study identifies the digital financial literacy knowledge of management undergraduates based on basic knowledge and skills of financial literacy concepts and DFS. We examine basic financial literacy concepts of

numeracy, compound interest, inflation and risk diversification. And this research examines basic digital knowledge of hardware (mobile phones phone, computers, and tablets) including turning on /off charging and locking devices. Also, check basic digital knowledge of website, software, apps and etc. It means creating user accounts, managing passwords, logging into accounts and using privacy settings. (Example; Invest in stock market using the CSE website or app, invest in traditional assets using online payment methods like that). Firstly, this study measure DFL, whether Generation Z undergraduates has basic knowledge and skills.

5.2 Problem of the Study

Sri Lanka as a developing country, level of digital financial literacy is significantly low level. According to the financial literacy survey of CBSL, "57.9 percent of adults are financially literate in Sri Lanka. Further, the findings imply that the level of financial literacy varies across different segments of the population, suggesting the need for targeted policy interventions" (CBSL, Published 25 October 2022).This survey focus four indicators, they are numeracy, compound interest rate, inflation and risk diversification. Which show significant increase 35 percent by the GFLS 2014. Level of understanding financial concepts as follows, numeracy 82.9%, inflation 55.5%, compound interest 90.5%, risk diversification 33.3%. There is a low level of knowledge about concept of risk diversification. And the gender gap was 55.2% female 61.1%. This research focuses on Generation Z management undergraduates because they are the next generation to develop Sri Lankan economy in the near future. Nowadays most female students are selected for higher education in Sri Lanka. Furthermore, the modern world is progressively becoming more digitized. This research will help to understand the level of digital financial literacy knowledge and the relationship between digital financial literacy and investment choices of management undergraduates in government universities in Sri Lanka. Understanding their digital financial literacy and its impact on investment choices is essential for their financial well-being and broader economic landscape of Sri Lanka.

Research objectives of the study are as follows:

1. To examine the level of digital financial literacy of management undergraduates in Government universities in Sri Lanka.
2. To examine the association between digital financial literacy and investment choices of management undergraduates.

5.3 Significance of the Study

Empirical Significance

There is a dearth of studies conducted in this area in Sri Lankan context (Thilakarathne & Rajakaruna, 2023; Dissanayake et.al., 2023). This research

supposed to bridge the empirical gap. Now Sri Lankan economy is situated in the bankrupt situation, therefore most of the investments are going down in Sri Lanka. Specially share market going down nowadays. It will also affect for GDP in Sri Lanka. And most of the investment choices are digitalized. Generation Z undergraduates need better understanding of digital financial literacy concepts. This research measures the basic skills and knowledge of management undergraduates in Sri Lanka based on financial literacy concepts and DFS. And awareness of existing providers of DFS, awareness of the specific purpose and usage of available DFS (e.g., digital payments, saving, etc.) awareness about risks of borrowings, awareness about the biases that affect decision making, and benefits of long-term planning and awareness about positive financial behaviors. Furthermore, this study examines whether generation Z management undergraduates have positive financial attitudes in managing day to day finances while setting future goals. In conclusion the empirical significance of the study extends beyond its immediate scope, offering insights that can influence financial education, policy decisions, investment practices, and the future economic landscape of Sri Lanka. There is a dearth of studies conducted in this area in Sri Lankan context. This research supposed to bridge the empirical gap. Next section describes practical significance of this research.

Practical Significance

According to this research management undergraduates are representing Generation Z who are the next generation of leaders in Sri Lanka. This study insights into their digital financial literacy and investment behaviors can have long team implications for the economic stability and economic growth in Sri Lanka. This study important to economic decision makers to take understanding about knowledge of digital financial literacy concepts and investment choices and awareness about DFS of generation Z people. This study will be useful for the future researchers to conduct more research by identifying research gaps. Other than that, this study will be useful for university curriculum to develop level of digital financial literacy knowledge. Also, DFL knowledge can be improve from school level students. Furthermore, knowledge of DFL and investment choices will be helpful CSE workshop and share market investments. As well as this study will be helpful to achieve STG Goals.

2. LITERATURE REVIEW

2.1 Financial Literacy

In order to define financial literacy as, “An individual’s ability to obtain, understand and evaluate the relevant information necessary to make decisions with an awareness of the likely financial consequences” (Wilson, 2000). The definition acknowledges to recognize that information relevant to decision making may not necessarily be financial information in its strictest sense. In addition, (Hogarth, 2002) define financial literacy as managing financial literacy

resources effectively involves form investment, insurance, budgeting and saving. Also, financial literacy is an expertise or skill that can helps to individual to manage their financial decisions.

Furthermore, Huston define financial literacy as "Financial literacy is a component of human capital that can be used in financial activities to increase expected lifetime utility from consumption (i.e., behaviors that enhance financial well-being). Other influences (such as behavioral/cognitive biases, self-control problems, family, peer, economic, community and institutional) can affect financial behaviors and financial well-being" (Huston, 2010).In addition, According to the OECD-INFF define financial literacy as follows, "A combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing." (OECD- INFE, 2011). OECD INFF members agreed to describe with different concepts, such as financial literacy, financial capability, financial culture and financial insight. Furthermore, according to the World Bank research group and GFLEC on the S & P Global FinLit Survey financial literacy, if people are not understanding about financial concepts (financial decision-making basic numeracy, interest compounding, risk diversification and inflation), people are not qualified to make correct decisions related to financial management. Who are financially literate have the ability to select financial choices (saving, investing, borrowing and more).

2.2 Digital Financial Literacy

Morgan & et.al (2019) define digital financial literacy as consist of four concepts, knowledge of digital financial products and services, awareness of digital financial risk control and knowledge of consumer's rights and redress procedures (Morgon et.al, 2019).

2.3 Theoretical framework

Theory of planned behavior

The Theory of Planned Behavior (TPB) is a well-established psychological theory that explains how individuals make decisions based on their attitudes, subjective norms, and perceived behavioral control. It has been applied to various domains, including financial behavior.

- **Attitudes:** In the context of financial behavior, attitudes refer to an individual's positive or negative evaluations of financial actions or decisions. For example, a positive attitude towards saving money would likely lead to a higher propensity to save.
- **Subjective Norms:** Subjective norms represent an individual's perception of the social pressure or influence from significant others (family, friends, and colleagues) regarding their financial behavior.

These norms can influence whether a person conforms to or resists financial expectations.

- **Perceived Behavioral Control:** This element reflects an individual's perception of their ability to perform a particular financial behavior. It includes factors such as self-efficacy, knowledge, and resources necessary for executing financial decisions.

2.4 Empirical Review

According to Vardari et.al (2016), the study aims to determine level of financial literacy of students and determine the relationship between investment decisions and covid 19 pandemic. The dataset includes four factors (investment behavior, self-control, peer influence and covid 19) that influence investment behavior of students. For this study collected data from questionnaire and participated 228 students from Kosovo. This study analyzed using the PLS – SEM algorithm. Further, the study found, useful for companies seeking potential investors from generation Y. (Vardari et.al, 2016).

Further, Tharanika and Andrew (2017) researched to identify the relationship between financial literacy and saving behavior among the university students and to identify the relationship of self-control and saving behavior among the university students. The target population for the study is all students from faculty of commerce and Management Eastern University Sri Lanka and collected data through self-administered questionnaire from sample size of 55 students. They have found that, both financial literacy and self-control have positive relationship with saving behavior (Andrew, 2017).

In addition to the previous study, Charles and Geursen (2017), study aim to investigate how undergraduates manage and respond to economic, social and psychological factors affecting their money management behavior, and to inspect whether this response changes as they make progress in their degree. This study uses qualitative exploratory approach to continue this research study. Also, data collected from focus six group discussions held in three Australian Universities and the sample size was 47 undergraduates. The conclusion has shown that their approach to manage spending, income, saving, peer associations and stress changes as they make progress in their degree (Jill Bamforth, 2017).

Rajdev et.al (2020), this study aimed to evaluate the relationship between demographic variables and level of DFL and aimed at exploring the relationship between DFL and use of DFS. For measurement of DFL, 135 students using as sample size. The data collected from using questionnaire method. Thus, 47 per cent of student's response this questionnaire. Further, this researcher uses SPSS software to analysis data. Finally, the researcher found, male and female don't have significant differences with respect to level of DFL and post graduate students scored high in DFL associated to graduate students. Also, the author found there is a gap between level of DFL and usage of DFL (Rajdev et.al, 2020).

Arora and Chakraborty (2022) the study aims to examine two objectives. Firstly, to examine the socioeconomic and demographic factors contributing to financial literacy and secondly, to analyze if financial literacy affects investment choices. This study collected primary data through the survey questionnaire from sample size of 47132 individuals in India. The author used descriptive statistics and regression analysis to analysis the relationship between variables. Further, this study found that different financial literacy level can be attributed to various socioeconomic/ demographic factors (age, gender, education levels, income, location of residence, sources of information, etc. Econometric analyses suggested that financial literacy influences investment decisions. Mainly affect for traditional assets such as gold, property, etc. (Arora, 2022).

3. METHODOLOGY

3.1 Research Philosophy

This study utilizes the philosophy of positivism. This research uses prevailing theories to develop hypothesis, uses quantitative method, and statistical analysis. "Positivism is related to the philosophical stance of natural scientist and entails working with an observable social reality to produce law-like generalizations" (Saunders, 2019).

3.2 Research Approach

This research focuses on deductive approach. In Deductive approach, this approach develops hypothesis based on existing theory and hypotheses. And collects data and analyses data to test those hypotheses to analyze the findings.

3.3 Methodological Choice

Quantitative method normally uses numerical data, and it analyzes relationship between variables using statistical techniques. This study uses mono method quantitative study using single data collection technique through issuing questionnaires, and quantitative analysis procedure.

3.4 Research Strategy

This research uses survey strategy. Survey strategy is more connected with deductive approach and questionnaires are mainly used to collect data. This study collects data using questionnaires.

3.5 Data Collection

This research gathers data from primary sources using questionnaire survey method. This questionnaire gathers data from management undergraduates in Government universities in Sri Lanka to examine research objectives.

3.6 Population and Sample

The study uses data from management undergraduates in Government universities in Sri Lanka. According to the annual intake from Sri Lankan Government University, average total number of students are 21535. We focus 12 Universities in Sri Lanka which they have faculty of management. Furthermore, we collect data regarding number of students in faculty of management in year vise and university vise. Based on that information total number of undergraduates are 21535. (N=200)

Table 7: Sample Selection table

Government Universities	First year	Second year	Third year	Final year	Total	Responses
University of Sri Jayewardenepura	1500	1500	1500	1500	6000	45
University of Colombo	420	420	420	420	1680	18
University of Kelaniya	585	585	585	585	2340	38
University of Ruhuna	600	600	600	600	2400	11
Wayamba University of Sri Lanka	547	547	547	547	2187	65
Sabaragamuwa University of Sri Lanka	400	400	400	400	1600	3
Rajarata University of Sri Lanka	465	465	465	465	1860	3
Uva Wellassa University of Sri Lanka	124	124	124	124	496	1
University of Jaffna	325	325	325	325	1300	3
University of Peradeniya	164	164	164	164	656	6
Eastern University of Sri Lanka	111	111	111	111	444	1
South Eastern University of Sri Lanka	143	143	143	143	572	6

Total Management undergraduates	21535	200

Source: Constructed by the authors

3.7 Conceptual Framework

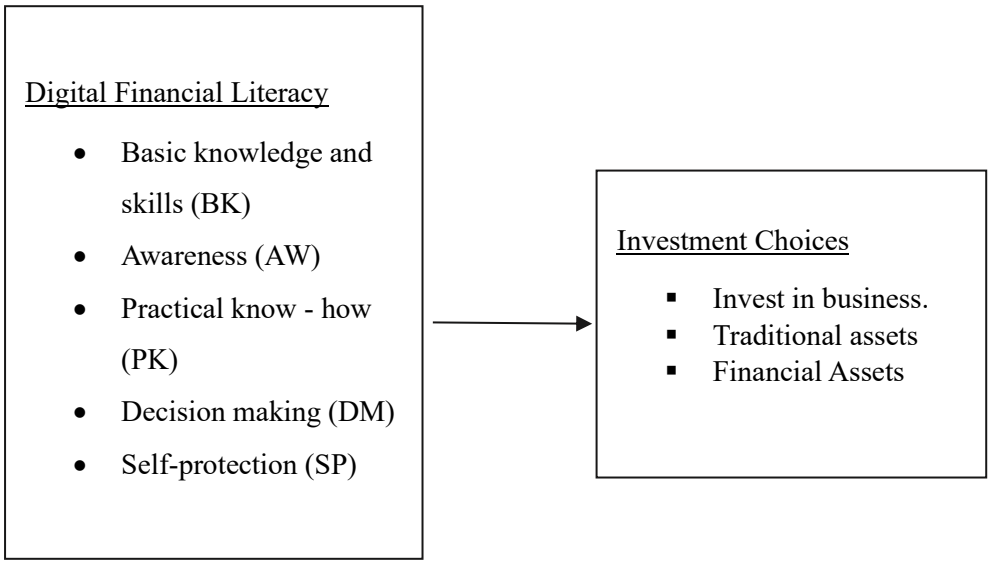

Figure 2: Conceptual framework
Source: Constructed by the authors

3.8 Operationalization of Variables

Table 8: Operationalization of variables

Variable	Abbreviation	Sub Variable	Measurement	Source
Digital Financial Literacy	DFL	Basic knowledge and skills (BK)	6 Questions	(Kass Hanna, 2021)
		Awareness (AW)	6 Questions	
		Practical know-how (PK)	4 Questions	
		Decision-making (DM)	7 Questions	

		Self-protection (SP)	2 Questions	
Investment choices	INC	Invest in Business	1 Questions	(Arora, 2022)
		Invest in traditional assets		
		Invest in financial assets		

Source: Constructed by the authors

3.9 Hypothesis

H1: There is a significant association between DFL and undergraduates' investment choices.

3.10 Data Analysis

This study analysis data by using SPSS statistical software is used to analyze demographic, frequency, descriptive, and correlation analysis. Smart PLS (Partial Least Square) regression model is used to analyze the measurement model and structural model to test hypothesis.

4. FINDINGS AND DISCUSSIONS

4.1 Demographic profile

Table 3 provides the entire summary of demographic profile.

Table 9: Summary of demographic profile

Variables	Category	Frequency	Percentage
Gender	Female	153	76.5
	Male	47	23.5
University	University of Jayewardenepura	45	22.5
	University of Colombo	18	9.0
	University of Kelaniya	38	19.0
	University of Ruhuna	11	5.5
	Wayamba University of Sri Lanka	65	32.5
	Sabaragamuwa University of Sri Lanka	3	1.5

	Rajarata University of Sri Lanka	3	1.5
	Uva Wellassa University of Sri Lanka	1	0.5
	University of Jaffna	3	1.5
	University of Peradeniya	6	3.0
	Eastern University of Sri Lanka	1	0.5
	South Eastern University of Sri Lanka	6	3.0
Department	Accountancy	113	56.5
	Finance	27	13.5
	Banking	3	1.5
	Insurance	1	0.5
	Business Administration	11	5.5
	Business Economics	4	2.0
	Commerce	11	5.5
	Business Management	22	11.0
	Human Resource Management	1	0.5
	Marketing	3	1.5
	Other	4	2.0
Academic year	First year	6	3.0
	Second year	5	2.5
	Third year	47	23.5
	Final year	142	71.0
Study of investment management	Yes	171	85.5
	No	29	14.5

Source: Constructed by the authors

4.2 Descriptive Analysis

Table 4 denotes, descriptive statistics of variables. According to that Basic knowledge has high mean value than other variables (μ =4.1817) / (*SD* = 0.50767). Also, overall mean values are greater than 3.5 and reached to 4 and some variable mean values are above 4. Therefore, all variables closure to agree side. As per this descriptive analysis, there is a positive perception between DFL and INV among management undergraduates in Government universities in Sri Lanka.

Table 10: Descriptive statistics of variables

	Minimum	Maximum	Mean	Std. Deviation
INV	1.71	5.00	3.8614	0.61764
BK	2.83	5.00	4.1817	0.50767
AW	2.00	5.00	4.0158	0.55001
PK	2.00	5.00	4.0088	0.68837
SP	2.00	5.00	4.0500	0.61799
DM	2.00	5.00	4.0871	0.53410

Source: SPSS Output

4.3 Correlation Analysis

The Correlation analysis finding out the relationship between variables. According to the correlation analysis, correlation coefficient of 0.7 to 1 is considered as extraordinarily strong. According to this research, there is an extraordinarily strong relationship between AW and PK, PK and SP. Further, there is an extraordinarily strong, positive correlation between INV and AW, INV and SP, BK and AW, BK and PK, BK and SP, BK and DM, AW and SP, AW and DM, PK and DM, SP and DM. Because the correlation coefficient of 0.5 to 0.7 is considered as strong. Also, there is a moderate relationship between INV and BK, INV and DM. Because the correlation coefficient of 0.3 to 0.5 is considered as moderate.

Table 11: Correlation Matrix

	INV	BK	AW	PK	SP	DM
INV	1					
BK	.405**	1				
AW	.502**	.666**	1			
PK	.487**	.539**	.713**	1		
SP	.518**	.569**	.604**	.703**	1	
DM	.422**	.595**	.650**	.654**	.648**	1

***. Correlation is significant at the 0.01 level (1-tailed)*

Source: SPSS Output

4.4 Model 1: Association between DFL and sub variable of INV

The **model 1** analyzes the relationship between sub variables of digital financial literacy and investment choices.

Assessment of Measurement model/ Outer model

The model is analyzed using Partial Least Square (PLS) method. Measurement model is used to confirm the questionnaire indicators are reliable. The model includes convergent validity and discriminant validity.

Construct Validity and Reliability

Construct validity and reliability is used to test whether the variables are interconnected. It analyzes composite reliability and average variance extracted. From the model, some items were deleted to improve the composite reliability values. In this research 2 items were deleted from the dependent variable, investment choices (INV6, INV7).

Table 12: Measurement Model 1

Variable	Item	Deleted Item	Loadings	Cronbach's alpha	CR	AVE
AW	AW1		0.762	0.874	0.905	0.613
	AW2		0.799			
	AW3		0.756			
	AW4		0.810			
	AW5		0.771			
	AW6		0.799			
BK	BK1		0.828	0.860	0.895	0.588
	BK2		0.828			
	BK3		0.740			
	BK4		0.678			
	BK5		0.724			
	BK6		0.803			
DM	DM1		0.743	0.883	0.908	0.585
	DM2		0.735			

	DM3		0.729			
	DM4		0.743			
	DM5		0.784			
	DM6		0.785			
	DM7		0.831			
PK	PK1		0.894	0.887	0.922	0.747
	PK2		0.887			
	PK3		0.828			
	PK4		0.846			
SP	SP1		0.907	0.723	0.877	0.782
	SP2		0.861			
INV	INV1	INV6	0.742	0.798	0.861	0.555
	INV2	INV7	0.647			
	INV3		0.793			
	INV4		0.842			
	INV5		0.683			

Source: SMART PLS Output

After deleting the items INV6 and INV7, the all the loadings' values were above 0.7 excluding BK4, INV2, and INV5. The reliability level is high in this model because Cronbach's alpha values are greater than 0.7. As well as the AVE values of all variables greater than 0.5, it indicates the model has convergent validity. So, it is considered as a reliable model.

Discriminant Validity

According to table 7, all of the square root of AVE (the bold values) are greater than the correlation between the variables. So, the model 1 have adequate discriminant validity.

Table 13: Fornell-Larcker discriminant Validity (Model 1)

	AW	BK	DM	INV	PK	SP
AW	**0.783**					
BK	0.670	**0.767**				
DM	0.666	0.596	**0.765**			
INV	0.543	0.366	0.394	**0.745**		
PK	0.714	0.541	0.663	0.462	**0.864**	
SP	0.607	0.579	0.654	0.478	0.701	**0.884**

Source: SMART PLS Output

Collinearity statistics (VIF)

Collinearity arises when the independent variables in a regression model are correlated with each other. The model is assumed to be good when the collinearity values are lower than 3.

Table 14: Collinearity statistics (inner model- Matrix)

Relationship	VIF
AW -> INV	2.806
BK -> INV	2.051
DM -> INV	2.346
PK -> INV	2.773
SP -> INV	2.375

Source: SMART PLS Output

According to the table 8, the correlation values between the variables are below 3. So, this model is considered as good.

Figure 2 depicts the measurement model diagram of Model 01.

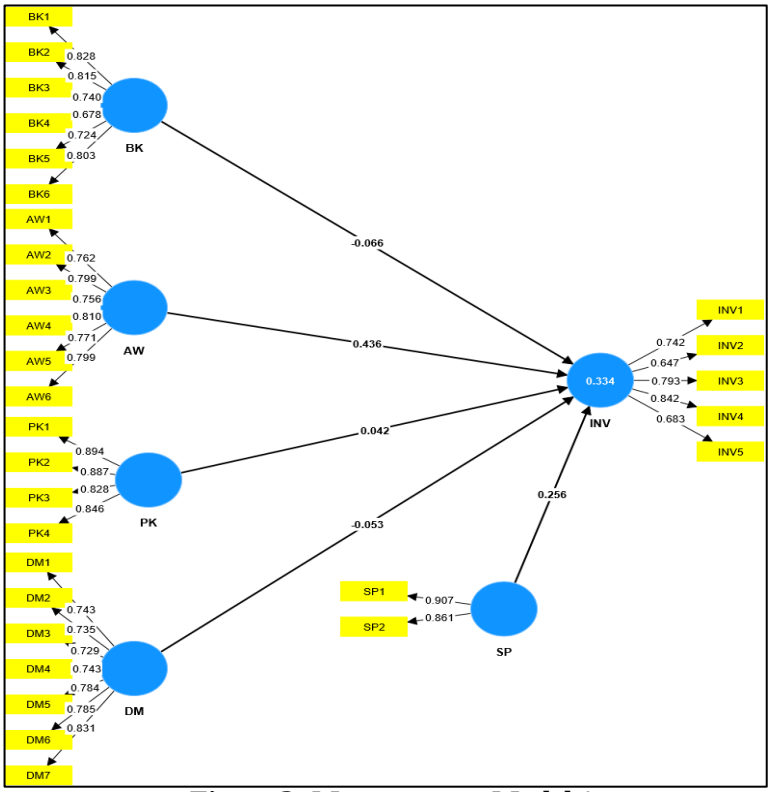

Figure 3: Measurement Model 1

Source: SMART PLS Output

Assessment of Structural Model/ Inner Model

Table 9 shows that, R^2 value for investment choices is 0.334. It indicates 33.4% of investment choices is explained by digital financial literacy.

Table 15: Coefficient of Determination (R^2) model 1

	R-square	R-square adjusted
INV	0.334	0.316

Source: SMART PLS Output

Hypothesis Testing

According to the table 10, awareness has a positive significant association with investment choices. Likewise, self-protection has a positive significant association on investment choice. The variable practical know how has no association with investment choice. However, the variables basic knowledge and

skills, and decision making have a negative insignificant association with investment choices.

Table 16: Hypothesis Testing Model 1

		Sample mean (M)	STDEV	T statistics	P values	Decision
H1	AW -> INV	0.437	0.098	4.446	0.000	Supported
H2	BK -> INV	-0.051	0.090	0.729	0.466	Not Supported
H3	DM -> INV	-0.057	0.113	0.466	0.641	Not Supported
H4	PK -> INV	0.054	0.110	0.382	0.703	Not Supported
H5	SP -> INV	0.252	0.113	2.274	0.023	Supported

Source: SMART PLS Output

Effects Size (f^2)

Table 11, indicates that digital financial literacy has small effect on investment choices.

Table 11: Effect size f^2 model 1

Relationship	f-square	Conclusion
AW -> INV	0.102	Small
BK -> INV	0.003	No effect
DM -> INV	0.002	No effect
PK -> INV	0.001	No effect
SP -> INV	0.041	Small

Source: SMART PLS Output

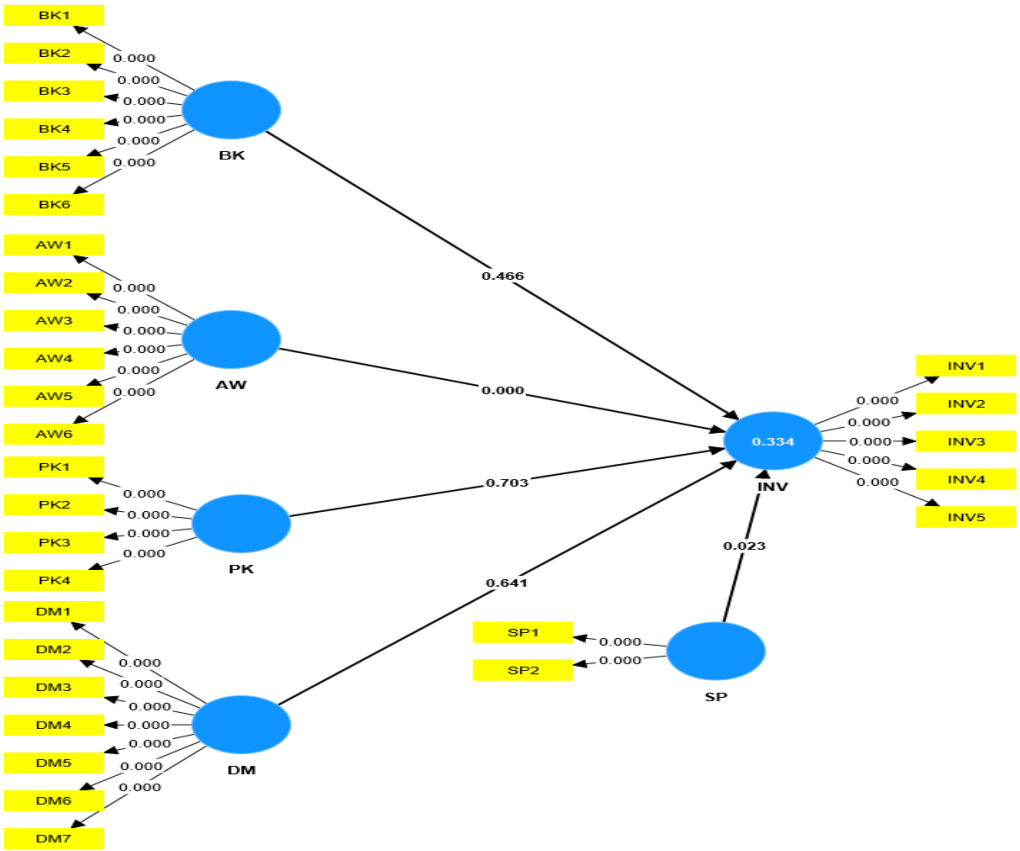

Figure 3: Structural model 1
Source: SMART PLS Output

4.5 Model 2: Association between DFL and INV

Assessment of Measurement model/ Outer model

This model analyzes reliability, convergent validity and discriminant validity.

Construct Validity and Reliability

Construct validity and reliability is used to test whether the variables are interconnected. It analyzes composite reliability and average variance extracted. From the model, some items were deleted to improve the composite reliability values. In this research 7 items were deleted from the independent variable, (BK3, BK4, BK5, DM1, DM2, DM3, and DM4).

According to the table 12, this model achieved reliability since all the AVE values are greater than 0.5. Also, the Cronbach alpha values are greater than 0.7, which implies the reliability is high.

Table 12: Reliability and Convergent validity model 2

	Alpha	CR	AVE
DFL	0.941	0.948	0.502
INV	0.798	0.861	0.555

Source: SMART PLS Output

Discriminant Validity

Table 13: Discriminant validity model 2

	DFL	INV
DFL	**0.709**	
INV	0.555	**0.745**

Source: SMART PLS Output

Model 2 has sufficient discriminant validity since all of the square root of AVE (the bold values) are greater than the correlation between the variables.

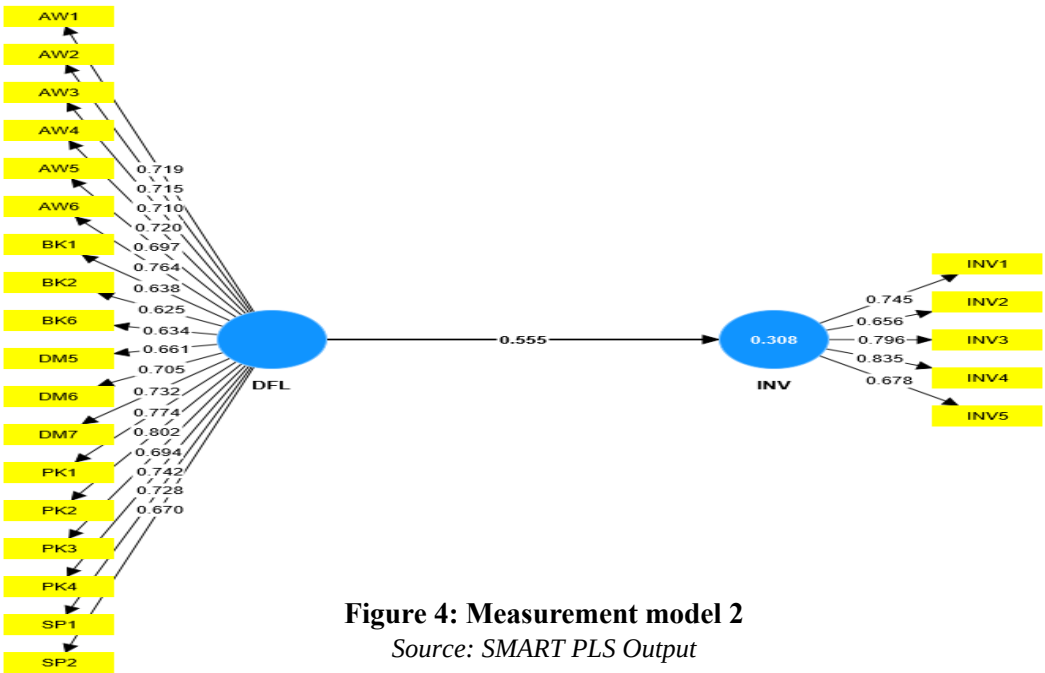

Figure 4: Measurement model 2
Source: SMART PLS Output

Assessment of Structural model/ Inner model

Hypothesis Testing

As per the table 14, there is a positive significant relationship between digital financial literacy and investment choices.

Table 14: Hypothesis testing model 2

Hypo	Relation	M	STDEV	T	P	Decision
H1	DFL -> INV	0.569	0.045	12.400	0.000	Supported

Source: SMART PLS Output

Effect Size (f^2)

The table 15 shows that, Digital financial literacy has a large effect on investment choices.

Table 15: Effect Size (f^2) model 2

Constructs	f-square	Effect
DFL -> INV	0.446	Large

Source: SMART PLS Output

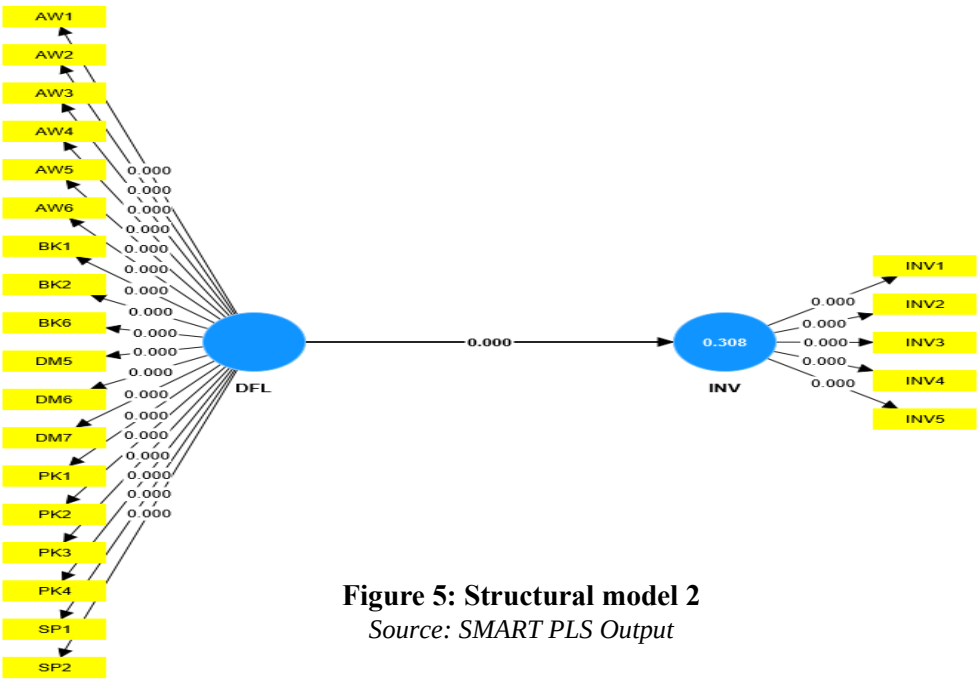

Figure 5: Structural model 2
Source: SMART PLS Output

4.6 Model 3: Association between DFL and (INV1, INV2 and INV3)

Assessment of Measurement model/ Outer model

This model analyzes reliability, convergent validity and discriminant validity.

Construct Validity and Reliability

Construct validity and reliability is used to test whether the variables are interconnected. It analyzes composite reliability and average variance extracted. From the model, some items were deleted to improve the composite reliability values. In this research 7 items were deleted from the independent variable, (BK3, BK4, BK5, DM1, DM2, DM3, and DM4).

Table 16: Convergent validity model 3

	Alpha	CR	AVE
DFL	0.941	0.948	0.502
INV 1	-	-	-
INV 2	0.798	0.881	0.712
INV 3	0.683	0.823	0.608

Source: SMART PLS Output

According to the table 16, this model achieved reliability since all the AVE values are greater than 0.5. Also, the Cronbach alpha values are greater than 0.7, which implies the reliability is high.

Discriminant Validity

Model 3 has sufficient discriminant validity since all of the square root of AVE (the bold values) are greater than the correlation between the variables.

Table 17: Discriminant validity model 3

	DFL	INV 1	INV 2	INV 3
DFL	**0.709**			
INV 1	0.472	**1.000**		
INV 2	0.451	0.502	**0.844**	
INV 3	0.460	0.343	0.469	**0.780**

Source: SMART PLS Output

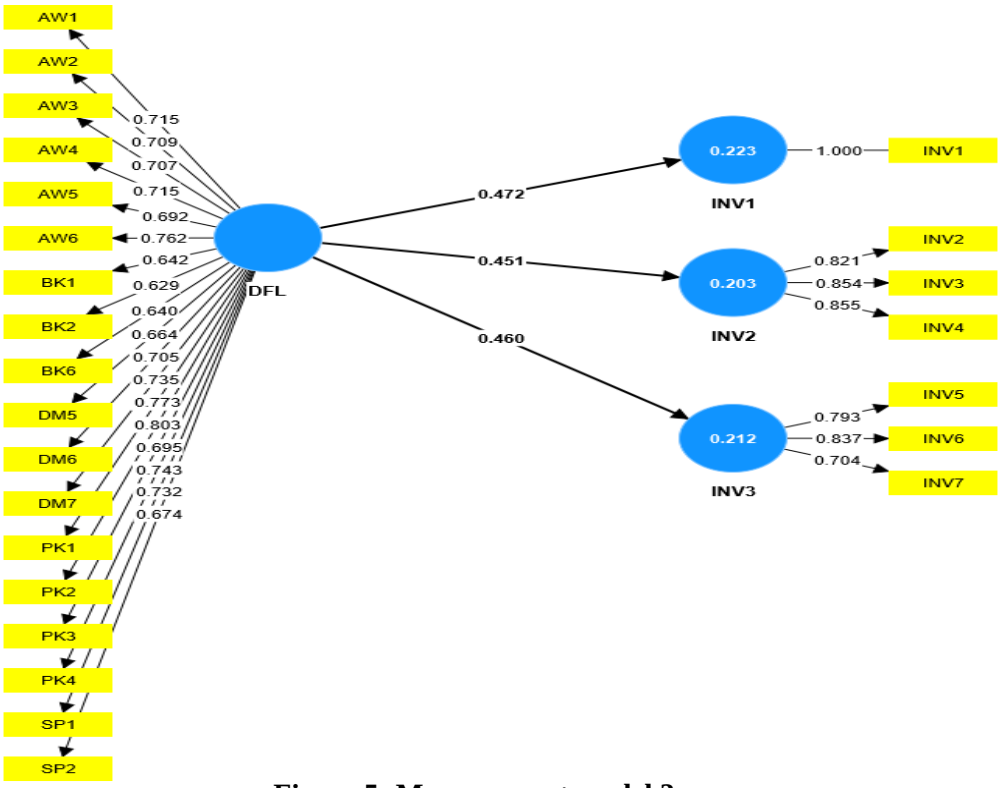

Figure 5: Measurement model 3

Source: SMART PLS Output

Assessment of Structural model/ Inner model

Hypothesis Testing

According to the table 18, there is a positive significant association between digital financial literacy and INV1, INV2, INV3.

Table 18: Hypothesis testing model 3

Hypo	Relation	M	STDEV	T	P	Decision
H1	DFL -> INV1	0.477	0.049	9.680	0.000	Supported
H2	DFL -> INV2	0.461	0.068	6.661	0.000	Supported
H3	DFL -> INV3	0.470	0.057	8.071	0.000	Supported

Source: SMART PLS Output

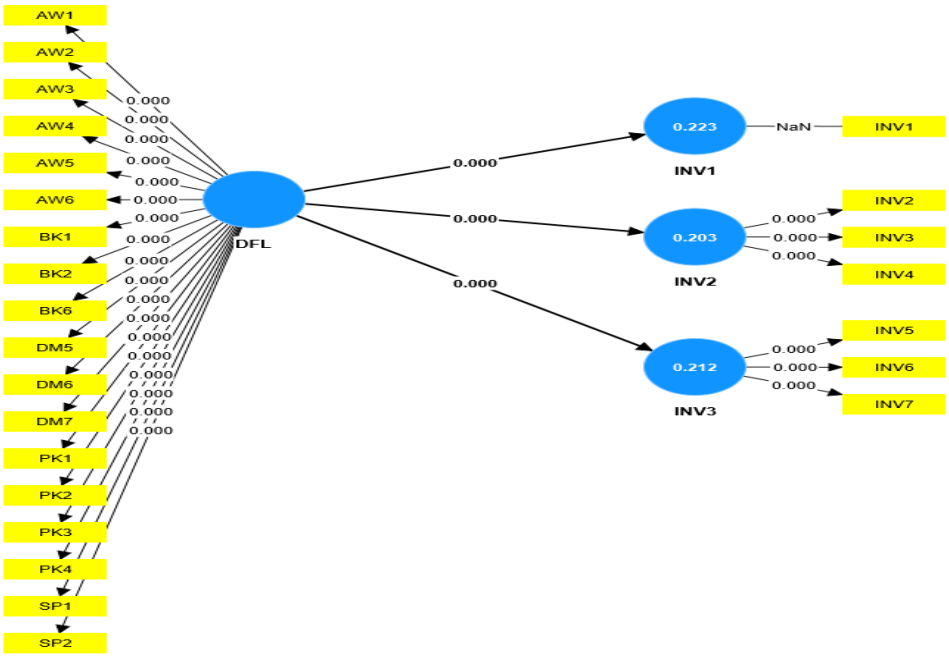

Figure 6: Structural Model 3
Source: SMART PLS Output

4.7 Discussions

The ***model 1*** analyzes the association between sub variables (BK, AW, DM, PK, SP) of digital financial literacy and investment choices. As per results of analysis, there is association between awareness and self-protection with investment choices.
The ***model 2*** analyzes the overall association between digital financial literacy and investment choices. As per results of analysis, there is an overall association between digital financial literacy and investment choices.
The ***model 3*** analyzes the overall association between digital financial literacy and investment choices (INV1, INV2 and INV3). As per results of analysis, there is an association between digital financial literacy and investment choices (INV1, INV2 and INV3).

As per the main question of this study, the results designate that, there is an overall relationship between digital financial literacy and investment choices *(Model 2).*

H1. There is a significant relationship between DFL and undergraduates' investment choices.

According to the results generated by smart PLS, there is a significant relationship between digital financial literacy and investment choices. P value of 0.000 is less than critical P value 0.05 (P value < 0.05). Therefor the researcher has agreed the alternative hypothesis. According to the finding of previous researchers our finding similar with (Arora, 2022). This analysis indicates financial literacy influences investment decisions.

According to this research found digital financial literacy influence for investment choices in near future. Generation Z people are dealing with online platforms. Therefore, this research will be helpful for future researchers. Further, this research found, there is a positive relationship between sub variable of awareness and self-protection with investment choices *(Model 1)*.

Its mean sub variable of awareness and self-protection affect for investment choices in near future. According to research questionnaire, undergraduates were awareness about existing providers of DFS, awareness about purpose and usage of available DFS (e.g., digital platforms for saving, digital payments, lending and remittances, awareness about biases that affect decision making and benefit of long-term planning, awareness about risk of borrowing, awareness about where to seek financial information and advice, awareness about positive financial behaviors. On the other hand, undergraduates have ability to understand the terms and conditions related to DFS and avoid deceptive practices, also ability to perceive scams and frauds associated with DFS.

5. CONCLUSIONS

5.1 Key Findings

The finding of the study revealed the positive significant association of digital financial literacy on investment choices of undergraduates. The study analyzed investment choices of undergraduates in Sri Lanka with the sub variables of digital financial literacy. According to the results, awareness and self-protection only have significant association with investment choices. Other variables such as basic knowledge and skills, practical know how, and decision making did not show significant relationship with investment choices. This means, the undergraduates in Sri Lankan government universities have inadequate basic knowledge and decision-making skills towards digital financial literacy.

As per the findings, digital financial literacy plays a vital role in the financial behavior of undergraduates in Sri Lanka. The improvement in digital financial literacy effects undergraduates to select appropriate investments to increase their finance by taking effective financial decisions. This study outlined the importance of digital financial literacy to the undergraduates. We can conclude that, even though undergraduates have basic level of knowledge towards digital

financial literacy, yet they need to improve their skills and knowledge on digital financial products and services.

5.2 Theoretical Implications

This research pointed out theory of planned behavior. Theory of planned behavior illustrates the individuals' attitudes, subjective norms, and perceived behavioral control when making decisions. This research helps undergraduates how to make effective financial decisions based on their attitudes, subjective norms, and perceived behavioral control. When making finance related decisions such as saving, investing and borrowing decisions, digital financial platforms are considered as convenient, and it helps in making better financial decisions in the digital world. The results suggest that digital financial literacy may influence financial behavior of undergraduates. Digital financial literacy is a modern term which will influence the behavior and attitude of undergraduates with the change of technology.

5.3 Implications for practitioners

This research is very important to undergraduates in Sri Lanka. As Sri Lanka faces bankruptcy, investments are very much needed to develop the economy. This study implies the value of digital financial literacy to the undergraduates in the current situation of our country. From this research, undergraduates can understand how to make effective financial decisions with the use of digital products and services. Digital financial literacy is convenient to undergraduates to make easy financing decisions with the changing technology. Undergraduates are considered as the future of the country, so their financial decisions will greatly impact our economy. This study helps undergraduates to improve their digital financial knowledge to make effective financial decisions in the future.

As well as this study supports government universities. In order to develop digital financial literacy to the undergraduates, universities need to take some steps. Universities must educate the undergraduates how to make appropriate finance decisions.

5.4 Limitations and Future Research

This study has limited the research context only to government universities in Sri Lanka. Extending the sample size will help to provide more information regarding investment choices of undergraduates. Including private universities in Sri Lanka will be beneficial to gather more information about all the undergraduates in Sri Lanka. Future researchers are encouraged to conduct a research study including all the universities in Sri Lanka. This research focused only the undergraduates of management faculty's investment choices. So, future researchers must try to involve all faculty undergraduates to examine their investment choices. Moreover, research to be done based on longitudinal study by comparing different time periods to analyze the cause and effect.

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