Life Insurance and Economic Empowerment: A Theoretical and Empirical Overview

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Abstract
The purpose of this paper is to explore the nature and strength of the relationship between purchasing life insurance plans and economic empowerment by using survey data. We propose, in the present study, a theoretical framework that could help to explain the promotion of poor people empowerment by life insurance industry. A random sample of 64 respondents was drawn from life and health policyholders. The Statistical Package for the Social Science version 20 was used to analyse the data. The findings show a moderate positive correlation between life insurance and economic empowerment (rs =.594). The paper further suggests that (a) annuities can play the most important role in contributing to economic empowerment, (b) improving the ability of policyholders to choose and decide may be the main effect of purchasing life insurance, and (c) the correlation between life insurance and economic empowerment is relatively higher for men.
*Key Words***:** Economic empowerment; Life insurance; Socioeconomic status; Algeria

JEL Classification: G22.

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Introduction

Poor people need access to finance not only for direct income generation but also to overcome shocks and to safeguard personal and household wellbeing. In fact, they need a range of assets (and capabilities) to increase their self-confidence; such assets enable them to expand their horizon of choices. The extreme limitation of poor people's physical and financial assets severely constrains their capacity to negotiate fair deals for themselves and increases their vulnerability (Narayan-Parker, 2002).

According to Narayan-Parker, empowerment is key for quality of life and human dignity, good governance, pro-poor growth, project effectiveness, and improved service delivery (Narayan-Parker, 2002).

The OECD Development Assistance Committee's Network on Gender Equality refers to economic empowerment as the capacity of women and men to participate in, contribute to and benefit from growth processes in ways that recognize the value of their contributions, respect their dignity and make it possible

to negotiate a fairer distribution of the benefits of growth. (Asian Development Bank, 2015).

In addition, economic empowerment means people thinking beyond immediate survival needs and thus able to recognise and exercise agency and choice (Eyben, Kabeer and Cornwall, 2008). For example, it enables households to make their own decisions around making investments in health and education, and taking risks in order to increase their income (GSDRC applied knowledge services, 2014).

The literature on economic empowerment is wide, and a large part of this focuses on the economic empowerment of women. Many policies have been implemented to promote the economic empowerment, among which we can mention entrepreneurship and private sector development, rural employment guarantee, productive employment and decent work, community-based micro-enterprise, education and skills development, cooperatives and fair trade movements, subsidized credit and grants, access to land and property rights, and conditional cash and asset transfer policies (Swedish International Development Cooperation Agency, 2015; Desai, 2010).

More generally, the discourse on economic empowerment centres around four broad areas: the promotion of the assets of poor people, transformative forms of social protection, microfinance, and skills training (GSDRC applied knowledge services, 2014).

On the other hand, life insurance offers a way to provide funds for dependents after a plan owner's death in order to protect them financially. Term life, whole life, and universal life insurance policies can all be options with some different provisions. It can be considered as a complex financial product that includes, in addition to coverage, a cash value component that accrues value over time, allowing the policyholder to borrow or withdraw funds as needed. Thus, life insurance plans could perform different economic and social functions.

In this context, the objective of the present study is to explore the nature and strength of the relationship between life insurance plans and economic empowerment by using survey data from a sample of respondents, in order to better understand the effects of life insurance products on the economic life of the policyholder, and certain aspects of his social and personal life.

More specifically, the objective is to compute and compare the correlation coefficient for the following relationships:
- The relationship between purchasing life insurance and the ability to choose and to make important decisions;
- The relationship between purchasing life insurance and improving the policyholder income and self-confidence;
- The relationship between purchasing life insurance and providing adequate income, stability and financial safety for dependents;
- The relationship between purchasing life insurance and positive effects on some social aspects of family life (heath, education, etc.);
- The relationship between purchasing life insurance and economic empowerment, for both women and men.

While much has been written about economic and social importance of life insurance, very few, to the best of the author knowledge, have linked it to empowerment issues. Some studies, especially Churchill (2006), have highlighted the importance of microinsurance schemes, including micro life insurance, in empowering poor people through participation and accumulating assets, in addition to certain aspects of women empowerment, but these studies have a predominantly theoretical dimension.

The contribution of this paper to existing literature is to propose a theoretical framework that could help to explain, in more detail, the promotion of poor people empowerment by life insurance industry, through a comparison between the main life insurance functions and the most important aspects of economic empowerment, based on the main definitions of the two concepts. The other contribution is the empirical survey that was conducted to examine the above-mentioned relationship. It should be noticed, however, that the present paper will not discuss the process of empowering women exclusively; instead, we will address the question of economic empowerment of low-income people in general, including poor women.

Accordingly, four questions guide our research:

RQ1. Is there a positive correlation between life insurance plans and economic empowerment of the policyholder?

RQ2. What are the main effects on the insured which could have a positive correlation with the purchase of life insurance policy?

RQ3. What is the type of life insurance that could have the strongest positive correlation with economic empowerment?

RQ4. Is the positive correlation (between life insurance and economic empowerment) for women higher than that for men?

Based on the different functions of life insurance industry and the characteristics of Algerian life insurance policyholder, it is assumed that the life insurance will be in positive correlation with economic empowerment. It is also expected that death benefits insurance may have the strongest correlation.

I-Theoretical Framework, Related Literature, and Research Hypotheses

1- Life Insurance plans

1-1- Life Insurance and its Types

Life insurance contract can be defined as a contract under which the insurer undertakes, towards the policyholder, for a certain period of time, in exchange for one or more premiums, to pay a lump-sum or an annuity to the beneficiary of the policy (either the policyholder himself or any third party, which may be determined or not in the policy), in the event of the death of the insured or the insured living to a certain age (Whelehan, 2002).

Life insurance is designed to provide protection against two distinct risks: premature death and superannuation (Vaughan and Vaughan, 2002).

A life insurance policy that provides coverage for the whole of the insured's life is called Whole Life insurance. A policy that covers a set time period, such as five or ten years, is called Term life insurance. Endowment policies are also term policies but the difference is it pays benefits when the insured dies during the

policy term and pays benefits if the insured survives the policy term. Annuity contracts, on the other hand, promise to pay the insured a periodic payment (The Institute of Chartered Accountants of India [ICAI], 2008).

1-2- Health Insurance

Accident and health insurance (or, more simply, health insurance) is defined as "insurance against loss by sickness or accidental bodily injury." The "loss" may be the loss of wages caused by the sickness or accident or it may be expenses for doctor bills, hospital bills, medicine, or the expenses of long-term care (Vaughan and Vaughan, 2002).

1-3- Group Life Insurance

Group Insurance is a scheme which provides insurance benefits to a number of people under a single policy (Karve, 2009). Group life insurance benefits have gradually expanded over time to meet the more varied needs of the employees and their dependents (Bluhm, 2012).

2- Definition of Economic Empowerment

Empowerment is a construct shared by many disciplines and used today by various researchers. We can mention in this context the political, economic and social fields. But our concern here is with its use in economic field and, especially, the insurance activity. So, we will consider three basic definitions that reflect, better, the characteristics of life insurance and serve the goal of our research.

2-1- First Definition

Kabeer`s empowerment concept of agency, resources and achievements is widely accepted, it specifies empowerment as: the expansion of people's ability to make strategic life choices in a context where this ability was previously denied to them. This acknowledges that empowerment relates to a process that moves from previous disempowerment to a change in status. Kabeer`s concept addresses areas that are critical to live a self-defined life (Masabo, 2015).

2-2- Second Definition

According to Sahay, empowerment is a process of awareness and capacity building leading to greater participation, to greater decision-making power and control, and to transformative action (Sahay, 1998). Economic empowerment is a process, thus, it can be determined not only by its tools but also by its outcomes, and the individual himself plays a key role in this process.

2-3- Third Definition

Sahay, also, suggests that the empowerment process is a continuing development involving many changes whereby an individual or group is able to strengthen and exercise the ability to act so as to gain greater control and mastery over life (Sahay, 1998). Empowerment, then, is an ongoing, not a temporary process, and it may require some interventions at both individual and collective levels, in order to achieve the required positive change.

In summary, there are four interlocking dimensions of empowerment: the development of a more positive and potent sense of self; the construction of knowledge and capacity for a more critical comprehension of the realities of one's environment; the cultivation of resources and strategies, or more functional

competence, for attainment of personal and collective goals (Lee, 2010); and achieving women's economic empowerment.

3- Importance of Life insurance Plans

Life insurance schemes can be used to achieve much more functions than just preparing for a loved one's care expenses.

3-1- Life insurance Plans Help to Protect the Family

Purchasing a life insurance policy by the head of a household means that he has a sound financial planning to protect the future income of his family. After his sudden death, this plan could help to keep life moving by covering mortgage expenses for instance. The widow could also use the money to start a small business. This is, especially, true for poor or middle-class families because the main source of income is the work done by the father (or mother), thus family expenses will depend on the work of the breadwinner, making his life valuable for those who depend on him.

Even those with no other assets to pass on, can create an inheritance by buying a life insurance policy and naming their heirs as beneficiaries (Insurance Information Institute [III], 2010).

3-2- Life Insurance and Retirement Benefits

A policyholder who has had a life insurance plan for his adult life could end up with enough money in cash value which would be a good source of income in future. In this regard, we have two main forms of life insurance, annuities and a lump sum after retirement.

Annuities are a natural and straightforward way to insure for longevity risk[1], since individuals receive annuity payments for their natural life, no matter how long it lasts (Cummins et al., 2016).

3-3- Life Insurance as an Investment Tool

Life insurance enables individuals and households to avoid self-insuring and better deploy savings in long-term, productive investments, and/or enjoy higher consumption. Unlike life insurance savings, non-insured savings are rarely sufficient to replace a wage-earner's salary in the event of premature death or disability (Cummins et al., 2016).

In addition, some types of life insurance create a cash value that, if not paid out as a death benefit, can be borrowed or withdrawn on the owner's request. Since most people make paying their life insurance policy premiums a high priority, buying a cash-value type policy can create a kind of "forced" savings plan (III, 2010).

3- 4- Women's Policies

Women are exposed to as many risks as their male counterparts. They are required to perform in the work place as well as fulfill their obligations towards family. If a female member in a home dies it is very difficult to compensate her position by her dependants. So, it is advisable for women from every socio economic environment to purchase a woman's policy to safeguard against the risk of her demise. These policies provide funds for the purpose of education, marriage

or sickness. Women's policies have been tailored to encourage women to save for their own safety and security (ICAI, 2008).

3-5- Life Insurance Mortgage Plans

Mortgage life insurance policy is designed to pay out a cash sum to help pay off the policyholder mortgage if he die during the length of the policy.

3-6- Life Insurance Plans Increase the Sense of Responsibility

Choosing the appropriate life insurance plans will help to earn a decent living for the family after the death or the retirement of the insured. This economic behaviour of the policyholder may increase the sense of responsibility toward himself first, then toward his family which will, in turn, enhance his social role in general.

Life insurance helps in meeting responsibilities of people even after death like higher education of children, their marriages, etc. (ICAI, 2008).

4 - A Brief Summary of Related Literature

Regarding the economic effects of life insurance products in general, Cummins, Cragg, Zhou, and deFonseka (2016) argued that life insurance industry is uniquely positioned to help millions of Americans mitigate the risks of financial assets more efficiently than through precautionary savings, thus increasing financial security and living standards. They suggested that life insurers improve the quality of life for their policyholders and their dependents by reducing the economic consequences of life-altering events and the financial risks associated with premature death, disability, and extended longevity. In addition to its primary benefit of smoothing and stabilizing household consumption, Cummins, Cragg, Zhou, and deFonseka (2016) argued that life insurers provide intangible benefits such as peace of mind and the feeling of financial security. While, based upon empirical research, Bernheim, Lorenzo, Gokhale, and Laurence (2003) examined life insurance holdings and financial vulnerabilities among couples approaching retirement age. The data is collected from the 1992 wave of the Health and Retirement Study surveyed over 7,000 households with at least one spouse between the ages of 51 and 61. The researchers found that, for surviving spouses, the insurance reduced the fractions of individuals at risk of significant financial consequences (defined as a decline in living standard of 20 percent or greater) from 29.0 percent to 20.4 percent for wives, from 33.4 percent to 23.9 percent for secondary earners, from 10.7 percent to 8.0 percent for husbands, and from 6.2 percent to 4.6 percent for primary earners.

On the subject of the importance of micro life insurance schemes, Amudha, Selvabaskar, and Cresenta Shakila Motha (2015) examined the need for micro insurance and its role in helping the unbanked people to enhance their livelihood. Simple random sampling is adopted for the collection of primary information from 150 respondents from Tiruchirapalli town by administering a questionnaire. The respondents revealed that joining in self-help groups linked LIC (the Life Insurance Corporation) results in the overall socio-economic empowerment in their individual lives.

In the same context, Churchill (2006) suggested that microinsurance can assist in promoting gender equality and empowering women. Insurance policies enable the poor to accumulate assets that can be used to pay for education, for daughters as well as for sons. Furthermore, Churchill (2006) claimed that microinsurance schemes can play an important role in the empowerment and participation of their members, which has implications in terms of the design of the products, the choice of the benefit package, affordability and the organization of the schemes.

Clearly, there are various aspects of economic empowerment by life insurance plans. At first, life insurance industry provides two types of benefits, tangible and intangible benefits. The first type include the advantages that can be achieved by reducing the economic or financial consequences of life-altering events and the financial risks associated with premature death, disability, and extended longevity (Cummins et al., 2016; Bernheim et al., 2003), while the second include the peace of mind and the feeling of financial security (Cummins et al., 2016). Then, life insurance, and especially microinsurance, can enhance gender equality and empowering women, in addition to the empowerment and participation of insurance scheme members, which has implications in terms of the design of the products, the choice of the benefit package, affordability and the organization of the schemes (Churchill, 2006). Ultimately, purchasing life insurance plans, including microinsurance, results in the overall socio-economic empowerment in policyholders' individual lives (Amudha et al., 2015).

Actually, our paper has explored the relationship between purchasing life insurance plans and economic empowerment by distinguishing between four aspects of empowerment, according to the types of life and health insurance (annuity contracts, "death benefit" policies, additional "life and health" benefits contracts). However, the role of life insurance industry in stabilizing household consumption and promoting gender equality has not been addressed in this paper.

5 - Economic Empowerment through Life Insurance Plans

Before discussing the different ideas about the empowerment through life insurance plans, we present, below, Table 1 that shows the main aspects of economic empowerment, as defined above, with the corresponding functions of life insurance plans.

Table 1: «Economic empowerment aspects and corresponding functions of life insurance»

Economic empowerment aspects	Life insurance functions	Outcomes about empowerment
- The expansion of people's ability to make strategic life choices; - Gaining control over life.	- Increasing financial security; - Mitigating financial consequences of *the death*; - Managing longevity risk.	Improving the economic status and empowering people psychologically
- Gaining access to and control over valued resources; - Income generation.	- Improving quality of life for policyholders and their dependents; - Rising living standards.	Improving the economic status
- The focus on the rights of women.	Contributing to the spouse needs and children' future (both male and female children).	Improving the socio-economic status of women
- Greater decision-making power and participation.	Implications in terms of: - The freedom to decide; - The design of the products; - The choice of the benefit package affordability; - The organization of the schemes.	Involving policyholders in their own decision-making
- The development of a more positive and potent sense of self.	- Protecting the policyholders and their dependents from the stress and anxiety; - Gaining self-confidence*;* - Providing adequate family support; - Gaining respect in family.	Empowering people psychologically
- Poverty reduction.	- Protecting vulnerable households from falling back or further into poverty - Enabling the poor to accumulate assets; - Supporting economic activities of the poor. (in particular through micro life insurance)	Improving economic outlook of the poor

Source: By the author

5-1- The Expansion of People's Ability to Make Strategic life Choices

What matters to economic empowerment is to make informed choices on matters that affect a person's life, or the lives of those who live with him. The following questions may reflect important economic decisions: how to protect my family financially? How does the cost of having children change? How to save money? Should I buy a house or does renting make more sense?

It can be seen that life insurance can help to solve some of these issues. For instance, we can buy additional coverage for children to meet their educational and health expenses, or we can use mortgage life insurance policy to get a house.

5-2- Gaining Control over Life

Permanent concern about financial security can inhibit individual efficiency. Participating in a life insurance program, then, leads the policyholder to perform better in his work, to achieve greater efficiencies and, thus, to get more income. The insured should feel more protected since he would not bear potential financial risks alone, instead, a lot of people will participate in the life insurance program, especially mutual or cooperative (insurance) programs.

To gain control over life, it seems, therefore, that buying an annuity, or whole life insurance policy, may be an effective way, among other things, because the insured can feel comfortable and safe, as well as have more stable income in future.

5-3- Increasing Decision-Making Power and Participation

The first step in the decision making process is to identify and define the problem. In our case, the problem concerns the manner in which the protection to family is ensured and the financial security is maintained. In this regard, it is important to purchase voluntarily coverage against financial consequences of unfortunate events, and everyone is assumed to think about this deeply if he is the breadwinner.

The potential insured must then collect relevant information and identify alternatives. Traditional bank deposits, real assets, especially gold and real estate, and savings accounts are the main alternatives to life insurance plans.

After adequate study of the available alternatives options, the potential policyholder will be ready to select the alternative that seems to be best for him, knowing that life insurance has, according to the type of plan, two aspects: insurance as an investment tool and as protective measure. After weighing the evidence, "the insured" will choose the appropriate plan (with the right operator and agent) and try to implement the alternative he chose.

It can be demonstrated that using the steps as described above may develop the decision-making skills of the policyholder.

We should mention to the importance of consulting the family, especially the spouse, and specialists before purchasing life insurance plan. It is crucial, for the policyholder also, to contribute to the negotiations with the insurance company on the terms concerning premium and insurance benefits, these terms may be revised in response to the changing circumstances.

5-4- Poverty Reduction

It is important to protect the poor from the risks, because they lack capacity to cope with the consequences of a shock without significant assets and other risk mitigation mechanisms (Noor Ashikin et al., 2012). Life insurance, especially micro life schemes, may be an efficient solution to help and protect low income people.

6 - Research Hypotheses

Based on the above explanation, the research hypotheses are as follows:

The main hypothesis: purchasing life insurance plans leads to the economic empowerment of the insured in Algeria.

The first sub-hypothesis (Ha): purchasing life insurance contracts enhances the policyholder ability to choose and to make important decisions.

The second sub-hypothesis (Hb): the annuity contract helps the policyholder to improve his future income and to feel more self-confident.

The third sub-hypothesis (Hc): "death benefits" insurance contributes to the stability and financial safety of dependents and provides them with adequate income.

The fourth sub-hypothesis (Hd): additional "life and health" benefits have positive effects on some social aspects of family life (especially health and education).

The fifth sub-hypothesis (He): women have stronger relationship between life insurance and economic empowerment, compared to men.

II - Research Data and Methodology
1- Life Insurance Sector Data

The reference text of Algerian insurance law is the Order No. 95-07 of January 25th, 1995. As a matter of fact, it is the most important legal framework of insurance business since the independence of the country in 1962 (Compagnie Centrale de Réassurance, 2012). This framework was supplemented by the law n ° 06-04 of February 20th, 2006.

1-1- Life Insurance Products

In Algeria, There are actually two main types of life insurance schemes, individual schemes and collective schemes (group insurance). Although there are at least ten products, all life and health insurance companies offer the same three products: group insurance, travel insurance, and term life insurance (Soufi, 2017), in addition to supplementary retirement scheme, a capitalization contract that was developed recently.

1-2- The Performance of Life Insurance Business

Property-liability business dominates the Algerian insurance industry, and has accounted for around 90 % of the market share for the few past years. In 2017, life and health insurance premiums increased by 11.26 % compared to 2016 (CNA, 2017). Table 2, below, show statistics about structure and turnover of life and health insurance.

Table 2: «Structure of life and health insurance turnover (2010-2017, USD Million)»

	2010	2013	2014	2015	2016	2017
Annuity and death benefits policies	22	28	33	33	35	40
Collective disability coverage	9	27	29	28	30	33
Health insurance	4	8	1	0.79	0.78	0.85
Others	41	45	48	41	39	43

Source: CNA, 2015: p. 4.; CNA, 2012: p. 5.; CNA, 2017: p. 10.

Annuity and death benefits policies exhibited a good growth level rising to $40 million in 2017 from $22 million in 2010, that is to say 34.6% of life and health insurance contracts, compared to 27.9% for collective disability coverage and 0.7% for health insurance. However, the sums of insurance claims do not reflect the same structure and relative importance. Collective disability coverage alone accounted for more than 60% of claims paid (about $25.9 million). The difference may be explained by the fact that, in contrast to annuity and death benefits policies, collective disability plans are shorter-term contracts and, thus, have a higher rate of claims.

2- Research Methodology

The survey research method was applied to measure the empowerment of the insured.

2-1- Statistical Sample

In statistics, we often rely on a sample, which is a small subset of a larger set of data, to draw inferences about the larger set. The larger set is known as the population from which the sample is drawn (Lane et al., n.d.). The statistical population of this research includes life and health insurance policyholders. The sampling was conducted using random sampling method.

2-2- Research Instrument and Statistical Tools Employed

The survey conducted, in 2019, by distributing questionnaires to 91 respondents. In this research, primary data obtained by distributing questionnaires among customers, as well as via emails.

The questionnaire applied was designed to gather demographic information of the respondent customer, his/her perception of economics and social effects of life insurance plans. Each questionnaire has three sections. Details of the measurement are as follows:

a. For the demographic variables, gender, age, education level, marital status and monthly income[2] were measured.

b. For the life insurance and its subscription, two items were used to identify the type of life insurance purchased and who paid for it, while the third item was used to measure two dimensional scales of policyholder perception, on a 5 point likert scale ranging from strongly agree, agree, undecided, disagree and strongly disagree.

c. For the policyholder perception, the economic empowerment of life insurance plans was measured on 5 point likert scale. Section C has five items corresponding to the five dimensions of empowerment of the insured.

Out of 91 questionnaires received, 64 ones (about 70%) were fully completed and used for the analysis.

Once data collected, it is analysed and summarized in a readable and easily interpretable form. The Statistical Package for the Social Science version 20 is used to analyse the data. The results will be in form of reliability testing, analysis of variance and Spearman correlation.

Data analysis

The analysis of collected data was divided into the following items.

2-3- Demographic Profile of Respondents

The majority of respondents (53.1 per cent) were males and 54.7 per cent of the sample fell in the age group of 30-40 years. Most of them (65.6 per cent) were graduates and they earned a monthly income of \$215.04-559.09. In the study sample, 56.3 per cent of the participants were married, or previously married, and 29.7 per cent of the respondents had one or two children.

2-4- Distribution of Life insurance Plans

The distribution of life insurance policies held by respondents did not differ significantly from the structure of domestic life insurance market. In fact, most of the contracts (65.6%) were developed on the basis of a group agreement, knowing that employers paid 28.1% of the total premiums and 31.3% were paid entirely by policyholders.

With regards to the types of the plans, "death benefit" policies and term insurance schemes represented 15.6% of the total number of plans, whereas annuity contracts and supplementary retirement schemes represented 10.9%.

2-5- Sample Representativeness

In order to achieve true inference, the respondents must have characteristics similar to those of the targeted population. Therefore, extracting random samples typically requires some auxiliary information on some key characteristics of the target population (Panzeri *et al*., 2008). In our case, key characteristics include the three main types of life (and health) insurance and a combination of individual and collective contracts, knowing that the collective ones represent the highest proportion. In addition, life insurance companies often target those in the middle class as their primary clientele, because these people have extra money (to buy life insurance) and yet are vulnerable to a sudden downturn in the economy or unexpected misfortunes in families (Chan, 2012). In our sample, 65.6 per cent of respondents were graduates and they belonged to lower middle class.

2-6- Reliability and Validity of the Research Instrument

Validity of a research instrument assesses the extent to which the instrument measures what it is designed to measure (Robson 2011, cited in Haradhan 2017). In this research, the validity was determined through content validity method; for this purpose, the questionnaire was firstly sent to some experts in economics and insurance with a request for feedback on the relevance of each item and its questions to the questionnaire's aim; then, the original questionnaire was designed after applying the necessary modifications in it according to experts' views.

The reliability of test scores is the extent to which they are consistent across different occasions of testing, different editions of the test, or different raters scoring the test taker's responses (Livingston, 2018). The better the reliability is perform, the more accurate the results (Haradhan, 2017). Cronbach Alpha is the method to test the reliability of the data collected by the researcher. Alpha values above .7 are generally considered acceptable and satisfactory, above 0.8 are usually considered quite good, and above .9 are considered to reflect exceptional internal consistency (Haradhan, 2017). The value of .94 was obtained regarding Cronbach's alpha in this research. This value shows the good level of research reliability.

2-7- Analysis of Variance

The one-way analysis of variance (ANOVA) is a group of statistical models to determine whether there are any statistically significant differences between the means of three or more independent (unrelated) groups.

The Null hypothesis is rejected when the p value yielded by the t-test is less than alpha. By convention, alpha is typically set to 0.05. The p value generated by the t-test statistic is based on numerical analysis of the experimental data, and represents the probability of committing a Type 1 error if the Null hypothesis is rejected. When p is less than alpha, there is a statistically significant result, i.e., the values in the two groups are inferred to differ from each other and to represent separate populations (Sawyer, 2009).

Table 3: «ANOVA summary table »

Dependent list	Factor list	F	Sig
Economic empowerment	Education level	.146	.964
	Monthly income	.409	.801
	Presence of children	.144	.705
	Policyholders age	.602	.617
	Type of life insurance (group insurance or individual contract)	.411	.524
	Marital status	.486	.488
	Gender	.962	.331

Source: Primary Data, Processed by SPSS V.20

For all factors, as shown in Table 3, we have non-significant result, since *p*-value is more than the .05 alpha level. This means there is not statistically significant difference between the means of the different levels of the empowerment variable.

2-8- Spearman Correlation Coefficient

Correlation coefficient of variables x and y shows how strongly the values of these variables are related to one another. It is denoted by r and r ∈ [-1, 1]. If the correlation coefficient is positive, then both variables are simultaneously increasing or simultaneously decreasing (Florentin, 2009).

Therefore, the correlation coefficient measures the degree of line association between two variables. Actually, we have strong relationship if r ∈ [0.8, 1] or r ∈ [-1, -0.8]; moderate relationship if r ∈ [0.5, 0.8] or r ∈ [-0.8, -0.5]; and weak relationship if r ∈ [-0.5, 0.5] (Florentin, 2009).

III - Results and Discussion

The results of conducting Spearman correlation analysis are reported in Tables 4 and 5 below. The correlations between the economic empowerment aspects (variable Y) and purchasing life insurance (variable X) are presented, in Table 4, according to the various hypotheses.

Table 4: « Hypotheses and correlations analysis »

Hypotheses	Economic empowerment and its aspects (Yi)	Correlation coefficient (N= 64)	Sig. (2-tailed)
The main hypothesis	Economic empowerment	.594**	.000
First sub-hypothesis	The ability to choose and to make important decisions Mean* (Y1, Y2, Y3, Y4, Y5, Y6, Y7, Y8)	.598**	.000
Second sub-hypothesis	Improving the policyholder income and self-confidence Mean (Y14, Y15, Y16, Y17, Y18, Y19, Y20)	.524**	.000
Third sub-hypothesis	Providing adequate income, stability and financial safety for dependents Mean (Y21,Y22,Y23,Y24,Y25,Y26,Y27,Y28, Y29,Y30,Y31,Y32)	.377**	.002
Fourth sub-hypothesis	Positive effects on some social aspects of family life (heath, education, etc.) Mean (Y33, Y34, Y35, Y36)	.414**	.001
*. The mean of variables (questions) was used to calculate correlation coefficient. **. Correlation is significant at the 0.01 level (2-tailed).			

The relationship between purchasing life insurance and the ability to choose and make important decisions (r_s =.598, p = .000) and between purchasing life insurance and improving the policyholder income and self-confidence (r_s =.524, p = .000) was moderate positive and statistically significant that supported Ha and Hb respectively. Despite a weak statistically significant relationship between purchasing life insurance and providing adequate income, stability and financial safety (r_s =.377, p < .01) and between purchasing life insurance and positive effects on some social aspects of family life (r_s =.414, p < .01), the findings provide support for Hc and Hd respectively. In addition, the result of positive relationship between purchasing life insurance and "providing adequate income, stability and safety" of this study is in accordance with other studies, especially, Cummins et al (2016). As revealed in Table 4, the results obtained have the expected positive sign that supports the main hypothesis of this study and is statistically significant (r_s =.594, p = .000), i.e., purchasing life insurance contracts leads to the economic empowerment of the insured in Algeria.

To test the degree of correlation, between life insurance and economic empowerment, for men and women separately, we divided the sample into two sub-samples. The results are shown in the table below.

Table 5: «Correlation between life insurance and empowerment»

Gender	Correlation Coefficient	Sig.	N (respondents)
Women	.509**	.004	30
Men	.644**	.000	34
**. Correlation is significant at the 0.01 level (2-tailed).			

For both men and women, the value of r_s is greater than .5 and *p*-value is less than .01, so the relationship is moderate positive and statistically significant, however, men have a stronger correlation (.644 compared to .509). This finding does not support He.

A positive correlation implies that the two sets of observations (purchasing life insurance and economic empowerment) increase or decrease together. If there was a moderate, positive association, we can say that more money spent on life insurance was associated with better economic empowerment of the insured.

The findings show a moderate positive correlation between purchasing life insurance and the ability to choose and make important decisions; people who have an appropriate life insurance policy tend to better perceive the different protection alternatives and to develop decision-making power and negotiating skills. The findings also highlight the medium (moderate) association between purchasing life insurance and improving the policyholder income and self-confidence, which means that the policyholders are more likely to have better control over their future income, especially in the case of disability or reduced work capacity. Consequently, enhancing the policyholder ability to choose and make important decisions, as well as improving his income and self-confidence will contribute to improving the economic status of policyholder and empowering him psychologically.

We infer from the result of the low positive correlation (r_s =.414) that additional ″life and health″ benefits contracts may play a role in supporting the well-being of policyholders and their families by ensuring appropriate compensation for education and health costs and encouraging policyholders to continue their activities (after illness), in addition to smoothing households consumption. We should also note that the weak correlation between purchasing life insurance and providing adequate income, stability and safety (r_s =.377) means that these two variables are hardly related.

The relatively higher correlation, between life insurance and economic empowerment, for men could be partly explained by the fact that half of women (15) in the sample are single, and that more than 60% (20) of the married women did not have children, so they are more likely not to appreciate the need to protect their families through insurance schemes, knowing that death benefits policies were purchased by only three women. Obviously, this finding does not mean that life insurance is not important for women, since the value of r_s reflects medium positive correlation.

What is interesting in our research is that the effect of the annuity contracts is more important than the effect of "death benefits" insurance, or even than that of additional ″life and health" benefits, especially given the characteristics of

Algerian clients, who tend to spend less on private annuities. In addition, the most interesting effect of purchasing life insurance is that of improving policyholder ability to choose and to make important decisions.

We must remember that 34.4 per cent of respondents earned at least about $559 per month, but if we limit the sample to low income and lower middle income categories, i.e., the participants who earned less than $559 per month (45 respondents), the correlation coefficient, between economic empowerment and life insurance, will be increased to .651 (p = .000). This finding is interesting in that it reflects non- negligible positive correlation, we think it underlines the need to help low income people understand that they can empower themselves economically by, among other things, choosing the appropriate life insurance plans, meaning that is not necessary for people to be empowered by others, as Sahay (1998) argued, neither by government programs nor by private donors.

In the interpretation of the findings note should be taken of the fact that, according to Shortell, there is no rule for determining what size of correlation is considered strong, moderate or weak. The interpretation of the coefficient depends, in part, on the topic of study. When we are studying things that are difficult to measure, such as the contents of someone's mental life, we should expect the correlation coefficients to be lower. In these kinds of studies, we rarely see correlations above 0.6. For this kind of data, we generally consider correlations above 0.4 to be relatively strong, and those between 0.2 and 0.4 are moderate (Shortell, 2001). Therefore, when we are studying the relationship between life insurance plans and economic empowerment, we do not expect higher correlations.

While our findings broadened understanding on the scope of life insurance importance, the paper has some limitations. Actually, we did not investigate the role of women's policies owing to the lack of relevant data. The effect of micro life insurance plans, also, was not examined in this study, because it is very difficult to conduct the survey research, given the most recent experience of micro insurance in Algeria and the limited cooperation from respondents. In addition, the role of the quality of life insurance plans and the possible mediating roles of other variables were not taken into account in our paper.

Conclusion

The expansion of people's ability to make strategic life choices, gaining access to and control over valued resources, and a greater decision-making power and participation are the most important aspects of economic empowerment. The question is about the better tools that could help people empower themselves and improve their economic status. This study is motivated by the need to understand the nature and strength of the relationship between life insurance plans and economic empowerment by using survey data. A random sample of respondents was drawn from life and health policyholders.

The findings show a moderate positive correlation between life insurance and economic empowerment. The result confirms erstwhile study that life insurance

would improve policyholder economic status, as a main aspect of economic empowerment, which is in line with theoretical expectations. The paper further suggests that annuities could play the most important role in contributing to economic empowerment, and that improving the ability of policyholders to choose and decide was the main effect of purchasing life insurance. Regarding women empowerment, it was found that the correlation between life insurance and economic empowerment was relatively higher for men.

Traditionally, life insurance has been seen as a tool that provides families with a measure of protection against the adverse financial consequences of premature death and a financial instrument to save money for long term goals. Actually, this paper is focusing on a new vision for life insurance based on a greater contribution to the economic empowerment of low-income people.

The study shows the role that life insurance plans can play in improving the economic status of policyholders and their empowerment. Thus, public authorities are invited to put more efforts into developing this industry by the establishment and enforcement of appropriate regulations, especially for private annuities business, accompanied by good fiscal incentives. These efforts could not succeed without the involvement, collaboration and commitment of private and public insurance operators, including the development of plans and products that meet the needs and expectations of policyholders, for instance health insurance packs, supported by important marketing activities.

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[1] Longevity risk: a risk that is growing as lifespans get longer.

[2] We have used the official exchange rate (dollars dinars, period average) from Algerian Ministry of Finance. The exchange rate of 2018 (116.62) was used in the questionnaire to indicate the level of income in dollars.