Master Degree Program in

MDDM

Data-Driven Marketing

How can financial literacy in Portugal be improved?

Rui Miguel Cunha Silva Eleutério

Dissertation

presented as partial requirement for obtaining the Master Degree Program in Data-Driven Marketing

NOVA Information Management School
Instituto Superior de Estatística e Gestão de Informação
Universidade Nova de Lisboa

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By

Rui Eleutério

Master Thesis presented as partial requirement for obtaining the Master's degree in Data-Driven Marketing, with a specialization in Marketing Intelligence.

Supervisor: Marlon Dalmoro

2023

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I hereby declare having conducted this academic work with integrity. I confirm that I have not used plagiarism, any form of undue use of information or falsification of results along the process leading to its elaboration. I further declare that I have fully acknowledged the Rules of Conduct and Code of Honor from the NOVA Information Management School.

Lisbon, 04th December 2023

Acknowledgements

I would like to express my deepest gratitude to my family for the encouragement, and understanding throughout this academic journey. Their continuous support and belief in my endeavours have been a constant source of strength.

To my girlfriend Bruna whose patience, understanding, and encouragement have been invaluable during this demanding period. Your unwavering support and belief in me have been a driving force in completing this thesis.

I extend my sincere appreciation to Professor Marlon Dalmoro for guidance, mentorship, and invaluable insights throughout the process of crafting this thesis. The expertise, encouragement, and constructive feedback have been instrumental in shaping my research and academic growth.

Thank you all, I am profoundly grateful for your contributions, support, and belief in my academic pursuits.

Abstract

Financial literacy is a crucial component of modern society, impacting individuals' ability to make informed financial decisions. This thesis explores strategies to improve financial literacy based on the three pillars of the concept: Knowledge, Attitude and Behavior. To formulate these policies, a comprehensive mixed-methods approach utilizing both primary and secondary data was employed. Alongside the examination of reports on Portuguese policies regarding financial literacy, ten interviews were conducted to gather diverse opinions and insights on the subject. From the interviews emerged a set of pivotal policies aimed at enhancing financial literacy: integration of financial literacy curricula in schools, regulatory reviews for consumer protection, a comprehensive educational marketing campaign, community-based initiatives, and tailored financial education for adults. The conclusions drawn from these policies are far-reaching. They underscore the potential positive impacts on financial literacy at various levels of society. Increased trust in financial institutions, improved knowledge dissemination from an early age, long-term economic stability, heightened public engagement in financial education, and tailored community interventions represent key implications. In sum, this research highlights the interplay between knowledge, attitudes, and behavior in the realm of financial literacy. It offers actionable policies drawn from interviews and emphasizes their potential to significantly advance financial competence, paving the way for a more financially empowered society.

Keywords: Financial literacy, Knowledge, Attitudes, Behavior, Policies

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1. Introduction

The decisions and financial risks taken nowadays by population are much more challenging than the ones taken by previous generations (Tavares, et al., 2022). For this reason, Financial Literacy has become an increasingly important topic in today's society and although there is no universal definition, it is considered a multidimensional concept based on several dimensions that contribute to a person's well-being. These dimensions are financial knowledge, financial attitudes and financial behavior (Potrich, et al., 2015) and will be explored with demographic variables in order to achieve the objectives of this study.

Although the number of studies on the subject is increasing, many studies have focused only on defining and measuring the literacy level of populations (Tavares & Santos, 2020) without presenting practical solutions to improve this skill. Altintas (2011) addressed this topic, of studies being focused only on defining and measuring, back in 2011 by identifying four "main categories" in which most studies on this topic fit together: studies measuring the level of financial literacy, studies assessing the impact of financial literacy on financial behavior and attitudes, studies assessing specific characteristics that largely influence the level of financial literacy, or studies assessing the effectiveness of curriculum in schools or educational programs.

So, this study took a different approach, the research question of this study is "How can financial literacy in Portugal be improved?" and in order to answer it, this study pursued a unique approach as the study did not solely rely on an exhaustive literature review; it also gathered diverse perspectives from ten individuals on methods to enhance financial literacy in the country. This research encompassed a qualitative study (an interview) involving individuals with relevant opinions and expertise in the domain of financial literacy. In order to make it easier for the respondents to answer, some options for conducting the interview were proposed, namely: in person, by Zoom, by email or through social media such as LinkedIn. In the second phase of this exploratory study, after the data is collected, it is processed and analysed to present valid and sustainable proposals that can be implemented to achieve the goal of the study.

The interviews conducted revealed five policies pertaining to financial literacy. These policies encompass the integration of financial literacy curriculum within school systems, a review of financial regulations aimed at enhancing consumer protection, the launch of a comprehensive educational marketing campaign, initiatives focused on promoting community-based financial literacy, and advancements in financial education tailored for adults beyond traditional schooling.

The implications stemming from these policies are diverse and potentially influential. They are expected to cultivate increased trust and confidence among consumers in financial institutions and products. Validating these anticipations in the research, (Muñoz-Céspedes, et al., 2021) noted that the progression encompasses the enhancement of financial consumers' or investors' comprehension regarding financial products and concepts. This is achieved through the dissemination of information, guidance, or impartial advice, fostering the development of skills and self-assurance. This procedure enables individuals to heighten their awareness of financial risks and opportunities, make informed decisions, seek assistance when necessary, and undertake various measures to improve their financial well-being.

Moreover, the integration of financial literacy programs in schools is anticipated to increase financial knowledge among students from an early age, nurturing financially responsible individuals as they transition into adulthood. The long-term benefits might include educated individuals making informed financial decisions, potentially contributing to overall economic stability. Additionally, these policies are aimed at driving higher awareness and engagement among the general public regarding financial education. Tailored community-based financial education initiatives seek to address specific local needs and provide customized learning experiences.

In conclusion, these implications underscore the considerable positive impacts each policy might generate in advancing financial literacy. Their effects are anticipated to extend across various domains, including educational institutions, regulatory frameworks, community involvement, and the ongoing educational opportunities available to individuals.

2. Literature Review

2.1. Financial Literacy definition

The term financial literacy and its importance have gained more and more attention worldwide (Jiang, et al., 2020). With the constant economic development, it is essential that people are able to keep up and manage their finances successfully (Szpringer, 2007). What actually happens is that people lack the ability to take on this responsibility (Lusardi & Mitchell, 2013). This importance is evident not only from the greater complexity of financial products (Tavares & Santos, 2020), but also from the increase in average life expectancy, which has shown the vulnerability of pension systems in some countries (Lusardi & Mitchell, 2009) and the population's dependence on them.

Events such as the subprime crisis in 2007, which showed how drastically bad decisions can affect the global economy (Lusardi, 2015), and more recently the Covid 19 pandemic, have also made people worried about their knowledge on the subject (Tavares & Santos, 2020). However, the concept of financial literacy is not new.

The first studies were conducted by students and date back to 1967, when Bakken already identified "the need" for financial literacy, which was later reinforced by Danes and Hira in 1987 (Goyal & Kumar, 2020). In the U.S., for example, the term was first introduced in 1997 by the Jump$tart Coalition for Personal Financial Literacy with the definition "the ability to use knowledge and skills to manage one's financial resources effectively for lifetime financial security" (Stolper & Walter, 2017). While there is no consensus on a global definition of the term (Tavares, et al., 2022), it is generally understood as a multidimensional concept that involves a person's ability to effectively manage his or her finances.

Financial literacy is characterized by a range of dimensions, including financial knowledge, financial behaviors, and financial attitudes (Potrich, et al., 2015) all of which contribute to a person's financial well-being. Another one of the challenges in defining it is that it is not a static concept, but rather one that evolves over time. Financial literacy is influenced by factors such as economic changes, technological advances, and shifting social attitudes towards money and financial management. Therefore, it is important to view financial literacy as a dynamic concept that requires constant attention and investment.

Despite the importance of financial literacy, the evidence on the effectiveness of financial education programs is mixed (Hung, et al., 2009). Some studies have found that financial education programs can improve financial literacy and lead to better outcomes, while others have found no significant impact. This suggests that the concept plays only a minor role when it comes to decision making, as those who have financial knowledge and do not use it properly to make decisions are defined as financially illiterate (Lusardi & Mitchell, 2013), and that other factors, such as access to financial resources and social and economic context, may play a more significant role in determining financial outcomes. Financial literacy also does not necessarily guarantee that a person will make the right financial decisions (Damayanti, et al., 2018) as these are often based on a range of factors beyond economic reasoning, such as emotions, personal values, and social norms. This highlights the importance of not only developing financial knowledge but also fostering positive financial behaviors and attitudes.

2.1.1. Behavioral Variables

As already mentioned, Financial Literacy is a multidimensional concept that comprises financial knowledge, financial behavior and financial attitude. While all three are interconnected, they represent distinct aspects of financial well-being.

2.1.1.1. Knowledge

Although "financial literacy" and "financial knowledge" are often used synonymously, they hold distinct meanings and should be distinguished (Baistaman, et al., 2020). Financial knowledge is a dimension of the concept Financial literacy (Huston, 2010) and involves the capacity to comprehend and analyse information from economic or financial procedures in order to make informed decisions (Lusardi, 2015).

Being more knowledgeable about money can improve one's financial life (Braunstein & Welch, 2002) as the person can be able to manage money autonomously and be prepared to handle events that may impact its financial welfare (Naoyuki, et al., 2017). These can be insufficiently and it can be important to combine the knowledge with financial habits (Dholakia, et al., 2016) as on the other hand individuals with lower levels of financial literacy often struggle to make optimal decisions, leading to increased indebtedness, reduced savings, and a higher susceptibility to fraudulent activities (Andarsari & Ningtyas, 2019). Also, Asaad (2015) empathize the importance of confidence in conjunction with knowledge, as it significantly influences financial behaviors. In her study, she concluded that individuals with overconfidence tend to believe they possess highly accurate knowledge and underestimate potential risks and this tendency may lead them, often without their awareness, to undertake riskier and more costly financial actions. In 2013, OECD made a survey across countries that corroborates Asaad's study as there were indications suggesting that some respondents displayed overconfidence by providing inaccurate responses instead of acknowledging their lack of knowledge on the subject.

The literature underscores the criticality of financial knowledge, emphasizing its importance in managing money, the association with financial habits and also the struggles faced with lack of literacy. Understanding the pivot role of knowledge, combined with confidence, is instrumental for educators and policymakers in designing more effective financial literacy initiatives aimed at improving individuals' financial decision-making (Andarsari & Ningtyas, 2019).

2.1.1.2. Attitude

The literature extensively supports the significance of Attitude within the domain of financial literacy (Rai, et al., 2019) recognizing its substantial influence on individuals' financial behaviors and decision-making processes.

Diverse perspectives regarding Financial Attitude have been documented across academic works, showcasing the multiplicity of definitions in the literature. Notably, Baptista and Dewi (2021) defined Financial Attitude as “the state of mind, opinion, and judgment about his finances applied to attitude”, while Khairani and Alfarisi (2019) presented an alternative viewpoint, describing it as the application of financial principles to generate and sustain value by making optimal resource decisions and effectively managing them. These distinct interpretations underline the intricate nature of Financial Attitude and the varied perceptions among academics.

In a foundational work, Hira (1997) stated that individuals acquire their financial attitudes significantly from their family and close social circles. This assertion has garnered support from subsequent authors, consolidating the idea that attitudes towards finance are deeply influenced by familial and social environments (Gutter, et al., 2010) (Falahati, et al., 2012). This highlights the substantial role played by family dynamics and social networks in shaping individuals' financial mindsets.

Furthermore, cultivating a positive Financial Attitude yields numerous tangible financial enhancements. Budiono (2020) stated that financial attitude can be observed from the individual's approach towards organizing both inflow and outflow of cash, managing investments for the long-term, and effectively handling finances tailored to their needs. On the other hand, if an individual holds a negative attitude towards saving for their future, they may prioritize short-term desires and are less likely to establish emergency savings or formulate longer-term financial plans (OECD, 2013). Also, it would significantly impact decisions related to spending, saving for the future (Özer & Mutlu, 2021) and reduce tendencies towards credit card borrowing (Ibrahim & Alqaydi, 2013).

This emphasizes the pivotal role of Attitude not only in shaping financial behaviors, but also in fostering sound financial practices and decision-making.

2.1.1.3. Behavior

According to Potrich, et al. (2018), Financial Behavior is defined as a concept that "comprises an individual's ability and actions when achieving short and long-term financial objectives, which may be future acquisitions or unforeseen expenses".

Within the sphere of financial literacy, the role of Financial Behavior stands as a critical determinant impacting individuals' financial well-being and decision-making processes, a connection substantiated by multiple studies indicating a positive relationship between financial literacy and financial behavior (Dwiastanti, 2015).

Notably, Andarsari and Ningtyas (2019) gathered, from multiple studies, positive outcomes from this correlation, mentioned in alphabetic order: accumulating wealth, budgeting, controlling spending, managing debts, managing household finance, participate in capital market, purchase high-risk investment assets and savings. Conversely, negative financial behavior may involve over-use of credit and loans impacting financial well-being (Atkinson & Messy, 2012), which can be changed through by a process that initiates from early habituation (Dwiastanti, 2015).

The influence of Financial Behavior on an individual's financial well-being cannot be underestimated. "The way in which a person behaves will have a significant impact on their financial wellbeing" (OECD, 2013). However, analyse the three dimensions is essential for enhancing financial literacy: Knowledge enables informed financial decisions, financial behavior translates knowledge into action, and financial attitude influences behavior and decision-making.

2.1.2. Sociodemographic Variables

Most financial literacy studies focus on how certain variables affect the decisions of economic agents (Stella, et al., 2020). According to Huston (2010), financial habits can be influenced by economic factors, family, friends, and cognitive ability, but there are also many studies on demographic variables such as gender (Hasler & Lusardi, 2017), age (Georgarakos and Pasini, 2009), income (Dhar & Zhu, 2006), and even IQ (Grinblatt, et al., 2009) (Grinblatt, et al., 2011).

The S&P Global Finlit Survey highlights widespread financial illiteracy globally, with only one in three adults deemed financially literate. Variations across countries and demographic groups underscore these disparities. As an example, although the reasons are inconclusive (Bucher-Koenen & Lusardi, 2011), studies observe disparities in financial literacy between genders. Andarsari & Ningtyas (2019) and Bogan, et al., (2013) observed in a study on portfolio choices that men are more likely to increase loss aversion.

Focusing on Portugal's financial challenges emphasizes the significance of tailored solutions to address regional concerns as sociodemographic variables significantly influence financial behaviors. Financial product consumption serves as a practical fusion of Knowledge, Attitude, and Behavior dimensions, shaping how individuals interact with financial choices.

In conclusion, the intricate relationship between sociodemographic factors and the dimensions of Knowledge, Attitude, and Behavior underscores their pivotal role in shaping financial behaviors and product consumption. This emphasizes the importance of targeted interventions to address Portugal's financial intricacies.

2.1.3. Financial Products

Financial products are becoming increasingly complex and for this reason it is important for individuals to take more responsibility and risk in managing their financial well-being (Lewis & Messy, 2012). While the concepts and categories in financial literacy are endless, there are some easy-to-learn basics that can have a significant impact on people's lives.

In his study, Remund (2010) evidenced 4 categories within the concept, including budget, saving, loans and investment. Budgeting is a basic concept and is considered a “first step” that involves creating and following a plan for managing one's income to cover expenses. This simple task can help avoid unreasonable purchases and also helps in saving money (Navickas, et al., 2014). Another basic concept is saving, which involves setting aside a portion of one's income to build an emergency fund or achieve long-term financial goals. By developing good saving habits, one can avoid debt and have a safety net in case of unexpected expenses. Loans are another concept to be familiar with. It is important to know the different types of loans available, such as personal loans, mortgages, credit cards and all the terms and conditions associated to it. Also, investments are an important concept for people who want to build wealth and secure their financial future. They can do this by saving or investing money to earn more money (Garman & Forgue, 2011). Knowing that exist different investment options available, such as stocks, bonds, and mutual funds, developing a sound investment strategy can help you achieve your financial goals and enjoy a comfortable retirement.

2.2. Financial Literacy level in the World

With globalization, the borders between different countries have disappeared, leading to a global market and new and more complex financial products. The responsibility of the population to make financial decisions is increasing, not only because of the complexity of the markets and the easy access to financial products, but also because of the impact that these decisions can have on the global economy (Cupák, et al., 2017).

Investigating further this topic, the results regarding literacy levels around the world are not positive. Billions of people are not prepared for this responsibility and only one in three adults has the knowledge of basic financial concepts (Lusardi & Oggero, 2017). Not only was this evident in the OECD (2017) report, where less than half of the sample could not answer 70% of the questions, but it has also been demonstrated for many years in studies around the world (De Beckker, et al., 2019).

By analysing two studies (Klapper, et al., 2015) and (Lusardi & Oggero, 2017) that were conducted based on the S&P Global FinLit Survey, and which according to Lusardi & Oggero (2017) is the most comprehensive global indicator of financial literacy to date, it is possible to get a picture of the global level of financial knowledge a few years ago. This survey was carried out in 2014 and done by more than 150.000 nationally representative and randomly selected adults in more than 140 economies. It was also conducted face-to-face and the target population consisted of individuals over the age of 15 who were neither prisoners nor soldiers. To measure financial literacy, questions were asked about 4 basic concept that are financially fundamental. These were compound interest, inflation, numeracy (interest), and risk diversification. If a person could answer three of the above four concepts correctly, they were considered financially literate. It was concluded that approximately 3,5 billion adults worldwide do not have a basic understanding of financial concepts.

There are large discrepancies in the analysis of financial literacy by country. The survey found that the highest-level countries, in alphabetical order, were Australia, Canada, Denmark, Finland, Germany, Israel, the Netherlands, Norway, Sweden, and the United Kingdom, where two-thirds of adults are financially literate. In contrast, the least educated countries were from South Asia, where a quarter or fewer of adults had basic financial knowledge.

A deeper analysis in Europe showed that southern countries such as Italy, Greece, Portugal and Spain had lower scores compared to the Nordic countries, and countries such as Bulgaria and Cyprus, which joined the EU in 2004 or later, also had the worst European results in the survey. Romania has the lowest score in Europe, with only 22% of adults being financial literate. These European results are supported and found in other studies such as the one conducted by Ayadi, et al. (2019).

Recent studies have found that the level of financial literacy in the world has remained almost unchanged compared to previous studies from the last decade. Despite the increased emphasis on financial literacy and the growing availability of financial information, the studies suggest that there has been little improvement in the financial literacy of people around the world.

The survey conducted by OECD (2020) in 2020 among adults globally, gathered financial literacy data from 26 countries and economies and presented knowledge, behavior, and attitude scores according to the OECD/INFE methodology and definition. A total of 125,787 adults aged 18 and older were surveyed, using the same core questions from a 2018 report by the same organization, with sample sizes ranging from 1,000 to 84,000.

Despite the emphasis that there is room for growth, the results were concerning. The maximum possible score was 21, indicating that individuals have a basic understanding of financial concepts and can apply them to their lives. However, the average score achieved was only 12.7, indicating low levels of financial literacy, high levels of financial stress and limited financial resilience. When analysed by country, more than half of the respondents scored between 12 and 14, showing the widespread problem of financial illiteracy. Italy received the lowest score with only 11.1, while Hong Kong (China) topped the ranking with 14.8. But even the highest score is far from the 21 set.

A study by a team of experts at the World Bank found that targeted financial literacy programs that focus on specific behaviors and populations can lead to smarter financial decisions (Miller, et al., 2015). Researchers have also found that financially savy adults are generally less likely to default on loans and more likely to save for retirement (Lusardi & Mitchell, 2013). For this reason, policymakers should consider offering specialized financial literacy training to vulnerable groups such as women, the poor, and adults nearing retirement (Klapper, et al., 2015).

2.2.1. In Portugal

Assessing the level of financial literacy within Portugal provides critical insights into the country's economic preparedness and individuals' ability to navigate financial complexities. Portugal, as many nations, faces challenges regarding its citizens' financial knowledge, decision-making, and resource management. This financial illiteracy of the population can be justified by the poor performance of the country's institutions and governments, which should set an example in this subject.

This section aims to scrutinize Portugal's financial literacy landscape, examining challenges, trends, and potential pathways to enhance financial literacy. By identifying areas needing attention, this exploration seeks to contribute to targeted strategies aimed at fostering a more financially literate society in Portugal.

For example, the first study of Portuguese individuals was only conducted in 2011 by the Banco de Portugal (Lopes, 2020), years after a major crisis that negatively affected the lives of many Portuguese, showing a lack of preparation and responsibility for the population.

Financial literacy communication has been neglected in Portugal for a long time (Passos, 2022). The author suggests that with more communication it can become a more important theme in the country and it would improve people's lives and positively impact the development of the country.

In 2020, Banco de Portugal released the results of the 3rd Survey on the Financial Literacy of the Portuguese population, conducted within the National Council of Financial Supervisors. This questionnaire aimed to characterize the overall financial literacy index using a methodology that had already been used in the 1st Survey in 2010. The Global Financial Literacy Index corresponds to the aggregation of five partial indices, namely: Financial Inclusion, Digital Financial Inclusion, Savings Management, Choice and Management of Banking Products, and Understanding of Banking Products. 1502 face-to-face interviews were conducted throughout the national territory between December 2019 and February 2020, conducted by the Center for Studies and Opinion Polls of the Catholic University (CESOP-UCP). For the interviews, quotas were established for each stratum, based on the proportions identified for the Portuguese population in the 2011 Census of the National Institute of Statistics. The interviewees were randomly selected, according to these stratification quotas, from a population universe composed of residents in Portugal aged 16 or over.

Firstly, a general analysis was conducted (by indices), followed by a more specific analysis by population groups: Young People, Seniors, Workers, Unemployed and Women. With the general analysis, it was found that the overall financial literacy index increases with income and education level, and the interviewees between the ages of 25 and 64, men, and workers stood out. Regarding the analysis by population groups, Young People represented 11% of the sample and showed better results in the digital financial inclusion index due to their ease of using apps to manage their money. However, they demonstrated weak results in the other indices. Seniors, approximately 19% of the sample, presented lower values in all partial indices compared to the other interviewees. This could be due to difficulty in using technology, insufficient retirement income to save, or even a weak understanding of banking concepts, making this population group the one that demonstrated the greatest weight in the low level of literacy. Meanwhile, Workers (51% of the sample) had better results compared to the rest.

The Unemployed accounted for 8% of the sample and showed less satisfactory results in most of the partial indices compared to the other interviewed. This is largely due to the lack of a fixed income source that does not allow saving, coping with unforeseen events, or even having contact with other types of financial products. Finally, Women, who represented 54% of the sample, were analysed in comparison to males and showed worse results, revealing less integration into the financial system and greater difficulty in understanding financial concepts than the opposite gender.

Despite these statistics and population groups being suitable for analysis in Portugal, it demonstrated that quantitative studies are still being conducted without discussing ideas to change these results. It can be said that the results of seniors (over 70 years old) facing the most difficulties with money, young people having greater ease with technology, and the unemployed being unable to save were already expected. This study is also limited in that it chose 5 sociodemographic variables and focused heavily on the banking services consumer profile, perhaps disregarding other important variables such as Financial Behavior and Financial Attitude. So, it seems incontestable that there is a need to educate people from a young age so they can make better financial decisions throughout their lives. For this to happen, the government must not only help with educational programs taught in schools, universities and publicized in the media, but also train teachers so they are able to pass on this knowledge (Santos & Tavares, 2020).

2.3. Why Financial Literacy is important

As Santos & Tavares (2020) stated "Ignorance of the world of finance leads to wrong decisions and represents significant costs". And if people fail to comprehend even basic financial problems is likely to lead to serious negative consequences on their lives (Bajo, et al., 2014). After analysing the level of financial education in the world and specifically in Portugal, it becomes clear why it is necessary to improve the level of financial education in the population.

One of the primary benefits of this skill is that it helps individuals make informed decisions about their finances. When they understand financial concepts, it impacts how they manage, save, borrow, and invest their finances (Widdowson & Hailwood, 2007).

As consumers, their decisions benefit themselves and their families (Akhtar & Liu, 2018), they will be able to sort goods, understand government policies, and know how to behave toward them (Damayanti, et al., 2018). However, if people continue to ignore this important concept, they increase the risk of making poor financial decisions and experiencing financial distress through their lives (Lusardi & Mitchell, 2011).

Financially illiterate households tend to have bigger dependence on debt to pay their needs, especially through credit cards, save less, and end up compromising their retirement plan (Casagrande, 2016). That is why it is so important and a critical competency in the 21st century (Messy & Monticone, 2016). Many studies have found that it contributes positively to financial satisfaction (Xiao, et al., 2013) (Ali, et al., 2015) and is also fundamental to a prosperous life (Karakurum-Ozdemir, et al., 2019). In fact, people who grew up in households that have higher levels of financial knowledge and financial stability tend to have higher self-esteem, suffer less from depression, and manifest less aggressive and antisocial behavior (Fox, et al., 2005).

The financial literacy literature highlights that consumers often make less-than-optimal decisions because of cognitive constraints, limited knowledge, or psychological biases. This establishes a clear correlation between financial literacy and the principles of behavioral economics (Koskelainen, et al., 2023).

This requires that people have the right tools, and this knowledge should be given as early as possible. Not only because bad habits are very harmful and difficult to undo, but also because it is a process that develops throughout life and should be applied daily from childhood. So, it makes perfect sense to conduct a study that focuses not only on improving financial literacy, but also on attitudes and behaviors to ensure that the right decisions are made and are consistent with policy goals. There is an urgent need to take practical and sustainable action, as this will benefit both individuals, companies and the economy as a whole.

2.4. Research Framework

With the various points analysed and developed above, not only was created a better perception of the concept of financial literacy as it was possible to establish a research framework for the further development of the study. It was possible to understand that it is a multidimensional concept based on dimensions such as financial knowledge, financial literacy and financial behavior, and can also be influenced by sociodemographic variables such as age and gender, as evidenced by the Banco de Portugal study.

To fulfil the study's objectives, it's crucial to comprehend the impact of these variables on financial literacy rather than solely establishing their correlations. Based on these concepts, the interview questions were formulated.

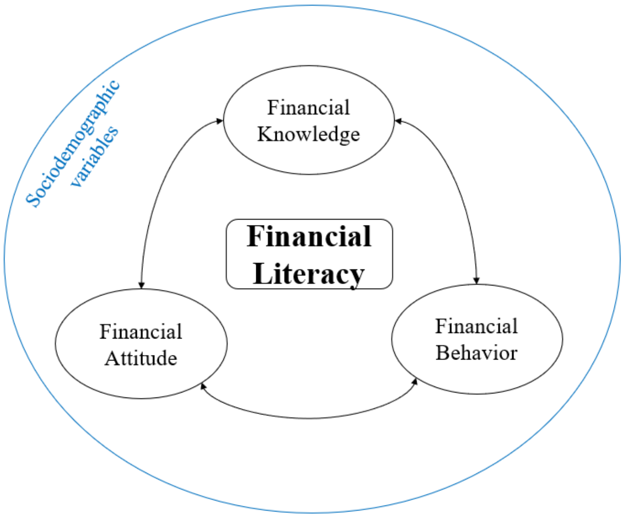

Figure 1: Theoretical framework

3. Methodology

This study aims to explore policies that could improve financial literacy level in Portugal and for that applies a qualitative research approach. Qualitative research has been the subject of extensive debate within the academic community due to its complex and multi-layered nature. On the one hand, some academics such as Hammersley (2013) say that while there are common characteristics of this type of research, there are no key features that could distinguish it from quantitative research. On the other hand, there are scholars who try to skilfully counter the criticism and create their own definition, such as Feuer, et al., (2002), who suggest that it has the potential to capture the complexity of teaching, learning and schooling.

In the absence of a global definition, this study addresses the definition that qualitative research is unique in that it focuses on the production of propositional knowledge, which relates to answering specific and factual questions. Although this knowledge may be valuable in terms of its relevance to important issues related to policy or practice in a field or to general human concerns, the ultimate aim of qualitative research is to produce useful and actionable knowledge (Hammersley 2011).

As mentioned previously, most studies related to financial literacy rather focus on the rating of the literacy level instead of offering actionable strategies and practical interventions to improve financial literacy levels. This gap between assessing financial literacy and implementing effective measures to enhance it requires deeper exploration.

To develop this thesis, primary data was collected through interviews and secondary data through the analysis of strategy reports on Portugal. Regarding the primary data the idea, at first, was to interview financial educators with certifications on financial literacy, but due to the difficulty of finding people with those requirements and accepted the invitation, the sample was expanded to include individuals who work in areas related to financial education and whose contributions could be relevant to the development of this thesis. They were identified through purposive sampling and contacted via email and social media platforms such as Instagram and LinkedIn and invited to participate in the study. Following this process, it was possible to interview ten professionals and gather their perspectives.

Table 1: Reseaarch participants profile

NAME	EDUCATION	PROFESSION	CERTIFICATION
Andrew	Bachelor & Master in Management	Financial Educator	Pedagogical skills - IEFP
Bryan	Attending Financial Master	Multi-Asset Account Manager	Monetary History
Catherine	Marketing	Financial Educator	Financial Educator - Soaper
Daniel	Banking Management	Financial Advisor	MiFID II
Elias	Executive Education Program	CEO	CFA & CEFA
Francis	Sociology	Financial Educator	Family budget Planning - Evoluir
Gregory	Economy	Economist	None
Henry	N/A	Financial Educator	CFA
Ingrid	Marketing	Financial Educator	Certified Financial Education Instructor - NFEC
John	Management	Professor	None

Appropriate ethical considerations were made to ensure the protection and welfare of the participants. They were informed of the purpose of the study and that the data collected would be used for research purposes only. It was also agreed that their identity would be kept confidential and that the interviews would be recorded in order to analyse them later. As can be seen in Table 1 – Research participants profile, after collecting and cleaning the data, the interviewees were assigned a fictitious name in the alphabetical order in which they were interviewed and according to their gender, e.g. the first: **A** + male = **A**ndrew, the second: **B** + male = **B**ryan and so on.

The interviews were conducted via Zoom and with open-ended questions to encourage participants to express their thoughts and ideas freely. The questions were created based on the constructs and research framework to better understand which of the categories (knowledge, attitude, or behaviour) were more important to the participants. The last five questions were more general in order to solicit respondents' opinions without being limited to the constructs.

In the second phase of data collection, the reports "ESTRATÉGIA DE LITERACIA DIGITAL PARA PORTUGAL" issued by Banco de Portugal, the "EBA Financial Education Repository 2019/2020" published by the European Banking Authority, and the "National Plan for Financial Education 2021-2025 (Portugal)" by the National Council of Financial Supervisors were analysed regarding measures of financial literacy either already implemented or anticipated to be implemented shortly in Portugal.

From these reports, eight measures were selected, and by emphasizing their principal objectives, these initiatives were categorized into the constructs of "knowledge", "behavior", and/or "attitude". This categorization aimed to provide a comprehensive overview of the delineated policies and their targeted focus areas within the realm of financial education.

In this way, it was not only possible to check whether these measures met the needs of the Portuguese, but also to carry out a triangulation or comparison with the final results of the primary data.

Table 2: Financial literacy policies in Portugal

REPORT	POLICY	OBJECTIVE	CONSTRUCT
ESTRATÉGIA DE LITERACIA DIGITAL PARA PORTUGAL - Banco de Portugal	Digital financial training initiatives	Improve the population's digital financial knowledge	Knowledge
	Online awareness campaigns	Improve digital financial attitudes and behaviors	Attitude & Behavior
National Plan for financial education 2021-2025 (Portugal) – National Council of financial supervisors	Financial Education in schools	Support professors in addressing the new topics in Core Competencies for financial education	Knowledge
	Financial Education in workplace	Establish partnerships to extend financial education in the workplace to a larger number of public sector entities.	Knowledge
	Traditional media campaigns	Promote information and awareness-raising campaigns on issues related to financial resilience and the safe use of digital financial services through traditional media	Behavior
EBA Financial education repository 2019/2020 - European Banking Authority	Website for financial education	The platform enhances financial decision-making for all ages through simple explanations, calculators, and tips. It offers educational materials, an e-learning platform, and a Facebook page for broader outreach, especially targeting Generation Y.	Behavior
	Financial literacy week	To raise awareness of the importance of financial education	Knowledge
	Banco de Portugal's financial education programme	To help existing and future consumers develop the knowledge, skills and confidence to appropriately understand risks and opportunities, to make informed choices and to know where to go for assistance	Knowledge / Behavior / Attitude

The data from reports and interview insights were grouped into four main themes: Knowledge, Attitude, Behavior, and Enhancing Financial Literacy. These themes were built based on the framework's theoretical dimensions and included categories that emerged from the data. These categories helped explain each theme's various aspects, offering a structured way to understand the complexities of financial literacy. They played a crucial role in analysing and explaining the findings, giving a deeper understanding of how the data connected with the theoretical framework. The following figure 2 presents a summary of the data analysis process represented in the form of a diagram.

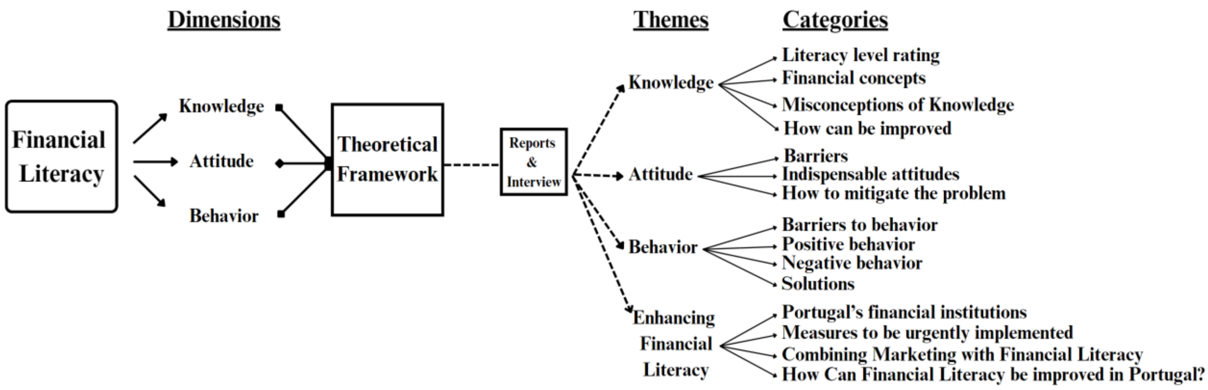

Figure 2: Data analysis process diagram

4. Results and Discussion

This section presents the results of the in-depth interviews with the individuals previously mentioned in Table 2, focusing on four key themes: Knowledge, Attitude, Behavior, and Strategies for Enhancing Financial Literacy. Based on the literature review and together with the interviewees' opinions, the analysis explores the relationships between these themes and their individual contributions with the aim of developing measures to help improve financial literacy in Portugal.

4.1. Results

4.1.1. Knowledge

The first theme addressed in the interviews was knowledge, which, as mentioned in the literature review, is one of the dimensions of financial literacy. It is through knowledge that people are able to make informed decisions in their lives (Lusardi, 2015). This idea was also conveyed by the interviewees, who consider it the greatest need of the Portuguese and the starting point for the next steps in the financial learning journey. Some basic concepts that Portuguese people should know were discussed and some mistakes that are made by the population and how to help people not to make them were pointed out.

4.1.1.1. Literacy level rating

In order to be able to define a successful policy, it is important since the beginning to carry out a correct analysis and evaluation. Therefore, the first question was how the respondents assessed the level of financial literacy of their students, if at all. The others were asked if they knew how this analysis was carried out and which factors, they considered most important. Elias and Daniel are the only ones who use a questionnaire, and Andrew, although he does not yet do so, says that he will soon start to evaluate his students with a questionnaire. Elias uses its own questionnaire, which it considers to be fairly complete. It asks about compound interest, derivatives, loans, variable or fixed interest rates to better assess people's level.

Bryan, although not practicing a profession that requires valuation, believes that he would value other factors besides knowledge, such as goals, investment horizon, etc. And this idea is in line with the analysis of Daniel, who was most concerned with this issue. As a way to measure the financial literacy of clients, it carries out the mandatory test imposed by the regulatory authority “investor profile questionnaire” where it assesses the level of academic training, the client's knowledge of the trading of financial assets and experience. He also states that with this questionnaire “first I state the purpose of the investment, determine the objective and then, depending on the purpose and objective, determine the appropriate form of investment for the client” (Daniel).

4.1.1.2. Financial Concepts

Regarding fundamental financial concepts respondents unanimously highlighted the lack of knowledge among the Portuguese, even to the everyday financial products used.

Ingrid, Gregory and Henry emphasized basic concepts that they considered to be the ones that raise more doubt in Portugal and are most are unknown for the population. Such as all terms related to credit (TAN, APR, MTIC, SPREAD), the concept of interest and compound interest, the concept of VAT and IRS, what is inflation and EURIBOR.

Elias says he is baffled as to how it is possible that most population do not know basic concepts about fees, commissions or inflation.

John questions “how individuals, lacking familiarity or interest in understanding fundamental concepts, could initiate investments or engage with financial products effectively. (…) People hold multiple credits while remaining unaware of concepts such as TAN and APR. John adopt a critical stance and attributes the Portuguese population's inadequate understanding of even the most basic financial concepts to financial institutions. He contends that “banks and financial entities capitalize on people's limited financial knowledge to generate profits so it is in the banks' self-interest for people not to have so much knowledge to be able to "push" the products they want.

The observations suggest a pressing need for comprehensive financial education initiatives aimed at bridging this knowledge gap. Additionally, the critique directed at financial institutions underscores the responsibility to empower individuals with the necessary knowledge to engage effectively with financial products and make informed decisions.

4.1.1.3. Misconceptions of Knowledge

The next category aimed to identify and understand the gaps and misconceptions that prevail in the public's understanding of finance. There were numerous opinions from the interviewees on this topic, if on the one hand Francis thinks that the biggest mistake of the Portuguese is something cultural such as inertia and lack of interest, for Henry the big mistake of the Portuguese is to confuse investment with speculation, which makes financial knowledge something very abstract and complex.

John whose expertise is closely linked to the cryptocurrency market emphasized that several people invest in this market without having the slightest idea of what they are doing or the product they are investing in. He noted that many scams such as Ponzi schemes and forex frauds could be avoided if people had even a minimal understanding or sometimes took a moment to think before trading. Consequently, he claimed that people tend to lump everything together due to a lack of understanding of these products. For example, if they were scammed on one forex scheme, they might see all forex products as scams or frauds.

Unfortunately, with an increasingly digital world and with increasingly easier and faster transactions, fraud will also tend to increase. More should be done to educate consumers as they are the key to detecting and preventing potential fraud (KPMG, 2019).

For Catherine, the population's issue is the overall lack of knowledge and the absence of the desire to seek more information. “People fail to prepare for the future and seem to make decisions without concern for the consequences.” (Catherine).

The interviewees' perspectives revealed prevalent misconceptions in financial understanding, stressing the urgency of enhanced financial education. Catherine's concern emphasizes the need for informed decision-making to mitigate future financial risks.

4.1.1.4. How can be improved

To conclude the “Knowledge” theme, the last category explores solutions to improve or end the problems in the previous point, which, as seen in the literature review, can be harmful to both individuals and the economy as a whole.

Andrew and Bryan claim that the topic is becoming “trendier” every day. “Although there is an increase in interest, especially among younger generations and the topic is currently trendy in Portugal, this alone is not enough” (Bryan).

As this study is being conducted, Portugal ranks second to last in the EU financial literacy rankings, surpassing only Romania (European Commission, 2023). It is crucial that everyone has a solid financial knowledge and a proper understanding of the many financial concepts and instruments.

All interviewees unanimously agreed on the crucial necessity of initiating financial literacy education in schools during the early years. John proposed integrating fundamental topics such as interest, fees, and taxes into existing math problems as a means to introduce this subject efficiently.

However, Catherine emphasized a significant point, stating: “While compulsory education serves as a solid foundation, it tends to exclude a considerable portion of the population no longer engaged in the school system. Establishing a course, perhaps managed by the state, could address this gap. The challenge lies in ensuring widespread accessibility and dissemination of this knowledge.” (Catherine).

Introducing this subject in schools demands investments beyond the classroom, as several critical elements require attention. For instance, Gregory highlighted the importance of equipping teachers with the necessary skills and tools to deliver effective financial education to students. He advocated for enhanced support for financial educators, proposing a wider array of certificates and trusted platforms for sharing their expertise. Expanding on this, Gregory expressed concern over the scepticism faced by financial professionals, attributing it to the prevalence of fraud in commonly accessed platforms disseminating financial information. He stressed the urgent need for reliable sources to safeguard individuals lacking the expertise to discern credible information.

Moreover, Andrew pointed out the inadequate involvement of governments and financial institutions, suggesting they are not fulfilling their roles adequately. Both Andrew and Henry concurred that organizing more events, workshops, and free lectures could ignite public interest.

A collective effort combining these strategies could establish an environment where financial education becomes accessible and relatable to the public, fostering improved financial decision-making and comprehension.

4.1.2. Attitude

To develop the theme of “Attitude”, interviewees were asked to identify attitudes they consider essential in daily life, the barriers that prevent people from adopting these same attitudes, and ways to help individuals begin practicing them. Generally, the importance of Portuguese culture in this context was discussed, along with the influence that knowledge and institutions exert on people's attitudes.

4.1.2.1. Barriers

The general opinion among the interviewees is that the lack of attitude among the Portuguese population stems from an ingrained culture. Andrew, Ingrid, and Francis believe there is a lack of willingness and inertia among individuals. Andrew further adds that people tend to become quite complacent within their comfort zones. Francis suggests that this lack of attitude significantly hampers Portuguese knowledge because financial literacy does not naturally come through education, media, or government channels. Therefore, an individual aiming for financial literacy must be willing to invest their time and money in seeking tools to enhance their knowledge. According to Elias, “Portuguese people have an issue with inertia; they leave their money in current accounts being eroded by bank fees and inflation. There is a significant amount of stagnant money in Portugal.” (Elias).

Gregory highlights through his profession that he often encounters individuals who perceive money as something negative and associate being wealthy with corrupt behavior. Agreeing with this viewpoint, Ingrid concludes that both this mindset and the lack of attitudes among people stem from their parents' behavior, as they observed their parents behaving in such a manner throughout their lives.

According to Catherine, there should be more reflection and maturity. Recounting some stories from her students, she feels that people allow themselves to be influenced by the societal “must-have” culture in which we live.

Elias used a concept coined by Daniel Kahneman called Loss Aversion (an important concept associated with prospect theory) to characterize an attitude issue among the Portuguese. Linked to financial unawareness, this issue is also emotional, leading individuals to take more risks and make more errors. An individual lacking financial knowledge tends to reinforce an investment when facing losses in an attempt to recoup the money, primarily due to a genuine fear of losing money. This pattern leads to even greater risks. Elias concludes by stating: “It's a global issue, but I notice it significantly in Portugal, where we are more averse to fear than to risk.” (Elias). Daniel reinforces this notion by highlighting that the most critical attitude problem among the Portuguese is their inability to cope with losses and develops a strategy to address this issue by focusing on delivering maximum financial literacy to his clients.

4.1.2.2. Indispensable attitudes

After analysing the origins and lack of appropriate financial behaviors among the Portuguese, the need to identify certain attitudes (or lack of it) that require change becomes evident. People's relationship with money is diverse and influenced by a range of factors, including personal experiences, cultural values, and levels of financial education. However, some specific attitudes warrant special attention to promote greater stability and financial well-being in Portuguese society.

Although changing the culture of a population is quite challenging, it is crucial to consider altering the mindset that many individuals hold regarding money. Andrew advocates prioritizing immediate consumption over long-term financial planning as a common attitude that requires reflection. Additionally, both Andrew and Henry, along with Gregory and Ingrid, strongly advocate the idea that a lack of understanding of basic financial concepts is a significant obstacle. The absence of financial education from an early age can help demystify some mental barriers related to money and can directly impact financial choices and habits.

Another attitude worthy of consideration is the balance between spending and personal satisfaction. Understanding that happiness is not solely linked to material possessions is a key point to be considered, according to Francis.

Finally, Bryan emphasizes the importance of a financial growth mindset. This includes a constant pursuit of financial learning and the willingness to adapt and grow personally and economically.

Reflecting on these attitudes that require change regarding money, it's possible to envision a more conscious and balanced approach to dealing with financial matters. This could lead to a significant transformation in the financial landscape for individuals and society as a whole.

4.1.2.3. How to mitigate the problem

The unanimous opinion strongly supports the idea that enhancing financial knowledge would be crucial in improving the attitudes and mindsets of the population. Beyond the solutions outlined in the "Knowledge" theme in section 4.1.1.4., Andrew believes that financial educators bear the responsibility and play a crucial role in imparting knowledge and instigating attitude shifts. He states: "People overestimate what they can do in a year and underestimate what they can do in ten." (Andrew). Individuals seek quick results, so financial educators need to demonstrate early on that this is unlikely to happen and a gradual path is necessary. Andrew even suggests "putting the carrot in front of the donkey". Since people respond well to visual evidence, educators should show, through graphs, the results of compound interest over the years to change people's perceptions until they become financially autonomous. Francis supports this notion, suggesting a greater emphasis on promoting the benefits that a healthy and well-managed financial life would bring to each person as a way to encourage them to take the necessary steps to achieve such security and freedom. A stronger focus on what they could achieve in the long run would be beneficial and would redirect thinking and actions away from the current societal emphasis on instant gratification.

“To overcome these challenges, a collaborative effort among financial institutions will be essential.” (John). Elias expressed a strong opinion regarding solutions for this change concerning the role of the state and financial entities in Portugal. He believes that besides enhancing knowledge for better attitudes, it's also crucial to increase the financial confidence that Portuguese citizens have in these institutions. He justifies this by stating: “There is a trauma that has shaken the trust of Portuguese people due to cases involving BCP, Banif, BES, BNP” (Elias) which were corruption cases within banks where individuals were neglected, causing a lack of trust in the system. He suggests that greater transparency from banks, a more solid ethical framework, and the absence of conflicts of interest are the right paths to address the problem he highlighted.

One of the significant conflicts of interest arises from a severe issue Portugal face concerning addiction to scratch cards. In 2018, it ranked as the European country with the highest spending on these types of games (Vilaverde & Morgado, 2020). Another example is sports betting, extensively advertised during prime time and increasingly accessible. Gregory and John assert, as liberals, that they do not advocate for banning these games. However, given that they are primarily exploited by the state, they believe it is the state's responsibility to oversee the lives of Portuguese citizens. They argue that individuals, seeking the “wrong” dream by taking risks, might develop significant dependencies and potentially ruin their financial lives.

4.1.3. Behavior

Understanding behavior plays a pivotal role in financial literacy, directly influencing the financial decisions of individuals and communities. Grasping how people think, feel, and act concerning money is crucial for fostering a positive and enduring change in financial habits. When addressing behavior in financial literacy, discussions encompassed the poor financial habits of the Portuguese, the desirable good habits they should adopt, and insights sought from interviewees regarding why individuals lack these habits and how they could be influenced to adopt better practices.

Four categories emerged throughout the behavior theme analysis. It was noted that the lack of attitude among the Portuguese negatively impacts their financial behavior. Additionally, it was observed that Portuguese individuals actively seek discounts in food expenditures and tend to excessively resort to credit.

4.1.3.1. Barriers to behavior

The issues in attitude (thinking) subsequently affect behaviors (actions). Andrew and Ingrid referenced their responses in section 4.2.1, reaffirming that the entrenched mindset among the Portuguese is inevitably linked to their poor financial behaviors throughout their lives. Ingrid asserts: “There is still the belief that managing one's budget and expenses results in a restrictive life where they wouldn't be able to do anything, when, on the contrary, they should realize that by optimizing these expenses, they could achieve more and better.” (Ingrid),

Andrew highlighted an example from his experience with some students. He found that despite having the opportunity to lower their interest rates through a free credit intermediary and potentially reducing their monthly payments by 70 or 80 euros, many individuals refrained from doing so due to simple bureaucratic processes. “The inertia of people prevents them from improving their financial condition.” (Andrew).

Elias observed the absence of easy access to financial resources and guidance. In his opinion people find it challenging to access financial advisors or information that could help them make better financial decisions.

Bryan have seen that technological challenges are prevalent, especially among older generations. “Not everyone is comfortable using digital platforms or mobile apps for banking or financial planning. This creates a barrier for them in managing their finances efficiently.” (Bryan). This statement is corroborated from the literature review regarding the Portugal’s analysis where seniors presented low scores in all partial indices and it may be explained due to their difficulty using technology.

These insights from Andrew, Bryan, Elias and Ingrid underline significant barriers such as the lack of financial education, cultural behaviors, and technological challenges impacting financial behavior among the Portuguese.

4.1.3.2. Positive behavior

The exploration of positive financial behaviors among the interviewees was challenging due to the predominant focus on negative aspects. However, some noteworthy positive practices emerged from the discussions.

In contrast to Ingrid's previous opinion, Bryan highlighted budgeting as a commendable financial habit commonly practiced by Portuguese families and Bryan's viewpoint is supported by Banco de Portugal (2021) indicating that 81% of respondents answered affirmatively to at least one question regarding planning and controlling their family budget. Bryan observed that many Portuguese individuals demonstrate frugality in managing their food budget by actively seeking better prices and promotions, showcasing a price-sensitive approach and a willingness to explore various stores for potential savings.

Another positive trend mentioned was the growing consciousness among some Portuguese individuals regarding savings. Gregory noted an emerging trend where some are increasingly recognizing the significance of regularly setting aside money for future needs, signifying a positive shift toward prudent financial planning.

These positive behaviors signify a potential shift in financial attitudes and practices among a segment of the Portuguese population, demonstrating a growing awareness of budget management, cost-consciousness, and the importance of saving for the future.

4.1.3.3. Negative behavior

Regarding negative financial behavior, the interviewed emphasize concerning in Portuguese population. Jhon mentioned one negative behavior is the tendency to live beyond means, saying that "people often rely heavily on credit for non-essential items, resulting in debt accumulation without a clear plan". He also noticed quite a few people, mostly youth, who invest in financial markets without adequate knowledge. "Many jumps into investments, particularly in complex products like cryptocurrencies, without fully understanding the risks involved" (Jhon). Both ideas are supported by Henry and Daniel.

Daniel, drawing from his professional experience, believes that the Portuguese face a serious issue with accumulated credit card debts, which consume all the money they could otherwise save. He emphasizes being astounded by how easily one can obtain credit for several thousand euros by simply responding "YES" to a text message and this concern is shared with other studies. The study (Koskelainen, et al., 2023), supported by research from multiple authors, it emphasizes the dangers and risks of technological advances in the market and fintech. Risks such as lack of security, lack of privacy and, as Daniel mentions, quick access to credit which damage financial well-being by triggering impulsive consumer.

Henry delved deeper into the subject, expressing significant discomfort with the behaviors of the Portuguese. He highlighted a considerable lack of understanding about financial products. Despite this lack of knowledge, people tend to invest simply based on advice from others or hearsay. There's also a scarcity of the habit of saving money monthly, leading to a lack of financial reserves and preparation for the future. Henry concludes his thoughts by stating: “I believe that everything I've just mentioned is, whether we want it or not, related to the primary bad habit of people not understanding and not seeking financial education.” (Henry).

The interviews highlighted troubling financial behaviors in the Portuguese population. There's a reliance on credit for non-essential items without proper planning, coupled with a tendency to invest without adequate knowledge. These observations underscore a need for improved financial awareness and responsible planning among individuals.

4.1.3.4. Solutions

Once again, the sentiment echoed by the interviewees was that knowledge is crucial to the solution. Catherine and Daniel advocate that with more knowledge, individuals would change their bad behaviors and cultivate positive habits. Daniel believes that “the more knowledge a person has, the more willingness to take risks and not be afraid to act.” (Daniel). Bryan supports this viewpoint by suggesting the importance of presenting financial topics in a more relaxed and less serious manner, removing the formal suit-and-tie image associated with discussing these topics extensively. This approach aims to help individuals encounter financial information as solutions rather than viewing them as problems or complex matters.

Francis concluded the discussion on this topic with a rather compelling statement: “I always advocate that an economic routine is the key to a more financially tranquil life. Achieving economic stability is possible through simple gestures and wiser choices. (...) Daily small actions can lead to a financially serene life in the long run.” (Francis)

The sentiments expressed by the interviewees resonate strongly with the notion that knowledge stands as a linchpin for resolving financial literacy challenges. The perspectives shared by Catherine, Daniel, Bryan, and Francis collectively emphasize the transformative potential of enhanced knowledge in reshaping financial behaviors. Daniel's insight underscores the correlation between knowledge acquisition and a willingness to take calculated risks, steering away from fear and inaction. Bryan's proposal to present financial information in a more approachable manner aligns with the endeavour to reframe financial discussions, making them accessible solutions rather than daunting complexities. Francis's advocacy for an economic routine echoes the idea that simple, consistent actions in everyday life can pave the way for lasting financial tranquillity. Ultimately, these viewpoints converge on a central theme: empowering individuals with financial knowledge is pivotal, serving as a catalyst for informed decisions, prudent behaviors, and a more secure financial future.

4.1.4. Strategies for Enhancing Financial Literacy

The last category of the interview provided an opportunity for respondents to express unrestricted opinions, extending beyond the predefined theoretical dimensions. The questions encompassed various topics, such as the anticipated behavior of financial institutions, suggestions for positive and negative implementations, proposed initiatives for the short and medium term, and the impact of marketing on fostering financial literacy. As part of the interviews culmination, participants were prompted to address the overarching research question: “How can financial literacy in Portugal be improved?”.

4.1.4.1. Portugal’s financial institutions

The first category highlights informants’ opinions concerning the government and financial institutions in the country. This involved evaluating their performance, considering the significance of their role regarding the topic, and suggesting potential behavioural approaches for these entities.

John expresses disbelief in institutions (citing the example of CMVM) and the government, highlighting a significant issue among the Portuguese populace concerning scratch cards and games of chance. He contends that the state promotes these behaviors among individuals with limited financial knowledge and capabilities. He suggests that if these matters were approached with greater seriousness, they would have been reconsidered and modified. However, John also underscores positive actions taken, such as the initiative by NOVA University Lisbon, launching a course aimed at educating individuals from lower socioeconomic backgrounds on fundamental financial aspects. He further mentions the efforts of the CFA Institute in implementing various initiatives and applauds XTB for conducting complimentary seminars.

Conversely, Elias, despite being highly critical, commends the “TODOS CONTAM” website launched by the Bank of Portugal, the Securities Market Commission (CMVM), and the Insurance and Pension Funds Supervisory Authority, characterizing it as an excellent, well-structured, and educational initiative. Although he perceives it as falling short of what should be done, Elias believes in acknowledging these incremental steps. He also holds a high regard for the annual report published by CMVM concerning the analysis of the average Portuguese investor.

According to Daniel, the commendable implemented policies include those involving the financial transposition of MiFID II, the mandatory assessment of client risk profiles, and the obligation to categorize clients based on their experience, knowledge, and training. Subsequently, this enables the restriction of access to higher-risk products such as forex, cryptocurrencies, etc. Regarding the failed measures, he emphasizes on the issue of distributing the regulation of financial product commercialization in Portugal. It seems illogical for the Portuguese Insurance Association to act as the regulatory entity for pension funds and retirement plans with risk. It is not rational for an insurance intermediary to sell investment funds without even possessing MiFID II certification.

In general, the opinion was largely negative, as despite unanimous agreement that financial institutions and the government should play a significant role in educating and disseminating financial information, they are falling short in fulfilling this role. Ingrid asserts that they show little to no concern regarding the subject, and the limited efforts made are inadequate. Andrew supports this view by citing examples, such as the podcast created by the Bank of Portugal, which he characterizes as overly formal and utilizing a closed communication style that is difficult to comprehend. He believes this approach isn't the correct way to reach people. While acknowledging initiatives from XTB and mentioning some from ActivoBank, he perceives no positive outcomes from public institutions, but notes emerging initiatives from private entities

However, Andrew concludes his reasoning by stating: “No matter how well financial institutions operate, it ultimately falls upon individuals to demonstrate interest, and there is a lack of demand for the subject.” (Andrew).

In evaluating the government and financial institutions in Portugal, interviewees offered mixed views. Concerns were raised about government-sponsored gambling activities affecting financially vulnerable individuals. While acknowledging positive strides in financial education by certain entities, there was a general sense of institutional shortcomings in promoting financial literacy. There's an apparent gap between efforts made by these institutions and public expectations, with suggestions for a more accessible and engaging approach. Ultimately, interviewees stressed the need for greater efforts in disseminating financial knowledge, emphasizing individual responsibility in fostering interest.

4.1.4.2. Measures to be urgently implemented

At this point, all the interviewees shared the same opinion that one of the first, if not the foremost, measures to be implemented "yesterday," as referred to by Francis, should be the introduction of a mandatory curriculum in schools starting from the first cycle. As a teacher, John considers this to be something that needs to be carefully thought out and structured due to its lengthy and difficulty. Moreover, he emphasizes its urgent need for prompt implementation. Catherine expresses concern for older individuals who are no longer attending school and would not benefit from this measure. However, she suggests that subsequently, a course could be established at the university level to encompass a significant portion of graduates. Additionally, she recommends implementing training for corporate employees, similar to the initiatives undertaken by companies like *Doutor Finanças*. She emphasizes that the creation of easily understandable and interactive content could have a significant impact.

In addition to this measure, Francis considers that an overall revision is needed concerning individual and corporate taxation, as well as social policies. The tax burden in the country is considerably high and heavily impacts the middle class. Francis asserts that "there must be more social justice, increased scrutiny, and a reassessment of incentives to achieve greater fairness" (Francis).

Other suggested measures came from Elias, who believes that there should be more openness for individuals to seek advice. He emphasizes that access to such premium services should not be exclusive to those with substantial wealth. Elias also advocates for increased investment in education and the creation of more events, workshops, and free initiatives to attract people.

4.1.4.3. Combining Marketing with Financial Literacy

Catherine highlighted the significance of educational marketing campaigns, emphasizing the necessity of making financial education more engaging and accessible. She proposed creating diversified content, such as explanatory videos, interactive infographics, and informative podcasts. According to Catherine, employing various formats and visual presentations could engage diverse audiences, particularly the younger demographic, facilitating the comprehension of financial concepts.

Ingrid emphasized the significance of forging strategic partnerships to expand the audience base. Her proposal involved teaming up with digital influencers, financial experts, and educational institutions to curate events, workshops, and webinars focused on financial literacy. Additionally, she expressed confidence in the efficacy of this diverse approach, leveraging multiple channels and voices to enhance the accessibility and relevance of financial knowledge across diverse societal segments.

Francis identified content personalization as a key strategy to engage and educate the public about finances. She highlighted the power of digital marketing in segmenting educational messages, tailoring them to meet individual consumers' needs and preferences. Furthermore, Francis stressed the significance of continuous follow-up, suggesting that providing resources and post-education support could be crucial for the practical application of the acquired financial information. “The study of Marketing helps us understand motivations, thought processes, and frustrations, enabling the creation of content that aligns with these objectives, thus rendering the message more effective. Marketing aids in comprehending and understanding demand needs while also contributing to the development of improved responses.” (Francis).

These varied perspectives have offered a diverse set of strategies for integrating marketing into financial literacy. From creating engaging educational content to strategic partnerships and personalized approaches, these suggestions underscore the need for a broad range of tactics to make financial education more engaging, relevant, and applicable to different segments of the population.

4.1.4.4. How can financial literacy in Portugal be improved?

The issue of how to enhance financial literacy in Portugal generated various perspectives during the interviews. Francis emphasized the importance of individual commitment, highlighting that each person plays a significant role not only in their own financial life but also in that of others. She emphasized that “Improvement begins with each individual. Each person must commit to playing their part in their financial life and that of others. With responsibility, we all can become financial educators for friends, family, and acquaintances.” (Francis).

Daniel highlighted the urgency of providing education to younger generations, identifying an alarming deficiency in financial knowledge that, according to him, might overshadow other concerns and objectives. However, Catherine emphasized the necessity for investment and broad public discourse to enhance financial literacy in Portugal. She stressed the importance of involvement from all educators, the government, the banking sector, and the educational system, asserting that such an approach is crucial to reach all population.

Andrew emphasized the importance of continuing the current awareness efforts on the subject. He noted an increase in interest since the COVID-19 crisis, suggesting that this crisis has raised people's awareness of financial challenges. For him, the continuity of these efforts, whether through media, schools, or businesses, is crucial to reach an increasingly broader audience and promote a wider understanding of financial literacy.

These diverse perspectives from the interviewees reveal the complexity and breadth of the challenges and pathways to follow in improving financial literacy in Portugal, which will be further explored in the following section.

4.2. Discussion

In the realm of financial literacy studies, the predominant focus often centres on evaluating and quantifying the level of financial literacy within populations (Tavares & Santos, 2020) rather than delving into the formulation, assessment, or enhancement of policies that could improve that level. While existing literature offers a comprehensive statistical analysis, the incorporation of qualitative interviews allows for a more nuanced and holistic understanding of the phenomenon. These interviews serve as a vital supplement, capturing subjective experiences and perspectives that statistical analysis might overlook.

Differences and similarities emerge between the literature and the data derived from reports and interviews. While the consensus regarding the lack of financial literacy is shared, the sentiment expressed by interviewees regarding the Portugal’s financial literacy situation is notably more pessimistic and negative compared to the general literature.

On one hand, interviewees express their concern over the low levels of financial literacy in Portugal and the apparent inertia from governmental/financial institutions. Conversely, reports indicate the presence of policies either already implemented or in the pipeline, aiming to reshape the paradigm. This sentiment might have been in line with the prevailing circumstances some years ago, as noted by Lopes (2020), considering that the first study on financial literacy in Portugal was conducted only in 2011, post a financial crisis. However, recent data suggests an increased proactive stance from these criticized institutions, evident through surveys and implemented measures.

Another contrasting viewpoint was the emphasis on knowledge presented by both interviewees and reports, identifying it as the primary concern and area for improvement in Portugal. However, the literature asserts that this dimension plays a relatively minor role in the concept of financial literacy. Even with knowledge, an individual may not necessarily utilize it correctly (Lusardi & Mitchell, 2013). The literature underscores that non-economic factors such as emotions, values, and norms hold substantial importance, emphasizing the need to not only develop the knowledge dimension but also consider the dimensions of attitude and behavior.

Both the literature and qualitative data confirm the significance of a multifaceted approach in addressing this issue. Institutions, as noted by Andrew and Henry, must tackle this problem through various avenues, including schools, universities, media publicity, and teacher training to equip educators with the necessary tools to impart financial knowledge.

Catherine in their statement highlighted the excluded portion of the population no longer engaged in the school system. Encompassing other vulnerable groups, such as women, the economically disadvantaged and individuals nearing retirement (Klapper, et al., 2015) is the real challenge.

4.2.1. Theoretical Implications

This research contributes significantly to the theoretical landscape of financial literacy studies by uncovering disparities between quantitative literature and qualitative data. The divergence between interviewee sentiments and prevailing literature underscores the necessity for a more comprehensive and integrated approach. It emphasizes the significance of holistic analyses that not only rely on statistical evaluations but also incorporate subjective experiences and viewpoints, as elucidated through qualitative interviews. The identified contrast in perspectives emphasizes the need for more nuanced and inclusive frameworks to comprehend the multifaceted nature of financial literacy.

4.2.2. Practical Implications

The findings gleaned from both the literature and qualitative data highlight crucial strategies for enhancing financial literacy in Portugal. Institutions are urged to adopt multifaceted initiatives targeting diverse demographics and societal segments. Implementation strategies should extend beyond traditional educational settings, encompassing schools, universities, and public awareness campaigns through various media platforms. Teacher training programs must equip educators with specialized tools to effectively impart financial knowledge. Additionally, Catherine's emphasis on reaching excluded segments, such as individuals outside the educational system and other vulnerable groups like women, the economically disadvantaged, and those nearing retirement, emphasizes the need for tailored interventions catering to these specific groups. This broader inclusivity in educational initiatives can address disparities in financial literacy and promote a more financially aware society.

5. Conclusions and Future Research

Through an extensive study involving literature review, reports, and qualitative interviews, five policies emerged as the answer to the research question "How can financial literacy in Portugal be improved?". These policies include the implementation of financial literacy curricula in schools, reviewing financial regulations for consumer protection, launching comprehensive educational marketing campaigns, fostering community-based financial literacy initiatives, enhancing financial education for adults beyond schooling, and advocating for a widespread commitment to elevate financial literacy levels among diverse demographic segments in Portugal. Also, they were categorized on a scale of urgency - High, Medium, and Low - indicating their immediacy in implementation for short, medium, and long-term objectives, respectively.

The urgency scale reflects the immediacy and importance of implementing the identified policies. High-urgency policies demand prompt implementation due to their critical impact on fostering immediate changes in financial literacy. Medium-urgency policies require a steady progression, establishing mid-term objectives to progressively influence financial behaviors and attitudes. Low-urgency policies, although crucial, are intended for long-term implementation to nurture lasting changes in financial habits and knowledge acquisition.

These policies were structured around three principal constructs: Knowledge, Attitude, and Behavior. Each construct encapsulates diverse elements instrumental in shaping financial literacy among the population. The Knowledge construct emphasizes the need to integrate financial education into schools and communities to ensure a solid foundation of financial understanding from an early age, addressing basic financial concepts and understanding financial products.

The Attitude construct focuses on shifting public perspectives regarding finances, aiming to transform mindsets, perceptions, and beliefs about money. Initiatives within this construct aim to foster a culture of prudent financial management, encouraging responsible financial behaviors and promoting long-term financial planning.

In tandem, the Behavior construct accentuates altering financial behaviors prevalent among the population. Policies derived from this construct focus on mitigating poor financial habits, promoting proactive financial management, and encouraging positive financial practices such as budgeting, saving, and responsible credit use.

While these policies serve as foundational pillars for improving financial literacy, additional components, including budget allocation, implementation plans with timelines, metrics for assessing progress, and designated entities responsible for execution, were not explicitly outlined in the interviews. However, it is essential to note that future studies may delve deeper into these aspects to complement the existing framework and enhance its effectiveness in practice. In essence, these derived policies encapsulate crucial measures to instigate a transformative shift in financial literacy within Portugal. By addressing immediate, mid-term, and long-term objectives within the constructs of Knowledge, Attitude, and Behavior, these policies lay the groundwork for advancing financial understanding and fostering responsible financial practices among individuals and communities.

Table 3: Financial literacy policies proposed

Policy	Urgency	Objective	Contrusct
Financial Literacy Curriculum Implementation in Schools	High	Develop and introduce a mandatory financial literacy curriculum in primary and secondary schools to enhance students' understanding of financial concepts. Incorporate modules covering basic financial concepts, attitudes, and behaviors.	Knowledge, Attitude, Behavior
Financial Regulation Review for Consumer Protection	High	Review financial regulations to safeguard consumers, ensuring better transparency, and ethical practices. Ensure that regulatory bodies are adequately equipped and efficiently manage financial products and services.	Behavior
Comprehensive Educational Marketing Campaign	Medium	Develop a diverse, engaging, and accessible marketing strategy using various mediums (videos, infographics, podcasts) to promote financial literacy. Engage influencers and financial experts to reach wider demographics.	Knowledge, Attitude
Community-Based Financial Literacy Initiatives	Medium	Establish community-focused financial literacy programs, offering workshops, seminars, and educational events. Empower community leaders and volunteers to engage with diverse groups and promote financial literacy.	Knowledge, Attitude, Behavior
Enhanced Financial Education for Adults Beyond Schooling	Low	Create courses and workshops targeting adults outside the formal education system. Develop easily understandable and interactive content focused on financial concepts and behavior improvement.	Behavior, Knowledge

The recommendations and insights proposed by the interviewees underscore the urgency of prioritizing these measures to foster a more financially literate society. Implementing these policies is deemed vital for equipping individuals with the necessary tools and knowledge to make informed financial decisions, ultimately contributing to a more robust and financially aware population in Portugal.

5.1. Limitations

It is important to acknowledge the limitations of this study. One of the limitations is the restricted nature of the interview sample, which may not fully cover the diversity of perspectives existing in society and relies on the author's subjective opinion in selecting interviewees. The sample may also be unrepresentative, given that most of our interviewees were financial educators, potentially biasing the opinions conveyed. Their opinions derive from their students who, despite sharing the same lack of financial knowledge and behaviors as the rest of the Portuguese population, sought education on the subject and thus may not accurately represent the wider population.

Additionally, the research predominantly focused on the direct opinions of the interviewees, not fully considering other socio-economic and contextual variables that could influence perceptions of financial literacy.

5.2. Recommendations

Based on the findings and identified limitations, it is suggested that future studies adopt a more inclusive and multifaceted approach. This can be achieved by incorporating a broader range of participants representing social, economic, and cultural diversity. Furthermore, it is recommended to integrate broader contextual factors such as access to financial education, income levels, and other socioeconomic variables.

It is also advisable to foster closer collaboration among academic institutions, government, the private sector, and civil society organizations to implement joint strategies for financial education. This may involve developing diverse educational programs, awareness campaigns, and strengthening existing policies to promote financial literacy throughout society.

5.3 Final statement

In summary, this research reinforces the crucial importance of investing in knowledge as an essential starting point for improving financial literacy in Portugal. Acknowledging both the theoretical and practical implications, as well as the limitations and recommendations, it is hoped that this study contributes to a broader and informed understanding of financial literacy and to the implementation of more effective strategies to promote it within Portuguese society.

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Annexes

Interview template

Thank you for participating in this interview, its purpose is to gather information on financial literacy from Portuguese population. The information collected will be used solely for research purposes, and your identity will be kept confidential.

Demographic information

1) What’s your name and how old are you?
2) Do you have experience in financial literacy? What type of experience and for how many years?
3) Do you hold certification related to financial education?

Knowledge

a) How would you rate financial literacy in Portugal and how do you believe it should be rated?

b) In your opinion, what are the essential financial concepts that people should be aware of, but often lack understanding?

c) What are the prevailing gaps and misconceptions in the public's understanding of finance knowledge?

d) What solutions do you propose to address these knowledge-related issues in financial literacy?

Attitude

a) What barriers do you observe in the attitudes of the Portuguese population towards financial matters?
b) In your perspective, what attitudes are indispensable for fostering financial literacy?
c) How can these barriers in attitudes be mitigated or overcome?

Behavior

a) What barriers do you identify in the financial behaviors of the Portuguese population?
b) Could you elaborate on what constitutes positive financial behaviors from your standpoint?
c) Conversely, what negative financial behaviors do you perceive?
d) What solutions or strategies do you suggest to address these barriers in financial behaviors?

Strategies for Enhancing Financial Literacy

a) In your view, what role should Portugal's Financial Institutions play in enhancing financial literacy?
b) What urgent measures do you believe should be implemented to improve financial literacy in Portugal?
c) How can Marketing strategies be effectively utilized to enhance Financial Literacy among the Portuguese population?
d) How can Financial Literacy can be improved in Portugal?

NOVA Information Management School
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Universidade Nova de Lisboa