



# Financial Literacy, Financial Education and Financial Experience: Conceptual Framework

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## ABSTRACT

Low levels of financial literacy continue to persist around the world with women, the poor, lowly educated groups and the youth possessing the least levels of financial literacy. Research has shown that both financial education and financial experience can help boost levels of financial literacy. Despite this, there remains no conceptual framework that shows how financial education and financial experience can be used to boost levels of financial literacy. The purpose of this study is to propose a conceptual framework that links financial literacy, financial education, and financial experience. This paper is based on a literature review of journals on financial literacy, financial education, and financial experience that were published on both Google Scholar, Semantic Scholar, and Scopus from 2018 to 2023. Variables that emerged from the literature review were used to construct a conceptual framework. The findings of this study reveal that financial education and financial experience can be used to enhance financial literacy levels. Thus, it can be concluded that both financial education and financial experience can help to improve levels of financial literacy among individuals and various groups.

**Keywords:** Financial Attitude, Financial Behavior, Financial Knowledge, Financial Plans, Inflation, Investments

**JEL Classifications:** G53, D14

## 1. INTRODUCTION

Several studies have found that financial literacy can be beneficial to individuals, businesses, and the economy (Sarpong-Kumankoma, 2023; Xu et al., 2022; Harahap et al., 2022). Through financial literacy individuals can learn budgeting skills which will help to apportion a certain percentage of individual earned income towards savings consequently leading to increased savings which can be used to purchase cars, houses, land or meet some emergencies in the future (Widjaja et al., 2020). Through financial literacy individuals can learn how to prepare financial plans that may include planning for purchases and investments, consequently reducing borrowing and curbing impulsive buying behaviour, (Potrich and Vieira, 2018). Through financial literacy individuals will get to know about the existing insurance and pension plans as well as the benefits of investing in them in their resident countries, which may boost insurance products and pension plans uptake

consequently widening financial inclusion (Sarpong-Kumankoma, 2023; Xu et al., 2022; Hasan, et al., 2021; Grohmann et al., 2018). Through financial literacy those individuals who fear to participate in the stock markets due to the risks attached to buying stocks and bonds may be motivated to buy stocks and bonds consequently leading to increased stock market participation (Hermansson and Jonsson, 2021; Bayar et al., 2020; Nguyen and Nguyen, 2020). In turn, stock market participation will help individuals to generate more wealth resulting in improved personal financial welfare and financial satisfaction (Madinga et al., 2022).

Through financial literacy individuals can learn the importance of paying their debt obligations to the society that they are part of and to the economy hence may motivate themselves to pay debts obligations in full and on time (Heru Kristanto and Gusaptono, 2020; Sabri and Aw 2019). Through financial literacy women can learn how to earn personal income, where to save their personal

income as well as where to invest their funds consequently leading to increased women economic empowerment (Kumari et al., 2020). Financial literacy can help to equip the youth with key financial skills that they can use to make sound financial decisions that can motivate them to be active participants of the stock market (Mudzingiri, 2021). Through financial literacy people who are interested in running a business can learn where to get financial support and other forms of business support thus business activity may be boosted which in turn will lead to job creation and a bustling economy (Ćumurović and Hyll, 2019). Moreover, through financial literacy those who are already running businesses can learn about the readily available financial support, which they can use in expanding and improving their businesses (Rahim and Balan, 2020; Ye and Kulathunga, 2019; Hussain et al., 2018; Mabula and Han, 2018). Through financial literacy businessmen and businesswomen will get to learn of various pension plans that suit business owners which their uptake may provide a safety net in case of business collapse (Harahap et al., 2022). As the population of a certain country becomes more financially literate, they will participate more in stock markets, pension plans and make more savings therefore resulting in economic sustainability (Pandey, et al., 2022). Despite the benefits that can be brought by financial literacy, many people across the globe possess low levels of financial literacy (Anshika and Singla, 2022; Goyal and Kumar, 2021; Santini et al., 2019, Garg and Singh, 2018). Financial literacy can be improved through education, specifically financial education (Bayar et al., 2020; Nguyen and Nguyen, 2020; Lursadi, 2019; Wagner and Walstad, 2019). However, several scholars warn that financial education alone cannot help to resolve the issue of high levels of financial illiteracy (Carpena, et al., 2019; Dewi, Febrian, et al., 2020; Boehnke, et al., 2018). Financial experience is another way that can be used to boost financial literacy skills (Förster, Happ & Walstad, 2019; Wagner & Walstad, 2019). Hence there is a need to propose a conceptual framework that tries to link financial literacy, financial education, and financial experience, which can be used, by policymakers and educators who are interested in lifting levels of financial literacy among their populations as such framework is nonexistent. The purpose of this study is to propose a framework that links financial literacy, financial education, and financial experience. The objective of this study is to investigate how financial education and financial experience can be used to boost levels of financial literacy in literature.

## 2. LITERATURE REVIEW

### 2.1. Financial Literacy

Financial literacy is defined as “a combination of awareness, knowledge, skill, attitude, and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing” (OECD/INFE, 2011). Financial literacy has become a necessity in the modern era due to the rise in new technologies that resulted in development of new financial products and increased responsibility in pension planning which are all new to individuals (Klapper and Lusardi, 2020; Lursadi, 2019). Further many people across the globe lack financial literacy especially women, young adults, low-income earners, those possessing low education and the impoverished (Sarpong-Kumankoma, 2023; Klapper and Lusardi,

2020; Karakurum-Ozdemir et al., 2019; Garg and Singh, 2018). Further, across the globe people continue to accumulate debts from micro lenders that charge exorbitant interest rates and often fail to pay off their loans consequently resulting in a debt trap (Lusardi, 2019). In trying to address these problems, OECD/INFE (2022) created a toolkit that shows the key skills that one should acquire for them to be deemed financially literate. The first skill is financial knowledge, which is concerned with the knowledge about money matters. The second skill is financial behavior, which is concerned with the prudent management of personal finances. The third skill is financial attitudes, which is concerned with having a positive attitude towards money. Despite this, several authors used different factors to measure financial literacy in their studies but found low levels of financial literacy among the study participants. Moreover, these studies used different measures of financial literacy which makes it difficult to know which factors are important in measuring financial literacy and sub-measures of financial literacy. Second, several scholars employed different methodologies and were skewed towards students which makes it difficult to tell whether the same results would have attained if same methodologies and different groups were used, but their sample sizes were large enough for generalization. Although some scholars employed similar methodologies in their studies, they used different measures and sub-measures of financial literacy which also makes it difficult to identify the key measures of financial literacy. Moreso, many studies do not have research questions, research objectives, research hypothesis and conceptual framework on financial literacy which makes it difficult to draw a framework through combining existing frameworks in the literature.

For example, a self- measure of financial literacy developed by scholars (Dewi et al., 2020) employed structural equation modeling. The study measured financial literacy of Indonesian lecturers using eight variables: financial behavior, financial decisions, financial goals, financial capability, financial skills, subjective financial knowledge, financial experience, and financial awareness. Financial behaviour of Indonesian lecturers was assessed by determining whether they have accumulated some savings for retirement, have invested in financial securities, whether they are involved in any philanthropist work and whether they pay all their bills on time. Financial decisions of Indonesian lecturers were assessed by determining how easy it is for them to be persuaded by friends, relatives, and coworkers to make unplanned purchases, whether they have any future financial plans, if they ever regretted succumbing to buying pressure from friends, relatives, and co-workers, if they ever made unplanned financial decisions and whether they have ever engaged in impulsive buying behavior. Financial goals of Indonesian lecturers were determined by assessing whether they have both financial and pension plans as well as by determining if they make cash purchases. Financial capability of Indonesian lectures was assessed by determining if they pay their bills on time, have cash savings, make purchases only when the need arises and if they ever compare prices of what they want to purchase before making purchases. Financial skills of Indonesian lectures were assessed by determining whether they ever perform periodic debt analysis, assessing the number of insurance products that they have taken, determining whether

they ever perform periodic assessment of savings and whether they have a proper documentation of bills and receipts that can easily be found.

Subjective financial knowledge of Indonesian lectures was assessed by determining whether they know of current financial events, understand how risk, and return works in stock markets and if they keep any cash records. Financial experience of Indonesian lecturers was assessed by determining if they learned financial literacy skills through actual practice with keeping contingency savings, recording all cash transactions they have made, personally manage their own finances, bought stocks in stock markets and through keeping savings with alternative financial institutions. Lastly, financial awareness of Indonesian lecturers was assessed by determining whether the lecturers are willing to discuss their finances with friends, family, or co-workers, whether they have interest in financial affairs, if they keep a proper record of their bills, do research before making financial decisions, make a shopping list and if they ever analyse their spending patterns periodically.

The study found that financial literacy is associated with the variables under study. The strength of this study is that it can be generalized to the entire population as it used a larger sample size. The second strength is that the study was based on a conceptual framework model of financial literacy. The third strength of the study is that it revealed how all the variables of financial literacy used in the study were measured. The weaknesses of this study are that it was only conducted on lecturers of higher education, which contained mostly lecturers in the private institutions (64% private colleges and 82.9% private universities) thus one cannot tell if the same results would have been achieved if the sample contained a balance with public universities. Second, as the study was conducted on academia of higher institutions and left out part of academia (teachers) it is not easy to tell how the results would have been if they had been included in the sample. Third this is a country specific study thus it remains unknown if similar results would have been achieved if the same study had been conducted in different countries. Fourth the study has no research questions, has not specified its limitations, and has also not stated areas for future study.

Further, a structural equation modeling employed in an Indonesian study found high levels of financial illiteracy among millennial of that country (Dewi et al., 2020). Financial knowledge, financial attitude, financial skills, and financial management behavior were used to assess levels of financial literacy among the millennial. Financial knowledge was measured by assessing if the millennial has the knowledge of credit management, understand the importance of having savings, knows that a house can be bought through a mortgage loan and they know the various types of investment products that are available in their country. To assess financial attitude of the millennial the study determined what their financial views are, how they perceive debts, how they use their credit cards, whether they are financially secure, their level of debt dependency, whether they use cash sparingly, if they understand risk mitigation and how much they value personal financial management. Financial behavior of the millennial was

assessed by determining their consumption patterns, strategies that they employ in managing their finances and types of financial products that have invested in, if they accumulated some savings and the strategies that they employ in managing their credit. The strength of this study is that it has an adequate sample size thus can be generalized to the entire population and has a conceptual framework that links financial knowledge, financial attitude, financial skills with financial behavior. The weaknesses of this study are that it has no objectives, no future direction and was focused on millennial group only.

Furthermore a study that employed partial least square structural equation modeling to test the effects of financial literacy on financial behavior (Zulaihati, Susanti & Widyastuti, 2020) found that financial literacy help to shape financial behaviors of 142 high school teachers of Greater Jakarta in Indonesia. The study assessed financial literacy of Indonesian teachers through determining how much they know about diversification, inflation and risk return relationship. Financial behavior of the study participants was determined by assessing whether they perform financial planning for both the short term and long term as well as assessing their buying and saving decisions. The strength of this study is that it has a conceptual framework, good sample size, future research and policy implication. The weaknesses of this study are that it mostly sampled the youth, males, bachelor degree holders, married people and the study was conducted on high school teachers. Moreover, the study has no limitations.

A self-measure of financial literacy in Malaysia developed by scholars (Baistaman et al., 2020) employed confirmatory factor analysis. The study only measured financial knowledge aspect of financial literacy of the Malaysian schoolteachers. The financial knowledge of the schoolteachers was measured by determining whether the teachers understand the impact of inflation on purchasing power, whether they know how to calculate compound interest and if they understand how monetary value changes with time. The study found that financial literacy is associated with the variables under study. The strength of this study is that it involved a large sample size, which can be generalized to the population of schoolteachers in that country. The weakness of this study is that the study was conducted in only two states, which makes it difficult to tell if the same results would have been obtained if the study was conducted in other states or across the entire country. The second weakness was the use of cross-sectional research design that makes it impossible to make causal inferences. The third weakness of the study is that it was conducted on schoolteachers, and one cannot tell if the same results would have been obtained if the same study was conducted on other groups or the entire population. The fourth weakness of the study is that it does not have research questions. Finally, a direction for future research was not stated. In addition, a study that employed confirmatory analysis on a sample size of 478 ESPOL university learners in Ecuador found low levels of financial literacy among them. The study measured financial literacy using financial knowledge, financial behavior, and financial attitude. Financial knowledge was assessed by determining if the learners have a car, a house, retirement savings, understood the impact of inflation on purchasing power, well-informed about their country taxes and if they understood how time affects monetary value. The ability to save and

financial control over finances was used as variables of measuring financial behavior while knowledge of personal finance concepts was used as a variable to measure financial attitude (Méndez-Prado et al., 2022). The strength of this study is that it used a large sample size which can be generalized to the population under study, however the sample was from one university thus it's difficult to tell if the results of the sample can be generalized to other student populations in other universities. Second the study highlighted the variables used to measure the three dimensions of financial literacy. Third the study highlights directions for future study. The weaknesses of this study are that it was based on one university as well as used self-reporting items which are often affected by human feelings. The second weakness is that the sample was carried on youth of a university thus one cannot tell if the same results could have been achieved if the same study included non-university youth.

A descriptive statistic that was employed in Colombia and Mexico found high levels of financial illiteracy among the study participants (Ramos-Hernández, et al., 2020). The study measured financial knowledge aspect of financial literacy by determining whether the students know about pension funds that are available in their countries, know how insurance and credit works, know the difference between financial investment and savings accounts, understand how inflation affects monetary value, can perform mathematical calculations of compound interests, and understand how risk diversification works. The strength of this study is that it compared two countries, however the study did not show how many students were Mexican and how many were Colombian. The second strength of this study is that it designed a new tool for measuring financial literacy. The weaknesses of this study are that it has no research questions and no conceptual framework. In addition, a study that employed descriptive statistics on a sample of 491 middle class populace of Thailand found a fair level of financial literacy among participants with men and women having similar levels of financial literacy. The study assessed levels of financial literacy of the middle class by determining if they know how to calculate compound interest rates, understands the impact of inflation on purchasing power and if they know how to diversify risk in a portfolio (Grohmann 2018). The strength of this study is that it used a large sample size thus can be generalized to the entire population. Further all adult age groups were represented in the study. The weakness of this study is that it was conducted among the middle class of the capital city which makes it difficult to know if the same results will be achieved if the same study was conducted in rural areas. The other weaknesses of this study are that it has no future direction, no conceptual framework and those with bachelor's degrees were oversampled in the study.

Similarly, a study that employed descriptive statistics and logistic regression on a sample size of 342 university students in Ghana found that the students possessed financial literacy that is little above 50% with males outperforming females (Oseifuah et al., 2018). The study measured financial literacy of the undergraduates using financial knowledge, application of financial knowledge, financial attitude, and financial experience. Financial knowledge was measured by determining whether the students know how to perform the mathematical calculations of compound interest, understands how inflation affect purchases, understands how time

affects the value of money, understands how risk, and return works in a portfolio, understand the importance of having savings and whether they know how to prepare financial budgets. Application of financial knowledge was measured by determining whether the students have actual savings, investment, and current accounts. Financial attitudes were measured by determining if the students keep proper records of their personal finances, whether they practice frugal spending, whether they have an actual savings plan and adhere to such savings plan and whether they do have monthly budgets that they stick to. Financial experience was measured by assessing how the students spend their funds. The strength of this study is that it has hypothesis, objective, and a large sample size that can be generalized to the entire population. The weaknesses of this study are that it does not have a research question, conceptual framework, methodology, no future direction, and no implication. Further the study was conducted on 18-to 30-year-olds of one university thus it is difficult to tell if the same results would have been obtained if a similar study was conducted in other universities in the country.

In South Africa, a study by scholars Nanziri and Leibbrandt (2018) that employed principal component approach revealed high levels of financial illiteracy among the adults of that country. The study further found that the populace of the Eastern Cape, low-income earners, non-attendants of high secondary schools, youth, women, and blacks possess the least financial literacy skills. Financial knowledge and financial capability were used in the study to assess levels of financial literacy. The study measured financial knowledge by determining whether the South African adults understand financial guidelines that are applicable in their country, if they are knowledgeable of the various financial institutions that exist in their country and if they have any financial ideas. The study measured the financial capability of the South African adults by determining whether they have the capacity to manage their personal finances well, if they are aware of various banking and non-banking financial products that exist in their country, if they have the capacity to choose the best financial products and services from products and services that are available, if they are capable of drawing financial plans and if they can make end meets. The strength of this study is that it was conducted on a large sample and thus can be generalized to the entire population. The second strength is that it was a whole country study, which covered all demographic groups. The third strength is that it used a framework titled "microeconomic framework of the financial behavior and consumption saving decision-making process of an individual." The fourth strength is that the study has research questions. The weaknesses of this that the study oversampled blacks (79%) may be because blacks are the majority in that country. The second weakness is that the study oversampled the uneducated (69%) and low-income earners (60%). The third weakness is that the study did not specify directions for future studies.

In Russia, an experimental study conducted by scholars (Belousova et al., 2019) found high levels of financial illiteracy among those 3<sup>rd</sup>-year undergraduates of finance. The study only measured financial knowledge aspect of financial literacy by determining whether the students know how financial concepts can be applied, have the capability of assessing financial bottlenecks, if they know about banking and non-banking products available in their

country and whether they understand that insurance uptake can be used to mitigate risks. The strength of this study is that the study was an experimental study. The weakness of this study is that it used a small sample size so cannot be generalized to the entire population. The second weakness is that the study was skewed towards males (74%). The third weakness is that the study used 20-22-year-old who are doing 3<sup>rd</sup> year finance thus one cannot tell if the same results would have been similar if all students doing finance from year 1 to 4 were included in the sample. Further one cannot tell what the results would have been if the sample included non-finance students. The fourth weakness is that the questionnaire itself did not ask questions that were practical. Lastly the study does not have research questions, theory, conceptual framework, and directions for future research.

In addition, a literature review conducted by (Garg and Singh, 2018) to investigate levels of financial literacy among the youth found that youth possess low levels of financial literacy in most parts of the world. Studies measured financial literacy using financial knowledge, financial attitude, and financial behavior. However, authors used different variables to measure financial knowledge, financial attitude, and financial behavior. The weaknesses of this study are that it was a literature review and not an empirical review.

Hypothesis 1: There are low levels of financial literacy.

## 2.2. Financial Education

OECD (2005) defines financial education as “the process by which financial consumers and investors improve their understanding of financial products, concepts, and risks and, through information, instruction, and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.” Several scholars suggest that one way in which financial literacy can be enhanced is through offering financial education to populaces around the world (Bayar et al., 2020; Nguyen and Nguyen, 2020; Carpena et al., 2019; Mabula and Han, 2018). However, scholars Carpena and Zia (2020) warn that for financial education to effectively enhance financial literacy it ought to include topics that cover financial attitudes, behavior and knowledge that are key in enriching levels of financial literacy. Further several scholars suggest that financial education can be used to improve financial literacy of demographic groups that have the lowest levels of financial literacy (Carpena et al., 2019; Lursadi, 2019). Urban, Schmeiser, Collins and Brown (2020) emphasized that financial education helps in shaping financial behaviours of young adults. In order to enhance financial literacy levels of the masses as well as enhance levels of financial literacy of various demographic groups, several scholars argue that financial education can be disseminated through various modes that are suitable and can easily be accessed such as financial platforms, personalized tutorials and investment analysts consultations, public lectures and financial campaigns, financial literacy fairs, videos and games, in-house trainings, virtual conferences, discussions, on the job trainings, social media outlets and all school levels (Ye and Kulathunga, 2019; Amagir et al., 2018).

Most empirical studies that tested whether financial education could boost financial literacy found that financial education can boost financial education in the short run. However, most of these studies investigated financial education programmes at various levels of school, used different methodologies, financial education programme duration differed, short-term effects of such programmes were measured, some defined what financial education programmes covered while others did not define the coverage, however their sample sizes were large enough for generalization. Although several scholars showed what the financial education course covered there were excessive variations in the topics covered which makes it difficult to tell the key topics that should be covered in financial education. For example, Cordero and Pedraja (2019) study found that financial education programme can only enhance financial literacy in Spain only if embedded within another subject. The study employed a difference-in difference method on sample of 1,005 students. The strength of this study is that it used a large sample size thus can be generalized to the entire population, has an objective and was a cross-country study. The weakness of this study is that it has no conceptual framework, no research question, no hypothesis, does not show what was covered in the financial education course and was conducted on 15-year-olds only.

In addition, a 1-h randomized experiment that employed descriptive statistics, t-tests, anova and Tukeytest on a sample of 172 undergraduate learners of land-grant American public University to test whether tailor made financial education programme can enhance financial literacy found that tailor made financial education courses does enhance financial literacy. The posttest and pretested financial education programme measured financial literacy using knowledge of financial instruments and securities, benefits of having a tax account, bond-interest rates association and risk and return association, (Fan and Chatterjee, 2018). The strength of this study is that it has a study objective, hypothesis, used theory, has adequate sample size and the financial education course covered general information on financial securities. The weakness of this study is that it was focused on university students who are 18-year-olds and above.

Similarly, a randomized experiment that employed structural equation modeling on a sample size of 270 middle students in Hong Kong to investigate if financial education offered at middle schools enhances financial literacy found that financial education does enhance financial literacy in the short run. Financial education program offered to the students covered topics such as how to detect financial scams, knowledge of various types of financial products, money management strategies, life events, types of investment vehicles, debt financing, cautious spending and various ways in which income can be earned was 15 h in length, covered 22 lessons over a period of 10 weeks. Financial exercises, problem solving, role-play, games, videos, group discussions, case studies and lectures were used to disseminate the programme. Financial literacy of the students was assessed using objective financial knowledge, financial attitudes, and financial behavior. Objective financial knowledge of the students was assessed by determining whether the students know how income is earned, whether they can think economically, whether they understand the benefits of

savings, if they know how to spend money cautiously, if they understand how credit can be used and whether they know how to manage money. Financial attitude of the students was measured by testing if the students have general financial attitudes, savings attitudes, financial self-efficacy, risk tolerance and time perspective. The general financial attitude of the students was measured by determining their attitude towards having savings for contingencies, prefer future consumption or current consumption, keep sufficient bank funds, spend based on budget and monitoring monthly expenses. The students' saving attitude was determined by getting their personal views on having savings. Financial efficacy of the students was determined by getting their views on how they resolved financial problems they have encountered in the past and whether they are confident in managing their personal finances. Risk tolerance of the students was assessed through game play that involved choosing between certain and uncertain outcomes with anticipated high returns. Time perspective of students was measured through playing a tradeoff game that involved choosing between earning incomes in the present versus earning income in the future. Financial behavior of the students was measured by seeking the perception of students on control of finances, common financial behavior, financial independence, handling finances in the same way as parents did and determining their savings patterns. Personal views of students on the difficulty or easiness of adhering to financial plans were used to measure perception on control of finances. Personal views of students on saving for contingencies, future purchases and regular savings, management of monthly expenses, budgetary spending and adequate cash banked were used to measure common financial behavior of students. Financial independence of the students was measured by determining whether the students are financially aware. Testing whether students handled finances in the same way as parents did was measured by determining whether financial decisions that students make are because of parental influence. Determining savings patterns of the students was used to measure their savings behavior. Determining whether the students were financially satisfied and whether they get financial guidance from their parents was used to measure their financial wellbeing. Furthermore, financial satisfaction of the students was measured by determining whether the young adults ever worry over finances whereas getting financial guidance from their parents was measured by determining whether the students ever engage in financial disputes with their parents over the use of their own finances (Zhu et al., 2021). The strength of this study is that it used a large sample size and showed what financial education course covered. The weakness of this journal article is that it was conducted on form 3 students only and the financial education programme was for a shorter duration.

Further, a field study that employed multiple linear regression and descriptive statistics on a sample of 521 final year undergraduates of higher learning in Indonesia was conducted to measure the effect of financial education on financial literacy on the short run. The financial education programme ran once a week for a period of 14 weeks and covered eight financial knowledge topics that taught the undergraduates how they can plan for their retirement, different types of investment vehicles they can invest in, how they can use insurance to manage risk, which factors they ought to consider when choosing financial products, how tax is important to their welfare,

how they can use credit cards and loans as a means of funding, importance of having savings and how money changes value over time. Financial knowledge of the university students was assessed by determining if the learners have the capacity to interpret bank statements, can effectively select the best pension plans and financial products, whether they understand what credit cards and investment securities are, whether they know how risk diversification and interest rate works, whether they have an understanding of how to manage money and whether they understand the impact of inflation on value of money. Financial attitudes of the undergraduates were assessed by determining how they make personal financial plans, manage risk and money, choose financial products and how they become financially informed. Lastly, financial behavior of the undergraduates was measured by determining why students choose to behave in a certain way with regards to finances, (Johan et al., 2021). The strengths of this study are that it has a large sample size, conceptual and theoretical framework and shows what the financial education course covered. The weakness of this study is that it was conducted on undergraduates of one university thus one cannot tell whether the same results will be obtained if the same study was conducted among graduates of other universities.

Moreover, a field experiment that involved 1,300 urban low-income adults in India, (Carpena et al., 2019) was conducted to test whether financial education programs can enhance their financial literacy. Financial literacy levels of urban low-income adults were measured using financial knowledge, financial awareness and financial attitude. Financial knowledge of the low-income class of the Indian adults was measured by assessing whether they know how to perform numerical calculations like summing up of household income and expenses every week and whether they have the capacity to compare interest rates of financial products. Financial awareness was measured by determining whether urban low-income adults know the goals of preparing household budgets, minimum requirements that are needed to open a bank account and whether they know that accounts savings at the bank are insured. Financial attitude of urban low-income adults was measured by finding the kind of advice they give to their acquaintances over uptake of insurance and having savings. The financial education program, which ran for a period of five uninterrupted weeks, was disseminated to participants through classroom-based learning. Financial education program was made up of short videos and discussions at the end of each session. Discussion involved writing on white boards, giving picture illustrations, and playing financial games. The financial education programme covered insurance, loans, savings, and budgeting. In addition, a summary of the videos was given separately. The results of the study found that financial education can enhance financial attitudes and financial awareness aspects of financial literacy when offered by itself but failed to enhance long-term behavioral outcomes such as control over long term debts, savings, and budgeting in the longer run. The strength of this study is that it used a large sample size, showed what financial education course covered, has research questions, and has an implication. The weaknesses of this study are that it was conducted on urban low-income adults, has no conceptual framework and no hypothesis.

Furthermore, a cross country study that tested the effect of financial education on financial literacy employed multilevel regression

modeling on a sample size of 29,041 15 year old learners in 18 countries namely Australia, Belgium, Czech Republic, Estonia, France, Israel, Italy, New Zealand, Poland, Slovakia, Slovenia, USA, Colombia, Croatia, Latvia, Russia and China found that financial education enhanced financial literacy of learners taught by specialists in private schools and non-governmental institutions relative to those taught by non-specialist. The students were given a 1-h duration financial literacy test that covered financial knowledge aspect of financial literacy. Financial knowledge tested whether the 15-year-olds are aware of available financial products and services, understand financial transactions, knows how to apply financial knowledge in the real world, understand portfolio risk and return and knows how to plan and manage funds (Cordero et al., 2022). The strength of this study is that the study has a research objective, gave future direction, cross country study and was conducted in both developed and emerging markets. The weakness of this study is that it was only conducted on 15-year-olds, did not specify what financial education covered and has no conceptual framework.

Moreover, a descriptive statistic employed on a study of 918 Italian adults to test whether financial education offered at basic educational levels and higher educational levels enhances financial literacy (Stella et al., 2020) found that financial literacy can be boosted by both basic education and higher-level education based financial education programs. However, the study discovered that taking financial education at University College enhanced financial literacy more. The study measured financial literacy of the Italian adults using financial knowledge, financial skills, and financial attitude. The study measured financial education through determining whether a person has done financial education at primary and secondary (school) and whether an individual had done financial education or not done it at a university. The strength of this study is that a large sample size was used, has an objective, hypothesis and policy implication given. The weakness of this study is that it was conducted on adults aged 30-91 years, does not have a conceptual framework and financial education course was measured by asking participants whether they have done a financial education course before. A small, sampled study comprising of 23 radiologists that employed descriptive statistics to test whether financial education programme can enhance financial literacy in the short run found that financial education programme enhances short-term financial literacy. The short term financial education programme that included a pretest and after 6 months post-test covered topics that include basic financial knowledge aspects of financial literacy topics, how value of money changes over time, knowledge of mortgage financing, types of investment vehicles, types of tax-preferred retirement vehicles, available student loan forgiveness programs in the country, how life insurance works and various types of medical insurance, (Boehnke et al., 2018). The strengths of this study are that it has an objective, gave future direction of the study and has shown what financial education course covered. The weaknesses of this study are that it has a small sample size and was conducted on radiologists only. Moreso, a longitudinal study that employed multivariate linear regression and descriptive statistics on a sample of 437 young adults to investigate whether parental financial education shapes children's financial behaviour (an aspect of financial literacy) found that parental financial education does shape young adults financial behaviours. Examining whether study participants have savings of any income earned, saves for

contingencies, can meet monthly loan installments, service credit cards debts in full every month, adhere to the monthly budget, document financial expenditure monthly and timely pay their bills were used to measure financial behavior. Parental financial education was measured by determining the frequency of financial dialogue that parents usually have with their children, (LeBaron et al., 2020). The strength of this study is that it has a large sample size, purpose, hypothesis, limitation, and future implications. The weakness of this study is that it does not have conceptual framework, was conducted on young adults and financial education was measured by seeking personal opinions of young adults.

In addition, the findings of meta-analysis studies revealed that financial education has the capacity to enhance short-term financial literacy levels of populations of advanced economies (Kaiser, et al., 2022; Kaiser and Menkhoff, 2020; Frisncho 2020).

Hypothesis 2: Financial education can help boost financial literacy.

### 2.3. Financial Experience

Financial experience is defined as “The real-life practice that an individual acquires on managing and making use of money” (IGI Global, 1988–2023). Several scholars suggest that the increased use of banking products such as loans, current accounts and savings accounts has led to an increase in financial experience in turn leading to acquirement of some financial literacy skills (Lusardi et al., 2020; Amagir et al., 2018; Oseifuah et al., 2018). Studies investigating the effects of financial experience on financial literacy remains scant, however, empirical studies conducted in both developing and developed countries to test whether financial experience can augment financial literacy found that financial experience does augment financial literacy. However, these studies employed different methodologies, were focused on different groups, used different variables to measure both financial literacy and financial experience and did not reveal how financial experience can be used to help boost financial literacy. For example, multiple regression employed on a cross-sectional study of 483 students at the University of Bengkulu (Afandy et al., 2020) found that financial experience and gender have a large impact on financial literacy. The study measured financial literacy by testing whether the students know how to diversify risk in a portfolio, the impact of inflation on value of money, how to calculate compound interest and simple mathematical calculations. Financial experience was measured by determining whether students have an actual bank account. The strength of this study is that it has an objective, large sample size, financial literacy conceptual framework, hypothesis, and future direction given and shows how financial experience was measured. The weaknesses of this study are that it sampled students of one university.

Further, a large study conducted on 889 lecturers in Indonesia that employed structural equation modeling to test the interrelationship between financial literacy and financial experience, among others, found that financial literacy and financial experiences are intertwined. Determining whether the lecturers have previously saved money with alternative financial institutions, have participated in the stock market, manage their personal assets, personally document their personal expenses, and have contingency

savings were used to measure financial experience (Dewi et al., 2020). The strength of this study is that it has a large sample size, conceptual framework on financial literacy, hypothesis, objective, implications to policy and sampled lectures of all universities across the country. The weaknesses of this study are that it oversampled lecturers with masters' degrees and oversampled lecturers working in the private sector. Furthermore, scholars Iramani and Lutfi (2021) used structural equation modeling to test how financial experience affect financial wellbeing of 1,158 households of East Java. The study found that financial experience is among the factors that affect financial wellbeing. Financial experience was measured by determining whether the households under study use financial products such as investment vehicles, insurance, pensions and banking products. The strength of this study is that it has a research framework, hypothesis, objectives and used a large sample size. The weaknesses of this study is that the study has no research question and was conducted on high income earning households living in East Java which makes it difficult to tell if the same results would have been achieved if the study was conducted in other demographic groups like low income earners and other locations. Moreover, a study that employed descriptive statistics (Eberhardt et al., 2019) on a sample of 926 adults of United Kingdom found that the combination of financial experience and older age enhance financial decisions. The study measured financial experience using actual practice with finances. The strength of this study is that it has a research question, implications to policy, limitation, used a large sample size and showed how financial experience was measured. The weaknesses of this study are that it does not have conceptual framework and has oversampled those aged more than 60 years.

On the contrary, studies that tested whether financial experience enhances gender risk taking found conflicting results. For example, ordered probit model employed on a self-assessment study of 533, 518 people in United Kingdom (Brooks et al., 2019) found that financial experience influence men to take more risk. The strength of this study is that it has an objective and large sample size. Weaknesses of this study are that it does not have a conceptual framework, no hypothesis, and oversampled men. Lastly, a longitudinal survey that employed ordered probit model on a sample of 2,128 households to test whether financial experience enhanced financial confidence in Netherlands found that financial experience does enhance financial confidence at adulthood. Financial confidence was measured through self-assessment of financial knowledge aspect of financial literacy while financial experience was measured by assessing spending patterns of how allowances that were given during childhood years (Sansone et al., 2019). The strengths of this study are that it has an objective, large sample size, cross country study and those households aged 16 years and above were surveyed.

Hypothesis 3: Financial experience can help boost financial literacy.

### 3. MATERIALS AND METHODS

The methodology for this study was a literature review. Google Scholar, Scopus, and semantic scholar were used to search for

published journals articles on financial literacy, financial education, and financial experience for the period 2018 to 2023. A Boolean search of keywords "financial literacy" OR "financial education" OR "financial experience" was used to search for the journals on Google scholar. Those articles that were found in Google scholar but were not found in Scopus were eliminated. Further only those articles that showed measures of financial literacy, impact of financial education on financial literacy and impact of financial experience on financial experience were selected. The journals that showed ways in which financial literacy can be measured were selected because knowing how to measure financial literacy is key towards the development of an effective conceptual framework. It is important to know which skills are essential towards assessing a person's financial literacy levels. Those journals that tested the impact of financial education on financial literacy were selected because there was a need to know whether financial education can help to boost levels of financial literacy. Few journals on financial experience were found in Google Scholar. A further search of journals on financial experience was conducted on Semantic Scholar. Any journal on financial experience that was not found in Scopus was eliminated. Those journals that tested the impact of financial experience on financial literacy were selected because there was a need to know whether financial experience can help to boost levels of financial literacy. For the literature review fourteen journals on financial literacy were used; eighteen journals that tested the impact of financial education on financial literacy were used- three of those journals were Meta studies and eight journals that tested the effect of financial experience on financial literacy were used.

## 4. RESULTS

The results of this literature review revealed that low levels of financial literacy exist around the world thus the need to enhance financial literacy. The literature also reveals that both financial education and financial experience can help to boost financial literacy. However, several studies that tested whether both financial education and financial experience can help boost levels of financial literacy were conducted in the short run thus the long-term effect of both financial education and financial experience on financial literacy remains unknown. Moreover, despite the evidence that both financial education and financial experience can enhance financial literacy, no conceptual framework that links financial education, financial experience with financial literacy does not exist. Moreover, several studies that tested the effects of financial education and financial experience on financial literacy do not have research questions, objectives, hypothesis, were skewed towards some groups and have no conceptual framework which makes it difficult to derive a framework that links both financial education, financial experience, and financial literacy through combining financial education, financial experience, and financial literacy frameworks in the literature.

## 5. DISCUSSION

This literature review has found that low levels of financial literacy persist worldwide. This corroborates study findings by Lusardi



(2019). These findings show the need to lift levels of financial literacy around the world. The literature review also revealed that financial knowledge, financial behavior, and financial attitude are the common measures of financial literacy that have been used by several scholars thus should be used to test whether a person is financially literate. However, variables that should be used to measure financial knowledge, financial behavior and financial attitude vary. This corroborates the findings by Garg and Sigh (2018). Despite this, the common variables that have been used in the literature to measure financial knowledge include impact of inflation on purchasing power, how interest rates (compound interest, interest-bond association) work, portfolio risk diversification, different types of investment vehicles, how time affects monetary value, knowledge of financial products, risk-return relationship, and risk mitigation through insurance. Hence these variables should be used to test financial knowledge. The common measures of financial attitude that emerged from the literature include factors to consider when choosing financial products, how to be financially current, how to craft financial plans and how to stick to a personal budget. Thus, these variables should be used to test financial attitude. The common measures of financial behavior that emerged from the literature included how to have control over personal finances, how to make continual savings and investments. Hence these variables should be used to test financial behavior.

Furthermore, the study found that financial education programmes do enhance financial literacy although in the short run as several studies tested the short run effect of financial education on financial literacy. This contradicts the findings by scholars (Skagerlund et al., 2018). Although several authors revealed how they measured financial education, there were extreme variations among variables that they used to measure financial education. For example, a topic that was covered in financial education that was used by three scholars only included tax (Johan et al., 2021; Boehnke et al., 2018). These extreme variations make it difficult to tell what topics should be covered in financial education. However, since several authors have shown that financial education has the capacity to enhance financial literacy, I argue that variables that emerged from the literature as measures and sub measures of financial literacy should be used as topics to be covered in financial education as these measures are key towards one being declared financially

literate. That is to say that financial education programmes should cover financial knowledge, financial behavior, and financial attitude aspects of financial literacy while their sub measures should be taught in financial education. Moreso, the literature revealed that financial education can be disseminated to various groups through all school levels, employment, e-learning programmes, household trainings, web conferencing, seminars, workshops, social platforms, online and offline videos, networks, computerized games, financial education fairs, conferences, crusades, financial counseling, individualized financial goal setting tutorials and investment platforms. Hence to be able to enhance financial literacy of the masses several modes of dissemination of financial education ought to be used. Moreover, the literature revealed that financial experience can also help to boost financial literacy, however the studies did not show how financial experience can be used to boost financial literacy. Thus, it is important to show how financial experience can be used to help to boost levels of financial literacy. Since the literature has revealed that both financial education and financial experience have the capacity to boost financial literacy there is a need to draw a framework that links the three.

Based on the hypothesis a conceptual model that links financial literacy, financial education and financial experience is drawn. The model is shown in Figure 1 as follows:

Conceptual model that shows how financial education and financial experience can be used to enhance financial literacy.

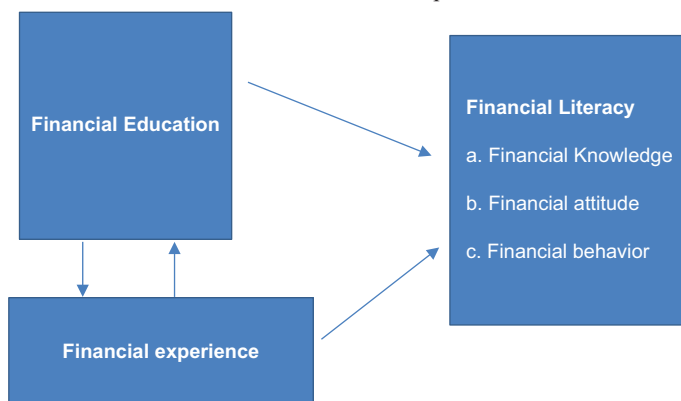
### 5.1. Variables in the Model

There are three variables in this model namely financial education, financial experience, and financial literacy. Both financial education and financial education are independent variables while financial literacy is the dependent variable.

### 5.2. Explanation of the Model

This model shows that financial education and financial experience can both be used to enhance financial literacy. This means that those individuals with low levels of financial literacy can learn financial literacy through financial education courses and through financial experience. The results of the literature review reveal that for a person to be deemed financially literate they ought to possess financial knowledge, financial attitude, and financial behavior. For one to be deemed financially knowledgeable they ought to be knowledgeable about inflation, they ought to know what is meant by inflation, how inflation affects purchasing power and how inflation affects monetary value. Second, they ought to know about interest rates, that is how compound interest works and the relationship between interest and bond prices. Third they ought to know about risk diversification, that is the meaning of risk diversification and how risk diversification works. Fourth they ought to know about the various types of investments that exist in their countries, where they can find them and how they can find them. Fifth, they ought to know about how monetary value changes over time as well as to know the advantages of present versus future consumption regarding monetary value. Sixth, they ought to know about financial products that are available in their country, where to get them and how to get them. Seventh, they ought to know the relationship between risk and return and lastly,

**Figure 1:** Conceptual framework linking financial literacy, financial education and financial experience



they ought to know about insurance products that are available in their country, where to get them and how to get them. Hence to ensure that financial knowledge aspect of financial literacy has effectively been disseminated to individuals the financial education programme ought to cover financial knowledge topics namely inflation, interest rates (compound interest, interest vs. bonds), risk diversification, investments, time value of money, knowledge of financial products, risk-return relationship, and insurance.

For one to be said to have a positive financial attitude, that person should know the factors to consider when selecting financial products. Second, they should be aware of current financial events and where to source current financial news. Third, they should know how to craft both long term and short-term financial plans for themselves. Fourth, they should know how to prepare personal/household budgets and strategies that they can employ to stick to the drawn budget. Hence to ensure that financial attitude aspect of financial literacy has effectively been disseminated to individuals the financial education programme ought to cover factors to consider when choosing financial products, how to be financially current, how to be making financial plans and how to stick to budget strategies. Lastly, for one to be said to have a positive financial behavior they ought to show control over their finances as well as display positive savings and investment behaviours. Positive savings and investment behavior are shown by continuously making savings and investments. Hence to ensure that the financial behaviour aspect of financial literacy has effectively been disseminated to individuals the financial education programme ought to cover ways of controlling personal finances, how to make continual savings and investment. A general financial education programme that covers three aspects of financial literacy ought to be drawn up.

However, before drafting the general financial education programme it is important to recognize that some people may have gained some financial literacy skills through handling of money, work experience or stock market participation while others may have zero knowledge of financial literacy skills. Thus, it is imperative that when drafting the general financial education programme financial experience should not be ignored but rather be considered. This can be done in two ways, first a person must be assessed to determine whether they have acquired some financial literacy skills through financial experience, what skills they acquired and what skills they need. After the assessment those with zero financial literacy skills (i.e do not even have financial experience) can be helped to visualize the real financial world through simulation of the real financial world or financial games embedded within financial education programme. For example, a simulation of savings can be made as an activity in the financial education programme where participants are given either plastic coins or metal coins to place in a money box daily. At the end of the week the participants can be told to count the money they have saved, make a recording of how much they have saved and then be asked to open a simulated bank savings account and place the money in a simulated bank savings account. The participants can be asked to repeat placing coins in a money box daily, counting, recording at the end of every week and saving the money in the savings account for the duration of the financial education course.

Further the participants can be asked to reconcile their personal recordings with the bank recordings that way participants may gain a key skill in knowing how to make continuous savings, how to keep records, how to open a bank account and how to keep track of personal savings. Thus, a general financial education programme that covers the three aspects of financial literacy and a simulation of financial experience can be drawn.

Second, for those that have gained some financial experience a financial education programme drawn from the general financial education programme that suits their needs should be tailor-made for them. Then the drafted financial education programmes that suits the needs of various groups or individuals should be disseminated through various ways that include school levels, various industries, e-learning platforms, household trainings, web conferencing, seminars, workshops, social platforms, online and offline videos, networks, computerized games, financial education fairs, conferences, crusades, financial counseling, individualized financial goal setting tutorials and investment platforms. Thus, this framework offers flexibility of financial education, and its dissemination therefore can be used to enhance levels of financial literacy of individuals, groups, workers, students, youth, uneducated and educated, low-income earners, males and females and the poor in both developed and developing countries. This framework supports scholars Peeters et al. (2018) who suggested that financial education programmes should address the needs of people.

## 6. CONCLUSIONS AND FUTURE IMPLICATION

The purpose of this article was to propose a conceptual framework that links financial literacy, financial education, and financial experience. The design and methodology of this paper was a literature review. Google Scholar, Scopus, and Semantic Scholar were used to look for journals on financial literacy, financial education, and financial experience from 2018 to 2023. The main findings of the study are that low levels of financial literacy exist across the world thus there is a need to help boost financial literacy levels. Second, financial literacy can be enhanced through financial education and financial experience. Third, the study revealed that authors measured financial literacy using financial knowledge, financial behavior, and financial attitudes. However, authors seem to disagree on the variables to use to measure them. Fourth, the study revealed that financial education can be disseminated to various groups in the form of lectures, financial platforms, and seminars, just to name a few. Finally, the study revealed that financial experience is measured using real-world experience with handling money. However, financial experience remains understudied. This study is the first to try and propose a framework that links financial literacy, financial education and financial experience that can be used to enhance financial literacy of various groups.

### 6.1. Limitations

The limitations of this study are that studies that investigated levels of financial literacy used different measures of financial

literacy, employed different methodologies, and were skewed towards students. The second limitation is that most of studies that investigated financial education programmes were conducted at various levels of school, used different methodologies, financial education programme duration differed and measured short-term effects of financial education. The third limitation is that studies investigating financial experience employed different methodologies, were focused on different groups and used different variables to measure financial experience. The recommendation for future research is that this framework can be used in studies trying to investigate how financial education and financial experience can be linked together to enhance financial literacy of individuals, groups, society, students in both developed and developing countries. Moreover, this framework can inform policy makers on how financial education and financial experience can be linked to enhance financial literacy.

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