THE INFLUENCE OF KNOWLEDGE OF PENSION FUND SCHEMES ON RETIREMENT PLANNING AMONG PRIMARY SCHOOL TEACHERS IN BUJUMBURA, BURUNDI

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Abstract: **Most of the people perceive retirement as limitations, losses, financial fears, and worries about how to stay healthy and leave family members unburdened. However, other people perceive retirement as an opportunity to experience freedom from work pressures, responsibilities and time constraints. The study investigated the influence of knowledge of pension fund schemes on retirement planning among primary school teachers in Burundi. The study was cross-sectional in design covering a sample of 107 respondents out of a target population of 1610 teachers. Interviews, questionnaire and documentary review were used in data collection. The study used a mix of data analysis techniques as informed by the nature of the data collected; quantitative data was analyzed using descriptive and inferential statistics through SPSS while qualitative data was analyzed through content analysis based on themes as guided by the research objectives. According to the study findings, the overall knowledge of pension schemes scored a mean of 4.1184 and S.D. of .61473; implying that the majority of primary teachers in Burundi do not have enough knowledge of pension schemes. Results indicate that knowledge of the pension schemes has a positive and significant correlation with retirement planning [$r_{(107)}$ =.273, ρ=.004]. Further analysis showed that demographic variables such as age (β=.11, t= 2.05, $p < .05$), educational level (β=.06, $p < .05$), income level (β=.15, t= 2.46, $p < .05$) and financial literacy (β=.09, t= 2.32, $\rho< .05$) had significant influence on the relationship between knowledge of the pension schemes and retirement planning. The study concludes that knowledge on various pension schemes are key to retirement planning among teachers in Burundi; when teachers are aware and more informed about various pension schemes, they are able to decide and plan for best retirement options. Therefore, for workers to better plan for retirement they should possess adequate knowledge of their pension schemes. It is therefore essential for employers to organize workshops or seminars to educate their employees on their pension schemes, identify the prospects and challenges associated with the schemes early enough to assist workers to make informed decisions about their retirement.**

Keywords: **Knowledge of pension schemes, demographic factors, retirement planning, primary school teachers.**

1. INTRODUCTION

Due to the long-term nature of pension arrangement, many people are unable to estimate what their pension benefit at retirement will be (Guiso, Jappelli & Padula, 2009). This means that whether these benefits will be sustainable or not may not be known to a number of people until retirement comes through. Workers who would want to avoid such situations usually invest in pensions and property accumulation known as retirement planning (Rosenkoetter & Garris, 1998). Workers who plan for retirement can contribute meaningfully towards building a sustained quality of life during retirement; the lack of pre-retirement planning however weakens an individual's life satisfaction (Prinsloo, 2009).

Planning for life events, such as retirement reduces uncertainty, motivates behaviour, and enhances personal well-being (Smith, 1996). It is clearly documented that those who plan for retirement have realistic expectation about life in retirement, positive attitudes towards retirement and perception of personal control (Aiken, 2002; Mutran, Reitzes, & Fernandez, 1997). Less depression and anxiety which promote psychological well-being during retirement have been found to be some of the long term benefits of retirement planning (Fretz, Kluge, Ossana, Jones, & Merkangas, 1989). Part of retirement planning includes pension schemes which are usually instituted to cater for some of the needs of the aged.

Knowledge of pension schemes has become very relevant for a number of reasons. According to Ameriks (2006) from the individual point of view, the lack of knowledge of the features and provisions of pension arrangement can inhibit the ability to plan for retirement. Ameriks (2006) further explains that whether the lack of familiarity is the result of indecision, complication or psychological barriers, becoming informed represents a real cost that individuals must bear to be able to plan for retirement, irrespective of the type of pension plan they have.

It is also worth noting that the effectiveness of the pension scheme on retirement planning depends on other factors such as gender, age, educational level, current income level, financial literacy, and generally the kind of lifestyle the individual will like to enjoy during retirement (Lusardi & Beeler, 2006). Mitchell (1988) contends that the information acquired about the pension scheme can be influenced by the abilities of individuals to process complex financial information which may affect retention and understanding of their pension plans.

Purpose:

The purpose of the study was to assess how the knowledge of the pension schemes influences the retirement planning among primary school teachers in Burundi. This current study intended to draw government's attention to the fact that providing pension schemes for workers is not enough to make them enjoy sustained retirement but by highlighting on the influence of knowledge of pension schemes on retirement planning.

2. METHODS

This is the cross-sectional design implying that the study was undertaken within a particular period of time. The study was carried in Bujumbura, Burundi. The target population for this study was primary school teachers in Bujumbura who were in total number 1610 (see *e.g.* DPE, 2018). The study covered a simple random sample of 107 drawn from different schools, National Pension Service and Ministry of Education. Questionnaires and interviews were used to collect data. The questionnaire contained both closed and open- ended questions; where in open-ended questions respondents were free to express their feelings/ thoughts, and in closed-ended questions in which respondents are required to choose among the alternatives given. Interviews covered 20 respondents who are the staff in in the Ministry Education and 7 from National Pension Service. They were considered to have more knowledge concerning pension fund schemes. The interviews were face to face and in preparation for the interview, the target respondents were requested for appointment and given copies of the interview guides to make them aware of the issues they would expect to respond. Data were analyzed using both descriptive and inferential statistics through Statistical Package for Social Sciences. The factors used as predictors and which were included in the model are knowledge of the existing pension fund schemes (β_1), age (β_2), income (β_3), educational level (β_4) and financial literacy (β_5) of the respondent and the model is as follows.

$$Y = a + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \dots \beta_{10} X_{10} + e$$

Where;

Y= the dependent variable was retirement plannings of primary school teacher.

$Y = f\{$ knowledge of existing pension schemes X_1 + age X_2 + Income X_3 + Educational level X_4 + Financial level X_5 $\}$

a= Intercept (constant) term.

X_1 to Xn= Independent variables.

e= Random error term.

β_1 to βn=Standardized partial regression coefficients for independent variables.

3. RESULTS AND DISCUSSION

Out of this 127 questionnaires distributed to respondents, 107 (84.2%) questionnaires were returned while the rest 20 (15.8%) were misplaced by the respondents. The majority of respondents, 57 (53.3%) were in the age range of 30-39 years, this was followed by 27 (25.2%) in the age range of 20-29, followed by 17(15.9%) in the age range of 40-49, then 1(0.9%) in the age range was 60+year which was represented by only 6 (7.5%). Findings indicated that the majority of the respondents, 77 (72.0%), were female as opposed to males who were 30 (28.0%). Results present the results of the sample distribution by education level. Results show that the majority of respondents 56 (52.3%) had attained secondary school while University level tied at 47.7% . Results show that 81 (75.7%) respondents were married, 24 (22.4%) respondents were single, 2 (1.9%) were widows.

Teachers' Knowledge on existing Pension Schemes:

Descriptive statistics were used for all the items using the means and standard deviations as summarized in Table 1.

Table 1: Descriptive statistics on the knowledge of pension schemes

	N	Minimum	Maximum	Mean	Std. Deviation
I have knowledge and skills about pension schemes in Burundi	107	2.00	5.00	4.0187	.96134
Compared to other teachers I consider myself possessing good knowledge of pension schemes	107	3.00	5.00	4.1963	.63601
I can fully understand the majority of financial concepts about pension	107	1.00	5.00	4.1402	.80621
Knowledge of pension schemes (Overall)	107	2.67	5.00	4.1184	.61473

The results in Table 1 show that for *'I have knowledge and skills about pension schemes in Burundi'* , the mean was 4.0187 and its standard deviation was .96134, for *'Compared to other teachers I consider myself possessing good knowledge of pension schemes'* , the mean was 4.1963 and the standard deviation was .63601, and for *'I can fully understand the majority of financial concepts about pension'*, the mean was 4.1402 and its standard deviation was .80621. Overall the knowledge of pension schemes scored a mean of 4.1184 and S.D. of .61473. These results imply that primary teachers did not have enough knowledge of pension schemes which mean that incorrect pension knowledge may lead to misleading retirement planning decisions. The finding of the current study is consistent with Mercer Human Resource Consulting (2004) who shows that lack of additional saving for retirement was attributed to lack of information on pension schemes.

The Relationship between Knowledge of Pension Schemes and Retirement Planning:

The correlation results in Table 2 shows that knowledge of the pension scheme correlates significantly and positively with retirement planning [$r_{(107)}$ =.273, ρ=.004]. This squared coefficient ($r^2 = 0.075$) demonstrates that knowledge of the pension schemes accounts for 7.5% of the variance in retirement planning.

Table 2: Pearson correlation for knowledge of pension schemes and retirement planning

		Retirement planning	Knowledge of pension schemes
Retirement planning	Pearson Correlation	1	.273[**]
	Sig. (2-tailed)		.004
	N	107	107
Knowledge of pension schemes	Pearson Correlation	.273[**]	1
	Sig. (2-tailed)	.004	
	N	107	107

**. Correlation is significant at the 0.05 level (2-tailed).

This results affirm the first alternative hypothesis which states that there is a positive relationship between knowledge of the pension scheme and retirement planning such that workers who have more knowledge of the pension scheme will plan better for their retirement. The current findings may be due to the fact that, workers who have more knowledge on pension schemes may have realised the risk associated with some parts of the scheme. It can also be that, workers who were planning for their retirement realised the need to learn more about the current scheme as a result exposing them to the details of the scheme and what they are to expect in the future regarding their pensions.

Role of Demographic Factors on the Relationship between Knowledge of Pension Schemes and Retirement Planning:

Age

As shown in Table 3, the study revealed an interaction between knowledge of the pension scheme and age which accounts is significant accounting for 11% variance in retirement planning (β=.11, t= 2.05, $p < .05$).

Table 3: Regression analysis on influence of age on the knowledge of the pension scheme and retirement planning

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.78	.64		5.94	.000*
	Knowledge of the pension schemes	.25	.11	.16	2.34	.020*
	Age	3.20	.42	.56	8.00	.000*
	Knowledge +Age	.57	.28	.11	2.05	.042*

a.   Dependent Variable: Retirement planning

b. $\Delta R^2 = .076$, p < .05

The result is consistent with hypothesis that there is a positive influence of age on the knowledge of pension schemes and retirement planning. This implies that individuals with old age (40 - 60+ years) are more likely to have better knowledge of their pension scheme and also more likely to plan better for their retirement compared to those aged 20-39 years. This finding is consistent with previous studies which indicate that age differences exist in individual's knowledge of pension schemes and retirement planning (for instance, Anderson *et al.,* 2000; Benitez-Silva *et al.,* 2010; Kelly, 2006; Mayhew, 2003).

Educational level:

To determine whether educational level significantly influence knowledge of the pension scheme and retirement planning, a regression linear was done using the ENTER method and the results are summarized in the Table 4.

Table 4: Multiple Regression Analysis testing the influence of Educational level on knowledge of pension schemes and Retirement planning

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.79	.97		7.04	.000*
	Knowledge of the pension schemes	.78	.10	.56	8.22	.000*
	Educational level	.69	.67	.06	1.00	.278
	Knowledge of pension schemes+educational level	.63	.23	.14	2.34	.020*

a.   Dependent Variable: Retirement planning

b.   p < .05

Table 4 indicates that educational level was also significantly correlated with retirement planning (β=.06, $p > .05$). The result indicates that the influence of educational level on the relationship between knowledge of pension schemes and retirement planning was significant. This means educational level strengthens the relationship between knowledge of the pension scheme and retirement planning accounting for (14%) variance in retirement planning.

Financial literacy:

To determine whether financial literacy significantly influences the relationship between knowledge of the pension scheme and retirement planning, a linear regression was done using the method and the results are summarized in Table 5.

Table 5: Multiple regression analysis testing the influence of financial literacy on knowledge of pension schemes and retirement planning

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.80	.39		12.17	.000***
	Knowledge of the pension schemes	.06	.08	.04	.70	.485
	Financial literacy	2.54	.16	.81	15.73	.000***
	Knowledge of pension schemes+Financial literacy	.44	.19	.09	2.32	.021*

a.   Dependent Variable: Retirement planning

b.   F=5.580, ΔR^2 = .097, *** p < .001, ** p < .01, * p < .05

Also, from the Table 5 above financial literacy accounted for 81% variance in retirement planning, (β=.81, t= 15.73, ρ< .001). The interaction between knowledge of the pension scheme and financial literacy is significant and accounts for a 9% variance in retirement planning, (β=.09, t= 2.32, ρ< .05). Using the multiple regression analysis, financial literacy significantly influence the relationship between knowledge of the pension scheme and retirement planning. This result indicates that with the presence of financial literacy the relationship between knowledge of the pension scheme and retirement planning is strengthened accounting for (9%) variance in retirement planning. This significant effect can be attributed to the direct relationship between financial literacy and retirement planning as revealed in studies by van Rooij, Lusardi and Alessie (2011); Bucher-Koenen and Lusardi (2010); Klapper and Panos (2011).

Income level:

Table 6 summarizes the result of the multiple regression analysis used for this section.

Table 6: Regression Analysis testing the influence of Income Level on Knowledge of the Pension Scheme and Retirement Planning

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4.82	1.00		4.82	.000*
	Knowledge of the pension schemes	.72	.10	.44	7.21	.000*
	Income level	1.04	.44	.15	2.39	.018*
	Knowledge of the pension schemes +Income level	.69	.28	.15	2.46	.015*

a.   Dependent Variable: Retirement planning

b.   F= 4.97; ΔR^2 = .087, * p < .05

As shown in Table 6, the model was significant and accounted for (15%) variance in the dependent variable. In line with the prediction made, the interaction between knowledge of the pension scheme and income level was statistically significant (β=.15, t= 2.46, $p < .05$) accounting for a 15% variance in retirement planning. This implies that the relationship between knowledge of the pension scheme and retirement planning is influenced by the income level of the worker. That is, income level was found to strengthen positively the relationship between knowledge of pension schemes and retirement planning accounting for 15% of the variance in retirement planning. The influence can be attributed to the inadequate saving among low and middle income earners as a result of their lack of sufficient income to afford saving. The reason can also be attributed to the fact that low and middle income earners who make up the majority of workers lack basic knowledge to save and invest wisely (Bell & Lerman, 2005).

4. CONCLUSIONS

The study concludes that knowledge of the pension scheme relate to retirement planning. Also, significant age differences were found among respondents in relation to their knowledge of pension scheme and retirement planning. Variables such as financial literacy, educational level, income level and age were found to have significant moderation effects on this relationship. Hence, from these findings, it can be concluded that for workers to better plan for retirement they must possess adequate knowledge of their pension scheme. They also need not to underplay the importance of age,

education, income and financial literacy when planning. The study elucidates the importance of pension scheme knowledge on retirement planning. It is therefore vital that organisations poise themselves to organize periodic retirement planning seminars during which features of the pension scheme must be treated into detail to keep workers in tune with how retirement is going to be. The study has come handy now that the responsibility of managing retirement welfare is mostly left in the hands of the individual. The lack of knowledge about pension schemes will negatively affect retirement planning as revealed by the study. It is also the view of this study that when teachers are well informed on the features of their pension schemes they will take advantage of the system to avert being burdens on their relatives during and after retirement.

5. RECOMMENDATIONS

Based on the study findings, the following are recommendations to meant to improve knowledge of pensions schemes among teachers in Burundi; For teachers, it is highly recommended that education should be provided on pension schemes towards retirement early in a worker's working life in order to allow adequate time to prepare for retirment. This can be done through workshops and seminars organized by employers. Further, an employee's date of retirement should be attached to his/her appointment letter in order to keep the retirement date in mind right from the very beginning of one's working life. To the government, it is recommended that the government must come out with policies to make education of employees on the pension scheme mandatory for all employers in order for the employees to be more motivated to plan for their retirement.

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