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FACTORS INFLUENCING THE RETIREMENT SAVINGS OF INDIVIDUALS IN THE EASTERN CAPE, SOUTH AFRICA

Abstract:

The state of saving in South Africa is known to be far from adequate. Prior research has shown that few South Africans have access to an affordable retirement funding vehicle and that more than half of the individuals contributing to retirement funds will have less than 28% of their final salary at retirement age (Nicholson 2013; National Treasury 2012:7). Through previous research, it has been shown that due to inadequate retirement savings, individuals are compelled to re-join the work force even once they have reached retirement age. Therefore, the purpose of this paper is to investigate the factors that influence the retirement savings of individuals.

A hypothesised model for aiding this investigation was constructed and included variables identified through a thorough review of the literature. The variables illustrated in the hypothesised model were grouped as follows:

- independent variables (financial literacy, future time perspective; level of retirement planning and sources of financial advice)
- dependent variable (retirement savings).

To determine the validity of the measuring instrument, an Exploratory Factor Analysis (EFA) was undertaken and to assess the reliability of the measuring instrument, Cronbach's Alpha coefficients were calculated. Pearson's Product Moment Correlation coefficients were also calculated to determine the correlations between the variables. Pearson's Product Moment Correlation coefficients were also calculated to ensure that multicollinearity was not present in the study. A regression analysis was undertaken to test the hypothesised relationships.

Based on the results of the EFA, the independent variables (level of retirement planning and sources of financial advice) and the dependent variable (retirement savings) retained their original definitions. However, the EFA also revealed that several of the items originally intended to measure the independent variables (financial literacy and future time perspective) as two separate constructs, loaded together onto one factor.

The findings of this study revealed that if an individual is financial literate and is mindful of the future, the greater the likelihood that an individual will save for retirement. Therefore, it is recommended that institutions such as schools and places of employment offer educational programmes geared towards improving individuals' financial literacy. Furthermore, the study found that individuals that actively plan for their retirement are more likely to save for their retirement. It is therefore recommended that individuals save as soon as possible for their retirement as individuals that plan for retirement have more control over their finances and are also more likely to be financially independent at retirement.

Keywords:

financial advice; financial literacy, future time perspective, level of retirement planning; retirement savings

JEL Classification: J26

Introduction and background

Retirement has been described by Bonsang and Klein (2012:311) as a major life event that affects individual well-being in various ways namely economically, socially and psychologically. Retirement presents changes in the financial situation of individuals, it can affect the physical and mental health of individuals, as well as social relations between the retired individual and their family members (Kesavayuth, Rosenman & Zikos, 2014, p. 3; Bonsang & Klein, 2012 p. 311). For these reason, it is suggested that all individuals should plan for that period of their lives (Botha, Rossini, Geach, Goodall, Du Preez & Rabenowitz, 2014, p. 951; Topa, Moriano, Depolo, Alcover, & Morales, 2009, p. 41).

Planning for retirement can be considered as either a process or an action, as it involves planning and making decisions about how limited financial resources should be assigned in order to maximise the use thereof later (Botha *et al.*, 2014, p. 951; Holtzman, 2002). However, increases in longevity have also led to retirement becoming an even longer period for which to prepare. (Kesavayuth *et al.*, 2014, p. 1; Legutko, 2014, p. 398). Additionally, there is a growing trend around the world where the primary responsibility for providing sufficient retirement income for an individual has shifted from governments and employers to those respective individuals (Legutko, 2014, p. 398). More so, the problem of saving and investing to provide for a secure retirement income is being transferred to the individuals who may not have the knowledge and/or the training to handle the task (Van Rooij, Lusardi & Alessie, 2011, p. 595). To be able to retire from active employment, individuals should have sufficient savings to support themselves during the postretirement period. (Kock & Yoong, 2011, p. 854-855). The methods to achieve sufficient savings include income derived from social security benefits, employment based retirement funds and voluntary retirement schemes (Knoef, Been, Alessie, Caminada, Goudswaard & Kalwij, 2016, p. 58-59). Unfortunately, these methods sometimes do not suffice and therefore additional saving methods must be considered (Brucker & Leppel, 2013, p. 9), as retirement savings are essential for financial security and to ensure individuals maintain a comfortable lifestyle during retirement.

Problem investigated

Prior research has shown that individuals in South Africa are not equipped with the relevant knowledge about the importance of saving for retirement (National Treasury, 2012, p. 3). Due to the lack of planning and savings for retirement, many South Africans are forced re-join the work force or become financially dependent on friends, family or the South African government for income during retirement. (Botha *et al.*, 2014, p. 951). The financial dependence of retirees on their family jeopardizes the ability of the family members to save for their own retirement. Thus, this situation perpetuates the cycle of inadequate retirement savings. (Old Mutual Retirement Monitor, 2013, p. 25; Stanlib, 2012).

Literature review

Retirement savings in the South African context

Gythfeldt (2008:7) refers to savings as the proportion of income an individual earns that is saved every year. Individuals generally begin to save at the start of their work careers. However, during this phase, savings are often prioritised for other purposes such as buying a home or family-building expenses (Bazhenova & Krytsun, 2013, p. 73). Gythfeldt (2008:5) states that the reason why individuals save their disposable income is reflected by the incentive of retirement. Bazhenova and Krytsun (2013:73) concur that savings occur as a result of the desire to be financially secure at an old age, or to pass an inheritance to children or grandchildren. Retirement literature (Bazhenova & Krytsun, 2013, p. 74; Dal Borgo, 2013, p. 21) states that effect of future uncertainty creates the desire in individuals to save more, thus individuals save not only for retirement but also for unforeseen costs that may arise in future.

Planning for retirement triggers an individuals' initiative to start saving for retirement. In South Africa, retirement savings are primarily done through two methods known as the formal and informal saving instruments (Botha *et al.*, 2014, p. 881; Collins, Morduch, Rutherford & Ruthven, 2010, p. 206). The formal saving instruments that are commonly used are pension, provident and retirement annuity funds. South Africans receive tax incentives to save for retirement through employment related pension funds and through individual savings arrangements (Botha *et al.*, 2014, p. 650-651; Rusconi, 2004, p. 43). The South African Revenue Services statistics for 2015 are a constant reminder of the individuals that saving for retirement. In a population of 54 million individuals, only 17 million South Africans were registered tax payers. However, only 5 million individuals actually submitted tax returns in 2015. Furthermore, out of the 5 million that submitted tax returns, only 2 million individuals claimed deductions for pension fund contributions and 1.5 million individuals claimed deductions for retirement annuity contributions. (National Treasury, 2015).

The informal tools South Africans use are instruments known as savings clubs. Savings-clubs are clubs whereby members or participants of the club save together for a particular event whereby, the members pay a fixed sum into a pool of funds at a fixed interval. On each occasion, one member takes the whole pool of funds. Such clubs are colloquially known as "stokvels" or "Umgalelo". (Collins *et al.*, 2010, p. 206). The estimated value of savings in stokvels in 2014 was worth R25 billion. There are 8.6 million stokvel members in South Africa which represents 23% of the adult population. (African Response Survey, 2014; National Treasury, 2014, p. 5). In terms of the informal savings funds, South Africans often use stokvels as a means of saving for retirement. Although informal savings tools are primarily used by individuals that do not have access to formal retirement funds, the presence of these informal savings schemes provides an indication that South Africans understand the need to save and have the propensity to save. However, many individuals in South Africa that use these formal and informal savings instruments still reach retirement age with insufficient

retirement savings. Therefore, it is importance to investigate the factors that influence their retirement savings.

Factors influencing retirement savings

An individual that is financial literate is deemed to possess a combination of financial knowledge, skills, attitudes and behaviors that are vital in order to make sound financial decisions to manage their financial resources effectively for a lifetime of financial well-being (OECD, 2011, p. 3; Hung, Parker & Yoong, 2009, p. 12; Sebstad, Cohen & Stack, 2006, p. 5-6). Individuals who have been identified as being financially illiterate are reported by Lusardi and Mitchell (2014:6) to be less likely to plan for retirement and as a result accumulate much less wealth for life after retirement. Moreover, states OECD (2006:2) that financial literacy is also crucial to help ensure consumers save enough to provide an adequate income during retirement.

According to Coudin and Lima (2011:220), future time perspective refers to an individual's perception of their remaining time to live. Hershey, Henkens and Van Dalen (2007:365) add that future time perspective is a psychological dimension that pertains to the extent to which individuals focus on the future, rather than on the present or the past. As a result of future time perspective, the future orientation of individuals is related to the tendency to plan and save for future events including retirement (Hershey *et al.*, 2007, p. 365).

Financial planning activities encompass a wide range of behaviours, such as the engaging in retirement planning and making retirement savings. Hershey *et al.* (2007:368) explain that individuals' perceptions of retirement savings is the result of the level of retirement planning they engage in and the retirement saving process (Kock & Yoong, 2011, p. 871). The measure of retirement saving, from a psychological perspective is to determine whether individuals believe they are saving enough to retire comfortably. (Brucker & Leppel, 2013, p. 7).

Given the state of retirement planning of South Africans, whereby, most individuals cannot afford to retire, the sources of financial advice that individuals receive must be noted. The Financial Services Board (2012:19) indicated that family members and friends remain the main source of financial advice South Africans receive (78%) and only 13% of South Africans seek the advice of a professional financial planner. Some researchers have shown that individuals who seek formal sources of financial advice such as consulting financial planners, attending retirement seminars/workshops and using the internet for retirement income calculations (Calcagno & Monticone, 2015, p. 365; Botha *et al.*, 2014, p. 7; Sillence & Briggs, 2007, p. 727-728) are more likely to have sufficient savings for retirement (Financial Planning Institute, 2016; Financial Services Board, 2012, p. 17). Whereas, Calcagno and Monticone (2015:365) elaborate that informal sources pertain to advice received from friends, family and co-workers. Barnes and Taylor (2006:42) assert that the use of informal sources of financial advice provides an indication of the very limited scope for retirement planning and retirement saving for individuals.

Objectives of the study

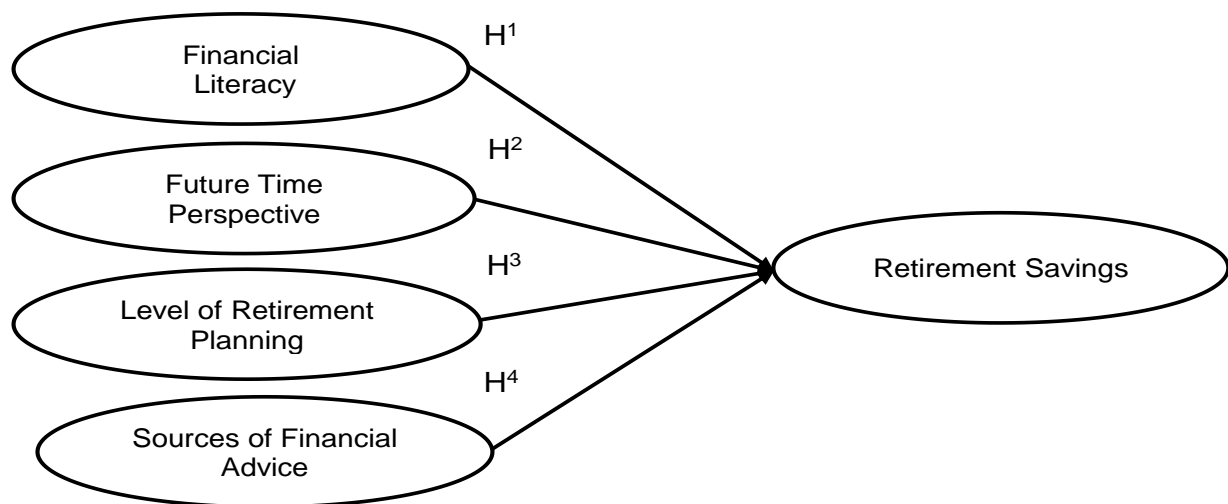
The primary objective of this study was to investigate the factors that influence the retirement savings of pre-retired individuals. A hypothesised model was empirically tested in order to attain this objective. The following secondary objectives were also pursued:

- to assess individuals' financial literacy, their future time perspective, their level of retirement planning, and their sources of financial advice;
- to determine which factors influence the retirement savings of individuals;
- to propose recommendations for improving the retirement savings of pre-retired individuals' in the Eastern Cape, South Africa.

Research hypotheses

Given that the primary objective of this study was to investigate the factors that influence the retirement savings of pre-retired individuals, a hypothesised model was constructed and tested, as depicted in Figure 1.

Figure 1: Hypothesised model



Source: Researcher's own construction from the literature review

As shown in Figure 1, the following hypotheses were constructed and tested:

H¹: There is a significant positive relationship between *financial literacy* and *retirement savings*.

H²: There is a significant positive relationship between *future time perspective* and *retirement savings*.

H³: There is a significant positive relationship between *level of retirement planning* and *retirement savings*.

H⁴: There is a significant positive relationship between *sources of financial advice* and *retirement savings*.

Research methodology

Sampling and data collection

This study followed a quantitative research approach to test the set of hypotheses empirically. In particular, a survey was used to collect primary data from a convenience sample of 140 respondents. A self-developed and self-administered measuring instrument in the form of a structured questionnaire was distributed to individuals in the Nelson Mandela Bay Metropolitan area in the Eastern Cape of South Africa. The questionnaire had three sections. Section A gathered the demographical data of the individuals, while Section B gathered data pertaining to the retirement plans of individuals. Section C of the survey consisted of statements about the factors influencing the retirement savings of individuals. The face validity of the measuring instrument was ensured by consulting experts in the field of retirement planning who assisted with the questionnaire design.

Data analysis

The study calculated descriptive statistics in order to summarise the information about the sample (Wiid & Diggines, 2013, p. 248; Gravetter & Forzano, 2012, p. 396). Thereafter, Exploratory Factor Analyses (EFA) were conducted to determine the validity of the measuring instrument (Zikmund, Babin, Carr & Griffin, 2010, p. 594). The principal components extraction method and Varimax raw rotation in the programme Statistica, were used to identify the factors in the study. Items with factor loadings of at least 0.4 are considered to provide proof of validity (Wiid & Diggines, 2013, p. 242; Bordens & Abbott, 2011, p. 474). In addition, the Cronbach's alpha coefficients, to test the reliability of the measuring instrument, were determined and it was established that Cronbach's Alpha correlation coefficients greater than 0.70 exhibits good reliability (Wiid & Diggines, 2013, p. 238; Mitchell & Jolley, 2010, p. 153). The Pearson's Product Moment Correlations were also calculated to determine the correlations between the variables used, and the measurements were to range between -1.00 and +1.00 (Mitchell & Jolley, 2010, p. 623). Thus, the Pearson's Product Moment Correlation coefficients were determined to illustrate the strength of the relationship between the variables. Finally, multiple regression analyses were used to test which factors influence the retirement savings of individuals, as the purpose of a multiple regression analysis is to investigate, simultaneously, the effects of a number of independent variables on a single dependent variable (Gravetter & Forzano, 2012, p. 415; Zikmund *et al.*, 2010, p. 592).

Empirical findings

Sample description

The majority of the respondents were black (87.86%) females (60.00%). The largest proportion of the sample (44.29%) indicated that they are between the ages of 20 and 29 years. Most of the respondents held a post graduate certificate/honours degree (33.57%) and earned between R10 000 and R20 000 in total per month (34.29%) in the organisation that they work for. With regards to the retirement plans of the respondents, the majority of the respondents (45.71%) plan to retire between 56-65 years. Although most of the respondents (90.2%) are members of a pension or provident fund and more than half (55.71%) voluntarily contribute to a retirement annuity, it was interesting to note that 60.00% of the respondents indicated that they did not have a documented retirement plan.

Validity and reliability results

The results of the EFA on the variables, as well as the variables' Cronbach's Alpha correlation coefficients (CA) are presented in Table 1. Table 1 will also provide the operational definitions of the factors.

Table 1: Operational definitions and validity and reliability results

Operationalisation of factors	Items	Factor loadings	CA
<i>Financial literacy and future time perspective</i> refers to an individuals' ability to save; the ability to maintain a good credit and to make use of financial products; the ability to think of the future.	10	Max: 0.76 Min: 0.44	0.81
<i>Level of retirement planning</i> refers to an individual having a retirement plan in place; making contributions to a retirement fund; having their financial records organised and gathered; having assessed their net worth and discussing their financial goals with a professional in the field of financial planning.	7	Max: 0.71 Min: 0.46	0.79
<i>Sources of financial advice</i> refers to the formal and informal channels individuals use to acquire advice relating to their finances, such as attending finance seminars, reading specialist magazines and consulting an independent financial advisor.	7	Max: 0.71 Min: 0.48	0.78
<i>Retirement savings</i> refers to the conscientious efforts of individuals to save for their retirement, by making meaningful savings for retirement and constantly monitoring those retirement savings.	7	Max: 0.75 Min: 0.70	0.87

Source: Researcher's own construction

According to the literature (Disney & Gathergood, 2013; Murphy, 2013; Coudin & Lima, 2011; Hershey *et al.*, 2007) financial literacy and future time perspective are considered as two separate factors that can influence the retirement savings of individuals. These constructs were measured using sixteen and seven items

respectively. However, the results of the EFA revealed that several of the items originally intended to measure these two construct loaded together onto one factor. The factor was named *Financial literacy and future time perspective*. Seven (FL5, FL7, FL9, FL10, FL11, FL12 and FL6) of the sixteen items measuring *Financial literacy* and three (FTP1, FTP2 and FTP7) of the seven items measuring *Future time perspective* loaded onto *Financial literacy and future time perspective*. Only seven (LRP1, LRP2, LRP3, LRP8, LRP9 LRP11 and LRP12) on the twelve items intended to measure *Level of retirement planning* loaded together. Based on the results of the EFA, seven (SFA1, SFA3, SFA5, SFA6, SFA7, SFA8 and SFA9) of the ten items intended to measure *Source of financial advice* loaded as expected. Seven (RS1, RS2, RS3, RS4, RS5, RS6 and RS7) of the fifteen items intended to measure *Retirement savings* loaded onto one factor.

As can be seen in Table 1, the highest Cronbach's alpha coefficient (0.87) was reported for *Retirement savings* and the lowest was returned for *Sources of financial advice* and *Level of retirement planning* (0.79 and 0.78 respectively). Given these results, all the constructs in the measuring instrument met the reliability requirements.

Items that did not load as expected from conducting the EFAs were consequently eliminated from further analyses. As a result of the EFA, the hypotheses were reformulated, whereby:

- H¹: There is a significant positive relationship between *financial literacy and future time perspective* and *retirement savings*.
- H²: There is a significant positive relationship between *level of retirement planning* and *retirement savings*.
- H³: There is a significant positive relationship between *sources of financial advice* and *retirement savings*.

Descriptive statistics and relationships between variables

As part of the data analysis conducted for this study, descriptive statistics were calculated in order to describe the sample data from the measuring instrument. The highest mean score of 3.90 was reported for *financial literacy and future time perspective*. Most respondents (71.43%) agreed with the statements pertaining to their financial knowledge, saving and spending behaviours, as well as their inclination to think about the future. However, *sources of financial advice* returned the lowest mean score of 2.50, with the majority of the respondents (51.43%) disagreeing with the statements about the various channels used to seek financial advice. This was an interesting finding, as most of the respondents (60.00%) revealed that they are still planning on receiving financial advice.

The Pearson's Product Moment Correlations showed significant positive ($p < 0.05$) correlations between some of the variables used in the study. Therefore, it is evident that there are positive correlations between the independent variables (*financial literacy and future time perspective*, *level of retirement planning* and *sources of*

financial advice) and the dependent variable (*retirement savings*). The results of the Pearson's Product Moment Correlations are presented in Table 2.

Table 2: Pearson's correlations coefficients

Factors		1	2	3	4
		Financial literacy and future time perspective	Level of retirement planning	Sources of financial advice	Retirement Savings
1	Financial literacy and future time perspective	1.000			
2	Level of retirement planning	0.246*	1.000		
3	Sources of financial advice	0.272*	0.160*	1.000	
4	Retirement Savings	0.434**	0.766***	0.202*	1.000

Source: Researcher's own construction

($r < 0.05$)

(*weak correlation; **moderate correlation; ***strong correlation)

The Pearson's Product Moment Correlations were conducted to support the necessity of performing multiple regression analyses to statistically test the proposed relationships in the study. In addition, the Pearson's Product Moment Correlations were conducted to ensure that multicollinearity does not violate the results of the multiple regression analyses undertaken in this study (Zikmund *et al.*, 2010, p. 588). To test the hypotheses in this study, a multiple regression analysis was used. The results of the regression analysis can be found in Table 3.

Table 3: Influence of the independent variables on the dependent variable

Dependent variable: Retirement savings			R-Square =
0.652			
Independent variables	b*	t-value	Sig.(p)
Financial literacy and future time perspective	0.369	13.344	0.000***
Level of retirement planning	0.720	4.760	0.000***
Sources of financial advice	0.022	0.375	0.708

Source: Researcher's own construction

(* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$)

A significant positive relationship ($b^* = 0.369$; $p = 0.000$) was reported between *financial literacy and future time perspective* and *retirement Savings*. This implies that the more financially literate individuals are, and the more they think about the future, the more likely it is that individuals will contribute savings towards their retirement. Another significant positive relationship ($b^* = 0.720$; $p = 0.000$) was reported between *level of retirement planning* and *retirement savings*. This

suggests that the more individuals engage in retirement planning initiatives, the greater the likelihood that he/she will make savings for their retirement. There was no significant relationship found between the independent variables (*sources of financial advice*) and the dependent variable (*retirement savings*). In other words, the formal or informal sources that individuals seek financial advice from does not significantly influence their ability to make retirement savings.

As a result of the multiple regression analyses, hypotheses H¹ and H² were accepted, while H³ was rejected.

Conclusions and recommendations

It is evident that the main factors influencing the retirement savings of individuals in this paper, is financial literacy and future time perspective as well as the level of retirement planning individuals engage in. The majority of the respondents agreed with the statements regarding financial literacy and future time perspective and the level of retirement planning. Therefore, these two factors be the focus areas for individuals and financial planners when aiming to increase individuals' retirement savings.

In light of the above findings, practical actions for pre-retired individuals and financial planners are recommended to achieve improved retirement savings. Individuals should monitor their finances, especially when it comes to their spending and saving habits. A monthly budget is recommended to mitigate the possibility of over spending and not having any money left for savings. Furthermore, financial planners can encourage individuals to incorporate their retirement savings into their monthly budget, so that individuals form the habit of spending the disposable income they have available after making discretionary saving.

Previous research has shown that individuals that actively engage in planning for retirement as opposed to those who have not, have the freedom and control to make their own financial choices and also have the eagerness to save (Brucker & Leppel, 2013, p. 7; Van Rooij *et al.*, 2011, p. 605). As the empirical findings in this paper has indicated that the level of retirement planning has a significant positive influence on retirement savings, individuals should aim to start planning for retirement as early as possible to ensure the adequacy of retirement provisions. This study also recommends that financial planners specifically draft retirement plans for existing and potential clients, so as to keep track of their client's progress with regard to their provisions for retirement. Furthermore, a documented retirement plan is a tangible way for individuals to see whether there are in line with meeting their retirement goals.

Some limitations were encountered during this study, among them was the convenience sampling technique utilised. The convenience sampling method employed proved to be a limitation. This is due to its disadvantages of potential sampling bias and producing a sample that is less representative of the population. Furthermore, this study was mainly focused on pre-retired individuals in the Nelson Mandela Bay area, and as a result the study may contain information and results that

are relevant for this particular area only. For future studies, a larger sample should be obtained by including individuals who reside in other provinces within South Africa.

Following the above discussion, it is clear that the results of this paper offer relevant, practical recommendations and suggestions to financial planners and pre-retired individuals on improving the retirement savings of pre-retired individuals, through individuals' financial literacy and future time perspectives and the level of retirement planning of individuals.

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