Indian Management Studies Journal 24, 25 (2020, 2021) 109-124

Indian
Management
Studies Journal

Financial Literacy and Retirement Planning in Punjab

Seerat* and Apar Singh**

** School of Management Studies, Punjabi University, Patiala*

*** School of Management Studies, Punjabi University, Patiala*

Abstract

India is all set to take the advantage of its demographic dividend. The scope of capitalizing the demographic dividend will depend on the extent of job opportunities created by the government for the youth. A bigger challenge awaits the government in the form of mounting old age dependency. This would have a detrimental effect both at the macro and the micro level. With the traditional family system crumbling in India, the government must take rapid steps to tackle the impending crisis of old age dependency before the situation goes out of hand. The government must develop a mechanism to provide old age support (Kulkarni, P.M. 2014). The matter might not appear to be urgent at the moment but, with the life expectancy going up and shifting from Defined Benefit (DB) to Defined Contribution (DC) pension plans the government will soon witness the retirement planning crisis in the country. Policy makers need to be proactive in handling the situation.

Key Words

Financial Literacy, Retirement Planning, Defined Benefits, Defined Contribution, Old Age.

INTRODUCTION

The recent past has witnessed the changing role of governments and employers towards managing investments on behalf of individuals. The social support structures across the world have changed where the role of the employer and government has shrunk, thereby increasing individual's responsibility to

manage their own finances and securing their financial future after retirement. During the past decade, the pension fund industry has witnessed a rapid growth in both the developed and emerging markets. Pension funds are ranked among the largest institutional investors in case of developed countries with respect to Asset Under Management (AUM). The concentration of more than 90% of the AUM can be attributed to three countries (Chan-Lau, 2004).

1. United States (75%)
2. United Kingdom (11%)
3. Japan (9 %)

Due to the demographic changes in the developed countries, the pension fund assets are witnessing a rapid growth. Aging of the population at a fast pace in these countries has increased the fiscal burden of national pay as you go system and the support ratio has increased noticeably. As a plausible solution to the problem, many developed nations have shifted from defined benefit to defined contribution pension plans. The importance of having a sound pension system in place cannot be ignored. Internationally pension funds hold a dominating position. To match the pace of growth, India too needs a sound modern pension system in place.

The past decade has witnessed new and complex financial products in the financial markets, which has increased the importance of understanding these complex products for a better future financial planning and to take informed financial decisions. Research around the world has witnessed low level of financial literacy (Agarwalla *et al.,* 2013, Lusardi and Mitchell, 2011). Even in developed nations like Japan, The United States, and Sweden, the level of financial literacy ranges from low to moderate. These Findings have increased the concern related to financial well-being of individuals after they retire.

The research conducted in this regard also provides an evidence that individuals either under-save or fail to invest prudently and mostly indebted (Mitchell 2011, Poterba *et al.* 2007). Due to the dynamic nature of financial products and services, it becomes important to financially educate people of all levels and age groups to cater to the needs of individuals with changing circumstances (Bernanke 2011).

The relevance of financial literacy to emerging economies cannot be undermined. Rather, financial literacy is of paramount importance to the emerging economies as these economies strive to improve the financial situation of their citizens by aiming at higher economic growth rates. Financial literacy enable the individuals to take informed financial decisions thereby, improving the financial well-being of the people through sound financial decision making.

LITERATURE REVIEW

Against the backdrop of the above problem, the author attempts to review the existing literature on financial literacy in an attempt to lay a strong foundation for the future research.

Financial Literacy

The term financial literacy was first defined in a report for the National Foundation for Educational Research (NFER) commissioned by Nat West Bank in the year 1992, which defined financial literacy as the ability to make informed judgments and take effective decisions regarding the use and management of money Noctoret *et al.* (1992). Financial advancement is extensively acknowledged as an important factor of economic growth (Levine, 2005). Literature shows that, the level of numeracy is low even among the developed nations, particularly widespread among some demographic groups like women, elderly and people with lower level of education (Annamaria Lusardi, 2012). Theory also suggests that, high income respondents could calculate savings after retirement on their own as compared to low income respondents (Miller and Devonish, 2009). Previous research also concludes that financial decision making is linked to numeracy (AnnamariaLusardi 2012). In the past decade it has been witnessed that governments around the world are shifting from Defined Benefit (DB) to Defined Contribution (DC) retirement plans (Van Rooij *et al.* 2007)which in turn puts the burden of retirement planning and retirement well-being on the shoulders of the employees. Studies also reveal that the level of financial literacy is low among youth and women (Annamaria Lusardi *et al.* 2010, Lusardi and Mitchell, 2011). Older people nearing retirement were not well aware about the company and national retirement plans (Robert Clark *et al.* 2010). It is also established that education has a positive impact on the financial literacy possessed by the respondents (Lusardi and Mitchell 2010) and mothers' education had a positive impact on the level of financial literacy possessed by the child (Annamaria Lusardi *et al.* 2010). Researchers have explored the important life events, that encouraged people to save and the top three among total twelve events include retirement motive and two other precautionary motives that is, illness and peace of mind (Horioka and Watanabe, 1997). To achieve these motives it becomes imperative for the people to embrace financial literacy and numeracy skills as life time skills to be able to survive in a dynamic financial environment. Research also reveals that respondents with already low wealth and low level of financial and political

literacy tend to have less wealth (Lusardi and Mitchell, 2006). Researchers have also observed that consumers who monitor their spending closely were less uncertain about their past spending and that the consumers with relatively more wealth had less incentive to monitor their spending and were considered absent minded consumers who tend to consume more as compared to the active consumers (John Ameriks *et al.* 2004). The authors have also highlighted the importance of financial education seminars. Research shows that the participants revised their financial goals and planned to modify their savings and investment after the seminar (Robert L. Clark *et al.* 2003). Authors have also explored the relationship between poor retirement planning and financial illiteracy. The research revealed that respondents did not understand financial economics concepts, particularly relating to bonds, stocks, mutual funds and compound interest. The results also revealed that even in the educated class only a few were undertaking retirement planning seriously (Lusardi and Mitchell, 2005). Emily Meyers (2020) made an attempt to study the current state of financial education and young adult financial literacy in the United States. The data was collected from the students of Franklin High School, Massachusetts. Assessments were administered to personal finance, business and history students. Most of the students failed the assessment and the author made an attempt to explore the possible reasons for the same. The author analyzed the scores of a personal finance assessment across three groups of students to analyze the differences in those who received formal education, had interest in business-related studies and those who had neither. The result shows that formal education did not guarantee better financial knowledge as there were personal finance students, who had failed and moreover, the personal finance class students were not able to outperform the other classes of students in all the question dimensions. The author advocated the viewpoint that formal education was not the only way to acquire financial knowledge and that all the young adults could use this opportunity to develop their personal financial skills through other means. The above evidence from the existing literature is sufficient to reveal the need to understand, where the people of the country stand, when it comes to financial literacy and numeracy skills. The importance of these concepts cannot be undermined in today's dynamic socio-economic environment.

Retirement Planning

Retirement planning can be described as the process that helps in ascertaining retirement income objectives, the investment decisions necessary

to achieve these objectives and to make this income sufficient for continual maintenance of lifestyle and old age needs. Researchers argue that, the definition of retirement needs a wider perspective, where retirement is not just viewed as discontinued work but includes a transition, that includes role expansion, redefinition and change (Thomas J. Calo, 2005). With increased life expectancy and reduced old age Mortality Rates individuals are faced with the challenge of life cycle planning as average age is rising (James M. Poterba, 2014). The past research on the topic views of changed employment relationship as a challenge due to which retirement planning is no longer a long awaited life event. The reason for this alteration, as viewed by the author, is mergers and acquisitions. Due to downsizing and business cycle downturns, many employees in their 40s and late 50s are faced the prospects of retirement. Thus, planning for retirement holds immense importance in every employee's life (Thomas J. Calo (2005). The Researcher's reason is that, increased life expectancy has also increased the retirement planning horizon of the individuals and thus financial planning has become inevitable and more challenging for the older population (James M. Poterba, 2014).

RESEARCH GAPS AND NEED OF THE STUDY

In the wake of the changing socio-economic and demographic profile of India, it becomes imperative to understand the awareness and attitude of it's citizens towards retirement. The social setup of the Indian society has changed over the years. People prefer to have a nuclear family. The traditional joint family system is coming at an end. Earlier, children were considered as the providers for old parents. Due to the altered social setup, where more and more people are shifting towards the nuclear family setup, the present generation may need to take care of themselves in their old age. This is another reason, that makes the study imperative in this area. Punjab is weak on the social security front and people who employed in the informal sector may need to provide for their retirement goals. All these factors when combined together, have a massive impact on the living standard of the people of this area. Punjab is a distressed state with a weak financial position (Economic Survey 2016-17, Government of Punjab). In such a scenario, it is important to investigate, how much the people are versed in terms of financial literacy and to understand their investment preferences.

Financial literacy is increasingly important in case of Punjab due to two major factors. The first factor, relates to the susceptibility of pay-as-you-go pension systems. Like most of the developed nations, India too has

shifted from Defined Benefit (DB) pension plans to Defined Contribution (DC) pension plans, thus increasing the responsibility of the employees to plan for their retirement. The second reason relates to the development of financial markets at a rapid pace with new and complex financial products. The above two reasons justify the author's attempt to conduct the study in this direction.

The author specifically selected the state of Punjab due to two main reasons. The first reason relates to the property and land inheritance in the area. Unlike other metro cities, where employees are dependent on their jobs to maintain their living standard, majority of the people in Punjab inherit property and land, thus giving them an additional source of income. Due to this, reason people are less worried about financial planning as compared to other metro cities where the only source of income is the job. The second reason of concern is the bad real estate markets and vulnerable agricultural profile of the state. Traditionally people of the state were never much worried about financial planning for retirement but, due to changed and more exposed situations prevalent in the state, people are losing out money and stability provided by land and real estate property. Thus, it becomes increasingly important to address the current situation in the state, before things go out of hand.

RESEARCH OBJECTIVES

The objective of the current paper is to study the relationship between demographics, academic background and level of financial literacy.

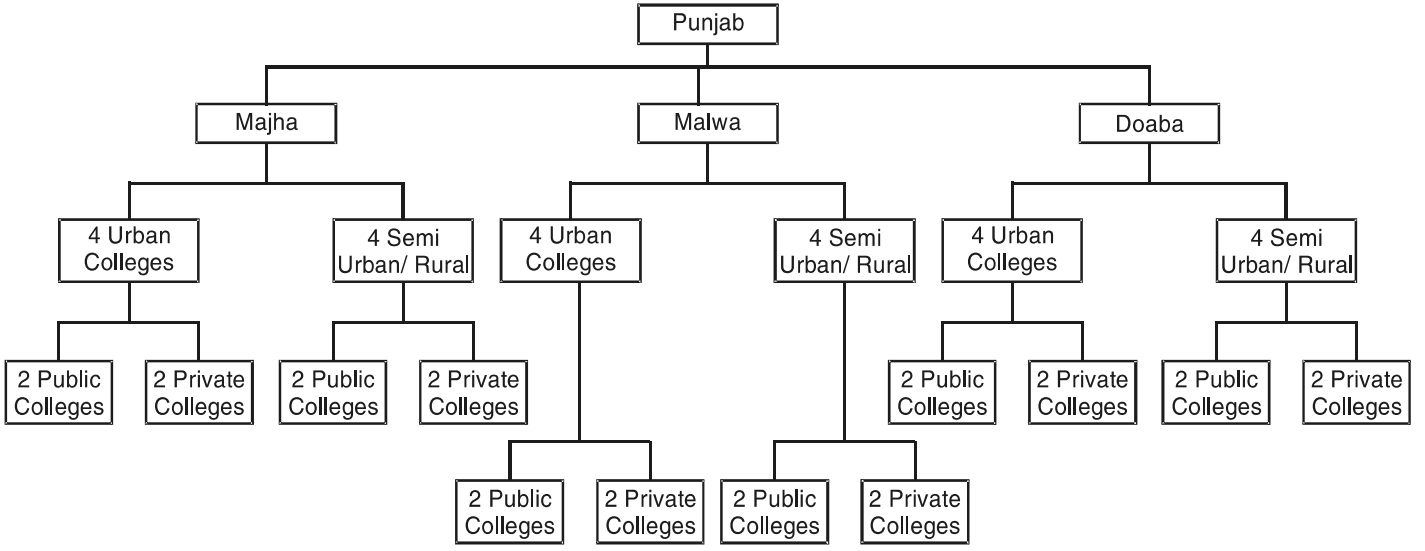
RESEARCH METHODOLOGY

Scope of the Study

The geographical coverage of this study is limited to the colleges of Punjab. The population consists of college educators, who do not have a formal pension plan in place by their institute. Each teacher, who is at-least in the third year of teaching and with no formal pension plans by the institute is considered as a unit. Data was collected using standardized questionnaires. A total of 550 questionnaires were distributed among various colleges, out of which 453 questionnaires were returned back by the respondents. 53 questionnaires were excluded from the study on account of missing values and other response biases. Finally 400 respondents were considered for the study.

Figure 1

Sampling Plan



Source : Created by the Author

Sampling Technique

The stratified quota sampling method and purposive sampling is employed to give equal representation to various strata of teachers. The strata were drawn on basis of academic streams. To bring representativeness to data gender, institute and location representation were considered as the basis for judgment.

RESULTS AND DISCUSSION

This section presents teacher's financial literacy scores. For this, the measurement tool designed by Lusardi and Mitchell (2007) is used to measure both basic and advanced financial literacy. The first Table depicts percentage of 'correct', 'incorrect' and 'do not know' answers for each question of these two segments. The first segment is a basic financial literacy score measured by five questions as shown in Table 1. The second segment is an advanced financial literacy score measured by eight questions shown in Table 2.

Table 1
Percentage of Answers for Basic Literacy Questions

Sr. No.	Variables (Objective 1)	Lusardi & Mitchell (2007)	Correct	Incorrect	Do Not Know
1.	I am aware about the movements in the prevailing interest rates	Numeracy	87	8	5
2.	I am aware about the changes in inflation rate	Inflation	74	24	2
3.	I understand the concept of time value of money	Time Value of Money	67	29	4
4.	I understand the concept of compounding and invest accordingly	Compound Interest	64	33	3
5.	I am aware of all the technological advancements in financial Institutions and I am responsible of making financial decisions in my household	Money Illusion	58	35	7

From above Table 1, it is seen that the first question had the highest score and was answered correctly by 87% of the teachers, followed by question 2, which was answered correctly by 74% of the teachers. The third question was answered correctly by 67% teachers. Question 4 and 5 were less correctly

answers as compared to other three questions. It shows that teachers know less about compound interest and money illusion as compared to other variables.

Table 2
Percentage of Answers for Advanced Literacy Questions

Sr. No.	Variables (Objective 1)	Lusardi & Mitchell (2007)	Correct	Incorrect	Do Not Know
6.	I understand the concept of diversification and try to maintain a diversified portfolio	Main Function of the stock market	65	23	12
7.	I am aware about the taxation laws, benefits and exemptions	Knowledge of unit trusts	56	26	18
8.	I keep a close eye on the major economic events	Relation between Interest rate & bond prices	53	21	26
9.	I keep a close eye on the government policies which could possibly affect all my financial decisions	Which is safer : share vs unit trusts	67	22	11
10.	Before taking any financial decision, I gather information from varied sources about various financial products	Which is riskier : share vs bonds	55	34	11
11.	I always consciously do my asset allocation	Highest Return over long period: Saving A/C, Bonds, Shares	68	23	9
12.		Highest Fluctuations: Saving A/C, Bonds, Shares	80	10	10
13.		Risk Diversification	81	12	7

From above Table 2, it is seen that the 13th question has the highest score and was answered correctly by 81% of the teachers followed by question 12th, which was answered correctly by 80% of the teachers. The 11th question was answered correctly by 68% teachers. Question 7 and 8 were less correct answers as compared to other eight questions. It shows that teaches know less about these topics as compared to other variables.

Table 3
Mean and Standard Deviation of Financial Literacy Scores

	N	Mean	SD
Basic Financial Literacy	400	70	22.32
Advanced Financial Literacy	400	65.62	15.43
Total Financial Literacy	400	67.30	17.27

The mean and SD for basic, advanced and total financial literacy is shown in Table 3. The average score for basic literacy came out to be 70% and for advanced literacy, it was 65.62 %. The average total financial literacy score for all 13 questions was 67.30 %.

Kolmogorov-Smirnov (K-S)

The assessment of normality made use of significant test, namely the Kolmogorov-Smirnov (K-S) test. This test aims to understand, whether the scores differ significantly from a normal distribution. If the test is significant, $p < 0.05$, then the distribution is significantly different from a normal distribution. The result is shown in Table 4.

Table 4
Test of Normality for Financial Literacy Scores

	Statistic	Df	Significance
Basic Financial Literacy	0.21	400	0.001
Advanced Financial Literacy	0.18	400	0.001
Total Financial Literacy	0.11	400	0.001

Above Table shows that basic financial literacy, D (400) = 0.21, p = .001, advanced financial literacy, D (400) = 0.18, p = .001, and total financial literacy, D (400) = 0.11, p = .001, scores are significantly non-normal.

It can be concluded that for all levels of financial literacy, the distribution of scores was significantly different from a normal distribution. Thus, appropriate non-parametric tests were used in the univariate analysis.

Univariate Analysis

This is used to determine the role that each demographic variable has in the financial literacy of teachers. Appropriate non-parametric tests were used to assess the significance, at a 5% significance level, of each predictor variable against the continuous outcome variable, i.e., financial literacy.

Gender

This includes statistical tests of two variables i.e. males and females.

$H_0 1$: Financial Literacy scores do not differ between male and female teachers.

Table 5
Mann-Whitney U Test Mean Rank Scores for Gender and Financial Literacy Scores

Gender	N	Basic Financial Literacy	Advanced Financial Literacy	Total Financial Literacy
Male	159	197.22	201.21	204.32
Female	241	184.23	182.12	172.98

Table 6
Mann-Whitney U Test Statistic for Variable Gender

Gender	Basic Financial Literacy	Advanced Financial Literacy	Total Financial Literacy
Mann-Whitney U	13542.500	12754.000	12534.000
Z	-2.426	-2.987	-3.124
Asymp. Sig. (2-tailed)	.001	.000	.000

The Mann-Whitney U Test is used to compare the predictor variable (gender) and the outcome variable (financial literacy scores) at a basic, advanced and total level. The results show that female teacher's basic financial literacy scores are significantly lower than the male teacher's scores, Mann-Whitney U = 13542.500, z-Score = -2.426, p-value = 0.001 and r = -0.143 which represents a small effect size. Also, the female teacher's advanced financial literacy scores are significantly lower than the male teacher's scores, Mann-Whitney U = 12754.000, z-Score = -2.987, p-value = 0.000 and r = -0.157 which represents a small effect size. After combining both basic and advanced financial literacy, the female teacher's combined financial literacy scores are significantly lower than the male teacher's scores, Mann-Whitney U = 12534.000, z-score = -3.124, p-value = 0.000 and r = -0.167 which also represents a small effect size. Therefore, the null hypothesis is rejected for basic, advanced and total financial literacy. It indicates that female teachers showed significantly lower basic, advanced and total financial literacy scores as compared to male teachers.

Academic Background

This includes statistical tests of four variables i.e. Science, Commerce/ Management, Humanities/ Arts and Vocational.

$H_0 2$: Financial Literacy Scores do not differ based on Academic Background.

Table 7

Kruskal-Wallis Mean Rank Scores for Academic Background and Financial Literacy Scores

Academic Background	N	Basic Financial Literacy	Advanced Financial Literacy	Total Financial Literacy
Science	86	201.27	195.23	199.92
Commerce/Management	130	205.82	203.12	202.01
Humanities/Arts	100	196.26	187.76	186.83
Vocational	84	178.93	162.52	166.08

Table 8

Kruskal-Wallis Test Statistic for Academic Background and Financial Literacy Scores

	Basic Financial Literacy	Advanced Financial Literacy	Total Financial Literacy
Chi-square	21.825	15.365	17.253
Df	4	4	4
Asymp. Sig. (2-tailed)	.001	.002	.000

The Kruskal-Wallis Test shows that there is a significant difference between academic background and basic financial literacy scores (21.825), p = .001, and advanced financial literacy scores (15.365), p = .002. Significant difference was also found between Academic Background and total financial literacy scores (17.253), p = .000. Therefore, the null hypothesis is rejected and it shows that basic financial literacy, advanced financial literacy and total financial literacy scores differs across academic background level.

$H_0 3$: Financial Literacy Scores do not differ by Age.

Table 9

Spearman's Correlation Coefficient of Age and Financial Literacy Scores

		Basic Financial Literacy	Advanced Financial Literacy	Total Financial Literacy
Age	Spearman's Correlation	-.028	-0.24	-0.26
	Sig. (2-tailed)	.543	.553	.534

The above Table shows the correlation of the continuous variable, age and financial literacy scores. It was seen that the age is not significantly correlated with the basic financial literacy (-.028) and p = .543, advanced financial literacy (-.024) and p = .553 and total financial literacy (-.026) and p = .534. Therefore, the null hypothesis is accepted and it shows that basic financial literacy, advanced financial literacy and total financial literacy scores do not have a relationship with age.

The results show that female teacher's basic financial literacy scores are significantly lower than the male teacher's scores, Mann-Whitney U = 13542.500, z-score = –2.426, p-value = 0.001 and r = –0.143, which represents a small effect size. Also, the female teacher's Advanced Financial Literacy scores are significantly lower than the male teacher's scores, Mann-Whitney U = 12754.000, z-score = -2.987, p-value = 0.000 and r = -0.157 which represents a small effect size. After combining both basic and advanced financial literacy, the female teacher's combined financial literacy scores are significantly lower than the male teacher's scores, Mann-Whitney U = 12534.000, z-score = -3.124, p-value = 0.000 and r = -0.167 which also represents a small effect size. Therefore, the null hypothesis is rejected for basic, advanced and total financial literacy. It indicates that female teachers showed significantly lower basic, advanced and total financial literacy scores as compared to male teachers.

The Kruskal-Wallis Test shows that there is a significant difference between academic background and basic financial literacy scores (21.825), p = .001, and advanced financial literacy scores (15.365), p = .002. Significant difference was also found between Academic Background and total financial literacy scores (17.253), p = .000. Therefore, the null hypothesis is rejected and it shows that basic financial literacy, advanced financial literacy and total financial literacy scores differs across academic background level.

Using Spearman's Correlation Coefficient of Age and financial literacy

scores, it was seen that the age is not significantly correlated with the basic financial literacy (-.028) and p = .543, advanced financial literacy (-.024) and p = .553 and total financial literacy (-.026) and p = .534. Therefore, the null hypothesis is accepted and it shows that basic financial literacy, advanced financial literacy and total financial literacy scores do not have a relationship with age.

CONCLUSION

Financial literacy is the main concern in retirement planning in the developed economies. Understanding the needs of each and every employ, can greatly aid in preparing individuals for retirement. Retirement planning can begin at any time and thus, must be the main priority. Financial know, how is an issue that every individual is facing. However, we must remember that it is essential to have sufficient financial knowledge to successfully plan for retirement. Through our research, we have found many differences among individuals that can be addressed through proper awareness. Nevertheless, it is very important to increase financial education through workshops and seminars.

References

Adami, R.; Gough, O.; Mukherjee, S.; and Sivaprasad, S. (2014), "An Empirical Analysis of the Performance of Pension Funds : Evidence from UK", *Studies in Economics and Finance,* 31(2), 141-155.

Agarwalla, S. K.; Barua, S. K.; Jacob, J.; and Varma, J. R. (2015), "Financial Literacy among Working Young in Urban India", *World Development,* 67, 101-109.

Agarwalla, S. K.; Barua, S. K.; Jacob, J.; and Varma, J. R. (2013), "Financial Literacy among Working Young in Urban India", Working Paper No. 2013-10-02, Indian Institute of Management, Ahmedabad.

Agnew, J. R.; and Szykman, L. R. (2005), "Asset Allocation and Information Overload : The Influence of Information Display, Asset Choice and Investor Experience", *The Journal of Behavioral Finance,* 6(2), 57-70.

Akhter, A. (2016), "Introduction : In Financial Literacy, Perceived Risk Attitudes and Investment Intentions among Youth In Jammu and Kashmir", (pp. 1-47), doi:http://hdl.handle.net/10603/185813.

Alda, M.; and Ferruz, L. (2016), "Pension Fund Herding and the Influence of Management Style", *Journal of Behavioral Finance,* 17(2), 144-156.

Alessie, R. J.; Van Rooij, M.; and Lusardi, A. (2011), "Financial Literacy, Retirement Preparation and Pension Expectations in the Netherlands", (NBER Working Papers No.17109), National Bureau of Economic Research, Inc.

Almenberg, J.; and Säve-Söderbergh, J. (2011), "Financial Literacy and Retirement Planning in Sweden", *Journal of Pension Economics & Finance,* 10(4), 585-598.

Ameriks, J.; Caplin, A.; and Leahy, J. (2004), "The Absent-Minded Consumer" (No. w10216), *National Bureau of Economic Research.*

Asher, M. (2009), "Pension Plans, Provident Fund Schemes and Retirement Policies : India's Social Security Reform Imperative", *ASCI Journal of Management,* 39(1), 1-18.

Ayers, C. A. (2012), "Empowering All Students with a Secure Economic and Financial Future : Multidisciplinary Investment Education in Social Studies Curricula and Beyond", *Journal of Consumer Education,* 29, 1-13.

Bernanke, B. S. (2011), Statement by Chairman Bernanke on Financial Literacy. Provided for the Record of a Hearing Held on April 12, 2011 conducted by the Subcommittee on Oversight of Government Management, the Federal Workforce, and the District of Columbia, Committee on Homeland Security and Governmental Affairs, U.S. Senate. Downloaded from http://www.federalreserve.gov/newsevents/testimony/bernanke20110420a.htm on 25 August, 2013.

Bucher-Koenen, T.; and Lusardi, A. (2011), "Financial Literacy and Retirement Planning in Germany", *Journal of Pension Economics & Finance,* 10(4), 565-584.

Chan-Lau, J. A. (2004), "Pension Funds and Emerging Markets", Working Paper 04/181, International Monetary Fund, Washington DC.

Clark, R. L.; and d'Ambrosio, M. (2003), "Financial Education and Retirement Savings", Available at SSRN 390642.

Clark, R. L.; Morrill, M. S.; and Allen, S. G. (2012), "The Role of Financial Literacy in Determining Retirement Plans", *Economic Inquiry,* 50(4), 851-866.

Meyers, E. (2020), Young Adult Financial Literacy and Its Underlying Factors, Honors Thesis. 64.

Foster, L. (2017), "Young People and Attitudes Towards Pension Planning", *Social Policy and Society,* 16(1), 65-80.

G. Rubbaniy; I. P. P. van Lelyveld; and W. F. C. Verschoor (2014), "Home Bias and Dutch Pension Funds' Investment Behavior", *The European Journal of Finance,* 20:11, 978-993, DOI: 10.1080/1351847X.2013.784206

Hershey, D. A.; Henkens, K.; and Van Dalen, H. P. (2010), "Aging and Financial Planning for Retirement : Interdisciplinary Influences Viewed Through a Cross-Cultural Lens", *The International Journal of Aging and Human Development,* 70(1), 1-38.

Hershey, D. A.; Jacobs-Lawson, J. M.; and Neukam, K. A. (2002), "Influences of Age and Gender on Workers' Goals for Retirement", *The International Journal of Aging and Human Development,* 55(2), 163-179.

Lusardi, A. (2009), "Planning for Retirement : The Importance of Financial

Literacy", *Public Policy and Aging Report,* 19(3), 7-13.

Lusardi, A.; and Mitchell, O. S. (2007), "Baby Boomer Retirement Security : The Roles of Planning, Financial Literacy, and Housing Wealth", *Journal of Monetary Economics,* 54(1), 205-224.

Lusardi, A.; and 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.

Lusardi, A.; and Mitchell, O. S. (2008), "Planning and Financial Literacy : How do Women Fare?", *American Economic Review,* 98(2), 413-17.

Lusardi, A.; and Mitchell, O. S. (2010), "How Ordinary Consumers Make Complex Economic Decisions : Financial Literacy and Retirement Readiness" (No. w15350), *National Bureau of Economic Research.*

Lusardi, A.; and Mitchell, O. S. (2011), "Financial Literacy and Retirement Planning in the United States", *Journal of Pension Economics & Finance,* 10(4), 509-525.

Lusardi, A.; and Mitchell, O. S. (2011), "Financial Literacy Around the World : An Overview", *Journal of Pension Economics & Finance,* 10(4), 497-508.

Lusardi, A.; and Mitchell, O. S. (2011), "Financial Literacy and Planning : Implications Forretirement Wellbeing" (No. w17078), *National Bureau of Economic Research.*

Lusardi, A.; Mitchell, O. S.; and Curto, V. (2010), "Financial Literacy among the Young", *Journal of Consumer Affairs,* 44(2), 358-380.