

Financial literacy and its dimensions

الثقافة المالية وأبعادها

Mohamed Sadek ZAIBET*, Constantine-2- University, Algeria.

mohamedzaibet@yahoo.fr

Dr. Cherabi Imed, Constantine-2- University, Algeria.

imedcharebi@gmail.com

Date de réception: (16/07/2020) , Date de révision: (12/08/2020), Date d'acceptation : (16/09/2020)

Abstract :

ملخص :

This paper sheds light on Financial literacy of individuals, due the great importance on this subject from the international organizations and institutions, through their massive contribution on this issue, in order to emphasis the necessity of being financial literate and its importance for achieving financial well-being among individuals, also ensuring the proper functioning of economy as a whole. We mention among these organization and institutions, which have worked on the same field, Organization for economic cooperation and development (OECD), Financial services authority, The World bank, Jump-start from USA. This study has focused on the most important concepts of financial literacy, and its dimensions which are: financial education, financial attitudes, financial behavior, financial capability, it has also determined the relationship between these dimensions, and how can we use them for measuring financial literacy among individuals.

Keywords : financial literacy, financial dimensions, financial education, financial attitudes, financial behavior, financial capability.

هدفت هذه الدراسة الى تسليط الضوء على موضوع الثقافة المالية للأفراد، وذلك بسبب الأهمية الكبيرة التي يحظى بها الموضوع على الصعيد الدولي، ويظهر هذا من خلال الدراسات التي قامت بها هيئات ومنظمات عالمية كمنظمة التعاون الاقتصادي والتنمية (OECD)، هيئة الخدمات المالية البريطانية (FSA)، البنك العالمي، منظمة JUMP START الأمريكية.....، بهدف إبراز ضرورة وحتمية التنقيف المالي للأفراد من أجل ضمان الرفاهية المالية للمجتمع وضمان السير الحسن للاقتصاد ككل، حيث تناولت هذه الدراسة معظم المفاهيم الأساسية المرتبطة بالثقافة المالية، وكذا الأبعاد الرئيسية المكونة لها والمتمثلة في التربية المالية، العادات المالية، السلوك المالي، الكفاءة المالية، كما تضمنت هذه الدراسة علاقة هذه الأبعاد مع بعضها البعض وكيفية الاعتماد عليها في قياس مستوى الثقافة المالية للأفراد.

الكلمات المفتاحية: الثقافة المالية، ابعاد الثقافة المالية، التربية المالية، العادات المالية، السلوك المالي، الكفاءة المالية.

INTRODUCTION:

The importance of financial literacy has increased in recent years, as a result of financial market developments and demographic, economic and policy changes. Financial literacy is especially important in times where increasingly complex products are easily available to a wide range of the populations, for example, with governments in many countries pushing to access to financial services, the number of people with bank accounts and access to credit products is rising rapidly, moreover, changes in the pension landscape transfer decision-making responsibility to participants who previously relied on their employers or governments for their financial security after retirement, all of these factors and more have made it essential for individual to be financial literate in order to improve their financial well-being, because financial ignorance carries significant costs, consumers who fail to understand the main financial concepts(rates interest, inflation, earn and manage money, borrowing, investing, assurance, preparing for retirement.....), they assume more risks when they deal with financial issues, that can affect their financial welfare. The purpose of being more financial literacy is built a strong range of consumers or investor with various tools, knowledge and skills that will improve their financial decision-making in the correct way for achieving their financial well-being.

This article purpose is giving more information and illustrate financial literacy, how we can get it and how we can measure its dimensions, basing on previous researches which have served the same topic and issue of financial literacy from other angles, whether these researches were quantities or qualities, among these studies we mention some of them; financial literacy around the world(Leora Klappe, Annamaria Lusardi, Peter Oudheusden, 2015), improving financial literacy(OECD, 2005), financial capability survey around the world(The World Bank,2013), financial literacy empowerment in the stock market(Ali Saeed, Meysam, 2018), improving financial literacy(Deniss Rabisinski, 2015), to study the level of financial literacy and its impact on investment decision(M.s Harsha Vijaykumar Jariwala, 2013), financial literacy among university students, evidence from Ghana(Kwame Mireku, 2015), measuring financial capability(financial services authority, 2005), from financial literacy to financial well-being(S.Hephazibah, 2017), exploring the importance of financial literacy within the capability approach framework(Arief, 2018), effect of financial literacy on personal financial management practices(Maina, Jhon Kennedy Monyoncho,2010), all of these study and others from worldwide, have played a big role to emphasis the necessity and the importance of financial literacy, which has a the most impact on financial well-being to individuals.

So from these researches our study came, which has attempted to collect the main financial literacy's concepts, financial literacy's dimensions and the interaction between them, and how can measure this dimensions.

Depending on the previous researches above which allowed us to do this descriptive study, we can pose the following question: " what is financial literacy and its dimensions?".

2. What is financial literacy:

Although different sources provide different definitions of financial literacy, a consistent theme runs through them "an individual's ability to acquire essential knowledge and skills to make decisions with awareness of the possible financial consequences, however it is important to elaborate on what knowledge and skills are considered essential" (Deniss rablsendki, 2015, p4).

Remund provides a very basic definition of financial literacy, 'financial literacy relates to a person's competency for managing money, further, Remund conducted a review research studies identified five categories where the conceptual definition of financial literacy fall (Remund, 2010,p277) :

- Knowledge of financial concepts.
- Ability to communicate about financial concepts.
- Aptitude in managing personal finances.
- Skill in making appropriate financial decisions.
- Confidence in planning effectively for future financial needs.

OECD defined financial literacy as "the essential knowledge and understanding of financial concepts and risks, and the skills, motivations and confidence to apply such knowledge and understanding in order to make effective decision across a range of financial context to improve financial well-being of individuals and society, and to enable participant in economic life"(Ali saeedi, 2018, p4).

Ray morgan stated, it can be extended as "enabling people to make informed and confident decision regarding all aspects of their budgeting, spending and saving, and their use of financial products and services, from everyday banking through to borrowing investing and planning for the future"(Kwame mireky, 2015,p13).

The president's advisory council of financial literacy in the United States, defined financial literacy as the ability to acquire knowledge and skills for use it to manage financial resources for lifetime and for one's financial well-being (President's advisory council on financial literacy, USA, 2008).

OECD reports that financial literacy is the combination of consumer's/investor understands of financial products and concepts and their ability and confidence to appreciate 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. Financial literacy is described as the ability to make informed judgements and take effective decisions regarding the use and management, it identifies four areas of competence, namely, mathematical literacy, financial understanding, financial competence and financial responsibility (Maina, 2010, p11).

Hogarth explained financial literacy as "the ability to read, analyze, manage, and communicate about the personal financial conditions that affect material well-being, it includes the ability to discern financial choices, discuss money and financial issues, plan for the future, and respond competently to life events that effect everyday financial decision, including events in the general economy (MS.Harsha, 2013,p14). As you can see, there are many different definitions of financial literacy, what is common among them is the ability to acquire knowledge and skills allowing individuals make informed decisions concerning financial life.

3. The importance of financial literacy:

Several research have demonstrated the importance of financial literacy, Danes and Hira" states that financial literacy can turn consumers into responsible and empowered market player, motivated and competent to engage in financial behaviors that increase their own welfare. A number of writers have noted that improving financial literacy can benefit all level of the economy and will support the financial services sector, social and economic exclusion will also be reduced, spending power, innovation and competitiveness will increase and loan defaults will decrease (Danes and Hira,1987,p5).

According the OECD, DFID, world bank, financial literacy is especially important in our modern era for three main reasons, first, the recent financial crisis has reduced

access to credit and increased its cost in many development country markets, just as it already has in the united states and Europe, second financial literacy can help to prepare consumers for tough financial times, by promoting strategies that mitigate risk such as accumulating saving, diversifying assets, and purchasing insurance, third, financial literacy can reinforce behaviors such as timely payment of bills and avoidance of over-indebtedness, that can help consumers maintain their access to loans in tight credit markets.

As result of that we can describe the important benefits of financial literacy to consumers and investors, as follows (Capuano and Ramsay, 2011) :

- saving and retirement planning : financially literate people have a greater capacity to save for retirement, this is achieved by financial efficiency which results in saving money, making an effort to set aside money and enhanced ability to set realistic retirement goals, and select suitable investment to realize those retirement goals, a better informed consumer will save for the future, for retirement and for unforeseen circumstances and emergencies.
- life skills and bargaining power: the realization of good financial behavior is achieved through the development of knowledge and skills, which provides the basis for making informed decisions; the European commission has recognized that financial literacy gives consumers greater bargaining power through understanding finance and terms in consumer contract, consumer can gain better deals and demand more from services providers.
- Financial capability: financial literacy results in financial capability refers to the use of financial products and investing without waste and unnecessary cost, financial capability can include selecting the best value product and services on the markets with the lowest suitable possible price.
- Activity in financial market: financial literate consumers have been seen to possess more financial product and productive investors, limited financial market participation may be consequence of low levels of financial literacy, Lusardi and Alessie find that people with low levels of financial literacy are significantly less likely to hold shares and stocks.
- consumer rights and regulatory intervention: education in consumer laws and fraudulent schemes is a component of financial literacy, this knowledge gives people the tools and understanding to identify and avoid fraudulent schemes and reduce the severity of falling victim to such schemes, this translates into lower levels of regulatory intervention because consumers are better able to take care of themselves, a financially capable person knows where to go for help.
- greater competition, innovation and quality products:

Financially literate people are more financially efficient, seeking and purchasing better, cheaper and more appropriate products and services can drive efficiencies in the financial literacy.

This leads to increased competition, better quality products and greater innovation and diversity in the market, knowledge of consumer rights and contracts also allows consumers to evaluate products more carefully and as a result demand more from suppliers.

- self-funding of retirement : the increased saving and retirement planning resulting from increased financial literacy also had positive effects on the financial system and economy, by reducing the burden on the state to provide pensions and government funding for people experiencing financial hardship, instead, people are more willing to build wealth during their working lives to fund retirement.

- Understanding of government financial policies:

Financially literate people are also able better to assess financial policies of government and the actions of financial institutions, this creates better-informed citizens who are able to make sense of policy reform to the financial sector. Financial literacy promotes understanding and acceptance political reforms, such as health care or pension reforms, while many political reforms are highly complex, transparent financial sector reforms which can be understood by an informed public are important because they give the public the ability to critic government policies.

4. Scope of financial literacy:

Roy morgan research explained the scope of term "financial literacy" is not limited up to mathematical literacy and standard literacy, but also includes knowledge and understanding, behavior, attitudes, perceptions, and awareness towards financial world, this includes (Roy Morgan,2003,p10):

- mathematical literacy and standard literacy
 - essential mathematical, reading and comprehensions skills.
- financial understanding
 - understanding of what money is and how can exchanged.
 - understanding of where money comes from and goes.
- financial competence
 - understanding financial records and appreciating the importance of reading and attitudes to
 - money and saving.
 - awareness of risks associated with some financial products and appreciation of the relationship
 - Between risk and return.
- financial responsibility
 - ability to make appropriate personal life choices about financial issues.
 - understanding consumer rights and responsibility.
 - ability and confidence to access assistance when things go wrong.

5. The four dimensions of financial literacy:

Financial literacy means different things to different people, and this reflected clearly in the many definitions use in the literature, for some it is a broad concept, including an understanding of economics and how household decisions are affected by economic conditions and circumstance. For others, it focuses quite narrowly on basic money management : budgeting, saving, investing and insuring, globally, there are some expressions that are applied interchangeably, financial education, financial behavior, financial capability, are three important expressions that can be found in the language of international or national organizations, they use it for expressing about financial literacy, but in fact these terms are component of financial literacy, and these components plus another component which is financial attitudes, regarding with financial behavior , all of theme in the reality are the principal dimensions of financial literacy. We try now to clarify these dimensions one by one, with necessity to mention the role and relationship between theme.

Figure2: financial literacy's dimensions

Financial literacy's dimensions

Financial education	Financial attitudes	Financial behaviour	Financial capability
<ul style="list-style-type: none"> ● knowledge of financial concepts (inflation, compound interest etc....) ● awareness of financial products and services ● Practical know-how, how to make payments, how to open a bank account etc.. ● skills (numeracy literacy) 	<ul style="list-style-type: none"> ● reason for or for not saving, borrowing, investing, etc.. ● attitudes towards the future ● confidence in own plans for old age ● proclivity towards budgeting, saving, lending etc.. 	<ul style="list-style-type: none"> ● money management, managing day to day finances ● long term planning, preparing for emergencies and retirement ● financial decisions-making ability to choose appropriate financial products ● seeking financial advice 	<ul style="list-style-type: none"> ● efficiency in managing money ● efficiency in planning for the future ● efficiency to take the best choices between a bunch of financial choices ● efficiency to make the optimal financial decision ● efficiency in managing all the issues related about the money

Source: The World bank, 2013, p2.

5.1 financial education:

OECD defined financial education as the process by which financial consumers or investors improve their understanding of financial products, concepts and risks, through information instruction and objective advice, develop skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where go for help in financial issues, and to take other effective actions to improve their financial well-being.

Briefly, it is where information involves providing consumers with facts data and specific knowledge to make them aware of financial opportunities, choices and consequences, instructions involve ensuring that individuals acquire the skills and ability to understand financial terms and concepts, through the provision of training and guidance, and advice involves providing consumers with counsel about generic financial issues and products, so that they can make the best use of the financial information and instruction they have received.

Financial education enhances and influences financial knowledge, attitude, and behavior. For instance, Flecher completed a pre and post assessment of financial knowledge, attitudes and behaviors to evaluate the effectiveness of low state’s personal finance workshop, and found that participants had improved in knowledge, attitudes and behavior. Increased financial knowledge is also found to influence student’s attitudes positively toward business in general and their ability to be wise consumers in society, financial education should be considered a concept that promotes financial literacy (Kwame Mireku, p21).

5.2 financial behavior:

In order to define financial behavior, it would be useful to define the concept of behavior itself in this context. behavior is the actions and reactions of a person in response to external or internal stimuli , in addition field consumer or investor attempts to understand an explain their decisions by combining the topics of psychology and consumption/investing on a micro level and a macro level in financial markets, therefore financial behavior can be defined simply as follows : financial behavior describes the actions and reactions(decisions and judgments) of consumers/investors during financial planning and financial management process in response to external or internal stimuli in the financial life (Ali saeedi,2018, p21).

Financial behavior examines the decisions-making approach of individuals including cognitive and emotional biases, financial behavior makes the premise that wide range of qualities and quantities issues influence the decisions making process, various laboratory, survey and market studies in financial behavior show that individuals are not always rational and apply the descriptive model from the social sciences that documents how people in real life make judgments and decisions, a basis of descriptive model is that consumer and investors are affected by their previous experiences ,tastes, cognitive issues, emotional factors, the presentation of information, and the validity of data, individuals also make judgments based on bounded rationality, bounded rationality is the premise that a person reduce the number of choices to a selection of smaller shortened steps, even when this oversimplifies the decisions-making process, according to bounded rationality, an individuals will select as satisfactory outcome rather than the optimal one (H.Kent Baker, 2017, p5).

5.3 financial attitude:

Financial attitudes is defined as a state mind opinion, and judgment about finance (Pankow,2012),these things are parts of attitude which are inseparable from the human mind that can influence the financial decision making that affects financial satisfaction.

Financial attitude can be also defined as personnel inclination towards financial matters, it is an ability to plan ahead and maintain a savings account that matters. In order to enhance financial literacy among generations, the focus should be on developing favorable financial attitudes among the people of the country(Bhushan and Medury,2014), the only real benefits of any financial education programmer can be achieved,(Ayzen,1991) identified that financial attitudes are the outcome of certain behavior of a decision-maker and the attitude can be entrenched through their economic and non-economic beliefs,(Ibrahime and Alqaydi,2013) concluded that education can improve personnel financial attitude, financial attitude and financial behavior, can also affect financial well-being, there are a lot of research concluded that there is a link between financial attitudes and financial literacy, these research indicate that attitudes towards money, may frame financial literacy among people, people's positive attitude towards finance and money can affect their behavior to achieve financial literacy and enhance financial knowledge. But negative attitude will weaken their financial decision-making power.

The aforementioned literature review supports that financial attitude is a necessary determinant to identify financial literacy of individuals, and it also influences the level of financial literacy.

5.4 financial capability:

The world bank defined financial capability as the internal capacity to act in one's best financial interest, given socio-economic environmental conditions, it

encompasses the knowledge, attitudes, skills and behavior, that means the ability to use all of them in the correct way, to managing their resources, understanding, selecting and making use of financial services that fit their needs (The world bank, 2013, p1).

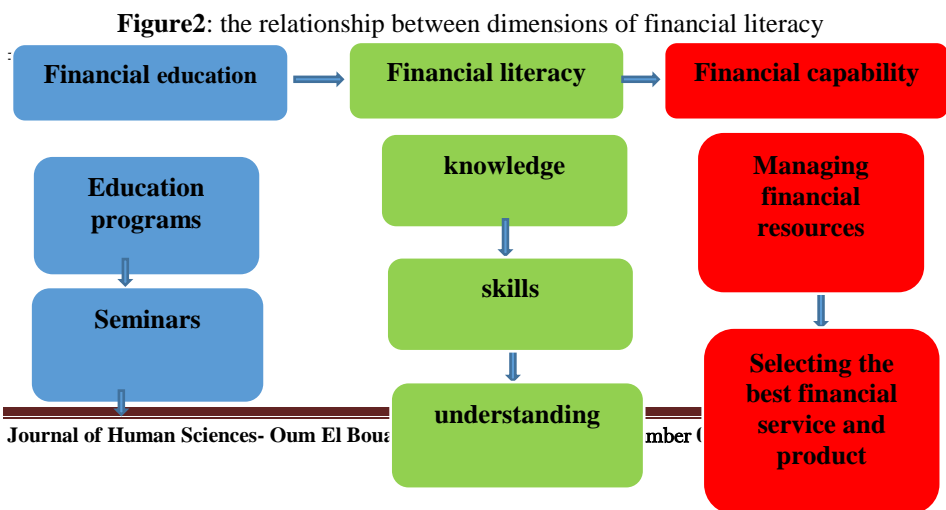
Financial capable people are able to make informed financial decisions, they can numerate and can budget and manage money effectively, they understand how to manage credit and debt, they are able to assess needs for insurance and protection, they can assess the different risks and returns involved in different saving and investment options, they have an understanding of the wider ethical, social, political and environmental dimensions of finances (Financial services authority, 2013, p13).

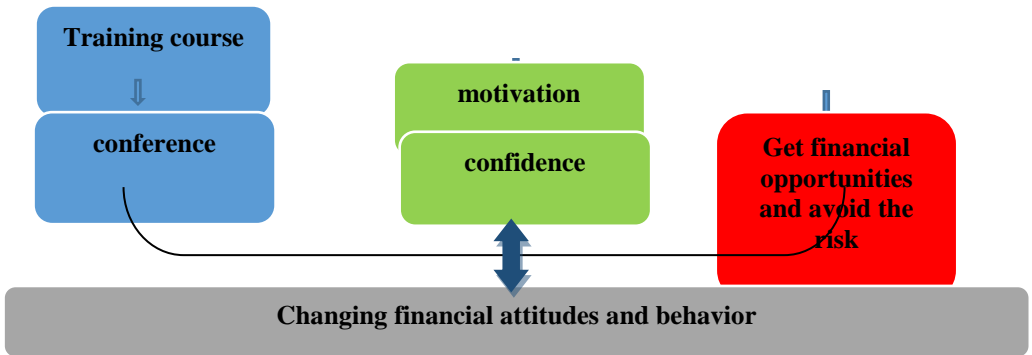
Financial capability is the ability and opportunity to use knowledge and skills implied in financial literacy, financial capability includes day to day management and planning for the future (Monique Colen, 2011).

Kepson and her colleagues developed a model of financial capability emplacing behavior, while recognizing knowledge and attitude components, they describe five domains of personal finance, making ends meet, keeping track, choosing products, planning ahead, staying informed and getting help (Jennifer Robson, 2012).

Financial capability is a broad concept encompassing people’s knowledge and skills to understand their own financial circumstances, along with the motivation to take action, financially capable consumers plan ahead, find and use the information, know when to seek advice and can understand and act on this advice, leading to greater participation in the financial services market. Financial capability is about bringing together informed clients with appropriate products in the marketplace, financial capability means being able to manage money keep track of your finances, plan ahead, choosing financial products and staying informed about matters (Hephzibah Priyadharhini,2015, p31).

As a summary of what is being mentioned, the following schema can illustrate the relationship between these dimensions, in order to simplify how they work with each other, for achieving the main goal of financial literacy;





From the schema above, we can understand there is a strong relationship among these dimensions, which interact with each other, in order to achieve the main goal of being financially literate, so the first step to start building financial literacy and get more financial knowledge is the financial education, which boosts, teaches and make people more conscious about financial issues, that confront their financial well-being and security through the daily life. Moreover financial education give to individuals the essential financial concepts, which they need them to improve their financial awareness and cognitive, in order to use them when they deal with money. That step or phase transforms people from financial illiteracy to financial literacy, which is the second and essential step, it is consists of, financial knowledge, financial skills, financial understanding, financial motivation, and financial confidence, all of them they allow individuals to practice efficiently their acquaintances and awareness in financial life, especially in this step appear the phase of financial capability, that means there is the opportunity and the ability to managing financial resources, selecting the best financial service and product, get financial opportunity and avoid risk, seeking for the financial information and advice and know where they can find it, in this phase we reach the whole goal of financial literacy which is financial efficiency. Further, there is another dimension which are always related with the previous dimensions and it accompanies them in all stages, this dimension is financial attitudes and behaviors, that works in interchangeably shape where it affects the other dimensions and it is affected by them.

6. Measuring financial literacy's dimensions (The world bank, 2013, p2-3-4):

6.1measuring financial knowledge (education):

One aspect of financial literacy that is often measured is financial knowledge or the level of financial education among people in general, for surveys of financial knowledge, this means identifying specific knowledge gaps and potential target population groups for financial education programs, studies of financial knowledge measure the following three concepts:

- knowledge of fundamental financial concepts;
- awareness of product and services offered by different financial service providers and understanding the risks associated with using the product and services;
- understanding how to manage personal finances or use financial services.

Studies that assess financial knowledge of financial concepts generally look at key economic concepts deemed important for navigating the formal economy, including inflation, interest rates, risk diversification, and taxation.

6.2measuring financial attitudes:

Personal views, beliefs, or psychological traits can affect people's financial decision-making and consequently form a part of their internal financial literacy, according to some financial literacy surveys; finaccess, the special Eurobarometer 230, and the WB/Russia trust fund survey include examples of questions on attitudes.

A number of studies focus on motivations for financial behavior using scales developed in psychological research or simply by inquiring about the reasons for adopting certain kinds of behavior, these surveys ask about reasons for savings, borrowing, long term planning, and budgeting, among other indicators, the WB/Russia trust fund survey, for example, contains a set of questions that measure impulsiveness, attitudes toward the future, and achievement orientation, other studies, like Singapore national financial surveys, finaccess survey, and the special Eurobarometer 230 include questions about preferences toward or reasons for long-term planning, lending, saving, and day to day money management.

Attitudes can also be measured by assessing people's proclivity toward certain types of behavior, these studies look at people's tendencies to choose between financial products, prepare for emergencies and manage the risks, and save, invest and borrow.

7.3 measuring financial behavior:

Often financial literacy is expressed and measured in terms of behavior that result from the interaction of internal capabilities and external factors, in surveys that measure financial behavior objective is to identify weak areas of behavior and the least capable subgroup of the population, the types of financial behavior that are measured by surveys can usually be classified into four main areas; money management (managing day to day finances), long term planning (preparing for emergencies and retirement), selecting financial products (ability to choose appropriate financial products) and seeking advice.

Survey questions about money management generally focus on people's abilities to budget and spend within their disposable income, pay bills, borrow within affordable limits, use and manage their bank accounts, in order to measure people's long term planning behavior, surveys ask respondents about their savings behavior, including the frequency of savings, how would they adjust in case of unexpected drop in income and whether they have made any pension provisions or other plans for old age and other types of insurance.

6.4 measuring financial capability:

Financial capability means that individuals have the internal capacity to act in their best financial interest, given socioeconomic and environmental conditions, which can play an important role in constraining or facilitating individual financial capability, financial capability encompasses the ability to practice financial knowledge, attitude, skills and behavior with regard to managing their financial issues on the best way, understanding, selecting, and making use of financial services that fit their needs. Surveys of financial capability can measure some observable aspects of this internal capacity, as well as the interaction between internal capacity and enabling environment.

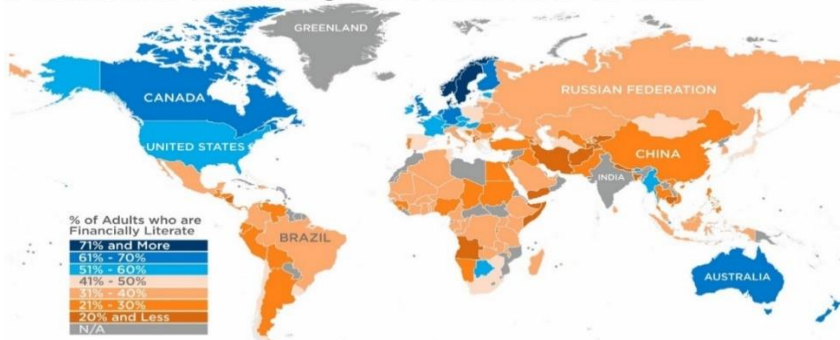
External factors that can affect how internal capacity manifests itself into actual behavior include financial resources, access to finance, social norms, and obligations, financial infrastructure, and existing financial consumer protection mechanisms, given its multidimensional nature, it is difficult to measure financial capability with a single indicator.

7. Financial literacy around the world:

Accordinging the study of Leora Kalpper, Annamaria Lusardi, Peter Van oudheusden, there are just 3-in-3 adults around the world show an understanding of basic financial concepts, although financial literacy is higher among the wealthy, well educated, and those who use financial services, it is clear that billions of people are unprepared to deal with rapid changes in financial landscape. Credit product, many of which carry high interest rates and complex terms, are becoming more readily available, governments are pushing to increase financial inclusion by boosting access to bank accounts and other financial services but, unless people have the necessary financial skills, the opportunities can easily lead to high debt, mortgage defaults, or insolvency, this is especially true for women, the poor, and the less educated, all of whom suffer from low financial literacy and are frequently the target of government programs to expand financial inclusion (Leora Klapper, Annamaria Lusardi, 2015) . The next map show the levels of financial literacy in each country around the world.

Figure3 : financial literacy around the world

Financial Literacy Around the World



Article & Sources:
<https://howmuch.net/articles/financial-literacy-around-the-world>
 Global Financial Literacy Excellence Center (GFLEC) - <http://gflec.org/>

howmuch^{net}

Source: <https://howmuch.net/articles/financial-literacy-around-the-world>

The countries with the highest financial literacy rates are Denmark, Finland, Norway, Sweden, Germany, united kingdom, Canada and Australia where about 65 percent or more of adults are financially literate, on the other countries with the average level of financial literacy we found united states, France, Switz, Belgium, Netherlands, Malaysia, Burma, Nepal, Botswana.

CONCLUSION:

Financial literacy has been increasingly researched in the past few years. There is a stream in the literature investigating the impact of financial literacy, financial literacy has always been important for consumers in helping them budget and manage their income, save and invest efficiently, avoid becoming victims of fraud. However, as financial markets become increasingly sophisticated and as households assume more of the responsibility and risks for financial decision, being financial literate is increasingly necessary for individuals, not only to ensure their own financial well-being, but also to facilitate the smooth functioning of financial markets.

The present study has tried to demonstrate the significance of financial literacy which is the first step for the financial health of individuals, the study has attempted to cover the essential concepts and issues of financial literacy, in order to identify what is it and why we need it , with mentioning its basic dimensions and how they interact with each other as component of financial literacy, finally the study has shown how

we can measure these dimensions among individuals, for the purpose of judging the level of financial literacy of individuals.

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