

Retirement Planning: The Role of Financial Literacy and Financial Education Programs

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Abstract

Retirement planning involves a number of complex financial decisions, such as how much to save, how to invest savings, and how to manage income in retirement. Financial literacy and financial education programs can help people to make more informed decisions about their retirement planning. Studies have found that individuals with higher levels of financial literacy are more likely to save for retirement, invest in a diversified portfolio, and have a plan for managing their assets in retirement. Financial advisors can also play an important role in helping individuals with retirement planning. Financial advisors can provide individuals with personalized advice and guidance on how to develop and implement a retirement plan. This review article examines the role of financial literacy, financial education programs, and financial advisors in retirement planning. The article discusses the importance of financial literacy and financial education for retirement planning, and it reviews the evidence on the impact of financial literacy and financial education programs on retirement planning outcomes. The article also discusses the role of financial advisors in retirement planning and provides recommendations for how individuals can choose a financial advisor.

Keywords: *Retirement Planning, Investment Decision, Financial Education, Financial advisor, Financial Security*

1. INTRODUCTION

Retirement is a truth of life that that going to happen to everyone. People may retire early or late by a few years but it is not possible to remove it completely from life, may be able to postpone retirement by a few years; but it is not possible to avoid it. Due to the shrinking joint family system, inflationary pressures, economic volatility, spiralling medical and education expenses, changing lifestyle, increased life expectancy etc.; a handsome amount is needed to be saved by individuals to live life hassle-free in the retirement phase. A well-known said a quote that “if you save money today the money will save you tomorrow”. Investing in an early stage will give you benefit at retirement age (Turner et al,1994). According to a 2019 World Health Organization poll, the average healthy life expectancy for the global population is 73 years. For the last ten years before they pass away, every individual is anticipated to be frail and ill. Whether we like it or not, everyone retires eventually. Also, the complexity of financial instruments has increased and individuals have to deal with new and more sophisticated financial products (Lusardi, 2009). 28% of Indians still haven't begun saving for retirement, the majority of them (52%) anticipate that their children would support them financially when they get older. Particularly rural Indians are less financially prepared for old age and save less.

According to Prashant Tripathi, managing director and CEO, Max Life Insurance. “As life expectancy rises and health patterns shift, retirement is set to become an important priority for a sizeable part of the population. Accentuated by the pandemic, the recent economic climate witnessed lower wage growth, financial uncertainty and job losses, resulting in further straining individual, and household incomes. It is, therefore, important to understand the sentiment and challenges of our consumers today as we prepare for tomorrow.”

But the real question is: Do Individuals have retirement plans? How well-equipped are individuals to make saving decisions? Do they possess adequate financial literacy? Are they informed about the most important components of saving plans? Do they even plan for retirement? Low literacy and lack of information affect the ability to save and to secure a comfortable retirement; ignorance about basic financial concepts can be linked to lack of retirement planning and lack of wealth.

Even though retirement is only five to ten years away, this report demonstrates that a significant number of workers have not given it much thought. Furthermore, most people are unfamiliar with basic financial concepts such as how interest compounding works, the difference between nominal and real values, and the fundamentals of risk diversification. The entire public suffers from financial illiteracy.

Low literacy and a lack of financial education have an impact on one's ability to save and plan for a good retirement; ignorance of basic financial concepts has been related to a lack of retirement planning and wealth. Several initiatives have been implemented to encourage saving and financial stability, such as educating employees to increase their financial literacy and knowledge of pensions, automatically enrolling employees in pension plans, and simplifying workers' pension enrolment decisions. While these programs have had an impact on saving behavior, there is still much more that can be done to improve their effectiveness.

It is now the responsibility of the individual to ensure that retirees have a sustainable standard of life rather than the government, corporations, and labor unions (Batra, 2013). The benefits of retirement planning accrue to an individual at a greater rate the sooner they begin (Bailey WC, Turner MJ, 1994). The extent of an individual's retirement planning is typically bigger than that of other persons (Kim, Kwon, and Anderson, 2005) if the level of household income is coupled with better health. People frequently disregard retirement planning due to the hardship of adjusting to retirement. Previous research has found that most people are unconcerned about their retirement, start late to prepare and invest for it, and end up with insufficient retirement resources (Lusardi and Mitchell, 2007; Mitchell & Utkus, 2003). Investments in early retirement planning improve a person's potential to reap rewards in their later years (Turner et al, 1994). To meet the growing demand of people who are getting close to retirement age, it is important to have a deeper understanding of the factors that go into successful transition negotiations into retirement (Rameli, R. S., & Marimuthu, 2018).

There are a number major personal resources that have been identified as impacting retirement, such as physical, economic, social support, and mental capacity (Moen, 1996; Szinovacz, 2003). Higher salaries, in particular, promote better retirement adjustment, whereas low income and financial stress are associated with discontent and a less favourable retirement experience (Atchley, R. C., 1976; Gallo, Bradley, Siegel, & Kasl, 2000; Price and Joo, 2005). According to the research, a better state of mind and body in retirement is directly linked to the amount of adjustment (Mutran, Ritz, & Fernandez, 1997; Richardson & Kilty, 1991; Quick & Moen, 1998 Van Solinge & Henkens, 2008). Demographics, organizational context, and health

predict better retirement planning (Wong & Earl, 2009). Retirement planners collect much more wealth than non-planners through various techniques such as saving, investing, and the ability to sell their properties to support their retirement (Lusardi & Mitchell, 2007).

2. RATIONALE OF THE STUDY

Financial literacy and awareness, as well as retirement planning, are quantitative qualities. While the majority of studies have focused on modelling lifetime resources and preferences in a way that best captures characteristics of individuals and the economic environment, including the fact that future predictions are uncertain (Schreiner et al, 2002), few studies have acknowledged that saving decisions are extremely difficult. Individuals may have to spend a significant amount of time and effort in order to gather all of the information needed to make sound financial decisions. Furthermore, people might not have the knowledge or abilities necessary to carry out the calculations involved in creating a saving plan.

The extent of retirement planning is a simple and direct technique to investigate if, along with the assumptions of theoretical models of saving, individuals think ahead and make preparations for the future. Lusardi (1999) examined that evidence using data from the 1992 Health and Retirement Study (HRS), which polled respondents aged 51 and up. She discovered that up to one-third of respondents had not considered retirement at all. While some of this behaviour may be completely rational (Lusardi, 2003), it is nonetheless remarkable that the majority of older responders have not considered retirement, even when it is just five to ten years away. Lack of planning is concentrated in some groups of the population, such as those with a low level of education. The computations behind pension and Social Security wealth are undoubtedly difficult, and individuals do not appear to participate in similar calculations for private savings. This article focuses on how much people plan to save for retirement, what they know about the factors that should impact a savings plan, and their level of financial knowledge and numeracy. Despite the fact that many of these traits have been neglected in earlier studies on saving, they are significant predictors of household saving behaviour.

3. FINANCIAL LITERACY, FINANCIAL KNOWLEDGE AND FINANCIAL ADVICE

3.1 Relationship Between Financial Literacy and Retirement Planning

Numerous studies (Almenberg and Säve-Söderbergh, 2011; Bucher-Koenen and Lusardi, 2011; Crossan et al., 2011; Fornero and Monticone, 2011; Lusardi and Mitchell, 2011a, 2011b; Van Rooij et al., 2011a) have discovered a connection between financial literacy and pension plans. Individuals' lack of financial literacy is one of the reasons they do not engage in planning or are unaware of pensions or the terms of their financial contracts. Bernheim (1995, 1998) was among the first to emphasize that most people lack basic financial knowledge and numeracy.

In the contexts of Germany, Italy, the United States, and the Netherlands, Bucher-Koenen and Lusardi (2011), Fornero and Monticone (2011), Lusardi and Mitchell (2011a, 2011b), and Van Rooij et al. (2011a), researchers find that households with more financial knowledge are more likely to plan for retirement. Lusardi and Mitchell (2011a) discovered that financial literacy is crucial to retirement security over the world, based on data from earlier empirical studies. In contrast, Almenberg and Säve-Söderbergh (2011), who do not adjust for demographic characteristics, and Crossan et al. (2011) find that financial literacy is unrelated to retirement planning in Sweden and New Zealand, respectively. Planning has also been linked

to more wealth, even among the more educated (Ameriks et al., 2003), and it is appealing to the young and middle-aged (Lusardi and Mitchell, 2009).

Power et al. (2011) attempted to determine the level of retirement knowledge, motivation to save for retirement, and relationship between financial education and financial literacy of graduating business finance students before and after taking a senior level Personal Risk Management and Insurance (PRMI) course. They discover that many people have insufficient financial understanding and are unprepared to make healthy financial decisions. Business students, in particular, were more financially literate than non-business students, and their familiarity with retirement plans and personal level of readiness to make retirement planning decisions improved significantly after taking the principles class, indicating that there is a curricula deficiency in business education in the area of financial and retirement literacy. The findings reflect the findings of Jennings et al. (2003) that communication and benefits value interact in complex ways, and that students with a better knowledge of benefits (retirement) may require less communication.

Furthermore, the findings are consistent with previous studies that found gender differences in retirement planning and financial knowledge (Chen and Volpe, 1998, 2002; Altamimi and Kalli, 2009; Almenberg and Säve-Söderbergh, 2011; Fornero and Monticone, 2011; Lusardi and Mitchell, 2011b, among others), but contradict the findings of Wagland and Taylor (2009), Jorgensen and Savla (2010), Altintas (2011), and Bucher. According to Power et al. (2011), their findings justify the inclusion of financial literacy as a general education requirement in colleges and universities. A survey of people's financial literacy in the Klang Valley area found that they have an acceptable level of core financial understanding, including interest rates, risk levels, and knowledge of relative risk on their financial holdings (N.S. Mahdzan and S. Tabiani, 2013). These studies aim to refocus policymakers' attention on improving financial literacy by educating people on the basic financial terms and concepts they need to make sound financial decisions, while also taking reasonable factors that influence financial behavior into account (Waga et. al, 2021).

One may argue that financial literacy and retirement planning are both decision factors, and that retirement planning may influence financial literacy. Those who want to plan for retirement, for example, may invest in financial education. Lusardi and Mitchell (2007c) use historical data on financial literacy to show that those who were financially educated when they were young are more likely to plan for retirement later in life.

According to Hilgerth, Hogarth, and Beverly (2003), there is a positive relationship between financial knowledge and financial conduct. According to Stango and Zinman (2007), persons who are unable to correctly calculate interest rates from a sequence of payments end up borrowing more and amassing less wealth. In the words of Van Rooij, Lusardi, and Alessie (2007) and Kimball and Shumway (2006), financially sophisticated households are more likely to invest in stocks. According to Agarwal, Driscoll, Gabaix, and Laibson (2007), financial mistakes are most common among the young and elderly, who also have the least amount of financial understanding and cognitive aptitude.

3.2 Lack of financial advice:

Individuals are misinformed about the most essential components of their total savings, and they lack fundamental financial understanding. This would be less concerning if people depended on professional guidance and financial specialists to make their saving decisions. In reality, the majority of households rely on informal sources of guidance, with just a small

percentage of households consulting financial counselors, bankers, certified public accountants, and other professionals.

According to the Survey of Consumer Finances, most people rely on family and friends for financial advice, and this is especially true for those with poor education (Lusardi, 2003). Low educated people can just rely on unreliable sources of information if there is a positive association between their education level and that of their family or peers. For example, given the recent rapid changes in financial markets and the pension landscape, it may be difficult to profit from parental counsel or experience. Similarly, persons with limited financial literacy may face additional challenges in overcoming a lack of information. According to Van Rooij, Lusardi, and Alessie (2007), low literacy individuals are disproportionately more likely to seek financial advice from family and friends, whereas more financially competent individuals are more likely to seek advice from newspapers, books, and the Internet.

Many studies have shown that people talk to their relatives and friends, rather than using worksheets or retirement calculators, to figure out how much money their household would need to save for retirement. Many people also report using no tools at all. This might explain why many people were unable to construct or stick to a savings strategy. Decisions concerning pension payments appear to be impacted by interactions with co-workers as well (Duflo and Saez, 2004, and Madrian and Shea 2001). Investment in complex assets, such as stocks, has also been proven to be influenced by word of mouth, recommendations from neighbours, and even fellow churchgoers (Hong, Kubik, and Stein, 2004, and Brown, Ivkovich, Smith, and Weisbenner, 2007).

It is difficult to determine if the restricted use of financial advice is attributable to the demand versus supply of professional assistance and the numerous issues impacting the operation of this market, but data from the 2007 RCS indicate some reluctance to depend on financial professionals. For example, when asked whether they would use professional investing advice provided by organizations that administer employer-sponsored retirement plans, almost half of respondents said they would. However, two-thirds of those prepared to seek professional investing advice say they would probably only accept recommendations that aligned with their own thoughts, and one in ten say they would execute none of the recommendations. As a result, the impact of financial guidance may be illusive since workers may disregard adviser recommendations.

We still don't know much about the impacts of financial guidance and if it might enhance financial decision-making, although there is some evidence that financial counseling can reduce debt levels and delinquency rates (Hirad and Zorn, 2001; Elliehausen, Londquist, and Staten, 2007). Mottola and Utkus (2007) present more evidence in support of hiring specialists to handle financial investments. They compare individual portfolios before and after switching to a professionally managed account. Those who shifted are not a random sample of the population, but the consequences are substantial. Those who switched to managed accounts drastically altered their asset allocation. Most crucially, their new portfolios avoided some of the "mistakes" highlighted in the finance literature, such as investing too little or too much in the stock market and keeping portfolios that were insufficiently diversified (Campbell, 2006).

3.3 Relationship between Financial Knowledge retirement planning

Basic financial knowledge is important in personal financial planning, according to Benartzi and Thaler (1993). Socioeconomic factors impact an individual's financial understanding, according to Setyawati and Suroso (2016). According to Lawson and Hershey (2005), financial awareness is a strong predictor of individuals' retirement saving behaviours. Retirement savings and the planning process are closely linked to financial literacy, claim Lusardi and Mitchell (2009) and Hershey et al. (2010). Age, education, and financial asset balance are all favourably connected to financial knowledge, according to Kadoya and Khan (2016), however employment position is inversely related to the variable. They also discovered that men are more successful than women in gaining financial information. Chen and Volpe (1998) observed that students with higher financial awareness are more likely than students with less financial understanding to keep financial records and make prudent financial decisions. According to Hogarth and O'Donnell (1999), less financial understanding leads to less involvement in financial markets. Households with lower financial literacy do not prepare for retirement (Lusardi & Mitchell, 2007), borrow at higher interest rates (Lusardi & Tufano, 2009), and purchase fewer assets (Lusardi & Mitchell, 2007). By researching the Dutch population before and after financial crises, Alessie, Rooij, and Lusardi (2011) revealed that financial knowledge had a major influence on retirement planning. A consumer with high financial understanding and an optimistic attitude on the future is more likely to engage in retirement programs, according to Howlett, Kees, and Kemp (2008). Mahapatra, Raveendran, and De (2019) found that financial education helps to enhance an individual's mental accounting, which impacts financial planning. They also suggested that banks try to boost financial literacy in order to help customers improve their financial planning process.

4. FINANCIAL EDUCATION PROMOTING SAVING AND FINANCIAL SECURITY

As financial illiteracy is thought to be a significant barrier to saving, both the government and companies have supported financial education initiatives. Most big corporations, particularly those with defined contribution pension plans, provide some type of education program (Bernheim and Garrett, 2003).

The OECD is committed to assisting policymakers and other stakeholders in member countries and beyond, particularly through the International Network on Financial Education (INFE), in developing efficient financial education strategies that encourage appropriate consumer behaviours with a focus on the balance between short-term priorities and long-term security (while acknowledging that financial education is a supplement rather than a substitute for a supporting econometric framework). The OECD's definition of financial education is the following: "the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being".

Previous studies (such as Muller 2003) have looked at the policy-driven increase in financial education that occurred in the United States prior to 2000. Lusardi (2002) indicates that retirement seminars offered by businesses had a favourable influence on employees at the lower end of the savings distribution using a nationwide sample (US Health and Retirement Study). Similarly, Bayer et al. (2009), using a survey of employers, add to the findings by

Bernheim and Garrett (2003) above by discovering that retirement seminars had a substantial influence on increasing membership and contribution to savings programs.

Duflo and Saez (2003) investigated a university that invited a random sample of workers to an annual information fair regarding its employer-sponsored retirement plan. In this trial, the authors discovered that plan participation rates in treated departments were around 1.25% higher than in control departments. Individually, the effects of those who attended were only marginally greater than those who did not, but Duflo and Saez (2003) attribute this in part to the possibility that financial education had both direct and indirect effects on those who attended. They also discovered that the improvements in savings outweighed the minimal expenses associated with rewarding participation in the study treatments.

Barcellos et al. (2014) design and test a generic version of financial education materials based on the US FDIC MoneySmart curriculum as well as a customized version on financial issues relevant to immigrants in the United States on a population of first and second-generation immigrants in a field experiment. Both interventions contained information on saving and investing, including rules controlling Individual Retirement Accounts, and for the customized version, non-citizen retirement plan rules. While the programs had a significant initial impact on knowledge, the effects were temporary and had no influence on planned financial behaviour.

Song (2012) conducts a field experiment with farmers in China to evaluate two types of financial education connected to a heavily subsidized rural pension program. Farmers were presented predictions of predicted pension benefit levels beyond age 60 if they contributed at various levels in one treatment (the computation treatment), while farmers were also taught fundamental concepts of compound interest in a second treatment (the education treatment). The author discovers that financial education had little effect on participation rates, but the calculating treatment boosted yearly contributions to the plan from 2% to 2.8 % of annual per capita income. This causes the average contribution rates in the education treatment group to increase by 40% in comparison to the control group, or by around 73 RMB. This rise is significantly more than that shown in the calculating treatment group, which exhibited an increase of 20-25 RMB. The author suggests that a better knowledge of compound interest is a significant driver of treatment results.

Evidence suggests that knowledge and skills alone are insufficient: additional dimensions of competence, including as motivation and self-efficacy, are important for LTSI. Early papers such as Bernheim, Garrett, and Maki (2001), Clancy et al. (2001), Duflo and Saez (2003), and Bernheim and Garrett (2003) indicate that certain financial education programs are associated with positive behaviour change.

According to Mathew (2007), there is a link between knowledge and behaviour, with more information having a favourable influence on personal financial behaviour. For example, families with low incomes and little education typically make more mistakes, therefore they also stand to gain the most from financial education.

Other studies suggest that education initiatives have a more minimal effect. Duflo and Saez (2003) study the consequences of subjecting employees of a major non-profit organization to a benefit fair. The rigorous methodology of this study is significant; a randomly selected group of workers were given incentives to attend a benefit fair, and their conduct was compared to that of a comparable group in which participants were not offered any incentives to attend the fair. This approach solves the issue that people who enroll in educational programs could

already have a saving tendency. This is obviously significant, and the outcomes of this study reveal that benefit fair attendance led participants to raise pension membership, while the effect on saving was nearly non-existent. The study's most notable finding is how pervasive peer effects are: not only benefit fair attendees, but also their colleagues who did not attend, were affected by it, providing further evidence that individuals rely on the behaviours' of those around them to make financial decisions (Duflo and Saez, 2004).

5. DISCUSSION AND CONCLUSION

Saving decisions are derived from maximizing utility not just within the constraints of a lifetime budget, but also within the constraints imposed by inadequate financial literacy, a lack of knowledge, and unsophisticated sources of financial advice. Thus, programs aimed at encouraging retirement savings and financial stability should examine a number of incentives, including how to reduce informational obstacles and simplify decision-making. Long-term savings and investments are both capable of increasing and decreasing savings levels, according to the available information. While the majority of studies (including three identified by Miller et al. (2013) showed positive effects, two actually showed "oppositional" effects; in Beshears et al. (2012) and Muller (2001), additional information reduced rather than increased long-term savings and investments, emphasizing the importance of careful program design that takes into account knowledge of typical behavioural biases.

There is evidence that illiteracy raises the question of whether customers would recognize and take use of the opportunities provided by financial markets or will be more susceptible to frauds or unethical brokers. The effectiveness of financial education programs has been measured in terms of specific outcomes, such as increased savings or pension participation, but there is other potential, though less easily measured, outcomes, such as avoiding being taken advantage of and having confidence in making financial decisions. Financial education programs teach the fundamental concepts and principles of personal finance. Even among people from extremely varied socioeconomic backgrounds, our findings imply that fundamental principles education remains an important aspect of enhancing individuals' ability to react to various forms of beneficial interventions.

Financial knowledge may influence many financial decisions, not just retirement savings. Furthermore, that information may be used throughout time and should be reviewed over time rather than simply a few months or years after a program is delivered. For example, Bernheim, Garrett, and Maki (2001) found that students who participated in financial education programs in high school were more likely to save later in life.

Finally, given the prevalence of financial illiteracy, it is clear that exposing individuals to a benefit fair or providing workers with one hour of financial instruction has no effect on saving. Programs must be adapted to the measure of the problem they are attempting to tackle in order to be effective. While it is not possible to turn low-literacy individuals into financial wizards, it is possible to emphasize simple rules and good financial behaviour, such as diversification, taking advantage of the power of interest compounding, and taking advantage of tax breaks and employer-sponsored pension matches.

Another possible function for financial education is to assist individuals in assessing their ability to make saving and investing decisions, as well as to make them recognize the importance of financial guidance or to provide them with skills to effectively interact with advisers and financial intermediaries. If people are unable to save and contribute to pensions

due to illiteracy, an inability to plan, or procrastination, default alternatives are clearly an effective cure. Defaults are the most potent and inventive saving and pension schemes, and they should be taken advantage of. Low contribution rates and investment in too conservative assets, on the other hand, may eventually counterbalance the benefits of default membership in saving schemes. Also, because almost half of private-sector workers do not have pensions, it is critical to broaden automatic enrolment to alternative forms of saving.

Another conclusion that emerges from both the saving literature and financial literacy research is that certain sectors of the population—those with low education and low income—save in quite different ways than other, more educated and affluent households. It may be necessary to target these people and develop programs that are more customized to their needs and savings obstacles. Existing targeted initiatives have shown some success in raising saving among the poor (Schreiner and Sherraden, 2007).

Considering that people have limited literacy and do not plan for retirement brings us to the issue of errors. Some of the previous publications show that mistakes are common; if left to their own devices, individuals may fail to save enough for retirement, invest in assets that are either too risky or too conservative, and fail to take advantage of employer matching or tax breaks. One such program may require participants to learn the fundamentals of finance (Alesina and Lusardi, 2006). Individuals may learn about basic financial principles in this manner, reducing their reliance on random advice and ideas from others.

6. ACKNOWLEDGEMENTS

The author is grateful to the anonymous referees of the journal for their extremely useful suggestions to improve the quality of the article.

References

- 1) Agarwal, S., Driscoll, J. C., Gabaix, X., & Laibson, D. (2007). The age of reason: Financial decisions over the lifecycle.
- 2) Alesina, A., & Lusardi, A. (2006). Driving Your Financial Investment. *Perhaps a*.
- 3) Alessie, R., Van Rooij, M., & Lusardi, A. (2011). Financial literacy and retirement preparation in the Netherlands. *Journal of Pension Economics & Finance*, 10(4), 527-545.
- 4) Almenberg, J., & Säve-Söderbergh, J. (2011). Financial literacy and retirement planning in Sweden. *Journal of Pension Economics & Finance*, 10(4), 585-598.
- 5) Altintas, K. M. (2011). The dynamics of financial literacy within the framework of personal finance: An analysis among Turkish university students. *African Journal of Business Management*, 5(26), 10483-10491.
- 6) Annamaria Lusardi; "Financial Literacy: An Essential Tool for Informed Consumer Choice?", NBER WORKING PAPER SERIES, 2008. (IF: 6)
- 7) Annamaria Lusardi; "Household Saving Behavior: The Role of Financial Literacy, Information, and Financial Education Programs", *Macroeconomics: Consumption*, 2008. (IF: 6)
- 8) Atchley, R. C. (1982). Retirement as a social institution. *Annual review of sociology*, 8(1), 263-287.

- 9) Barcellos, S. H., Carvalho, L. S., & Lleras-Muney, A. (2014). Child gender and parental investments in India: Are boys and girls treated differently?. *American Economic Journal: Applied Economics*, 6(1), 157-189.
- 10) Barcellos, S. H., Carvalho, L. S., & Lleras-Muney, A. (2014). Child gender and parental investments in India: Are boys and girls treated differently?. *American Economic Journal: Applied Economics*, 6(1), 157-189.
- 11) Bayer, P. J., Bernheim, B. D., & Scholz, J. K. (2009). The effects of financial education in the workplace: Evidence from a survey of employers. *Economic Inquiry*, 47(4), 605-624.
- 12) Benartzi, S., & Thaler, R. H. (1993). Myopic loss aversion and the equity premium puzzle (No. w4369). *National Bureau of Economic Research*.
- 13) Bernheim, B. D., & Garrett, D. M. (2003). The effects of financial education in the workplace: Evidence from a survey of households. *Journal of public Economics*, 87(7-8), 1487-1519.
- 14) Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and saving:: The long-term effects of high school financial curriculum mandates. *Journal of public Economics*, 80(3), 435-465.
- 15) Bernheim, Douglas (1995), "Do Households Appreciate Their Financial Vulnerabilities? An Analysis of Actions, Perceptions, and Public Policy," Tax Policy and Economic Growth, Washington, DC: American Council for Capital Formation, pp. 1-30.
- 16) Bernheim, Douglas (1998), "Financial Illiteracy, Education and Retirement Saving," in Olivia S. Mitchell and Sylvester Schieber (eds.), Living with Defined Contribution Pensions, Philadelphia: University of Pennsylvania Press, pp. 38-68.
- 17) Brown, J. R., Ivković, Z., Smith, P. A., & Weisbenner, S. (2008). Neighbors matter: Causal community effects and stock market participation. *The Journal of Finance*, 63(3), 1509-1531.
- 18) Bucher-Koenen, T., & Lusardi, A. (2011). Financial literacy and retirement planning in Germany. *Journal of Pension Economics & Finance*, 10(4), 565-584.
- 19) Bumcrot, C. B., Lin, J., & Lusardi, A. (2011). The geography of financial literacy.
- 20) Campbell, J. Y. (2006). Household finance. *The journal of finance*, 61(4), 1553-1604.
- 21) Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial services review*, 7(2), 107-128.
- 22) Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial services review*, 11(3), 289-307.
- 23) Crossan, D., Feslier, D., & Hurnard, R. (2011). Financial literacy and retirement planning in New Zealand. *Journal of Pension Economics & Finance*, 10(4), 619-635.
- 24) Dewe, P., Dunn, S., & Richardsont, R. (1988). Employee Share Option Schemes, Why Workers Are Attracted to Them 1. *British Journal of Industrial Relations*, 26(1), 1-20.

- 25) Duflo, E., & Saez, E. (2002). Participation and investment decisions in a retirement plan: The influence of colleagues' choices. *Journal of public Economics*, 85(1), 121-148.
- 26) Duflo, E., & Saez, E. (2002). Participation and investment decisions in a retirement plan: The influence of colleagues' choices. *Journal of public Economics*, 85(1), 121-148.
- 27) Duflo, E., & Saez, E. (2003). The role of information and social interactions in retirement plan decisions: Evidence from a randomized experiment. *The Quarterly journal of economics*, 118(3), 815-842.
- 28) Elliehausen, G., Christopher Lundquist, E., & Staten, M. E. (2007). The impact of credit counseling on subsequent borrower behavior. *Journal of Consumer Affairs*, 41(1), 1-28.
- 29) Fornero, E., & Monticone, C. (2011). Financial literacy and pension plan participation in Italy. *Journal of Pension Economics & Finance*, 10(4), 547-564.
- 30) Hassan Al-Tamimi, H. A., & Anood Bin Kalli, A. (2009). Financial literacy and investment decisions of UAE investors. *The journal of risk finance*, 10(5), 500-516.
- 31) Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Fed. Res. Bull.*, 89, 309.
- 32) Hirad, A., & Zorn, P. M. (2001). *A little knowledge is a good thing: Empirical evidence of the effectiveness of pre-purchase homeownership counseling*. Cambridge, MA: Joint Center for Housing Studies of Harvard University.
- 33) Hogarth, J. M., & O'Donnell, K. H. (1999). Banking relationships of lower-income families and the governmental trend toward electronic payment. *Fed. Res. Bull.*, 85, 459.
- 34) Hong, H., Kubik, J. D., & Stein, J. C. (2004). Social interaction and stock-market participation. *The journal of finance*, 59(1), 137-163.
- 35) Howlett, E., Kees, J., & Kemp, E. (2008). The role of self-regulation, future orientation, and financial knowledge in long-term financial decisions. *Journal of Consumer Affairs*, 42(2), 223-242.
- 36) Jennings, M., Werbel, J. D., & Power, M. L. (2003). The impact of benefits on graduating student willingness to accept job offers. *Journal of Business Communication*, 40(4), 289-302
- 37) Jorgensen, B. L., & Savla, J. (2010). Financial literacy of young adults: The importance of parental socialization. *Family relations*, 59(4), 465-478.
- 38) Kadoya, Y., & Khan, M. S. R. (2016). What determines financial literacy in Japan?.
- 39) Kimball, M., & Shumway, T. (2006). Investor sophistication, and the participation, home bias, diversification, and employer stock puzzles. *Unpublished Manuscript, University of Michigan*.
- 40) Lusardi, A. (2002, January). Preparing for retirement: The importance of planning costs. In *Proceedings. Annual Conference on Taxation and Minutes of the Annual*

- Meeting of the National Tax Association* (Vol. 95, pp. 148-154). National Tax Association.
- 41) Lusardi, A. (2006). Financial literacy and financial education: Review and policy implications. *NFI Policy Brief*, (2006-PB), 11.
 - 42) Lusardi, A. (2009). Planning for retirement: The importance of financial literacy. *Public Policy and Aging Report*, 19(3), 7-13.
 - 43) Lusardi, A. (2012). *Numeracy, financial literacy, and financial decision-making* (No. w17821). National Bureau of Economic Research.
 - 44) Lusardi, A., & Mitchell, O. S. (2007). Financial literacy and retirement planning: New evidence from the Rand American Life Panel. *Michigan Retirement Research Center Research Paper No. WP, 157*.
 - 45) Lusardi, A., & Tufano, P. (2009). Teach workers about the perils of debt.
 - 46) Lusardi, A., and O. S. Mitchell. 2011a. The outlook for financial literacy. In *Financial Literacy: Implications for Retirement Security and the Financial 14 Marketplace*, edited by Olivia S. Mitchell and Annamaria Lusardi. Oxford, UK: Oxford University Press, 1–16
 - 47) Lusardi, A., and O. S. Mitchell. 2011b. Financial literacy and planning: Implications for retirement wellbeing. In *Financial literacy: Implications for retirement security and the financial marketplace*, eds. Olivia S. Mitchell and Annamaria Lusardi. Oxford, UK: Oxford University Press, 17–39.
 - 48) Lusardi, Annamaria and Olivia S. Mitchell. (2009). “How Ordinary Consumers Make Complex Economic Decisions: Financial Literacy and Retirement Readiness.” NBER Working Paper 15350
 - 49) LUSARDI, Annamaria, MITCHELL, Olivia S. (2007). Financial literacy and retirement preparedness: Evidence and implications for financial education, *Business Economics*, Vol.42, Iss.1, pp.35-44
 - 50) Madrian, B. C., & Shea, D. F. (2001). The power of suggestion: Inertia in 401 (k) participation and savings behavior. *The Quarterly journal of economics*, 116(4), 1149-1187.
 - 51) Mahapatra, M. S., Raveendran, J., & De, A. (2019). Building a model on influence of behavioural and cognitive factors on personal financial planning: A study among Indian households. *Global Business Review*, 20(4), 996-1009.
 - 52) Mahdzan, N. S., & Tabiani, S. (2013). The Impact of Literasi keuangan on Individual Saving: an Exploratory Study in Malaysian Context. *Transformations in Business & Economics*, 12(1),28
 - 53) Milkman, K. L., Beshears, J., Choi, J. J., Laibson, D., & Madrian, B. C. (2012). *Following through on good intentions: The power of planning prompts* (No. w17995). National Bureau of Economic Research.
 - 54) Moen, P. (1996). A life course perspective on retirement, gender, and well-being. *Journal of occupational health psychology*, 1(2), 131.

- 55) Muller, L. A. (2001). Does retirement education teach people to save pension distributions. *Soc. Sec. Bull.*, 64, 48.
- 56) Mutran, Ritz, & Fernandez, 1997; Richardson & Kilty, 1991; Quick & Moen, 1998 Van Solinge & Henkens, 2008)
- 57) Quick, H. E., & Moen, P. (1998). Gender, employment, and retirement quality: A life course approach to the differential experiences of men and women. *Journal of Occupational Health Psychology*, 3, 44 – 64. doi:10.1037/1076-8998.3.1.44
- 58) Rameli, R. S., & Marimuthu, M. (2018). A conceptual review on the effect of attitudes towards retirement on saving intentions and retirement planning behavior. In *SHS Web of Conferences* (Vol. 56, p. 02005). EDP Sciences.
- 59) Ratcliffe, C., Chen, H., Shanks, T. R. W., Nam, Y., Schreiner, M., Zhan, M., & Sherraden, M. (2007). Assessing asset data on low-income households: Current availability and options for improvement. *Report to the US Department of Health and Human Services, The Urban Institute*
- 60) Richardson, V. E. (1999). Women and retirement. *Journal of Women & Aging*, 11(2-3), 49-66.
- 61) Schneider, M. (2005). The status of US public pension plans: A review with policy considerations. *Review of Public Personnel Administration*, 25(2), 107-137.
- 62) Setyawati, I., & Suroso, S. (2016). Sharia financial literacy and effect on social economic factors (survey on lecturer in Indonesia). *International Journal of Scientific & Technology Research*, 5(2), 92-102.
- 63) Stango, V., & Zinman, J. (2007). Fuzzy math and household finance: Theory and evidence. *The Review of Financial Studies*, 24(2), 506-534.
- 64) Szinovacz, M. E., & Davey, A. (2005). Predictors of perceptions of involuntary retirement. *The Gerontologist*, 45(1), 36-47.
- 65) Topa, G., Moriano, J. A., Depolo, M., Alcover, C. M., & Morales, J. F. (2009). Antecedents and consequences of retirement planning and decision-making: A meta-analysis and model. *Journal of Vocational Behavior*, 75(1), 38-55.
- 66) Turner, J. A., & Watanabe, N. (1995). Private pension policies in industrialized countries: A comparative analysis.
- 67) Turner, M. J., Bailey, W. C., & Scott, J. P. (1994). Factors influencing attitude toward retirement and retirement planning among midlife university employees. *Journal of Applied Gerontology*, 13(2), 143-156.
- 68) Van Rooij, M., Lusardi, A., & Alessie, R. (2007). Financial literacy and stock market participation (No. w13565). Retrieved from the National Bureau of Economic Research website: <https://www.nber.org/papers/w13565>.
- 69) Van Solinge, H., & Henkens, K. (2005). Couples' adjustment to retirement: A multi-actor panel study. *Journal of Gerontology: Social Sciences*, 60B, S11–S20.
- 70) Van Solinge, H., & Henkens, K. (2008). Adjustment to and satisfaction with retirement: Two of a kind? *Psychology and Aging*, 23, 422– 434. doi:10.1037/0882-7974.23.2.422

- 71) Vieira, E. F. S. (2012). What Do We Know About Financial Literacy? A Literature Review. *Marmara Journal of European Studies*, 20(2).
- 72) Waga, C. S., Memba, F., & Muriithi, J. (2021). Financial Behaviour and Retirement Planning in Kenya, Assessing the Role of Self-Control Bias. *European Scientific Journal, ESJ*, 17(23), 348.
- 73) Wagland, S. P., & Taylor, S. (2009). When it comes to financial literacy, is gender really an issue?. *Australasian Accounting, Business and Finance Journal*, 3(1), 3.
- 74) Wang, M. (2007). Profiling retirees in the retirement transition and adjustment process: Examining the longitudinal change patterns of retirees' psychological well-being. *Journal of Applied Psychology*, 92, 455– 474. doi:10.1037/0021-9010.92.2.455
- 75) Yamaguchi, T., Mitchell, O. S., Mottola, G. R., & Utkus, S. P. (2007). Winners and losers: 401 (k) trading and portfolio performance.