

Literacy to Financial Literacy: Evolution of Competency and its Contemporary Imperatives

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Abstract—The definition of Literacy has evolved over a period of time to encompass within its fold not only the ability to read and write, but competencies like critical thinking, interpretative and application-based skills in a highly complex social and global context. This paper has extracted certain definitions of the construct Literacy from dictionaries, experts, and global reports like those published by the UNESCO and OECD, to derive its essential constituents which have evolved from reading, writing, numerical ability, gathering information, gaining knowledge and its critical analysis and application, emphasizing on the functional aspect of the construct. This exercise is further extended to the prerequisite for understanding the connect between literacy and financial literacy—a derivative of Literacy. The ensuing goal being to correlate the components of literacy with financial literacy, encompassing knowledge, attitudes, skills and behaviour in the context of reading, understanding and analysing financial documents, numerical ability in financial settings and their application to achieve financial empowerment, freedom and sustainability. This study is designed to exemplify the evolution of literacy followed by deriving the crucial components required for conceptualising and operationalising the construct Financial Literacy in an evolving, complex financial landscape.

Index Terms — Literacy, Financial Literacy, Conceptualisation, Operationalisation

I. INTRODUCTION

“Literacy is the path from slavery to freedom” - Frederick Douglass

“Acquiring literacy is an empowering process, enabling millions to enjoy access to knowledge and information which broadens horizons, increases opportunities and creates alternatives for building a better life”-Kofi Annan

The aforementioned quotes by historical luminaries emphasize upon the significance of literacy in shaping the future of the citizens of a nation, as it empowers people to improvise their living by expanding capabilities which in turn reduces

poverty, increases participation in employment and has positive impacts on health and sustainable development. In the same vein, financial literacy endows on an individual the ability to make knowledgeable and informed financial decisions and achieving financial goals. Thus currently, the term financial literacy assumes great import in almost all the economies of the world owing to a highly complex, liberalised and a globally evolving financial world. Literature on financial literacy speaks volumes of its significance and its impact on financial decision making and behaviours. However, any study on financial literacy would be incomplete in the absence of a unanimous definition of the construct. Thus, prior to embarking on an exercise to arrive at a working definition of the term financial literacy, it is essential to comprehend the meaning of literacy along with its components. This is essential as financial literacy derives its components from literacy, as financial literacy is a derivative or extension of literacy.

II. PROBLEM STATEMENT

Literacy is the foundational premise for financial literacy, it is the underlying concept for defining financial literacy. However, despite various strides by researchers in studying the impact of financial literacy on financial behaviours or in understanding the antecedents of financial literacy aimed at financial education initiatives or in understanding the impact of financial education initiatives on financial behaviours, the moot question keeps looming - the lack of a consensus definition of the construct financial literacy. This problem may be due to a lack of a consensus definition of Literacy itself as pointed out by (Kirsch et al, 2001) or a disregard to the components of Literacy while defining financial literacy or in a lack of understanding the need for defining Financial Literacy. This gives rise to flawed measurement tools, findings and recommendations and

furthermore impractical policy initiatives. However, one can look at the broader definition of Literacy put forth by (Kirsch et al, 2001) arrived at through a consensus process, i.e. “Literacy comprises of understanding and application”. Thus, researchers need to understand that a derivative like Financial Literacy should import its components from its foundational concept i.e. Literacy, to make it more concrete and significant.

III. SCOPE OF THE STUDY

The study analyses the evolution of Literacy as “Functional Literacy” thereby emphasizing the application-based components for enhancing capabilities and for empowerment. i.e. it brings to the fore that the basic elements of literacy function as the crucial "DNA" for financial literacy. It recommends that even Financial Literacy must incorporate knowledge, skills and behaviour related to analysis of financial documents, acquiring numerical skills and its application for pursuing financial goals, financial freedom and financial capabilities. This is essential because the evolving new global financial order demands a functional and dynamic conceptualisation and operationalisation of the construct Financial Literacy.

IV. RATIONALE FOR THIS STUDY

Numerous previous studies have overlooked the concept of Literacy to arrive at the working definition of Financial Literacy and to draw a connect between the two. However, this study highlights the imperativeness to align the two constructs not only to formulate a definition of Financial Literacy, but also for understanding the impact of literacy / education on financial literacy (especially in the context of meaning-making) and that of financial literacy on financial behaviours, to devise scientific construct measurement tools and derive effective policy interventions.

V. OBJECTIVES OF THE STUDY

- 1) To understand the meaning and components of Literacy to arrive at a working definition of Financial Literacy.
- 2) To appreciate the significance of Literacy in research studies on Financial Literacy.

- 3) To demonstrate that financial literacy is a specialized subsidiary of literacy rather than a distinct domain of knowledge.

VI. EXPLORATION OF PREVIOUS STUDIES

Studies on Literacy / Education as an Antecedent of Financial Literacy

This review concentrates on research studies showing either literacy or education as a determinant of financial literacy. Although, Literacy is related to the basic skills of reading, writing and comprehension, education is a more refined measure of human capital. For this review education is used as a proxy for literacy, as both are highly correlated constructs, as high literacy levels indicate access to educational resources owing to high socio-economic backgrounds.

Studies conducted by various researchers have endorsed a robust affirmative association between literacy and financial literacy execution. For instance, studies conducted by OECD (PISA) in different nations reveal that literacy strongly impacts the student’s financial management abilities, as reading skills are essential to understand transactional and contractual details, whereas maths is needed for financial calculations. In PISA, 2022 tests, it was revealed that among all participating countries, there was a high connect between reading and math scores and financial literacy (Russell, 2022). The studies also reflect on a strong correlation between socio-economic background as a predictor of literacy and literacy as a predictor of financial literacy. For instance, (Miller, 2014) revealed that the OECD survey results show a correlation between financial literacy scores and performance in mathematics and reading across the OECD countries in the survey sample. For high performers like Shanghai and New Zealand, these correlations were even stronger. (PISA, 2022) results also indicate a same relationship in a study conducted in Brazil. Approximately 77% of performance in financial literacy scores were related to performance in mathematics and reading. In a study conducted by (Oberrauch et al, 2025) similar relationships were observed between maths, reading and financial literacy, as well as between higher strata of the social stratum (influencing access to educational resources and support) and financial literacy scores. According to (Hanafi et al, 2025) the central constituent of the STEM i.e. Maths, offers a

basic financial skill essential for making a budget, for investments, etc. Algebra can also be useful for computing interest rates and loan payments, whereas statistics can help in understanding the risk-return trade-off (Özkale et al, 2022). As per the researchers a holistic and integrated approach in education would be to pool together the distinct subject areas like, literacy, STEM and financial literacy (Darling-Hammond, 2021). This highlights the fact that most of the financial literacy assessment studies incorporate few maths questions in their studies. Huston (2010) argues that “if an individual struggles with arithmetic skills, this will certainly impact his/her financial literacy”. Children in UK of all ages lag behind their counterparts in mathematical accomplishment (Buchanan, 2013, Bennett, 2008 and Hurst, 2013) and so do their employees (Grimston, 2010b) which has adversely affected the UK’s leadership in financial services and held up recovery of the nation from the 2008 crisis (Wilson). However, there are large areas where the content of mathematical literacy and financial literacy do not intersect. This should be taken cognizance of by the researchers, to comprehend the reasons for the same. Yet another component essential in literacy is reading. Reading skills are important for academic accomplishment as well as efficacious functioning in daily life, as it influences economic, social and cultural participation in society (Stefanova, 2024). (Obeng, 2025) highlights the significance of reading skill in financial literacy, as it equips students in interpreting the financial text. According to (Teravainen-Goff, 2019) skills in reading and financial capability are associated with each other. (Acar, 2023) brings to the fore the mediating role which reading literacy plays between ICT skills and financial literacy. However, skills in maths have a direct bearing on financial literacy, indicating a unique role maths plays in reinforcing financial literacy. According to the Organization for Economic Co-operation and Development (2013), between 4.9% and 27.7% of adults in literate countries demonstrate extremely limited reading abilities and these individuals are typically at extreme social and cultural disadvantage (Dinicola, 2007). Thus, the significance of reading as a communication tool is on the rise, as it has a functional context in terms of personal, occupational and financial (Johnson, 2015).

A study conducted by (Asli et al., 2021) showed a positive impact of education on financial literacy. A

similar correlation was found in a study conducted by (Mbona, 2022). As per Kummu et al. (2018) HDI is a measure of the sustainability and well-being of nations, as one of its critical components is education. Strong correlates between the Human Development Index (HDI) and financial literacy and HDI and financial behaviour are found in studies conducted by (Datta et al, 2019 and Xiao, 2023) respectively. Studies conducted by (Nugraha, 2018; Alvarado et al., 2021; Muzekenyi et al., 2023) have indicated an inverse relation between the Human Inequality Coefficient (HIC) and financial literacy, as a high HIC indicates lower financial literacy due to less educational opportunities, lack of resources, leading to prolonged societal disparity, which in turn affects efficacious financial decisions. Additionally, this human inequality impacts people’s involvement in financial markets, embracing latest digital technologies and enhancing financial literacy, highly significant for economically disadvantaged countries (Febrianto et al., 2023). Studies conducted in India and Indonesia by (Nugraha, 2018 and Pandey, 2023) endorse the aforesaid views that inequalities in these nations limits access to educational prospects and financial resources, leading to prolonging poverty and succeeding financial exclusion. Lack of education opportunities and income inequalities led to a negative impact on financial literacy and knowledge as per (Nogueira, 2025).

(Nugraha, 2018 and Muzekenyi et al, 2023) underline the significance of education at different stages as a key to enhancing financial literacy. This is demonstrated by (Liu et al., 2024, Kálmán et al., 2023 and Abdelghaffar et al, 2023) by showing a positive connect between higher education and financial literacy, further impacting financial capabilities, financial inclusion and economic development.

A study conducted by (Pietrzak et al, 2018) show a relationship between the quality of higher education characterised by the type of Higher Education Institute and employment opportunities and financial literacy. A study on impact of education on financial literacy, financial knowledge, and financial behaviour, by (Johan et al, 2021) concludes that education positively impacts financial knowledge and financial literacy but not financial behaviours, which may be due to affective factors, like attitude, motivation, confidence, etc. A similar finding was

indicated by the OECD-PISA studies which stated that while literacy majorly affects financial literacy scores however, about 20-23% of the variation may be due to domain-specific i.e. financial domain factors.

Studies conducted by (Monticone Chiara, 2010, Kehiaian, 2012, Agarwalla, 2013, Bhushan, 2013, Gupta, 2014, and Sekar, 2015) showed a positive correlation between Financial literacy level and level of education and by (Seth, 2010) between financial literacy and type of education (finance specialisation). A positive significant relationship was found between tax literacy and level of education (Bhushan, 2013).

VII. CONNECT BETWEEN LITERACY AND FINANCIAL LITERACY

The aforementioned studies indicate a positive relationship between literacy and Financial Literacy. Thus it is clear that Financial Literacy is the functional application of Literacy to the economic and financial decision making domain. Thus while proposing a working definition of Financial Literacy as a construct, researchers should pay heed to the definitions and components of Literacy. This is essential because scanty studies in the domain of financial literacy by (Huston, 2010, Remund, 2010, Nayyar, 2025, Gupta et al, 2025 and Zieser, 2024) have considered the concept of Literacy in their financial literacy studies. Further studies have not defined the construct Financial Literacy.

I. Defining Literacy: A Conceptual Progression

With civilisations progressing, definitions of literacy have evolved from elementary skills to a wider, socio-eco-contextual proficiency.

A. Foundational Definitions

Customary definitions focus on the most basic components:

a) Merriam Webster's Collegiate Dictionary: "Able to read and write," and "Having knowledge or competence."

b) Oxford Dictionary: "The ability to read and write," and "Competence or knowledge in a specified area."

Ability to read and write, combined with knowledge or competency in a particular domain are emphasized by these definitions.

B. Evolving Imperatives: From Skills to Application
 Researchers observed the confines of previous definitions, which led to a change in approach from knowledge oriented to skill focused approach. For instance, (Dubin et al, 1992) noted that "Literacy goes beyond the simple definition of reading and writing...we acknowledge that the word literacy itself has come to mean competence, knowledge and skills." Thus while defining Financial Literacy the two phases i.e. seeking knowledge and its application need to be considered. (Langer, 1991) further expanded this, proposing literacy as a way of thinking and reasoning, particularly in a culturally apposite manner. In the realm of Financial Literacy, this fits well in the Indian context where investors think and act culturally while investing (i.e. more dominance of realty and gold in their investment portfolios instead of equity). This cultural understanding of financial literacy will enable policy intervention through a suitable framework for formulating and designing financial education policies and procedures.

This emphasis of the definitions of literacy on application culminated in the concept of Functional Literacy.

C. Functional Literacy

Thus literacy which was understood as a set of technical skills began to be associated with the socio-economic development, which has given rise to the functional aspect of literacy, a term put forth by Paulo Freire in the 1970's, which moves beyond merely acquiring skills to emphasizing the application and use of these skills in daily life and socio-economic development.

The EFA Global Monitoring Report (2006) defined functional literacy as:

"A person is literate when he has acquired the essential knowledge and skills which enable him to engage in all those activities in which literacy is required for effective functioning in his group or community and also for enabling him to use reading, writing and calculation for his own and the community's development."

(Mason et al, 2000) while referring to Margaret Jackson's definition of literacy highlights the key element of literacy i.e. meaning making (understanding) in addition to the skills of reading and writing, imperative in a technologically advancing world, essential for survival.

While defining Financial Literacy, reading literacy would mean reflecting on written texts like annual reports of companies, fine print and advertisements of financial products. It also includes retrieving financial information, its interpretation and ability to reflect (meaning-making) on the same. Numeracy skills in the context of financial literacy should include quantitative reasoning and understanding relationships between two variables, for example relation between inflation and returns on investments.

A more comprehensive operational definition proposed by an international expert meeting (June 2003) defines literacy as: “The ability to identify, understand, interpret, create, communicate and compute, and use written and printed materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and the wider society.”

This definition focuses on the social dimensions of acquiring and applying literacy, rather than looking upon it only as a generic set of technical skills. In the context of financial literacy this definition can include components like financial literacy as a continuous process to achieve financial goals i.e. acquisition and application of financial knowledge.

A Joint Statistics Canada OECD Study (2000) defines literacy as, “the ability to understand and employ printed information in daily activities at home, at work and in the community to achieve one’s goals and to develop one’s knowledge and potential”. In the context of financial literacy, it relates to understanding the fine print, company annual reports, Stock Indices, etc. and use of this information to make financial decisions and achieve financial goals.

The UN Literacy Decade (2003-2012) emphasizes “Literacy as Freedom”. Similarly, according to (Postmus, 2010) the expected outcome of financial literacy is also financial freedom and empowerment, as financial literacy enhances economic self-sufficiency, leading to self-confidence which is reflected in economic behaviours.

The National Literacy Mission defines literacy as, “acquiring the skills of reading, writing and

arithmetic and the ability to apply them to one’s day-to-day life”. The definition of financial literacy also should comprise of acquisition of knowledge and its application i.e. utilization. Thus “many of us can ‘read’ texts we cannot understand, example tax forms or insurance documents or scientific journals, we can read the words but not the world they represent” (Juliet Merrifield). For instance, even in case of financial literacy individuals can read the fine print relating to life insurance or mutual funds or any investment class; however, they may not be able to comprehend it. Thus the important question is not whether people are able to read and write but how well they can perform this task. In the context of financial literacy how well they can interpret this information.

Thus these definitions of literacy are useful in understanding the meaning and components of financial literacy, which will help in conceptualization and operationalisation of the concept based on functionality.

D. Key Common Strands between Literacy and Financial Literacy

Literacy and Financial Literacy share common constituents, which are significant for conceptualising financial literacy, like:

- a) Cognitive Skills – ability of reading, writing and numeracy.
- b) Application - ability of identifying, understanding, interpreting, and reflecting on written/printed materials
- c) Critical Thinking - ability of thinking, reasoning, decision-making and problem solving
- d) Socio-Eco Contextual - Ability of applying skills in daily life for pursuing financial and societal goals.
- e) Outcome – Financial freedom and empowerment leading to self-confidence

II. From Literacy to Financial Literacy: The Contemporary Imperative

As Financial Literacy is the functional application of general literacy to the domain of personal finance, the same forces that propelled the progression of the definition of literacy from reading and writing to application, require the same elements while defining financial literacy.

A. The Conceptual Link

The crucial features of contemporary, functional literacy are directly adaptable to the financial context as follows:

1) Reading Literacy (Financial Context): Interpreting written financial texts such as company annual reports, fine print on contracts, offer documents, prospectus, etc.

2) Numeracy Skills (Financial Context): Quantitative reasoning and calculation, including understanding complex information presented in charts/graphs, dealing with percentages, calculating the impact of inflation on returns, and understanding compounding.

3) Application and Reflection (Financial Context): The ability to not only read the words of a tax form or insurance document but also to comprehend and interpret the world they represent, enabling informed financial decisions. This addresses the challenge noted by (Merrifield): "many of us can 'read' texts we cannot understand."

The aim of this paper was to propose a working definition of Financial Literacy. In this context, definitions given by OECD/INFE (2011), ASIC (2014-2017) and PISA (2012) being inclusive were deliberated upon. Undoubtedly, the definitions of literacy were also considered. The working definition of Financial Literacy proposed in this study is "Financial Literacy is a measure of the degree to which one possesses the competency to manage personal finances, for enhancing participation in economic life, while being mindful of life events and changing economic conditions". Competency comprising of all the three constituents i.e. Financial Knowledge-Cognitive, Financial Attitudes-Affective and Financial Behaviours in terms of outcomes-conative (Wagh, 2025).

B. Operationalizing Financial Literacy

The components for operationalisation of the construct based on the working definition of Financial Literacy:

1) Financial Knowledge: comprising of the following:

It should be operationalised based on the measurement framework given by the International Adult Literacy Survey (IALS), on the basis of the following three types of application skills

a) Prose Literacy (Financial): The knowledge and expertise needed to understand and use information from texts like investment brochures and policy documents.

b) Document Literacy (Financial): The knowledge and expertise required to locate and use financial information contained in various formats, such as

mutual fund factsheets, stock performance charts and bank statements.

c) Quantitative Literacy (Financial): The knowledge and expertise required to apply arithmetic operations to numbers embedded in printed financial materials, such as balancing a budget or determining interest on a loan.

2) Financial Attitudes: This is required for rational financial decision making, i.e. overcoming behavioural biases.

3) Financial Behaviour: The outcomes expected from the knowledge and expertise, coupled with rational attitudes i.e. financial behaviours.

VIII. CONCLUSION

The conceptual journey from basic literacy to functional literacy provides the essential blueprint for defining and implementing Financial Literacy. Literacy has evolved into a concept requiring acquisition of knowledge, application of skills, and cultivation of specific behaviours (the conative aspect) to enable individuals to achieve their goals and participate fully in society. Similarly, Financial Literacy is a functional competency with an outcome of meaning making and achieving financial freedom. Secondly, the imperativeness to define the construct stems from the fact that individuals are increasingly responsible for their own financial security required to take financial decisions. Thus, research in this field needs to understand the components required to test the financial literacy levels of people, so that the governments understand the policy initiatives required to enhance financial literacy of their citizens of all ages. Thus, exploring how different financial literacy reforms correlate with financial literacy outcomes over time could provide valuable policy insights (Oberrauch, 2025).

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