

Financial Literacy and Retirement Preparedness among Algerians Who Have Reached the Age of Retirement

Imed CHERABI

Maitre de Conférences

Laboratoire Grand Maghreb: Economie et société. Univ. Constantine 2

imedcherabi@gmail.com

Received date : 2018-05-07 & Accepted date .2018-07-09 & Publication date:2018-08-18

Abstract

The objective of this paper is to explore the financial practices of Algerian individuals who have reached the age of retirement. More precisely, it aims to assess their financial literacy level and their retirement preparedness. Data consisted of 154 individuals who have reached the age of retirement in the city of Constantine, Algeria. Results show that: (1) individuals who have reached the age of retirement did not prepare enough for retirement; (2) financial literacy among individuals who have reached the age of retirement is relatively low; and (3) individuals who have reached the age of retirement do not have in general more than one source of income.

Keywords: Financial literacy, retirement preparedness, individuals, age of retirement, Algeria.

JEL codes: A20, D10, D12, D14, D31.

Corresponding Author: Imed CHERABI. imedcherabi@gmail.com

Introduction

In opposite to expectations, people tend to spend more during retirement compared to what they used to spend in pre-retirement. According to (Brady et al. 2017), this is mainly due to an increase in expenses that are related to: (i) preserving the same lifestyle level of pre-retirement; and (ii) covering the raising costs of unexpected health issues.

According to (Lusardi and Mitchell 2011a), Americans who have a higher level of financial literacy tend to be more aware of the fact that they will spend more during retirement and thus will tend to plan in a better way for it. (Rooij, Lusardi, and Alessie 2011), (Almenberg and Säve-Söderbergh 2011) and (Bucher-Koenen and Lusardi 2011) have conducted similar studies in Netherlands, Sweden and Germany, respectively. They found a strong and positive relationship between financial knowledge and retirement preparedness.

The issue of financial literacy and retirement preparedness has already been tackled by an important number of researchers. Most of them have focused on developed countries. However, there is little if no evidence regarding financial literacy and retirement preparedness among individuals in Algeria. Based on this, the present paper aims to explore the financial practices of individuals who have reached the age of retirement in Algeria.

Most importantly, it aims to answer three questions:

RQ1: What are the precautions that have been taken by individuals who have reached the age of retirement in order to financially manage this phase of life?

RQ2: How financially literate are individuals who have reached the age of retirement in Algeria?

RQ3: Do individuals who have reached the age of retirement in Algeria rely on one single income?

The hypotheses of the study are:

H1: Algerian individuals who have reached the age of retirement did not take enough precautions for the phase of retirement.

H2: Algerian individuals who have reached the age of retirement do not enjoy high levels of financial literacy.

H3: Algerian individuals who have reached the age of retirement do not have diversified sources of income.

1. Methods

In order to answer these questions, a survey was designed and distributed to individuals who have reached the age of retirement. The present section provides the necessary information regarding the survey itself, the data and the procedures.

1.1 Survey Design

The survey¹ was designed based on (OCDE 2011) and on (Lusardi and Mitchell 2011a; Almenberg and Säve-Söderbergh 2011; Lusardi and Mitchell 2011b, 2007; Lusardi and Mitchell 2007) methodologies. It contains three sections. The first section aims to collect demographic data of the respondents such as: (1) gender; (2) age; (3) level of education; (4) individual income; (5) family members; and (6) sector of work before retirement.

¹ See appendix 1.

The second section aims to collect data concerning financial literacy such as: (1) budgeting; (2) understanding of simple interest; (3) basic computing skills; (4) awareness about the purchasing power of money; (5) money habits; (6) income sufficiency; (7) options when income insufficiency; (8) ability to resist an expenditure shock; and (9) ability to resist an income loss.

The third section aims to collect data concerning retirement including: (1) assertion of an increase in expenses during retirement compared to pre-retirement; (2) potential reasons behind the increase of expenses during retirement, if any; and (3) sources of income during retirement.

1.2 Data

Given that the age at which individuals can enter retirement varies from a case to another, we have defined age 60 as a threshold. Thus, the population of the study consists of every retired Algerian who has reached age 60. The selection of a narrow range of age can be justified by many reasons. First of all, the study aims to check what has already been achieved by individuals who have reached the age of retirement. Second, the fact of including younger or pre-retired individuals would only provide us with an insight of their future plans that may or may not be realized.

The sample of the study consists of 154 randomly chosen individuals across the city of Constantine, Algeria. Data was collected through direct interviews in early April 2018. Interviews were carried out by the author who was carefully following the (OCDE 2011) guidelines on the matter.

2. Results and discussion

In this section, results are presented and discussed variable by variable. It is divided into three subsections. The first subsection summarizes the descriptive statistics concerning the studied sample. The second subsection presents the results that are related to financial literacy. Finally, the third subsection presents the results that are related to retirement.

2.1 Descriptive statistics

Gender. Table 1 stipulates that in a sample of 154 individual, 71.4 % are males and the remaining %28.6 are females. The low percentage of female respondents is mainly due to the fact that an important number of women were reluctant about sharing financial matters with a stranger.

Age. According to Table 1, around 87% of the respondents were aged between 60 and 69. 9.1% were aged between 70 and 79. Only 3.9 % were aged between 80 and 89. No respondent was aged 90 or above.

Education. While, 9.1% of the respondents said that they did not receive any kind of formal education, 68.9% of the respondents who have received a formal education did not attend university. Only, 22.1% have received university education.

Income. The majority of respondents, approximately 94.9% had an income range between 18000 Algerian Dinars and 72000 Algerian Dinars. 2.5% have refused to disclose any information about their salary. It is important to mention here that there was a fairly significant number of respondents, females mostly, who were ready to participate to the study, but later refused to carry on as the subject required them to disclose financial information.

Family members. Around 66.2% of the respondents stated that they are still living with their partner and children who have less than 18 years old. 18.2% stated that

they still live with their partner and children who have more than 18 years old. Only 9.1% are living with their partner without having any children in charge. Similarly, 6.5% are living alone. Since the study was conducted randomly and outdoors, it could not reach those individuals who were living in senior care centers.

Work sector in pre-retirement. It is important to mention that 80.5% of the respondents have been employed by a public or government entity, in opposite to 3.9% who have been employed by a private entity. While 9.1% have been working independently, only 2.6% have created their own business. Finally, 3.9% of the respondents stated that they did not have a job although they perceived an income.

Table 1: Data description

Variable	Statement	Frequency	Total	Percentage	Total (%)
Gender	Male	110	154	71.4 %	%100
	Female	44		28.6 %	
Age	60-69	134	154	87 %	%100
	70-79	14		9.1 %	
	80-81	6		3.9 %	
	90 +	0		0 %	
Education	No education	14	154	9.1 %	%100
	Primary	18		11.7 %	
	Secondary	32		20.8 %	
	College	56		36.4 %	
	University	34		22.1 %	
Individual income	0 – 18000	0	154	0 %	%100
	18001 – 36000	58		37.7 %	
	36001- 54000	60		39 %	
	54001 – 72000	28		18.2 %	
	72001- 90000	2		1.3 %	
	90001 – 108000	2		1.3 %	
	108000+	0		0 %	
	Refuse	4		2.5 %	
Family members	Alone	10	154	6.5 %	100%
	With partner	14		9.1 %	
	Partner and + 18 y/o children	28		18.2 %	
	Partner and – 18 y/o children	102		66.2 %	
	Senior care center	0		0 %	
Work sector in pre-retirement	Public sector employee	124	154	80.5 %	100%
	Private sector employee	6		3.9 %	
	Business owner	4		2.6 %	
	Independent worker	14		9.1 %	
	Jobless	6		3.9 %	

Note. Elaborated by the author based on SPSS outputs.

2.2 Financial literacy

Assessing the level of financial literacy of an individual requires the inclusion of different variables. Each variable is meant to capture a specific aspect. During this study, we have only selected the most relevant variables for Algerians. The results are illustrated from Table 2 to Table 10.

2.2.1 Budgeting

According to Table 2, around 62.3% of the individuals who have participated in the study do have a monthly budget. 33.8% stated that they do not budget at all. The budget includes assigning each amount of money to a specific task before the beginning of the month. It will mainly allow its user to keep track of spending and properly manage daily finances.

Table 2: Budgeting

Statement	Frequency	Percentage
Yes	96	62.3 %
No	52	33.8 %
Don't know	6	3.9 %
Total	154	100 %

Note. Elaborated by the author based on SPSS outputs.

2.2.2 Simple interest

When it comes to the understanding of the concept of simple interest, Table 3 stipulates that only 41.5% of the respondents could answer correctly a basic question regarding it. 33.8 % provided a wrong answer and 24.7% stated that they do not know the answer. The understanding of the concept of simple interest and compound interest is extremely important. They are both present along with various financial products such as savings accounts, loans and investments.

Table 3: Understanding of simple interest

Statement	Frequency	Percentage
Correct answer	64	41.5 %
Wrong answer	52	33.8 %
Don't know	38	24.7 %
Total	154	100 %

Note. Elaborated by the author based on SPSS outputs.

2.2.3 Basic computing skills

Table 4 provides statistics about a more elementary matter, namely computing skills. Around 88.3% of the respondents were able to correctly answer this question. Only 11.7% of the respondents failed to provide a correct answer. Mastering basic computing skills turns out to be of an extreme importance in everyday life. It is required in most financial operations.

Table 4: Basic computing skills

Statement	Frequency	Percentage
Correct answer	136	88.3 %
Wrong answer	8	5.2 %
Don't know	10	6.5 %
Total	154	100 %

Note. Elaborated by the author based on SPSS outputs.

2.2.4 Purchasing power of money

Table 5 provides an insight about a highly important issue that concerns the purchasing power of money. Respondents were asked about what would happen to the purchasing power of 100 Algerian Dinars in terms of purchasing power in a year from now. Dramatically, 38.9 % have failed to provide a correct answer to this question. In Addition, 16.8% think that the purchasing power of money will either stay the same or will increase over time. Unfortunately, the latter category of respondents could find itself stuck in the trap of inflation especially, if they still hold their savings in cash.

Table 5: Purchasing power of 100 DA. Today vs. a year from now

Statement	Frequency	Percentage
Higher	12	7.7 %
Same	14	9.1 %
Lower	76	49.4 %
Depends on the nature of the purchase	18	11.7 %
Refuse	32	20.8 %
Other	2	1.3 %
Total	154	100 %

Note. Elaborated by the author based on SPSS outputs.

2.2.5 Money habits

Table 6 provides pertinent information regarding various financial practices among individuals who have reached the age of retirement. The positive findings are: (1) 97.4% of respondents buy things they can afford and pay for it in cash. This is an indication that individuals in the study are wisely living within their means; in addition, (2) 84.4% pay their bills on time.

However, there were significantly much more negative findings, for instance: (1) 68.9% of the respondents feel that their financial situation does not allow them to do things that are important to them. This is pretty much a sad reality, given the fact that these individuals spent their lifetime working hard in a hope that one day they will enjoy a comfortable retirement. But on the overall level, only one out of two individuals is unsatisfied with his financial situation; (2) One in three individuals is not planning any more for his own near financial future and tend to live every day as it is the last. In fact, this is a double edged statement. On one hand, individuals who have reached the age of retirement are supposed to enjoy years of hard work and are not supposed to actively plan for the future as they did when they were younger. On the other hand, life expectancy in Algeria has significantly increased in the last decades to reach 75 years in 2015 (World Health Expectancy 2015), which means that an individual who retires at the age of 65 will have to manage his finances for an average of 10 years with a relatively fixed income. Obviously, the earlier an individual retires, the higher the number of years left for him to manage financially; and (3) 22.1% have reached the age of retirement carrying with them the burden of too much debt. In other words, this category will still not enjoy their income as it will be largely dedicated to paying debt.

Table 6: Financial practices

Statement	Totally disagree		Disagree		Neutral		Agree		Totally agree	
	F	%	F	%	F	%	F	%	F	%
Before I buy something, I always make sure that I can pay for it in cash.	0	0	2	1.3	2	1.3	28	18.2	122	79.2
I tend to live every day as it is my last.	42	27.2	50	32.5	10	6.5	12	7.8	40	26
I pay my bills on time.	4	2.6	6	3.9	14	9.1	46	29.9	84	54.5
I pay high attention to all my financial matters.	2	1.3	16	10.4	14	9.1	30	19.5	92	59.7
Money is here so that we can spend it.	18	11.6	24	15.6	38	24.7	36	23.4	38	24.7
My financial situation doesn't allow me to do things that are important to me.	14	9	16	10.4	18	11.7	42	27.3	64	41.6
I have too much debt.	52	33.7	56	36.4	12	7.8	20	13	14	9.1
I am satisfied with my financial situation.	28	18.1	24	15.6	14	9.1	42	27.3	46	29.9

Note. Elaborated by the author based on SPSS outputs.

2.2.6 Insufficient income and options

In accordance with the fact that 68.9% of the respondents feel that their financial situation does not allow them to do things that are important to them, Table 7 confirms that 70.1% complain about an insufficient income. Only 26 % reported that they do not suffer from an insufficient income.

Table 8 provides us with the most common options for individuals who suffer from insufficient income, starting by the most common option: (1) borrowing money from friends or family; (2) cutting spending; and (3) digging into savings. Even if 62.3 % of the respondents previously stated that they are keeping a monthly budget, it is clear that not all of them are able to follow it. When income is insufficient, the most appropriate options would be to cut spending or to work more in order to increase income. However, we can see that a significant percentage of respondents tend to go into debt in this type of situations.

Table 7: Insufficient income

Statement	Frequency	Percentage
Yes	108	70.1 %
No	40	26 %
Don't know	2	1.3 %
Refuse	4	2.6 %
Total	154	100%

Note. Elaborated by the author based on SPSS outputs.

Table 8: Action when insufficient income

Statement	Frequency	Percentage
Withdraw money from account.	14	12.96 %
Spend less.	28	25.92 %
Sell something I own.	2	1.85 %
Work more.	8	7.40 %

Ask for a loan from friend or family.	40	37.03 %
Pledge something I own.	2	1.85 %
Take a loan from a local club or association	0	0 %
Take a loan from a financial institution	2	1.85 %
Take a loan and pay it on pay day.	0	0
I default on payment.	2	1.85 %
Don't know.	6	5.55 %
Not Applicable.	2	1.85 %
Refuse to answer	2	1.85 %
Total	108	~100 %

Note. Elaborated by the author based on SPSS outputs.

2.2.7 Expenditure shock

In case of a sudden expenditure equal to their monthly income, 51.9% of the respondents stated that they will not be able to deal with it without having to borrow money. Moreover, Table 9 shows that only 35.1% are able to handle it properly. This could be a clear indication that the 51.9% who were unable to handle this sudden expense did not even have an emergency fund equal to their monthly income.

Table 9: Ability to resist expenditure shock equal to monthly income without taking a loan

Statement	Frequency	Percentage
Yes	54	35.1 %
No	80	51.9 %
Don't know	14	9.1 %
Refuse to answer	6	3.89 %
Total	154	100 %

Note. Elaborated by the author based on SPSS outputs.

2.2.8 Surviving in case of income loss

Table 10 stipulates that in case of an income loss, one out of two individuals who have reached the age of retirement will not be able to survive on their own means for more than one month. This is another strong indication that individuals who have reached the age of retirement are still living paycheck to paycheck and that they do not have a subsequent emergency fund.

Table 10: Surviving period in case of income loss

Statement	Frequency	Percentage
Less than a week	30	19.5 %
From one week to one month	52	33.8 %
From one to three months	24	15.6 %
From three to six months	10	6.5 %
More than six months	20	13 %
Don't know	16	10.4 %
Refuse	2	1.3 %
Total	154	100 %

Note. Elaborated by the author based on SPSS outputs.

2.3 Retirement planning

The present subsection provides an insight about some of the aspects that are related to retirement. It contains three questions.

2.3.1 Rate of spending: pre-retirement vs. retirement and reasons behind it

As stated at the beginning of the study, expenses during retirement were more likely to increase compared to pre-retirement. This question has been addressed to the participants of this study. Table 11 shows that 62.3% confirmed that they in fact found themselves in front of more expenses. Table 12 indicates that 43.75 % of those who felt an increase in expenses were obliged to financially assist their children whom expenses are also on the rise. The remaining participants stated that this was due to unexpected health issues (14.58 %), inflation (16.66 %) and enjoyment of retirement (16.66 %).

Table 11: Feeling that spending rate has increased after retirement.

Statement	Frequency	Percentage
Yes	96	62.3 %
No	48	31.2 %
Don't know	10	6.5 %
Total	154	100 %

Note. Elaborated by the author based on SPSS outputs.

Table 12: Reasons behind the increased rate of spending.

Statement	Frequency	Percentage
Assist children	42	43.75 %
Health issues	14	14.58 %
Inflation	16	16.66 %
Enjoy retirement	16	16.66 %
Other	8	8.33 %
Total	96	~100 %

Note. Elaborated by the author based on SPSS outputs.

2.3.2 Source of income during retirement

Table 13 provides a list of various sources of income on which individuals at the age of retirement rely. It stipulates that 55.84 % relied on a pension from a government fund, 12.98% perceived a passive income from non-financial assets (renting homes, farm land etc.), 6.49% dangerously stated that they have sold or will sell their non-financial assets in order to finance their retirement. Similarly, 6.49 % stated that they are dependent on their children. In addition, none of the respondents is relying on passive income from financial assets such as stocks or bonds, as the financial products from this asset class are very few and less popular. On the overall level, most of the respondents relied on one single type of income. This is a strong indication that individuals at the age of retirement did not actively plan for retirement by trying to diversify or create various sources of income.

Table 13: Source of income during retirement

Statement	Frequency	Percentage
Pension from government Fund	86	55.84 %
Passive income from financial assets	0	0 %
Selling non-financial assets	10	6.49 %

Dependent on my partner	10	6.49 %
Passive income from non-financial assets	20	12.98 %
Dependent on children	10	6.49 %
Other	14	9.09 %
Refuse	4	2.59 %
Total	154	~100%

Note. Elaborated by the author based on SPSS outputs.

3. Summary and concluding remarks

Individuals who have reached the age of retirement are becoming financially more vulnerable. They are required to manage a critical phase of their life with a relatively fixed amount of income. The present research has focused on studying the retirement preparedness and the financial practices of Algerians who have reached the age of retirement.

Results indicated that the level of financial literacy among individuals who have reached the age of retirement was relatively low. Moreover, an important percentage of individuals who have reached the age of retirement did not prepare enough for retirement. Finally, individuals who have reached the age of retirement did not have in general more than one source of income. In addition to the previous results, we found that:

- Only 62.3 % do hold a monthly budget.
- 58.5 % do not understand the concept of simple interest.
- 38.9 % do not realize that the purchasing power of money drops over time.
- 68.9 % feel that their financial situation does not allow them to do things that are important to them.
- 22.1 % have too much debt.
- 70.1 % feel that their income is insufficient.
- When their income is insufficient, 37.03 % will borrow money from friends or family, 25.92 % will cut spending and 12.96 % will dig into their savings.
- 51.9 % will not be able to resist an expenditure shock equal to their monthly income without borrowing money.
- 53.3 % are living paycheck to paycheck.
- 62.3 % agree that expenses have significantly increased during retirement.
- The most common reasons behind the increase in expenses are: assisting children, paying for unexpected health expenses, maintaining the same level of life and enjoying retirement.
- Although 80.5% of the respondents stated that they have worked for a governmental entity in pre-retirement, only 55.84% perceive a pension from a government fund.

These findings are of an extreme importance and of an urgent nature for both individuals who have reached the age of retirement and for public authorities. Individuals who have reached the age of retirement need in fact to adapt some of their financial practices in order to successfully manage this critical period of their life. Moreover, public authorities should step in and help promoting financial literacy in order to (i) allow this category to enjoy retirement; and (ii) prevent them from making any financial mistakes that could be fatal.

References

1. Almenberg, Johan, and Jenny Säve-Söderbergh. 2011. "Financial Literacy and Retirement Planning in Sweden." *Journal of Pension Economics & Finance* 10 (4): 585–598.
2. Brady, Peter J., Steven Bass, Jessica Holland, and Kevin Pierce. 2017. "Using Panel Tax Data to Examine the Transition to Retirement." SSRN Scholarly Paper ID 2928375. Rochester, NY: Social Science Research Network.
3. Bucher-Koenen, Tabea, and Annamaria Lusardi. 2011. "Financial Literacy and Retirement Planning in Germany." *Journal of Pension Economics & Finance* 10 (4): 565–584.
4. Lusardi, Annamaria, and Olivia Mitchell. 2007. "Financial Literacy and Retirement Planning: New Evidence from the Rand American Life Panel."
5. Lusardi, Annamaria, and Olivia S. Mitchell. 2011a. "Financial Literacy and Planning: Implications for Retirement Wellbeing." National Bureau of Economic Research.
6. ———. 2011b. "Financial Literacy and Retirement Planning in the United States." Working Paper 17108. National Bureau of Economic Research.
7. Lusardi, Annamaria, and Olivia S. Mitchell. 2007. "Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education." *Business Economics* 42 (1): 35–44.
8. OCDE, ed. 2011. "Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy."
9. Rooij, Maarten, Annamaria Lusardi, and Rob Alessie. 2011. "Financial Literacy and Retirement Planning in the Netherlands." *Journal of Economic Psychology* 32 (August): 593–608..
10. World Health Expectancy. 2015. "World Health Expectancy." *World Life Expectancy*. 2015. <http://www.worldlifeexpectancy.com/algeria-life-expectancy>.

Appendix 1: Survey Questions

- Q1:** Do you hold a monthly budget? (1) Yes; (2) No; (3) Don't know.
- Q2:** Suppose you had 100 Algerian dinars in a bank account and that the annual interest on this account is 10%. How much money would you have after one year? (1) Answer:.....; (2) Don't know.
- Q3:** Suppose that five brothers have received an amount of money equal to 100 Algerian dinars. What is the amount that each one of them will receive? (1) Answer:.....; (2) Don't know.
- Q4:** Suppose that these five brothers will receive this amount of money a year later. If the inflation rate was 5% that year, will the purchasing power of the amount of money they received be: (1) higher; (2) same; (3) lower; (4) depends on the nature of the purchase; (5) refuse; (6) other.
- Q5:** on a scale from 1 to 5, how would you agree or disagree with the following statements? (1) Before I buy something, I always make sure that I can pay for it in cash. (2) I tend to live every day as it is my last. (3) I pay my bills on time. (4) I pay high attention to all my financial matters. (5) Money is here so that we spend it. (6) My financial situation doesn't allow me to do things that are important to me. (7) I have too much debt. (8) I am satisfied with my financial situation.
- Q6:** Sometimes, people find that their monthly income does not cover their expenses. Did this happen to you in the last 12 months? (1) Yes; (2) No; (3) don't know; (4) refuse.
- Q7:** If you answered yes to Q6, how did you proceed the last time your income was insufficient? (1) withdraw money from account; (2) spend less; (3) sell something I own; (4) work more; (5) take a loan from friends or family; (6) pledge something I own; (7) Take a loan from a local club or association; (8) take a loan from a financial institution; (9) take a loan and pay it on pay day; (10) I default on payment; (11) don't know; (12) not applicable; (13) refuse.
- Q8:** If today, you faced an unexpected expense equal to your monthly income, would you be able to handle it without having to borrow money? (1) yes; (2) no; (3) don't know; (4) refuse.
- Q9:** If today, you lose your income, how long could you survive without having to borrow money? (1) less than a week; (2) from one week to one month; (3) from one to three months; (4) from three to six months; (5) more than six months; (6) don't know; (7) refuse.
- Q10:** Did you feel that your expenses have increased during retirement compared to pre-retirement? (1) yes; (2) no; (3) don't know.
- Q11:** If you answered yes to Q10, what are the reasons behind the increase in spending? (1) Assist children; (2) health issues; (3) inflation; (4) enjoyment of retirement; (5) other.
- Q12:** From the list below, select the types of income that you perceive. (1) pension from government fund; (2) passive income from financial assets; (3) selling non-financial assets; (4) dependent on my partner; (5) passive income from non-financial assets; (6) dependent on children; (7) other; (8) refuse.