Financial Literacy for Effective Financial Planning among Sri Lankan University Students

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ARTICLE INFORMATION

ABSTRACT

Key words:
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This study examines the impact of the financial literacy level on the effectiveness of financial planning. Survey among a sample of 100 undergraduates in Sri Lankan university system was used to gather data. Purpose of the study is to identify whether the financial literacy is playing a vital role in financial planning of university students. Financial literacy was measured by Knowledge level on financial concepts, financial risk, financial system components, investments, loans and saving products. Effectiveness of Financial planning was measured through the questions relevant to cash management, saving and investment planning and execution in debt management. Regression Analysis through E-Views has been used to major statistical analysis. Through the analysis, it was founded that financial knowledge about financial risk, financial concepts, savings, investments and loans are leading a person towards a better financial behavior and planning. However, the knowledge about financial system components is not having a significant impact on effectiveness of financial planning. Results of the research study would assist to understand the importance of financial knowledge and literacy on personal financial success which would lead towards a successful nation as well.

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1. Introduction

Financial literacy means the level of knowledge and understanding regarding the concepts and practices of finance. (Lusardi and Annamaria, 2019) Financial planning is an essential activity in today's world, as anyone couldn't live without engaging in finance related activities. However, financial planning is not being successful for everyone. There are many real-world examples, where financial decisions have brought up drastic failures as the planning has not done properly.

Failures in financial planning are mainly occurring due to suboptimal instructions and inefficiencies in deploying resources(Asebedo, 2024). When analyzing the cases, it's observable that, not only the people with lower financial literacy have failed in financial planning, but also the experts in the finance field also have been failed sometimes. A Higher propensity of risk taking of highly literate people due to overconfidence could lead to such failures.(Addo and Asante, 2023) Therefore, it's an interesting study to find out whether the financial literacy is really having a significant impact on financial planning effectiveness.

If there is a significant impact of financial literacy, then there is a possibility of utilizing the research findings to make an opportunity to make the people to realize the importance of financial literacy. If so, there will be an enhanced opportunity to provide financial knowledge to interested parties. Finance is not just limited to the businesses and corporations. Personal financing is one of most important activity in human life as savings, investments, debts; retirement planning etc. are playing a vital role. If the personal financing is not done properly, then the people have to suffer with higher level of debt burden, zero or negative savings and poverty. Proper personal financing would help to face financial changes successfully while achieving financial well-being stability.(Lasmiatun, 2024)

Sri Lankan university students are the target group for this study. Sri Lanka is a developing country where the majority of citizens are comparatively lower in financial knowledge. There are many infamous cases where the people invested in highly risky investment plans and ended up with extreme losses. Most of the victims of such incidents are from adult and uneducated population. Central bank of Sri Lanka is reporting that the people with lower education and poor language skills are being victimized to financial scams. (Thennakoon, 2020) Therefore, it could be expressively assumed that illiteracy is having a significant impact on ineffective financial planning. However, such an assumption or suggestion couldn't be made for literate population. In order to find whether the literate population who has high financial knowledge such as Finance undergraduates would be more effective in financial planning than other disciplines of management studies, this study has been planned and executed.

Further sections would present the literature review, methodology, findings, discussions, recommendations and conclusions.

1.1. Research Gap

As elaborated in below literature review, it's evident that the financial literacy is essential for anyone who would be economically active. Financial literacy is composed with financial knowledge and financial attitude. Financial literacy has had a considerable impact on financial decision making, financial planning and financial behavior at certain times.

However, when the Sri Lankan context is studied through the literature, it was identified that even the financially literate parties also had made terrible mistakes which had affect themselves and the economy. Therefore, there is a gap to be identified whether the financial literacy is having a significant impact on financial planning and decision making.

As the university undergraduates are considered as a major part of the country that would run the businesses, manage the well reputed corporations and engage actively in financial market, the remaining part of the research study will focus on university undergraduates and the impact of financial literacy on their financial planning.

1.1. Research Objectives

To identify whether there is a significant impact of financial literacy level on the financial planning based on the evidence collected through university students who continue higher studies in management subject areas.

2. Literature Review

2.1. Conceptual Review

2.1.1. Financial Literacy

Financial literacy could be defined in different ways as many researchers have come up with numerous amounts of definitions. Ability of knowing fundamental concepts with relevant to finance, ability of conducting basic calculations for day-to-day finance decisions, ability of assessing various financial products and taking optimal decisions to enhance returns and to reduce risks etc. could be mentioned as some major elements which includes in to the capacity of 'financial literacy' concept. Organization for Economic Co-operation and Development (OECD) has established major three dimensions of financial literacy. Those are financial knowledge, financial behavior and financial attitude(Garg and Singh, 2018) Financial literacy would help the people enhance the quality of financial decisions. Higher financial wellbeing could be achieved through the higher level of financial literacy. It would lead to increase the level of knowledge and aspects relevant to financial decisions while their financial behavior would also be disciplined.(Kamakia et al., 2017) Financial literacy is integral with the 'financial inclusivity' concept as well. Financial Inclusiveness is explaining about the accessibility for citizens of a country to utilize financial system and facilities while the financial literacy is more focusing on the level of awareness.(Chatterjee et al., 2021)

Research studies have identified and classified different levels of financial literacy. Well literate category is indicating the people who understand and having sufficient trust on the financial institutions and financial products. Less literate group is not having an appropriate understanding and trust about the financial institutions and financial products. Therefore they possess very lower or zero level of skill to utilize financial products and services.(Kimiyaghalam, Fatemeh and Yap, 2017)

Index which has been used in (Andarsari and Ningtyas, 2019) is measuring the financial literacy through the questions relevant to savings account,

minimum deposit required to begin an account, minimum balance to be kept in an account, deposit interest rates, loan interest rates, price fluctuations etc. (Ambarkhane *et al.*, 2015) has used questions related to asset liquidity, net worth, overspending, leases, bank account reconciliation, savings account, inflation and interest rates, fixed deposits and early withdrawals, floating rates, obtaining credit reports, credit cards, over draft facilities, creditworthiness, signing as a guarantor, Insurance policies, insurance premiums, micro insurance, Investment in stocks, government bonds, foreign exchange rate, maintenance of financial records, borrowing and spending patterns etc. to measure the financial literacy.

2.1.2. Need and Importance of Financial Literacy

At present, number of financial products and services has been extensively spread. Therefore, the people who are expecting to utilize or invest their money, are facing significant difficulties on choosing the best secured investing options. This difficulty has been led towards an inability of appropriate monetary management. Literatures are suggesting that having a financial literacy would assist people to reduce aforementioned difficulties. Choosing appropriate financial decisions could be identified as a crucial factor, as the income level, obligations, savings and other many important aspects would be depend on it .(Garg and Singh, 2018) Different research studies are suggesting that the financial literacy would assist the people to conveniently manage the frequent tasks and emergency situations. Further, researches have proven through their researches that, people with higher financial literacy would have a better understanding about the inflation. They would always try to borrow at a comparatively lower cost while being confident with their investment decisions. Their spending behavior is more likely controlled, managed and planned.(Jariwala, 2013) Further, research studies are emphasizing that financially literate people would try to identify the savings and investment opportunities which are giving a higher return. They would take relevant possible actions to diversify the risks. (Deuflhard, Georgarakos and Inderst, 2015) Financial literacy is also assisting to have higher debt literacy through identifying the real cost of loans by conducting the compounded interest rate calculations. Not being limited to that,

financial literate people would consider about the time value concept as well. Further they would emphasize about the importance of retirement plans. They would focus on diversified investment opportunities such as stock market investments while utilizing the credit card facilities frugally. Studies have identified that the people with lower financial literacy are suffering with intolerable debts. Therefore, it's important to take necessary actions to enhance the financial literate level in a country. It would help to take appropriate finance decisions. There should be a basic level of understanding before obtaining a loan, in order to understand the terms and conditions of loan schemes.(Nkundabanyanga et al., 2014) Literacy and sufficient knowledge to manage personal savings would positively impact on the household welfare. Effective management of money would lead towards a longer term financial and social security.(Lusardi, Annamaria and Mitchel, 2014) Studies are suggesting that there should be more focus given to the women who are with lower level of education and also not actively engaged in a proper employment. Reason behind suggestion is that, they are much likely to be cheated from different loan schemes and investment schemes due to lower literacy. Not only that, but also as they are mostly dependent to their spouses for even the simplest domestic expenses. Therefore, those women would try to obtain loans if given without lot of procedures even without thinking the cost and consequences. (Potrich et al., 2018) It's evident that financially literate people are encouraged to obtain essential funds for their personal, business, educational and other needs through formal, standardized and trustworthy sources of financing. They would avoid informal and risky financing sources as even the terms and conditions are not clearly stated. Reason for mentioned utilization of formal financing sources by literate people is that, they are aware of available financing sources, comparative interest rates and other terms and conditions as well. Therefore they could analyze the cost and benefits of each possible source and choose the most convenient and beneficial source. (Andarsari and Ningtyas, 2019) Financial literacy is providing another important benefit which would prevent people from mixing up the business finance and personal finance. Most of the small and medium enterprise owners are not aware of basic financing and accounting concepts. It would lead them to use

the profits and turnover money of the business of unessential personal expenses. It would avoid appropriately allocating funds for the working capital requirements of business, due expenses settlements, loan repayments and other essential requirements. That would lead the business towards high liquidate issues and it would destroy the trustworthiness of the business and of the person as well. (Peiic-Bach et al., 2014) If there is no sufficient level of financial literacy, there is a higher probability of people being trapped with intolerable amount of loans with extremely higher interest rates. Further they would tend to borrow from informal lenders as a temporary measure, but it would also lead to many issues in personal and social life as well. (Lusardi, Annamaria and Tufano, 2015)

After the 2007/2008 global financial crisis, researchers and other interest parties have done number of studies. They identified the fact the poor financial decision which taken by less literate and less considerate parties have been caused not only for the failures of their personal lives but also to whole global economy as well. Hungarian government also had to face a highly destructive failure in banking system due to the massive trend of foreign exchange loans. It had been initiated without proper cost benefit analysis. Lower knowledge and awareness regarding the risks and potential losses of foreign exchange loans, had been the major reason for the tragic failure in whole banking system.(BARANYI et al., 2022)

According to the extensive studies conducted with relevant to financial knowledge, researchers have identified basic four elements. Those are basic concepts related to monetary systems, Various savings and investment schemes, Borrowing related concepts and safety/security relevant to financial decisions. In addition to that, studies have identified some major focus areas such as different types of interest (compound vs simple), inflation and returns etc. (Filipiak and Walle, 2015) Studies have proven with the evidence that lower level of financial knowledge would lead to the financial anxiety issues. Therefore such people would show lower level of interest on any kind of finance related matter.(Linciano et al., 2019) Financial attitude is also considered as a major element of financial literacy. Financial Attitude could be defined as the preferred way of behaving at different economic and financial conditions and

situations. Researchers have observed that the people with positive financial attitudes would be more preferable regarding planned financing activities. (Atkinson and Messy, 2012) Extreme negative attitude on finance and investments would lead to a non-developing or slowly developing economy. For an instance if the citizens of a country are highly risk averse and not preferring to invest in any investment opportunity just because of the assumption of high return would give high risks. In such a case, profitable management of asset portfolio would not occur.

Banking system and whole economy would be not functioning properly due to the weaken system. Therefore it's important that the people should have a positive financial attitude where they could analyze both risk and return factors and other essential factors while they take financial decisions. (Banthia and Kumar Dey, 2021)In addition to the financial knowledge and attitude, financial behavior is also considered as another important element of financial Researchers are emphasizing that the people who have high financial behavior would analyze about the affordability prior to the transactions. They prefer to accumulate assets rather than spending, actively engage in budgeting for personal finance needs while setting financial goals in day-to-day activities. (Bucher-Koenen et al., 2017)

Financial confidence is also considered as a major component which would lead to favorable financial behaviors. Researchers have identified that higher financial knowledge which is combined with higher self-confidence would lead to take better decisions regarding to financial activities. Those who are with lower financial confidence would be reluctant to take decisions which would be profitable and beneficial to them.

However, when studying regarding the financial confidence, researchers have emphasized the fact that, people should not be over confident also. Over-confidence would lead to assume the existing financial knowledge in an over-estimated way. Therefore, the risks related to the financial decisions would not be considered appropriately. Then those financial decisions would be ended up as failures.(Asaad and Tokar, 2015)

2.1.3. Global Attempts on Enhancing Financial Literacy

Different countries have taken different measures to increase the financial literacy. For instance, Australia has launched the Australian Securities and Investment Commission. UK has established the Financial services Authority. New Zealand has developed and executed the National Strategy for Financial literacy. India has taken several initiative to open number of centers all over the country to enhance the financial literacy through the Reserve Bank of India.(Garg and Singh, 2018)

2.1.4. Factors Affecting the Financial Literacy

Studies are elaborating the factor that the demographical and social factors are having an impact on the financial literacy. Researchers have identified a significant impact of the education level on financial literacy. Further, studies are indicating that the employment status doesn't have a significant impact on financial literacy. However, the years of working experience is having an impact. Financial socialization level which could be offered through the school and university level has also been identified as a major factor which is affecting the financial literacy. (Alkan *et al.*, 2020)

Different studies have come up with the conclusion that, youth are having a negative perspective on financial planning. Mostly young generation is focusing on spending the earned money in various entertaining ways rather than planning for the retirement. As per the studies, age factor is having a significant relationship with the financial attitude towards financial planning. Credit card usage among youth when compared to the older generation has identified as less concentrative and poor analyze of interest cost.(Kaur, Baljit and Hassan, 2018)

2.1.5. Measuring the Financial Literacy

Measurement of the financial literacy has been identified as an important factor. It would help to develop effective learning and educative programs with relevant to the finance disciplines. OECD and other researchers have developed major few elements to assess the financial literacy level. Those elements are namely index of financial

knowledge, index of financial behavior, index of financial attitude and index of financial familiarity.(Bongini *et al.*, 2018)

Different studies have utilized different measures, criteria and variables to measure the financial literacy level. In the assessment different kind of financial concepts such as credit management, investing in insurance schemes, managing the expenses, preparation and execution of budgets, changes of the price levels, various investment and saving plans, planning for retirement financial independency etc. OECD and INFE (International Network on Financial Education) together have analyzed various number of studies. They have come up with a common questionnaire to measure the financial literacy level. That questionnaire is being utilized in various contexts, countries in order to conduct the studies and to get comparable data. (De Clercq and Bernadene, 2019)

Another measure of assessing the financial literacy is evaluating the knowledge level regarding various financial instruments and products such as savings, facilities relevant to credit cards, stock market instruments such as shares, options and insurance related investments etc. (Choi, Insu and Chang Kim., 2023)

2.1.6. Different Methods of Obtaining Financial Literacy

As the researchers are suggesting, higher education programs on finance studies could be identified as one of major sources of gaining financial literacy. However, for the people who were not able to go through such higher education path, professional financial advice could be used as a substitute. It would provide an appropriate intervention of subject experts who are having sufficient level of knowledge, skills and experiences with regard to finance.(Stolper, Oscar and Walter, 2017)

Organization for Economic Co-operation and Development has stated that major source of increasing the financial literacy is through promoting the financial education. Financial education could be defined as making people to appropriately understand different concepts with relevant to financial instruments and other finance system elements. This financial education would enhance the level of self-confidence and skill to utilize and get returns from investments and other financing activities. Financial education would

assist people to understand the potential risks and beneficial opportunities. They would be able to make appropriate decisions to manage their finance and other activities. It would enhance the financial and social well-being as well.(Lusardi and Annamaria, 2019)

In addition to the formal education, financial literacy could be developed through some other engaging ways. Some of those are, seeking for counselor's opinion, introducing and promoting online apps where the people could conveniently learn about financial concepts they prefer. Online gaming platform also could be used to enhance the financial literacy, if developed through the correct authorities, terms and conditions. (Platz, Liane and Jüttler, 2022)

2.1.7. Impact of Financial Literacy on Financial Planning

Research studies are showing that, enhancing of the financial literacy through various methods such as awareness programs and trainings have been affected the level of opening bank savings accounts.(Garg and Singh, 2018) Awareness programs would give only a temporary and limited knowledge. Studies are suggesting that developing educational programs would give a longer term and high scope financial knowledge. It would increase the financial literacy in an effective way.(Kaiser, Tim and Menkhoff, 2017) Studies have proven that the financial literacy is having a direct impact on the financial planning. For instance, usually for business purposes or personal purposes people would intend to obtain loan facilities. However, banks and other lending institutions are reluctant to provide loans to the people or business those who are not maintaining proper financial statements/ recordings and evidences of cash inflows and outflows. Banks are having the assumption of poor monetary management and weak bankable profile. Therefore it' evident that, in order to plan the financial needs for future, there should be a sureness about possible financing sources. For that, monetary management should be in a highly acceptable level and it requires a reasonable amount of financial literacy. (Mensah et al., 2015)

If a person is having sufficient level of financial literacy, he/she would most probably take better financial decisions. For instance, if a person could understand the concept of inflation and it would cause to the reduction of similar amount of money

stock's value by the time, then he/she would always try to invest in the investment opportunities which would give higher return rate than the inflation rate.(Orabi, and Abu, 2020)

2.1.8. Measuring the Financial Planning and Execution

Financial planning is having a direct relationship with the financial behavior. Financial planning has been measured in prior studies by using various kind of questions. Such questions are level of doing purchases as per the budgeted estimations, doing the payments on time, engaging in savings rather than preferring current spending, choosing profitable and secured investment opportunities, planning for the long term financial independence, way of identifying and understanding possible risks and returns of a supposed investment, diversifying investments as a measure of reducing the risks, various interest rates etc.(Govindasamy et al., 2020)

Financial planning and execution are also could be identified as the way of financial behavior. Financial behavior has being measured through the questions relevant to budgeting, purchasing patterns, money utilization, engaging in formal savings, utility and other payments, choosing and investing in different investment schemes, planning the financial requirements for long term, controlling of unnecessary expenses etc.(Barbić *et al.*, 2019)

2.2. Empirical Review

2.2.1. Importance of Financial Literacy to University Students

University students or undergraduates could be identified as the future of country as well of the economy. They would be the main contributors towards the investments of country. Without a proper knowledge, literacy and skills about the financial and economic concepts they wouldn't be able to engage in profitable investments and other financial activities. Undergraduates should possess enough literacy regarding various financial instruments, risks and returns of various lending, borrowing and investment opportunities, appropriate management of money stock and cash flows etc. If so, it could be assumed that they would engage in managing their household finances and business/corporate finance in highly professional

and appropriate way. Therefore, the possibilities of facing drastic economic and financial system failures and household financial failures would be lower in future times. As the undergraduates are always having wide-spread friend communities, if the financial knowledge is sufficiently provided to at least a one category of them, there is a higher probability that they would share their opinions with colleagues. It would affect to change other's decision making and financial practices as well. (Kumari, 2020)

University students are having various needs such as purchasing academic books, electronic equipment such as mobile phones, tablets, laptops, pen drives etc., registering to simultaneous professional courses and paying the timely payments for examinations and exemptions, taking care of family economy, paying for foods, accommodations and travel etc. Even though all other grown adults also have to bear the similar types of expenses, university students are being considered unique. Most of the state universities in developing countries such as Sri Lanka, are offering their degrees as full-time courses. Therefore, the students would not get sufficient opportunities to engage in employment. They could not earn sufficient amount of money to manage all above mentioned expenses. Most of the students are depending on their parent's money throughout all the years until degree completion. Some students of whom parents are unable to supply their financial needs are engaging in part time works, utilizing their scholarship funds and sacrificing most of the essential needs. Therefore, mostly they would not get proper exposure in doing savings and investments. It would cause to the lack of financial skills among the university students. If they were not provided with sufficient financial knowledge and literacy as well, then when they entered in to corporate world as employees or in to the business world as entrepreneurs, they would face many difficulties to make appropriate financial decisions. Therefore studies researches are suggesting that the financial literacy would have a greater impact on the financial behavior of university students, not only for the short term but for the longer term as well.(Udayanga and Samitha, 2018)

Banking and lending institutions are usually going through properly standardized process when they are issuing credit cards. Most of the banks are requiring a minimum revenue limit, employment confirmations, frequently transacted savings account and some other documentary requirements as well. But when it comes to the university undergraduates, Sri Lankan banks are offering them with credit card facilities just for their qualification of completing few years of graduation process. Banking institutions are not seeking undergraduate's employment level, consistency of income, transactions of the savings accounts etc. They would offer credit card facilities to almost all university students (most preferably for 3rd and 4th year students) without any of above-mentioned requirements. Therefore, most undergraduates are having the tendency to obtain the credit card facility without any further analysis regarding cost of facility, ability of repayment the utilized amount etc. After that undergraduates would utilize the maximum credit limit and then face difficulties in paying back. As a consequence, they had to end up with paying higher number of interests, delay charges etc. It would negatively affect on their credit score and ability of obtain loan facilities in future as well. One of the main reasons for this kind of negative consequences faced by the undergraduates is the lower level of financial literacy. Undergraduates should be well-equipped with financial literacy to identify the costs and risks relevant to credit card facilities. When there is no consistent source of income, they would analyze properly before they obtain the facility.(Sachitra et al., 2019)

As the university students would enter into the phase where they starting to earn their own income, they should be well-equipped with a proper financial literacy. They have to be secured in any kind of economic condition. Having sufficient savings, investing in differentiated portfolio in order to reduce the risk, entering in to beneficial insurance schemes and making appropriate plans for the retirement planning would help for the financial security. If the university undergraduates are not provided with sufficient financial knowledge, they would have to face difficulties while they are planning and executing the financial activities in their latter part of the life.(Tavares *et al.*, 2019)

In Sri Lanka stock market participation is relatively lower among the university undergraduates. Due to education system of the country, students would not get any kind of exposure regarding the stock market transaction until they complete their ordinary level examinations. Students who study for the Advance Level examination in Commerce stream would get a theoretical basic knowledge about the stock market. But the students who studies in other subject areas such as Arts, Mathematics, Bio-Science, Technology etc. would not even get the basic knowledge. Until the students are being entered in to universities most of them are not getting any kind of advanced knowledge or practical exposure to the stock market transactions. Public listed companies are playing an extremely important role in the economy. Stock market transactions are a major part of the country's economy. Therefore, undergraduate students should provide with a highly sufficient financial knowledge. Unless otherwise the future of the economic growth, financial markets and stock market would be in a higher risk.(Livanage, 2014)

In Sri Lanka, state universities are providing the degree programs in completely free basis. However, as the literatures studies above, students have to bear numerous amounts of other expenses. When it comes to the context of private universities, students are even more tighten with the financial needs. They have paid higher amount of cash for the registration and completion of the degree program itself. Majority of the students would get educational loans in that context. Studies are suggesting that, students and their parents are borrowing the student loans/ educational loans without a proper analysis. There are not considering about the risk combined with such loans. As they are not analyzing the ability of loan repayment, they would face issues when the payments are due. (Razaki et al., 2014)

After the completion of bachelor's degrees, most of the students in developing countries would go to developing countries to follow the master's degrees. Finding better employment opportunities is also considered as one of major motivation behind this. It's observable that, most of immigrant students are obtaining extremely higher amount of loans with very high interest rates. Some of the students and their parents are selling their own properties such as houses, lands and jewelries to fulfill the financial need of this immigration. Incidents of withdrawing the whole amount of savings and utilizing the complete amount of retirement funds also happened to fulfill these

financial requirements. Majority of the students are obtaining the chance of studying abroad by these aggressive financing methods, with the expectation of receiving job opportunities which would provide them with sufficient remuneration. However, studies and surveys have found that, there is higher possibilities of students have to work in more than one job in order to pay the loans. It would negatively affect on the completion of their higher education on time. Some of the students could also be ended up with physical and mental illnesses due to extreme work load, academic pressure, poor economic condition and burden of the loan and interest etc. Therefore, it is important to analyze about the conformity of revenue, ability to repayment and tolerability of the cost of financing methods. It would help to maintain and lead a proper, quality time while being in abroad for higher education. Financial literacy and knowledge provided in the undergraduate studies would help to achieve it.(Todua, 2017)

Educational institutions are supposed to provide sufficient debt counseling to the students. As the students are following different degree programs in different disciplines, they would not provide with formal financial literacy. Therefore, such debt counseling would be highly useful for students to manage the current debts and planning the future loans as well. However, studies are showing that, the concept of debt counseling is difficult to implement practically. Lack of sufficient employees in student financial aid divisions is the major reason behind this difficulty. Lower number of staff is unable of counseling larger number of students. Therefore, students themselves have the responsibility of making appropriate borrowing decisions to monitor the debt progression. As the educational institutions are not capable of providing individual level debt counseling to all the students, offering general-purpose short-term programs to increase the financial literacy would be highly effective. Irrespective of the subject area or the discipline, every interest student would get an opportunity to obtain sufficient level of financial knowledge. It would assist them to appropriately plan and execute financial decisions.(Olson-Garriott *et al.*, 2015)

Literatures are suggesting that, undergraduate students who possess a sufficient level of financial knowledge would analyze below mentioned questions before taking financing decisions. It would help them to ensure the financial capability. Those questions are; complete expenses of major loan requirement, available savings which could be used for the university related expenses, parental assistance and other sources of expected revenues, scholarships, capability of securing an employment opportunity, level of future earnings etc. However, students with lower financial literacy are not considering any of given factors. (Razaki *et al.*, 2014)

As per the research findings, efficient financial education programs would assist the younger generation and specially the university students. They would improve the level of financial planning and financial control. (Lajuni *et al.*, 2016) as the studies have found that students would go to some negative extremes to protect the financial conditions. Activities such as skipping meals, working extended hours, cutting down essential expenses, skipping semesters and exams to avoid the payments etc. could be stated as examples. Therefore it is evident that enhancing the financial literacy and financial planning is important. (Soria *et al.*, 2014)

Concept called 'financial self-efficacy' could be identified as the way of practically utilizing available financial knowledge to act effectively. Appropriate use of financial self-efficacy would reduce the financial stress. As most of the university students are no having self-owned assets or consistent earning capability, they are having a lower level of financial security and related skills. Financial pressures which arise from the university level expenses and families are also leading students towards further financial stress. Studies are suggesting that financial stress is mainly arising due to the lower capability of fulfilling financial requirements. It is happened due to the weaknesses of financial planning.(Fosnacht and Calderone, 2017)

2.2.2. Importance of Financial Literacy in Si Lanka

Sri Lanka is a country which is having a free education system which enables its citizens to be highly literate. (Central Bank of Sri Lanka, 2023) Even though the country is having highest literacy rate among the developing Asian countries, it is observable that, there are many financial institution which are facing huge failures and bankruptcies. (Heenkenda, 2014)For instance Central Investment

and Finance Plc, The Standard Credit Finance Ltd, TKS Finance Ltd, The Finance Company Plc, ETI Finance Plc and Swarnamahal Financial Services Plc etc. could be mentioned.

In above mentioned incidents Investors and depositors had to face huge losses and most of them were not able to withdraw their deposits at all. Lack of financial literacy had been a major reason behind their losses in addition to the mismanagement of the company. Investors had not properly insured their large sum of deposits as regulated by the Sri Lanka Deposit Insurance and Liquidity Support Scheme. The parties who had insured were able to compensate for their losses. Another observation which shows the lack of financial skills in this incident is that, even though the company's financial statements shows the lack of resources to pay the obligations, Investors had not properly concentrate on that issue. (Central Bank of Sri Lanka, 2018) (Kiršienė, Julija and Misevičiūtė, (Samaraweera, Thilakerathne 2017) and Pathirawasam, 2021)

Apart from the failed financial institutions and inconsiderate investments which followed by drastic losses to the investors, there are many informal investment schemes are also being introduced time to time. People are investing without proper analyzing and then losing all their invested money. One such failed investment scheme is 'Golden Key' credit card company investment scheme. Researchers and experts are expressing their findings and stating that the investors also have to take the responsibility on their financial decisions. Those have been taken without proper analysis on the risk-return. In golden key scandal the company was offering a very higher interest rate nearly to 20%-24%, where the company revenue is not that much higher and consistent. If the investors had sufficient financial literacy to identify the risk of their investment rather than the temporary higher returns, they would not be ended up with huge losses. (Azeez, 2015)

Not having or not considerately utilizing the financial knowledge and financial disciplines could be considered as one of major reasons not only for the personal financial failures, but also for huge corporate level failures as well. One of major example for such collapse due to poor utilization of knowledge and financial disciplines is the failure

of 'Pramuka Savings and Development Bank'. Major reasons behind the huge collapse of the bank according to researchers and analysts could be mentioned as below. Bank management was providing loans to the borrowers who were not proved with the ability of paying back and therefore bank had to end up with higher amount of bad debts and non performing advances. If the management utilizes the financial knowledge appropriately, they would have analyzed the default risk and risk mitigation methods as well to prevent such a situation. Another weak financial decision taken by the bank management is that, granting a higher percentage of capital loans to a single unquoted company, when the Central Bank has clearly provided a maximum percentage. In addition to that, the management was not taking actions to maintain the minimum level of statutory deposit ratio as well. Such inconsiderate and poordisciplined financial decisions and behaviors by the people who were assumed to had a good financial knowledge has lead towards a huge collapse which affected the whole country's economy.(Ekanayake et al., 2023)

If the people who are willing to invest and get a sufficient return, it's essential to get correct financial decisions through using the financial knowledge. If they got mis-leaded through aggressive advertising campaigns and paid promotional programs which would emphasize only the possible returns of the investment, there would be a higher probability that the investors would lose their money to some financial scammers. In Sri Lanka, such incident occurred at Through the S.R.Property Investment (Private) Limited, it's owner manager who had gain an enormous fame through his previous career, offered the potential investors with highly attractive dividends. Without considering or analyzing the possibility of giving such higher amount of dividends consistently, investors started to invest large sums of money in the mentioned investment schemes. As mentioned earlier, advertisement and aggressive promotional activities played a major role in this initial investment inflow. However, as any literate person could predict, the company was not able to pay the agreed higher dividends consequently and investors had to end up with enormous losses. (Vithanage, 2018). In the case of ETI Finance also, researchers are mentioning that there is major

three parties who have to take the responsibility of the failure and financial fraud. Management of the company is the major party who involved in taking all investing and liability related decisions. Even though they were assumed to be highly financially literate, they didn't practice an ethical financial attitude. They were being failed to fulfill the regulatory requirements. Sri Lankan financial regulators who are well-equipped with all necessary financial knowledge, literacy is also failed to express appropriate financial behavior. They failed to regulate the mentioned company which had a higher default risk which is also warned by Fitch-ratings as well. Then the lack of financial literacy of the investors also had been a reason behind the collapse. They didn't demand or provided with proper information for the analysis before their investments. Just because of the trust they kept on the financial institutions, they have taken the financial decisions.

literacy on financial aspects. As there are time limitations, extending the study to those other faculties was not convenient. Data collection had been done through a questionnaire and sent to the targeted respondents as a Google form. As explained earlier, purposive sampling method has been used to collect data only from management faculty students. Convenient sampling method is being used to collect data only from management faculty students. Convenient sampling method is being used to finalize the sample, as data collected from the students who were accessible and available for responses.

Hypotheses Development

Based on the Literature review, below hypothesis has been developed.

H1: Literacy on financial concepts is having a significant impact on the Effectiveness of Financial

3. Conceptual Framework

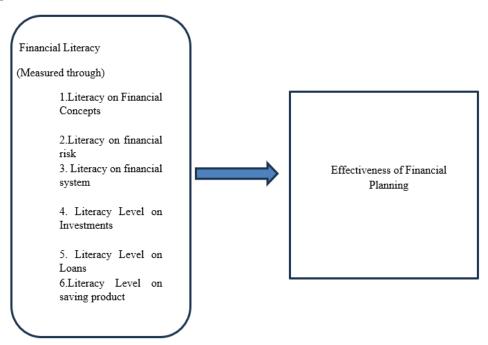


Figure 1: Conceptual Framework

4. Methodology

Data has been collected from state and private university students in Sri Lanka. Data collection has been limited to the management faculties of the universities with the assumption that, other faculty students are having a lower level of knowledge and

Planning

H2: Literacy on financial risk is having a significant impact on the Effectiveness of Financial Planning

H3: Literacy on financial system is having a

Table 01 Variable Measurement

Dependent Variable	Survey Questions presented to measure the variable	Supporting Literatures	
Effectiveness of Financial Planning	1.Level of managing the revenue or available cash balances for the necessary requirements and essential expenses	(Whited, 2014), (BANAAG, 2024)	
	2.Level of respondent's planning and execution of savings and investments	(Brounen, Koedijk and Pownall, 2016), (Novita, Edriani and Kusnara, 2024)	
	3. Level of planning and analysing before and after obtaining credit/loan.	(Kotzé and Smit, 2015), (Woodyard <i>et al.</i> , 2017)	
Independent Variable: Financial Literac (Measured through Below Dimensions)			
1.Literacy on Financial Concepts	Knowledge relevant to financial concepts such as inflation, risk return, NPV, working capital, personal/corporate finance	(Ghasarma, Putri and Mohamad., 2017), (Kabaci and Cude, 2015)	
2.Literacy on financial risk	Knowledge relevant to Default risk, Market risks, Liquidity Risks, Risk avereseness and Risk Neutrality	(Liudmyla, Shepeliuk and Rtyshchev, 2023), (Shadrack <i>et al.</i> , 2024)	
3. Literacy on financial system	Knowledge relevant to components of financial system such as financial markets, instruments, infrastructures, institutions and financial authorities	(Berndsen, León and Renneboog., 2018), (Allen, Qian, and Gu, 2017)	
4. Literacy Level on Investments	Knowledge relevant to Investment opportunities such as treasury bonds, share securities, investing in real estate, fixed deposits and corporate bonds	(Supraja and Kanakaraj, 2024), (Krische, 2019)	
5.Literacy Level on Loans	Knowledge on Personal Loans, Mortage loans, gold loans, educational loans and SME loan schemes	(Boatman and Evans, 2017), (Korutaro <i>et al.</i> , 2014)	
6.Literacy Level on saving product	Knowledge on Interest rate differences, ability of withdrawals, cheque and overdraft facilties and special requirement differences between savings, fixed and current accounts	(Hogarth and Hilgert, 2002),(Percy and Arnott-Hill, 2014)	

significant impact on the Effectiveness of Financial Planning

H4: Literacy on Investments is having a significant impact on the Effectiveness of Financial Planning

H5: Literacy on Loans is having a significant impact on the Effectiveness of Financial Planning

H6: Literacy on savings is having a significant impact on the Effectiveness of Financial Planning

Model Specification

Eff_Fin_Plan = B0 + B1* Lit_fin_con + B2* Lit _fin_rsk + B3* Lit _fin_sys + B4* Lit _inv +B5* Lit _loan + B6 * Lit _sav + e where: Eff_Fin_Plan= Effectiveness of Financial Planning
Lit_fin_con= Literacy on financial concepts
Lit_fin_rsk= Literacy on financial risk
Lit_fin_sys= Literacy on financial system
Lit_inv= Literacy Level on Investments
Lit_loan= Literacy Level on Loans
Lit_sav= Literacy Level on saving product
e= Error Term
B1, B2, B3, B4, B5, B6= Coefficient Terms

5. Data Analysing Methodology

Data analyzing would be conducted through Eviews statistical software. Descriptive statistics would be used to find the average level of respondent's financial literacy level and effectiveness of financial planning. Data will be tested for the normality through Jarque-Bera test. If the p-value is less than 0.05, it indicates that data are not following a normal distribution.

After conducting the normality test and descriptive statistical analysis, model will be tested through the least square method. Model's overall significant will be measured through the F-statistical probability. If the Probability value is lower than 0.05, and then the model is having an overall significance.

After testing for overall significance, each independent variable also will be tested to find whether they are significantly impact on the dependent variable. It would be measured through the T- statistical probability. If the T-statistical probability value is less than 0.05, that means the particular independent variable is significantly impact the dependent variable. If there is any insignificant independent variable detected, the model has to be re-testing excluding that variable. Then the R-squared value could be tested to detect how well the regression model is explaining the observed data.

Coefficient and Residual Diagnostics

Through the coefficient diagnostic option, scaled coefficient values could be taken to identify the independent variable which is having the highest contribution to the model. Variance inflation factor is being used to identify whether the model is having any multicollinearity issues. This issue arises when the independent variables are highly correlated with one or more another independent variable. If there is a multicollinearity issue, then the model results might be less reliable. If the VIF is higher than 5, then multicollinearity issues could be detected.

After identifying the coefficients, overall and separate significance level and other coefficient diagnostic, it is necessary to conduct residual diagnostic as well. It is essential to check whether the mean of residuals is zero, whether the residual is being normally distributed, whether the residuals are random and whether the variance of residuals is constant. Graphical representation could be used to present the difference between actual and fitted values. Normality test is being used to check whether the data are normally distributed or not.

Serial Correlation LM test could be used to check whether the data set is random. Breusch–Godfrey test of Serial Correlation test is having probability greater than 0.05 means; there is no auto correlation between residuals. Therefore, variables could be interpreted as random. Correlogram of Residuals could also be used to confirm the series is random, if the lag values are stayed within confidence interval.

Heteroscedasticity test could be used to test whether the variance of the variables is constant. Breusch-Pagan test is being used to analyze the heteroscedasticity. If the probability value is lower than 0.05 that means there is heteroskedasticity in the model.

Relevance, Dependability and Ethical Consideration

The research study is having the characteristic of dependability, where any other researcher might repeat the study and obtain the relevant results. However, the exact similarity of the results couldn't be expected as the respondent's level of knowledge and financial behavior could be highly deviated by the time. Research is having the characteristic of relevance as well. Management faculty students have been selected for the sample to enhance the relevance as they are fit to the purpose of the study and bias level would be reduced. While conducting the research the ethical aspects were also highly considered. Questionnaire was sent within a reasonable time and let the respondents to participate voluntarily while the anonymity has been highly secured.

Limitations of the Research

Research could be further developed and cover all the university students from every faculty as this research has been limited just to management faculty students. Number of samples could also be increased. In this research number of respondents has been limited only to 100.

6. Results and Discussion

Table 2 is presenting the descriptive summary statistics of literacy level and effectiveness of financial planning. Six indicators which are representing the financial literacy level are having an average value between 60% -70% while the

effectiveness of the financial planning of respondents is having an average value of 53%. Normal distribution of the variables is important to run reliable research as the data should not be highly deviated from its mean value. Jarque-Bera test probabilities of each individual variable are showing whether the data are normally distributed or not. As per the table 2, except for the 'knowledge on investment' all other variable is having Jarque-Bera test probabilities which are higher than 0.05. It indicates that, all those variables are having a normal distribution.

Table 3 is presenting the results of regression analysis. As the probability of F-statistic is lower than 0.05 (0.0001), it could be concluded that the model is having the overall significance. It indicates that, at least a one independent variable is having a significant impact on dependent variable. R-squared value is being used to detect how well the regression model is explaining the observed data. In the model R-squared value is 0.732451. That indicates that regression model is describing 73.24% of the observed data.

As the overall significance level and R-squared values are having a satisfactory level, it is possible to check the significance of the impact of each independent variable. T-statistic probability could be used to identify whether the impact is significant or not. If the P-value is less than 0.05, that means the impact is significant. As per the results shown in Table 3, all the independent variables are having significant impact on the effectiveness of financial planning except for the literacy on financial system. That variable is showing a probability value of 0.3889. Only considering the significant independent variable, it is possible to recreate the suggested model as below.

Eff_Fin_Plan = 0.2401 + 0.2812 Lit _fin_con + 0.6517 Lit _fin_rsk + 0.6094 Lit _inv + 0.7640 Lit loan + 0.8601 Lit _sav

Every independent variable considered in the model except the literacy on the financial system, are having a positive significant impact on the effectiveness of the financial planning.

According to the Table 04, scaled coefficient analysis is showing the independent variables which had the highest contribution to the model. According to the results, it could be concluded that Literacy level on investments, savings, loans, financial risk are having the highest contribution to the model while Literacy level on financial concepts and components of financial system are having lower contribution to the model.

Table 05 is showing the results for the multicollinearity issue. This issue occurs if the independent variables are highly correlated with other independent variables and it would cause to reduce the reliability and the statistical significance. If the VIF is higher than 5, then multicollinearity issues could be detected. However, as per the result in table 05, VIF values are lower than 5. Therefore, it could be concluded that, there is no multicollinearity issue in the model. Breusch-Godfrey Serial Correlation LM Test which is represented in Table 05 also confirming that there is no auto-correlation among independent variables.

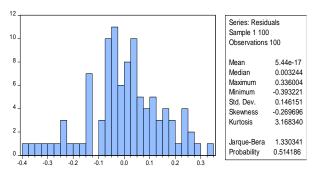


Figure 02: Normal Distribution Test

Normal distribution of the variables is also important to have a reliable result. Figure 1 is showing that data are normally distributed. Jarque-Bera test probability, which is higher than 0.05 also confirming the normal distribution.

Heteroscedesticity is another statistical error, where the variance of the variables is not constant. It could cause to reduce the model reliability. Breusch-Pagan test is being used to analyze the heteroscedasticity. If the probability value is lower than 0.05 that means there is heteroskedasticity in the model. However, as all the probability values as per the Table 06 is higher than 0.05, it could be concluded that there is no heteroscedesticity issue in the model.

Table 02
Descriptive Summary Statistics of Literacy level and Effectiveness of Financial Planning

	EFF_FIN_PL	LIT_FIN_CO	LIT	LIT			
	AN	N	_FIN_RSK	_FIN_SYS	LIT_INV	LIT _LOAN	LIT _SAV
Mean	0.576667	0.672000	0.614000	0.662000	0.684000	0.656000	0.662000
Median	0.533333	0.600000	0.600000	0.600000	0.600000	0.600000	0.600000
Maximum	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000
Minimum	0.266667	0.200000	0.200000	0.200000	0.200000	0.200000	0.200000
Std. Dev.	0.178879	0.262882	0.227867	0.269223	0.252950	0.259105	0.264682
Skewness	0.329859	-0.176087	0.233238	-0.128239	-0.195413	-0.110977	-0.136792
Kurtosis	2.312221	1.798138	2.226518	1.724156	1.861015	1.875631	1.798914
Jarque-Bera	3.784455	6.535409	3.399481	7.056491	6.041801	5.472790	6.322730
Probability	0.150736	0.338094	0.182731	0.069356	0.028757	0.064804	0.052368
Sum	57.66667	67.200000	61.40000	66.200000	68.400000	65.600000	66.200000
Sum Sq. Dev.	3.167778	6.841600	5.140400	7.175600	6.334400	6.646400	6.935600
_							
Observations	100	100	100	100	100	100	100

Table 03 Regression Analysis Results- Generated by E-views Least Squares Method

Dependent Variable: EFF_FIN_PLAN

Method: Least Squares

Sample: 1 100

Included observations: 100

Variable	Coefficient		Std. Error	t-Statistic	Prob.
LIT_FIN_CON	0.281157		0.096823	0.838190	0.0041
LIT _FIN_RSK	0.651662		0.084116	3.110719	0.0025
LIT _FIN_SYS	0.054908		0.097541	0.152834	0.3889
LIT _INV	0.609412		0.083315	0.833120	0.0469
LIT _LOAN	0.764071		0.085784	0.781851	0.0063
LIT_SAV	0.860051		0.082515	0.727759	0.0266
C	0.240109		0.052708	4.555477	0.0000
R-squared	0.732451	Mean dependent var			0.576667
Adjusted R-squared	0.536484	S.D. dependent var			0.178879
S.E. of regression	0.150792	Akaike info criterion			0.878405
Sum squared resid	2.114647	Schwarz criterion			0.696043
Log likelihood	50.92027	Hannan-Quinn criter.			0.804600
F-statistic	7.719272	Durbin-Watson stat			2.051856
Prob(F-statistic)	0.000001				

7. Conclusion and Recommendations

This article examined the impact of financial literacy on the effectiveness of financial planning among university students in Sri Lanka. The study was executed to fill up the gap where the majority of literature are suggesting that financial literacy has a significant impact on the effectiveness of

financial planning while many real-world incidents and relative emphasize the factor that, even well-educated and highly literate people could end up with extreme failures in personal and corporate financial planning. As per the results of statistical analysis, a literate level on different financial products such as savings, loans, and investment

Table 04 Scaled Coefficient Analysis

Scaled Coefficients Sample: 1 100

Included observations: 100

Variable	Coefficient	Standardized Coefficient	Elasticity at Means
LIT_FIN_CO			
N	0.281157	0.119268	0.094573
LIT			
_FIN_RSK	0.651662	0.833320	0.278602
LIT			
_FIN_SYS	0.054908	0.022437	0.017113
LIT _INV	0.609412	0.918154	0.082331
LIT _LOAN	0.764071	0.927151	0.076298
LIT _SAV	0.860051	0.848855	0.068937
C	0.240109	NA	0.416373

Table 05 Checking for the Multicollinearity Issues– Variance Inflation Factor Test

Variance Inflation Factors
Date: 05/15/24 Time: 19:07

Sample: 1 100

Included observations: 100

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
LIT_FIN_CON	0.009375	21.439250	2.820746
LIT _FIN_RSK	0.007076	13.330700	1.599559
LIT _FIN_SYS	0.009514	21.339720	3.002457
LIT _INV	0.006941	16.216260	1.933740
LIT LOAN	0.007359	16.078420	2.151039
LIT SAV	0.006809	15.199470	2.076782
C	0.002778	12.217810	NA

Table 06 Checking for the Heteroscedestacity

 $Heterosked a sticity\ Test:\ Breusch-Pagan-Godfrey$

F-statistic	1.7047	Prob. F(6,93)	0.1285
Obs*R-			
squared	9.9081	Prob. Chi-Square(6)	0.1286
Scaled			
explained			
SS	9.2908	Prob. Chi-Square(6)	0.1579

and a literacy level on financial risks and basic

financial concepts would have a significant positive impact on the effectiveness of financial planning. Literacy on the financial system is not showing a significant impact on it though. Throughout this study and the literature review it has been emphasized that; higher financial literacy would lead to more effective financial planning. Therefore, policy makers in the higher-education field could consider the new ways to improve the financial literacy level of people. It will lead people toward highly effective financial planning and successful financial behavior. Therefore, it is important to increase different ways where the citizens could obtain sufficient knowledge regarding up-to-date finance-related matters. Recommendations for practical implications and enhancement of financial literacy are presented as the conclusion remark.

As per the suggestions provided by literatures, financial literacy could be enhanced by various methods such as integrating theoretical and practical financial literacy aspects in to the educational curricular, providing government and improving institutional support, practical components for practice financial skills, providing integrating public-private digital training, partnerships along with university studies, introducing case study analysis regarding special financial circumstance etc. Developed countries such as USA have installed specific websites to assist citizens to enhance the financial literacy. Sri Lanka government could also use such platforms to enhance the general citizen's literacy level on investment opportunities, rates and charges, assessing of risk tolerance, working with investment professionals, investment professional background check, search company filings, fund analyzing, types of frauds, fraud avoidance, resources and remittance for victims and other essential information. In the suggested ways financial literacy of university students and general population could be enhanced and it would lead towards higher effectiveness of financial planning.

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