

# **The evolution of the Financial Literacy Concept: A Literature Review**

## **ABSTRACT**

The financial literacy term originated around the '90s has gained importance the previous ten years as financial products and services have become more complex and population faced financial and economic crisis. The lack of a precise and generalizable definition of financial literacy has led to several issues regarding the difficulty to measure and comparison of research results. Therefore, the purpose of this study is to condense previous literature on the subject of financial literacy; its conceptualization, the areas covered and determining factors. Carrying out a literature review, the current research presents the evolution of the concept as established by authors developing studies in this area. Based on the findings, I provide a generalizable definition taking into account previous conceptualizations and areas covered under the terminology.

**Keywords:** Financial literacy, literature review, financial knowledge.

## INTRODUCTION

The main topic chosen in this study is the financial literacy concept; how it is defined, the areas covered under the terminology, and how it is measured. This topic was selected because financial literacy landscape has become more sophisticated over the past few years with the introduction of many new financial products and services (Cull & Whitton, 2011; Deepak et al. 2015), a growing number of workers approaching retirement (Kamakia, et al. 2017), undesired financial and economic consequences in the economy, particularly the global socio-economic crisis (Refera et al, 2016; Cichowicz & Nowak, 2017), high levels of poverty (Nanda & Samantha, 2018) and rising levels of household debt (Cull & Whitton, 2011).

Financial literacy is remarkably important as it can improve the standard of living (Lindsey-Taliefero et al. 2011), individuals must plan for financial security that extends 20 or 30 years further (Faulkner, 2015). According to Fortuna (2007), Americans have poor financial habits; a large percentage of the population lacks basic financial knowledge and skills to ensure long-term stability for themselves and their families. This is not different around the world, Kebede & Kuar (2015) declare that people from both developed and developing countries lack basic knowledge, skill, and attitude required to make optimal personal decisions. In Mexico this is not far from true, according to the ENIF (2015), only 41.2 percent of the Mexican population has a financial retirement product to save for the future and only just 36 percent keeps a record of their expenses.

Along with this broad array of aspects that the concept encompasses, there is a lack of a precise and generalizable definition (Selim & Aydemir, 2014; Cichowicz & Nowak, 2017), the shortcomings on a unified conceptualization of the term had led to a diverse of approaches to measure the financial literacy level among population and hinder comparisons among different contexts (Huston, 2010; Hung, et al. 2009). Research is needed to unify the benchmarks for the ongoing measurement of financial literacy (Marcolin & Abraham, 2006).

In this paper, I carry out a literature review of the financial literacy concept to delineate the evolution of the conceptualization of the term as established by prominent authors in the subject. Building on this research, I identified critical aspects of the concept; areas covered, measurement methods and approaches, factors taken into account when evaluating the level among populations, and contexts studied. Based on previous research outcomes, I provide a conceptualization that encompasses the relevant elements encountered. Overall, the results suggest that financial literacy is a broad concept that may help the economic situation of individuals and their environment if individuals receive education since

early stages of their lives as it encompasses a diversity of subject areas which impact the financial behavior of people.

The remainder of the paper is structured as follows. First, I explain a detailed methodology employed in the literature review carried on this research about the term financial literacy. Then, I discuss the research findings based on the literature review separated by five major areas. The first one established the importance of the topic and how it has been growing and gaining importance in the literature. The second one provides the evolution of the term as given by the prominent authors in the subject and a brief argument of its progress. The third one exposes the areas covered and analyzed under the terminology. The fourth one mentions the factors taken into account when evaluating the financial literacy level of previous studies. The fifth one discloses the measurement methods and issues faced by previous research. Finally, I conclude with a discussion of the lessons learned and the implications for practice and future research.

### **METHODOLOGY**

In order to identify the state of conceptualization of the financial literacy concept and levels of analysis in the field, an integrative literature review was conducted following the methodology of Torraco (2005; 2016). The literature review shall describe the author's strategy for selecting the literature included in the study, i.e. the criteria for retaining or discarding the literature yielded by the searches (Torraco, 2005).

As a first step, the concept Financial Literacy was determined as the relevant research topic, I found the Financial Literacy concept as an important field of study because of the benefits it can provide to individuals with higher levels of knowledge in this area that bears much potential for research. In the next step, the concept was determined as the jointed keywords to be used in this research. The goal was to provide an overview of the relevant and current research literature that defines the concept and subject areas analyzed under this terminology.

For this search, I used databases of academic literature such as EBSCO, ProQuest, Scopus, Web of Science and Google Scholar. In order to identify the articles that fit the research topic and eliminate all irrelevant articles, a search and selection procedure was determined based on pre-defined criteria. I focused the research on works published in the English language and it does not cover books or non-academic research papers.

Out of the papers identified based on the previous keywords "Financial Literacy" and "Review", in a second step, I eliminated all papers that were not relevant for Financial Literacy Research and duplicated articles. This methodology yielded 26 research articles in

total. The references of the selected articles were then examined, via snowballing technique, to find relevant literature related to the target concept. The articles were kept if the words “Financial Literacy” appeared in the articles’ title. Additionally, I kept the articles cited more than two times in the first selected articles. Finally, I retrieved those articles that were cited as providers of the financial literacy definition in the first selected articles.

For this research the main focus was the provided definitions of the financial literacy concept across time as part of the central analysis of this research, additionally I reviewed the areas taken into account when evaluating the financial literacy in studies, and the influence factors affecting the level of financial literacy in the individuals; this information was mostly retrieved from the introduction, discussion and conclusion sections of the works reviewed.

## **DEVELOPMENT**

### *Importance of the Financial Literacy Concept*

The importance of financial literacy and knowledge of financial products and services has gradually increased (Deepak & Kumar, 2015; Cichowicz & Nowac, 2017). The financial crisis of 2007 shifted attention of the world towards the importance of financial literacy to ordinary and sophisticated investors (Abdullah & Chong, 2014, Kebede & Kuar, 2015). Another factor that enhances the development and importance of financial literacy is the growing number of workers approaching retirement (Kamakia et al. 2017) and the shift of retirement responsibility from government to individuals (Refera & Kaur, 2016). Finally, another aspect worth to mention is the current complexity of financial instruments and the financial decisions faced in everyday life; individuals must know how to think financially to compare credit cards offerings, to choose payment methods, to decide how much to save and where to invest, and how to get the best loan (Lusardi, 2008).

Lack of financial knowledge leads to poor choice and decision making, which can result in undesired financial and economic consequences to the individual, financial system and the general economy (Refera, et al. 2016). Previous research reveals that a great number of people worldwide is financially illiterate (Kamakia, et al. 2017). Severe consequences people have faced because of their lack of knowledge especially about investing in financial markets (Abdullah & Chong, 2014).

Financial security can only be achieved when population is considered financially literate (Taylor & Wagland, 2011), when financially prepared individuals face challenges such as personal bankruptcies, health issues, early retirement, job losses, among others, the well are able to overcome them with more ease than poorly financially prepared individuals

(Kamakia et al. 2017). Therefore, financial literacy leads to correct financial decision making and independence (Charitha, 2018).

Different actors i.e. policy makers, scholars, and researchers agree that financial education for the youth is of vital importance of financial well-being of individuals, families and the nation as a whole (Totenhagen et al. 2015). As the government and employers shift responsibility for saving and investing to workers it has become important to enhance their knowledge through guidance to face this duty (Lusardi, Mitchell & Curto, 2010; Van Rooij, Lusardi & Alessie, 2011). Poverty is meant for lack of awareness of financial products and services (Nanda & Samantha, 2018). Households with higher levels of financial literacy are better at reacting to a shock like the financial crisis (Bucher-Koenen, T., & Ziegelmeier, 2011).

#### *Evolution of the Financial Literacy Concept*

There is confusion regarding the definition of the term financial literacy (Faulkner, 2015). Numerous authors have pointed out a lack of a clear and generalizable definition of the financial literacy term (Taylor & Wagland, 2011; Selim & Aydemir, 2014; Deepak et al. 2015; Faulkner, 2015; Kimiyaghalam & Safari, 2015; Cichowicz & Nowac, 2017; Charitha, 2018). The lack of a consensus may be originated because different actors have defined the term; e.g. researchers, academics, universities and financial organizations (Charitha, 2018) since its origins around the '90s. According to Remund (2010), a clearer definition would improve future research, as it would provide the basis for the studies in the areas to cover, the measurement aspects and so forth.

Selim and Aydemir (2014) highlighted that definitional issues should not be ignored since a well-structured definition represents the nucleus of the operationalization, therefore, they proposed that studies should primarily describe financial literacy before proceeding to another stage of research. Differences in the definitions had led to different measurements which in turn have caused mixed results (Kamakia et al. 2017). Thereupon, to prevent future inconclusive results, the current research provides the evolution of the financial literacy term to discuss its progress and provide future directions. As a starting point, Table 1 presents the definitions provided by researchers when developing a financial literacy study according to the literature review carried out in this research. I only take into account definitions given by the authors conducting the study, this excludes definitions by authors citing other authors in order to maintain the exact same words given by the author defining the concept.

Table 1. *Evolution of the conceptualization of the financial literacy term.*

Year	Author	Definition
1992	Noctor, Stoney, & Stradling.	Ability to make informed judgments and to take effective decisions regarding the use and management of money.
2005	OCDE	Process by which financial consumers or investors improve their understanding of financial products and concepts 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.
2008	Servon, & Kaestner.	Person's ability to understand and make use of financial concepts.
2009	Hung, Parker, & Yoong.	Knowledge of basic economic and financial concepts, as well as the ability to use that knowledge and other financial skills to manage financial resources effectively for a lifetime of financial well-being.
2010	Agarwal, Amromin, Ben-David, Chomsisengphet, & Evanoff.	Ability to acquire sufficient information about financial concepts and instruments in order to make informed financial decisions
2010	Remund.	Measure of the degree to which one understands key financial concepts and possesses the ability and confidence to manage personal finances through appropriate, short-term decision-making and sound, long-range financial planning, while mindful of life events and changing economic conditions.
2010	Huston.	Financial literacy has an application dimension which implies that an individual must have the ability and confidence to use his/her financial knowledge to make financial decisions. It is composed of two dimensions: understanding (having sufficient financial knowledge) and application (applying this knowledge appropriately).
2011	Cull, & Whitton.	It is a broad term and encompasses a basic level of knowledge and skills in areas such as superannuation, taxation, estate planning, home ownership, investments, debt and risk management, annuities and welfare benefits.
2012	Vieira.	Ability to understand matters of financial nature, consisting in the set of skills and knowledge that allows an individual to make informed and effective decisions through their understanding of finances.
2012	Atkinson, A. F., & Messy, F.	Combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial well-being.
2013	Bhushan, P. & Medurey, Y.	Helps individuals to improve their level of understanding of financial matters which enables them to process financial information and make informed decisions about personal finance.
2013	Hastings, J.S., Madrian, B.C., & Skimmyhorn, W.L.	The term has taken on a variety of meanings; it has been used to refer to knowledge of financial products (e.g., the definition of a stock and a bond, the difference between a fixed and an adjustable rate mortgage), knowledge of financial concepts (inflation, compounding, diversification, credit scores), mathematical skills or numeracy necessary for effective financial decision making, and engagement in certain activities such as financial planning.
2014	Abdullah, M., & Chong, R.	Ability to make effective decisions regarding the use and management of money and other assets.
2014	Lusardi, A. & Mitchell, O.	Peoples' ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions
2015	Deepak, C. A., Singh, P., & Kumar, A.	Financial literacy gives consumers the knowledge and skill required to assess the suitability of various financial products and investments available in the financial market. This benefits the consumers by translating itself in benefits to the economy as a whole. Financial literacy is first and foremost about empowering and educating consumers so that they are knowledgeable about finance in a way that is relevant to their lives and enables them to use this knowledge to evaluate products and make informed decisions.
2015	Kimiyaghalam, F., & Safari, M.	A person's competence in money management.
2017	Cichowicz, E. & Nowak, A.,	Financial knowledge and skills of individuals in this area as well as their attitudes and their behaviour towards changes in the financial environment.
2017	Okello Candiya Bongomin, G., Mpeera Ntayi, J., Munene, J. C., & Akol Malinga, C.	Ability to obtain, understand and evaluate the relevant information necessary to make financial decisions and choices with an awareness of the likely financial consequences
2018	Amagir, A., Groot, W., Van Den Brink, H., & Wilschut, A.	Ways in which individuals understand, manage, and plan their personal finances. The definition comprises knowing what to do, the skills to be able to perform these actions, and the inclination to carry them out.

Along this research we have found Annamaria Lusardi as the most prominent author in the field; she was cited almost in all the papers retrieved and has almost seven papers that contain the financial literacy concept on the title according to this research (appearing as first author).

Even though the definition of the concept has been advancing, the main idea has prevailed. In its origins, in the 1990s, seminal authors in the topic talked about the ability of an individual to make judgements and effective decisions regarding the use of money. More than 10 years later, in the twenty first century, authors were talking about a process by which people acquires knowledge and develop the skills required to make those effective choices in this topic. After 2010, the level of definitions found in the literature increased exponentially, authors were talking about the measure of the degree to which individuals understand the key financial concepts and have the ability to apply it. Authors started mixing more and more subject areas such as awareness, different types of knowledge (e.g. financial products, concepts, etc), skills, attitudes, and behavior. Additionally, they started mentioning the areas encompassed by the term (taxation, home ownership, investments, debt, risk management, annuities, pensions). The latest years, authors highlighted that the knowledge does not have to be ample, individuals should have a basic level of knowledge in a wide range of areas that allow them to make informed decisions but highlighting the importance of the application of this basic knowledge to make informed decisions.

As a first attempt to provide a unified conceptualization of the term, I propose that authors should take into account the common aspects of all these definitions and conceptualize basing their definition on the following. Financial literacy encompasses the basic knowledge of concepts and products related to their usage of money throughout a person life, the skills to apply this knowledge and look for direction when requiring specialized guidance, their attitude and behavior towards the different areas that they should take into account when planning for their future.

#### *Areas of the Financial Literacy Concept*

The concept encompass several areas about finance, according to the research a broad array of elements integrate the financial literacy concept: planning or budgeting (Taylor & Wagland, 2011; Vieira, 2012; Totenhagen et al. 2015; Amagir, et al. 2018), savings (Chen & Volpe, 1998; Lusardi, 2006; Fortuna, 2007; Lindsey-Taliefero, et al. 2011; Taylor & Wagland, 2011; Vieira, 2012; Totenhagen et al. 2015; Refera, et al. 2016; Amagir, et al. 2018), investing (Chen & Volpe, 1998; Lusardi, 2006; Fortuna, 2007; Lindsey-

Taliefero, et al. 2011; Taylor & Wagland, 2011; Cull & Whitton, 2011; Deepak et al. 2015; Totenhagen et al. 2015; Amagir, et al. 2018), spending (Taylor & Wagland, 2011; Vieira, 2012; Amagir, et al. 2018), borrowing (Chen & Volpe, 1998; Fortuna, 2007; Lindsey-Taliefero, et al. 2011; Refera, et al. 2016), insurance (Chen & Volpe, 1998; Fortuna, 2007; Refera, et al. 2016; Amagir, et al. 2018), and planning for retirement or superannuation (Lusardi, 2006; Taylor & Wagland, 2011; Cull & Whitton, 2011; Collins & O'Rourke, 2012; Vieira, 2012; Deepak et al. 2015). Additional scarce elements in the research about financial literacy involve taxation (Cull & Whitton, 2011), estate planning (Cull & Whitton, 2011;) and home ownership or mortgage loans (Cull & Whitton, 2011; Collins & O'Rourke, 2012).

Other researchers talk about debt management (Cull & Whitton, 2011; Taylor & Wagland, 2011; Lusardi & Tufano, 2015) or credit (Totenhagen et al. 2015; Refera, et al. 2016; Amagir, et al. 2018), areas that may be linked to borrowing, and the selection of financial products (Vieira, 2012) and handling financial risk (Taylor & Wagland, 2011) which may be linked to investing. Finally, few point out to areas as money management (Lindsey-Taliefero, et al. 2011; Refera, et al. 2016) which may encompass all the previous areas.

When talking about spending and borrowing, the credit card is one of the most common instruments used and it encompasses a broad spectrum of terms to understand for a proper usage (Shen, 2016), they can be so complicated that usage of credit cards may be one sub area of financial literacy.

As financial products and services evolved, individuals are increasingly required to learn about financial topics (Collins & O'Rourke, 2012). Some authors argue that all basic education should include a varied of topics pointing to planning or budgeting, saving, spending, investing and credit (Totenhagen et al. 2015; Amagir et al. 2018) being saving and investing the ones that need the greatest improvement (Lindsey-Taliefero, 2011).

Finally, Ratna et al. (2018) identified factors that affect the level of financial literacy and categorized them into three major dimensions: knowledge, financial attitude and financial awareness. The first dimension, knowledge, is about education and experience from the individual (it may encompass the understanding the functioning of financial products). The second one, financial attitude, incorporates the behavior of the individual toward financial topics or areas; e.g. when to save or spend (Vieira, 2012). The last dimension, financial awareness, encompass some of the areas of interest mentioned above (e.g. saving, investing, and planning for retirement).



Based on all these areas covered in the studies analyzed, I resolve that first individuals must plan all their current and future income and expenses. Then one can define that the broad areas covered under this terminology are spending, saving, investing. In the third level of analysis one can subcategorize these areas into specific domains; e.g. under the saving area one can consider saving for retirement. However, some of the specific domains can mixed two or more broad areas; e.g. one can save for retirement and invest those savings in a portfolio to gain interest along time.

#### *Factors considered in Financial Literacy Studies*

Ratna et al. (2018) provides a long list of factors that influence the financial literacy according to a literature review of 25 studies. Some can be summarized as demographic factors (e.g. gender, income level, education, age, nationality, race, marital status, occupation, religiosity, culture, among others.) additionally, there are some others that can be comprised as previous experience on the subject (money attitude, knowledge product and service, perception and opinion, and so on). Deepak et al. (2015) highlights the importance of identifying predictors of financial literacy and establishes that the most important are financial education, cognitive ability, maturity and family background.

Deepak et al. (2015) have conclude that the major factors of financial literacy are financial knowledge, financial behavior and financial attitude. Compen et al. (2018) emphasizes the importance of financial attitude and behavior and avoiding the solely focus on knowledge when evaluating financial literacy. Is also recommendable to include additional factors rather than just gender, age and field of study as there is a large literature on its effect on the level of financial literacy (Cull & Whitton, 2011; Selim & Aydemir, 2014; Kebede & Kuar, 2015; Ratna et al. 2018).

One interesting study is the one of Lusardi & Mitchell (2007) who compared between two cohorts of people close to retirement on two different periods. These authors analyzed people around the same ages but in different periods of time to enrich their findings; additionally, they also included in their variables the ethnicity and levels of income of the participants. Their results suggested that conclusions do not change over time; people with least education remain in the lower rankings of wealth across time.

Another interesting factor analyzed was the channel through which people acquire their financial knowledge. Chen and Volpe (2002) analyzed where the financial education came from and came to the conclusion that as 70% acquired them from their parents is the reason why Americans (and individuals in general) are not knowledgeable in this area.

### *Measurement methods and issues in Financial Literacy Studies*

Researchers commonly employ questionnaires to test the financial literacy of individuals (Fortuna, 2007; Lindsey-Taliefero et al. 2011; Charitha, 2018). The questionnaires often encompass financial literacy areas (e.g. saving, investing, borrowing, etc.) questioning mainly about knowledge, as well as, demographic factors. The processing of the data extracted from the surveys has primarily been done by cross-sectional or longitudinal methods with regression analysis (Lindsey-Taliefero et al. 2011).

However, Financial literacy has been measured in several different ways (Selim & Aydemir, 2014), a unified financial literacy conceptualization is urgent to unify its measurement (Kimiyağhalam & Safari, 2015) and compare among studies to provide generalizable findings. Issues of comparison arise as researchers measure financial literacy differently because of their different perspectives (Deepak et al. 2015; Kimiyağhalam & Safari, 2015).

### **CONCLUSIONS**

Throughout the evolution of the term it has been found that in most of the definitions the financial literacy concept has encompassed the basic knowledge of concepts and products related to their usage of money throughout a person life, the skills to apply this knowledge and seeking for direction when requiring specialized guidance, as well as the attitude and behavior toward the different areas that individuals should take into account when planning for their future.

According to the current literature review, the financial literacy concept encompasses the following financial areas focused on the individual perspective: planning or budgeting, saving, investing, spending, borrowing, insurance, and planning for retirement or superannuation. Other elements found in lesser proportion in the literature may involve taxation, estate planning and home ownership or mortgage loans; which can be a sub-area of the first mentioned.

Based on all these areas covered in the studies analyzed, I resolve that individuals must plan all their current and future income and expenses. Then we can determine that the broad areas covered under this terminology are spending, saving, investing. In the third level of analysis we can subcategorize these areas into specific domains; e.g. estate planning may be related to savings. However, some of the specific domains can mixed two or more broad areas; e.g. mortgage loans and home ownership may be related to saving, investing and spending. We can conclude that all the major areas of the financial literacy concept are interrelated and cannot be teach, developed and evaluated separately.

### *Suggestions for future research in Financial Literacy Studies*

Refera, et al. (2015) proposes that researchers develop a framework and instrument applicable to a particular context as this will facilitate better survey results through a contextualized conceptualization of the construct, dimensions, items, measures, scoring approach, analysis and interpretations. I better recommend researchers to base their studies on the strongest conceptualizations of the term and most utilized scales to generalize across contexts and time. I provide an attempt to unified this definition and areas covered.

Previous studies have recommended to researchers to analyze different predictors of the financial literacy beyond demographics (Selim & Aydemir, 2014). Additionally, Kebede & Kuar (2015) declare that most of the studies measuring financial literacy do not include the ultimate impact on individuals, the performance of the financial institution and the overall economy. When researchers evaluate the financial literacy level of a population generally, they make comparisons based on demographic factors and compare among regions without going further in the analysis testing if financially literate individual really benefit from their knowledge, behavior and attitude towards their financial decisions. Finally, Johnson and Sherraden (2007) propose that not only knowledge and skill are important in the financial literacy field, they proposed the financial capability as an important subject matter, authors should include in their analysis the access to financial institutions and saving incentives; among others.

Finally, future research can employ different statistical methods to analyze the phenomena, e.g. an interesting approach for this research topic could be spatial analysis, one can analyze if the level of knowledge in certain groups is related to its neighbors and the areas where knowledge is concentrated.

### *Limitations*

The current research is not without limitations. The wide range of studies published under the concept financial literacy and similar concepts is the first obstacle when reviewing the literature in the subject. Future research can analyze similar concepts to determine if they can be unified or highlight their differences in conceptualization and areas covered. Additionally, I limited this research to works published in English Language, one can find several studies in a diverse of languages that could enrich the conceptualization.

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