

The impact of financial literacy on financial preparedness for retirement among formally employed individuals in Zimbabwe

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Abstract

Purpose: Changes in global retirement systems have necessitated greater personal responsibility for making retirement financial decisions. The main purpose of this study is to evaluate the effect of financial literacy on the financial preparedness for retirement among the formally employed in Zimbabwe.

Research Methodology: The study adopted a positivist philosophy and an explanatory research design. Questionnaires were used to collect data from a target population of employees in Bindura, Zimbabwe. The final sample consisted of 384 participants. The independent variable, financial literacy, was measured using knowledge of financial instruments and computational capabilities of retirement benefits. Data were analyzed by multiple regression analysis using SPSS version 25.

Results: The findings show a statistically significant relationship between knowledge of financial instruments and financial preparedness for retirement at the 5% significance level. The computational capabilities of retirement benefits are found to have no effect on financial preparedness for retirement.

Limitations: Other factors that affect financial preparedness, such as demographics and financial factors, were not included in the model.

Contribution: This study addresses retirement preparedness, which is one of the least-researched areas of personal finance in Zimbabwe. Therefore, the results are useful for policymakers to enhance the framework of retirement financial literacy.

Keywords: *financial literacy, computational capability, financial preparedness, retirement, formally employed*

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1. Introduction

In recent years, employers have been responsible for providing retirement benefits to their employees, but this has since changed (Hutchings, Wilkinson, & Brewster, 2022). Employees are now more accountable for making financial plans for their retirement and selecting from among the available retirement plans the most appropriate investment options (Krekula & Vickerstaff, 2020; Lusardi & Mitchell, 2011). Global retirement system modifications have increased individual accountability for financial decision-making (Agnew, Bateman, & Thorp, 2012). Preparing for retirement has become critical to retirees' welfare (Mndzebele & Kwenda, 2020). Financial literacy and its relationship with retirement preparedness have been studied from various perspectives and locations.

According to Eagers, Franklin, Broome, and Yau (2019), this subject has received an elevated amount of attention from academic and scholarly communities in the last 26 years (1997–2023). The progression of the number of publications during this period reveals a growing concern (Lusardi &

Mitchell, 2011). The US subprime meltdown and European sovereign debt and banking crises were two economically critical events that heightened research concerns about retirement preparedness and financial literacy, as most employees were retrenched without any financial plan to fall back on (Niu, Zhou, & Gan, 2020). A number of studies have been undertaken in various countries and these studies have concluded that financial knowledge and preparedness for retirement both have become a principal economic worry (Ahmad, Widyastuti, Susanti, & Mukhibad, 2020; Antoni, Saayman, & Vosloo, 2020; Bucher-Koenen & Lusardi, 2011; Lusardi & Mitchell, 2011; Niu et al., 2020; Sekita, 2011). However, few studies have been carried out in the African context, resulting in a knowledge gap on retirement preparedness in the continent.

Studies have shown that a vast number of pensioners often live despondent lives because of decreased earnings at retirement, which is a result of insufficient forward financial planning for retirement (Dhlembeu, 2018). Studies have found that most employees are not confident in their financial preparedness for retirement plans and are unsure whether they are adequate to cover expenses during retirement. Additionally, more individuals withdraw their retirement savings when they change jobs before retirement (Niu et al., 2020). The major reason individuals are inadequately prepared for retirement is that they do not have the requisite financial knowledge to determine how much they need for their future financial well-being and whether they are saving enough. (Antoni et al., 2020; Reyers, Van Schalkwyk, & Gouws, 2014). This is also the case for non-OECD countries, such as South Africa, China, and India. In contrast, less than four percent (4%) of the relatively old age live in relative poverty in France, Iceland, Denmark, France, and the Netherlands (OECD, 2023). This shows that individual financial preparedness for retirement has become crucial to avoiding living in poverty.

From a global financial perspective, there has been concern that inadequate retirement preparation is widespread (Reyers et al., 2014). Research has found that in the United Kingdom (UK), China, France, Canada and the United States of America (USA), over 50% of the retired population is dependent on the government for their welfare (Bassett, Fleming, & Rodrigues, 1998). This is the outcome of their failure to make sufficient retirement plans during their years of employment. In addition, a study conducted in the United States of America suggests that approximately 75% of Americans aged over 40 fall behind their retirement savings (GoBankingRates, 2016). South Africa is no exception in sub-Saharan Africa; they are also ill-prepared for retirement. Only 6% of South Africans are predicted to sustain their level of living after retirement (Lamprecht 2015).

Another major concern when preparing for retirement is an increase in life expectancy. Life expectancy has improved globally, leading to an aging population due to the decrease in poverty, improvement in medicines and hospital services, availability of improved sanitation and healthcare facilities, and energetic and healthy lifestyles (Mndzebele & Kwenda, 2020). Longer lifespans require advanced savings levels to sustain longer lifetimes and aged populations. Individuals now have prolonged living in retirement, and consequently, saving old age has been categorized as of utmost importance (Mourine, Ambrose, & Fredrick, 2017). The OECD predicts that by 2040, the average life expectancy for males living in OECD countries will be 83.1 years and 86.6 years for women. The United Nations also predicts that the proportion of the worldwide population aged > 60 years will increase by 20% by 2050 (UN, n.d.). This improved long life combined with shorter working lives in many countries has resulted in the years anticipated to be spent in retirement increasing dramatically (Brown & Graf, 2013).

Around the world, financial products available for retirement planning are escalating in number and intricacy (Achari, Oduro, & Nyarko, 2020). Because of this, the expertise needed to guarantee sufficient monetary security in senior years is challenging, necessitating a comprehension of discounted values, interest rates, inflation, and endurance possibilities (Mourine et al., 2017). Financial literacy has become a key survival skill that is needed to ensure satisfactory financial protection in senior age, as retirement security is determined by individual decisions (Lusardi & Mitchell, 2011). The inability to have sufficient retirement savings can result in difficulties not only for the individual but also for the community and the government (Mndzebele & Kwenda, 2020). Knowledgeable, financially literate employees are in a better position to make sound retirement decisions for themselves and their dependents and thus are in a condition to improve their financial and social well-being (Antoni et al.,

2020; Gallego-Losada, Montero-Navarro, Rodríguez-Sánchez, & González-Torres, 2022). The ever-shifting retirement saving environment, coupled with the above-mentioned demographic progressions and policy responses, makes financial training increasingly important (Agnew et al., 2012).

According to Statutory Instrument 393 of 1993, every person in Zimbabwe, who is employed permanently, seasonally, on a contract basis, or temporarily, and who is under 65 years of age must be members of the Pension and Other Benefits Scheme administered by NSSA through the National Social Security Authority Act (Chapter 17:04) of 1989 (NSSA, 2021). With the NSSA pension schemes, the overall responsibility of retirement provision lies with the employer and not the employee; however, because of the deteriorating economic situation in Zimbabwe that escalated between 2000 and 2009, pensioners have been adversely affected by hyperinflation, dollarization, devaluation of pension fund assets, and demonetization, years of pension savings have evaporated under hyperinflation, as evidenced by the low pension benefits that are being received at retirement (Murendo & Mutsonziwa, 2017).

In 2009, hyperinflation pushed the Zimbabwean government to discard sovereign currency and embrace multiple currencies, including the United States dollar, which grossly affected the valuation of pension assets. Pension fund assets lost value, thus negatively affecting anticipations and assurances made to retiring employees (Chowa, Mhlanga, & Munakamwe, 2015). High rates of unemployment in Zimbabwe have also resulted in the majority of the population not being covered by any of these employee pension benefits (Mutsawu & Sarawoi, 2016). Due to these unanticipated economic downturns, individuals now have a greater obligation to financially prepare for their retirement and select from the many investment opportunities and retirement plans available. Although Zimbabwe ranks among the top countries in Africa with high literacy rates, the rate of financial literacy remains low (Murendo & Mutsonziwa, 2017). This low financial literacy level has resulted in the majority of Zimbabweans failing to adequately plan their retirement. Lower rates of financial literacy also imply that individuals are unaware of retirement financial instruments at their disposal.

Against this background, this study sought to evaluate the effect of financial literacy on the financial preparedness for retirement among the formally employed in Zimbabwe. The objectives of this study were to examine the impact of financial instrument knowledge on financial preparedness for retirement and to determine whether computational capabilities had an effect on financial preparedness for retirement.

2. Literature Review

2.1 The Concept of Financial Literacy

Financial literacy has been identified as an essential indicator of people's ability to make comprehensive and cognizant choices about their finances and other behavioral decisions (Lusardi, 2019). Such decisions may include investment, savings options, and other wealth-amassing decisions (Mndzebele & Kwenda, 2020). Pension financial literacy empowers employees to make retirement plans, make wise choices about pension products, and effectively contributes to pension scheme management (Mourine et al., 2017). It also has a bearing on savings performance and individual involvement in pension schemes and consequently adds to the economic development of countries (Achari et al., 2020).

According to Huston (2010), financial literacy is the skill and poise to apply knowledge related to personal finance issues. Lusardi and Mitchell (2011) define financial literacy as knowledge of essential financial ideas and the ability to perform simple financial mathematics. It is a multidimensional perception that captures aspects of financial awareness, attitudes, and behavior (OECD, 2011). A skill related to financial literacy is numeracy, defined as the ability to process basic mathematical concepts, quantitative approximations, probabilities, and quotients (Lim et al., 2013). For the purposes of this study, financial literacy is defined according to the OECD (2011) definition, which states that it is "a combination of awareness, knowledge, skill, attitude, and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing". It is measured using the knowledge of financial instruments and the computational capabilities of retirement benefits.

H_{1a}: Financial literacy has a positive and statistically significant relationship with financial preparedness for retirement

2.1.1 Knowledge of financial instruments

Knowledge of financial instruments is attained through training and expertise connected to important private financial concepts and instruments (Huston, 2010). Since it serves as the foundation for other aspects of financial literacy, financial knowledge is crucial to efforts to become financially literate. A person's ability to handle finances effectively affects other financial behaviors, such as debt management, retirement readiness, and savings management (Huston, 2010). The association between financial literacy and retirement planning was first studied in the USA by Lusardi and Mitchell (2014), who found that people with high financial literacy scores are more likely to have retirement plans. Lusardi and Mitchell (2014) claim that one reason people struggle to prepare for retirement is that they do not prioritize the impact of risk, inflation, and compound interest on their assets.

H_{1b}: Knowledge of financial instruments has a positive and statistically significant relationship with financial preparedness for retirement

2.1.2 Computation Capabilities of Retirement Benefits

Lusardi and Mitchell (2014) cited in Mndzebele and Kwenda (2020) give financial illiteracy as the reason why individuals are unable to prepare for retirement. They are unable to understand the role of compounding interest, rate of inflation, and the risk of their savings. While focusing on computational capabilities, numerous studies have specified that individuals who fail to perform simple calculations are more unlikely to correctly calculate their pension requirements (Lusardi & Mitchell, 2011). Various studies carried out in the USA found that serious planners with adequate financial knowledge are more likely to get one answer correct on questions about interest and inflation than on questions about risk and diversification.

H_{1c}: Computation capabilities have a positive and statistically significant relationship with financial preparedness for retirement

2.2 Measuring Financial Literacy

In their groundbreaking study of financial literacy, Lusardi and Mitchell (2014) formulated the most frequently asked questions about interest, inflation, and risk. Research on financial literacy in South Africa has focused on other financial issues, such as financial planning, banking, taxation, and legal issues, as well as on using a variety of problems to measure financial literacy (Mndzebele & Kwenda, 2020). Oseifuah (2010) focused on financial literacy and youth entrepreneurship to test knowledge of interest rates. There were questions about money management, income, savings and investments, debt, and spending from Fatoki (2014), cited in Dhlembeu (2018).

The three fundamental financial literacy questions on compound interest, inflation, and risk diversification developed by Lusardi and Mitchell (2014) served as the foundational gauge for this investigation. This study is comparable to previous financial literacy and retirement preparedness studies because the concepts they test are similar to those tested in studies conducted in the USA, Malaysia, Germany, Russia, Chile, and Japan (Boisclair, Lusardi, & Michaud, 2017; Brown & Graf, 2013; Bucher-Koenen & Lusardi, 2011; Lusardi & Mitchell, 2011; Moure, 2016; Van Rooij et al., 2012).

2.3 Financial Preparedness for Retirement

Alavinia and Burdorf (2008) defined retiring as the culmination of uninterrupted employment, where individuals are able to substitute means such as asset investments and pension plans. Retirement preparedness is described as an organized way of putting away resources or financial reserves, commercial enterprises, and time to provide income in old age. Mourine et al. (2017) elucidated that preparedness for retirement assumes that the retiree is ready to sustain a lifestyle of financial freedom all through the pension period, maintaining the same routine that was enjoyed during full time employment.

Individuals are said to be adequately equipped for retirement if they have accrued the least wealth required to meet their retirement needs (Mourine et al., 2017). However, it is difficult to measure the consumption levels of individuals during retirement because they differ from individual needs; some individuals have decreased costs during retirement, while others have increased expenses (Dhlembeu, 2018). Retirement preparedness is subjective and can be measured in several ways.

2.4 Theoretical Review

The Life Cycle theory of consumption focuses on financial decisions made for pension savings with the justification of an employee's salary and revenue to capitalize on its utility over his lifetime (Achari et al., 2020). It was initially established by Ando and Modigliani (1963) and founded on a conservative financial method for savings and consumption. The life cycle theory attempts to explain how rational consumers design their consumption and wealth accumulation over their lifetime. This approach assumes that an entirely sensible and knowledgeable person will use up less than his revenue in periods of employment and puts funds aside to back up usage when revenue streams decrease post-retirement (Mourine et al., 2017). Differences in the scheduling of an individual's revenue and expenditure streams make it essential to balance income between periods to meet consumption needs (Achari et al., 2020). Consequently, it is necessary to manage and plan financial streams across diverse life stages.

2.5 Empirical Review

Previous studies have revealed that a lack of awareness of financial instruments and products affects an individual's ability to make retirement investment decisions. Dhlembeu (2018), in their study in South Africa, proved that financially and economically inexperienced families normally have a tendency to evade stock markets and are less inclined to buy mutual funds at lower fees (Mndzebele & Kwenda, 2020). Clark, Lusardi, and Mitchell (2017) discovered that Federal Reserve Bank workers who were financially literate were most likely to make contributions towards an additional retirement-defined contribution plan. These same workers were more inclined to pay off a higher proportion of their remuneration towards savings and also had greater equity investments in their pension plans as compared to their counterparts who were financially less literate. The conclusions by Klapper and Lusardi (2020) were in agreement with those of Hilgert, Hogarth, and Beverly (2003), who concluded that individuals who had little financial knowledge reported the worst outcomes with regards to their financial plans, investment involvement and retirement planning decisions.

Bucher-Koenen and Lusardi (2011) carried out a study in Germany making use of data obtained from a SAVE survey. The researchers found a positive impact of financial knowledge on pension planning, and that financial knowledge was established to have a positive effect on retirement planning. Pangestu and Karnadi (2020) examined the association between financial literacy and retirement preparedness in Indonesia and found that financial literacy is positively and significantly associated with retirement plans that involve private pension funds.

Nkoutchou and Eiselen (2012) study the correlation between financial literacy and retirement preparedness. Financial literacy levels were found to be remarkably low, and only 47% of the population were able to comprehend compound interest, while only 18% understood inflation. Other studies carried out by Mullock (2012) in Canada and Aluodi, Njuguna, and Omboi (2017) in Kenya opposed the findings of Moure (2016) and found that being financially literate had no exceptional influence on retirement preparedness.

Several other studies have also specified that individuals who are unable to perform simple and compounding interest calculations are most likely to be unable to compute their retirement needs (Lusardi & Mitchell, 2011). Studies performed in Sweden by Almenberg and Säve-Söderbergh (2011) and in the Netherlands by Van Rooij et al. (2012) concluded that thoughtful individuals are expected to correctly answer questions on interest and inflation than the financial knowledge question that asks about financial risk and diversification.

In light of the literature reviewed above, this study hypothesized that there is a positive and statistically significant relationship between financial literacy and financial preparedness for retirement among the formally employed in Zimbabwe.

3. Methodology

This study adopted a positivist philosophy and explanatory research design. The design, also known as cause-and-effect design, sought to establish whether financial literacy had an impact on financial preparedness for retirement among formally employed individuals in Zimbabwe. In this study, the population comprised 1386 pensionable employees between the ages of 18 and 65 years who had been employed for two (2) years and above in public entities in Bindura. This age group enabled the study to focus on the ideal groups that need to consider their retirement years. The study used convenience sampling to select a sample of 384 participants, which was calculated using a statistical formula appropriate for large population sizes. Twenty-eight percent (28%) of pensionable employees were included in the sample.

The study was quantitative in nature and utilized structured, self-administered questionnaires to collect data. The instrument was pilot tested on 20 employees from the researchers' institution to ensure validity, and its reliability was measured using Cronbach's alpha. The collected data were coded and analyzed using the Statistical Package for Social Sciences (SPSS version 25). Descriptive statistics, such as mean, mode, variance, and standard deviation, and inferential statistics, such as the Pearson Correlation and Multiple regression, were employed to study the relationship between the variables. The study also tested the hypothesis for any statistically significant relationship between financial literacy and preparedness for retirement.

4. Result and discussions

A total of 321 questionnaires were returned, with a response rate of 84%. Reliability was examined using Cronbach's alpha to assess the internal consistency of the instrument. The score obtained was 0.963, indicating greater consistency of the questionnaire.

4.1 Diagnostic Test

Table 1. Univariate Normality Test

	N Statistic	Mean Statistic	Standard Deviation Statistic	Skewness		Kurtosis	
				Statistic	Std Error	Statistic	Std Error
Knowledge of financial instruments	321	4.9720	.94338	.003	.136	-1.244	.271
Computational capabilities	321	4.5720	1.25900	.200	.136	-1.389	.271
Financial preparedness for retirement	321	5.2920	.84900	.380	.136	-.768	.271
Valid N Listwise	321						

Source: SPSS Output (2024)

To test for normality, skewness and kurtosis were analyzed. The skewness and kurtosis of normally distributed data lies between -2 and +2 (Pallant, 2020). The ranges for the data fell between the acceptable ranges of -2 and +2 (Table 1); hence, there was no violation of the assumption of univariate normality.

4.2 Knowledge of financial instruments

The study also aimed to assess the effect of financial instrument knowledge on financial preparedness for retirement; hence, information on the level of awareness of financial instruments was sought. The

bulk of the responses (94.7%) indicated that participants were cognizant of financial instruments such as bonds and stocks. Only 5.3% indicated that they were not aware of financial instruments. Additionally, 21.5% of the respondents had invested in stocks before, while 5.3% had invested in bonds. The majority of the respondents (73.2%) had never invested in any instrument, and none of the respondents had invested in derivatives. Attendance at retirement workshops, which is crucial for gaining financial information on retirement savings, was used to further analyze the knowledge of financial instruments. Only 29% attended retirement seminars. Given that 94.7% of employees said they were aware of the financial tools for retirement investment, it can be argued that their knowledge was obtained from sources other than seminars.

4.3 Computational Capability

To determine the effect of computational capability on financial preparedness for retirement, the survey included three basic literacy questions by Lusardi and Mitchell (2014), testing the participants' capacity to answer simple mathematical questions. A summary of the responses is provided in Table 2.

Table 2. Responses to basic financial literacy questions

	BASIC FINANCIAL LITERACY QUESTIONS		
	Correct Responses (%)	Incorrect Response (%)	Do not Know (%)
Interest Rates	79.7	13.4	7.5
Inflation	62.9	32.1	5
Risk - Diversification	24	25.2	50.8

Source: Primary data (2024)

The findings show that respondents had above-average knowledge of the financial literacy questions. Further, 79.1% and 62.9% were able to correctly answer questions on interest rates and inflation, respectively. 7.5% and 5% indicated that they did not know the answers to the interest rate and inflation questions, respectively. However, only 24% answered correctly to questions on diversification, and 50.8% did not know the answer.

4.4 Correlation between knowledge of financial instruments, computational capability and financial preparedness for retirement

4.4.1 Pearson Correlation Analysis

Pearson Correlation analysis was used to deduce the relationship between the indicators of financial literacy, knowledge of financial instruments, computational capability of retirement benefits, and financial preparedness for retirement, as shown in Table 3 below.

Table 3. Pearson Correlation Analysis

Correlations				
		Knowledge- of_ financial instruments	Computational _capability	Financial Preparedness _for retirement
Knowledge of financial instruments	Pearson Correlation	1	.800**	.890**
	Sig (2-tailed)		<.001	<.001
	N	321	321	321
Computational capability	Pearson Correlation	.800**	1	.692**
	Sig (2-tailed)	<.001		<.001
	N	321	321	321
Financial Preparedness for retirement	Pearson Correlation	.890**	.692**	1
	Sig (2-tailed)	<.001	<.001	
	N	321	321	321

****Correlation is significant at the 0.01 level (2-tailed).**

Source: SPSS Output (2024)

The correlation tests the direction and strength of the linear relationship between two or more variables (Pallant, 2020). Pearson's correlation was used because it is appropriate for quantitative, normally distributed data. A positive correlation is indicated by a coefficient of +1, whereas a negative correlation is indicated by a coefficient of -1. A zero correlation indicates that there is no association between the variables. The correlation outcomes projected in Table 4.3 above reveal that there is a statistically significant association between knowledge of financial instruments and financial preparedness for retirement at the 95% confidence level. The Pearson coefficients for knowledge of financial instruments (0.890, <0.001) and the computational capability of retirement benefits (0.692, <0.001) indicate that these variables have a strong association. A single unit increase in knowledge of financial instruments and computation capability results in 89% and 69% increases in financial preparedness for retirement, respectively, indicating a strong association between the variables.

4.4.2 Multiple Regression Analysis

Multiple regression analysis was also used to empirically test whether there was a positive statistically significant relationship between knowledge of financial instruments, computational capability of retirement benefits, and financial preparedness for retirement.

Table 5. Model Summary of Predictor and Dependent Variables

Model Summary				
Model	R	R-Squared	Adjusted R-Squared	Std. Error of Estimate
1	.890 ^a	.793	.791	.38792

a. Predictors(Constant),_Computational_Capability, Knowledge_of_financial_instruments

Source: SPSS Output (2024)

Table 5 shows the results from the regression model that were estimated to show the changes in the R-squared variations between the predictor variables' knowledge of financial instruments and the computation capability of retirement benefits and the outcome variable, financial preparedness for retirement. The adjusted R-squared coefficient of 0.791 implies that financial literacy accounts for 79% of the change in financial preparedness for retirement. Other changes could be attributed to factors that were not included in the model.

Table 6. Relationship between predictor (Knowledge of financial instruments and computational capability) and outcome variables (Financial preparedness for retirement)

Coefficients^a

Model		Unstandardised B	Coefficients Std Error	Standardised Coefficients Beta	t	Sig.
1	(Constant)	1.284	.118		10.862	<.001
	Knowledge_of_financial_instruments	.840	.038	.933	21.906	<.001
	Computational_capability	-.036	.029	-.054	-1.269	<.001

a. Dependent Variable: Financial_Preparedness_for_Retirement

Source: SPSS Output (2024)

Table 6 shows that knowledge of financial instruments is statistically significant at (B=0.840, t=21.906, p<0.001) at the 95% confidence level. The results indicate a positive and significant relationship between knowledge of financial instruments and financial preparedness for retirement. These findings

are consistent with the opinions of Lusardi and Mitchell (2011), who conclude that low financial knowledge is a major determinant of inadequate retirement planning. These findings are also in agreement with Achari et al. (2020), who noted that financial knowledge increases the possibility of stock market investments, which, in turn, allow retirees to benefit from share premiums. The same authors also find that financial knowledge is positively associated with retirement planning; therefore, financial literacy, both explicitly and implicitly, is strongly associated with retirement savings. However, Antoni et al. (2020) contradict these findings, as they state that knowledge of financial instruments contributes insignificantly to financial preparedness for retirement.

In addition, Table 6 shows a statistically insignificant relationship between the computational capability of retirement benefits and financial preparedness for retirement ($B = -0.36$, $t = -1.269$, $p = 0.205$) at a 95% confidence interval. This implies that computational capabilities have no impact on retirement preparedness. The findings of this study contradict those of Lusardi and Mitchell (2011) and Ahmad et al. (2020), who propose that financial literacy presented by the computation ability of basic financial calculations has a strong, significant association with retirement planning. Lim et al. (2013) in their study on Malaysian employees found that numeracy skills were directly associated with retirement savings. He found that individuals who lacked bank statement numeracy skills did not contribute to saving retirement. Gallego-Losada et al. (2022) support these findings by stating that there is a causal relationship between computational abilities and retirement planning. Mashizha et al. (2019) also contended that mathematical capacity is the foundation of financial literacy that leads to retirement preparedness among consumers.

5. Conclusion

Based on the results presented above, this study concludes that financial literacy is an important aspect of effective retirement preparedness among the formally employed in Zimbabwe. The absence of proper retirement financial information dissemination channels has led to employees lacking adequate information to assist them in making retirement decisions. Financial literacy is necessary even among the highly educated, because being educated in one's profession does not lead to being skilled in financial matters. In light of the above, it is recommended that employers and relevant government authorities formulate comprehensive policies on retirement financial literacy enhancement and develop educational programs and training so that the financial literacy gap among workers can be reduced. Future research should focus on factors affecting the retirement preparedness of entrepreneurs and self-employed individuals.

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References

- Achhari, D., Oduro, R., & Nyarko, F. (2020). Financial Literacy on Retirement Planning of Workers of University of Mines and Technology, Tarkwa. *International Journal of Management Sciences and Business Research*, 9(5), 23.
- Agnew, J. R., Bateman, H., & Thorp, S. (2012). Financial literacy and retirement planning in Australian. *UNSW Australian School of Business Research Paper*(2012ACTL16).
- Ahmad, G., Widyastuti, U., Susanti, S., & Mukhibad, H. (2020). Determinants of the Islamic financial literacy. *Accounting*, 6(6), 961-966.
- Alavinia, S. M., & Burdorf, A. (2008). Unemployment and retirement and ill-health: a cross-sectional analysis across European countries. *International archives of occupational and environmental health*, 82, 39-45.
- Almenberg, J., & S  ve-S  derbergh, J. (2011). Financial literacy and retirement planning in Sweden. *Journal of Pension Economics & Finance*, 10(4), 585-598.
- Aluodi, E., Njuguna, A., & Omboi, B. (2017). Effect of financial literacy on retirement preparedness among employees in the insurance sector in Kenya. *International Journal of Biometrics*, 12.
- Ando, A., & Modigliani, F. (1963). The "life cycle" hypothesis of saving: Aggregate implications and tests.

- Antoni, X., Saayman, M., & Vosloo, N. (2020). The relationship between financial literacy and retirement planning, Nelson Mandela Bay. *International Journal of Business and Management Studies*, 12(2), 579-593.
- Bassett, W. F., Fleming, M. J., & Rodrigues, A. P. (1998). How workers use 401 (k) plans: The participation, contribution, and withdrawal decisions. *National Tax Journal*, 51(2), 263-289.
- Boisclair, D., Lusardi, A., & Michaud, P.-C. (2017). Financial literacy and retirement planning in Canada. *Journal of Pension Economics & Finance*, 16(3), 277-296.
- Brown, M., & Graf, R. (2013). Financial literacy and retirement planning in Switzerland. *Numeracy*, 6(2), 6.
- Bucher-Koenen, T., & Lusardi, A. (2011). Financial literacy and retirement planning in Germany. *Journal of Pension Economics & Finance*, 10(4), 565-584.
- Chowa, T., Mhlanga, R., & Munakamwe, M. A. (2015). Where did our money go? Answering the questions behind loss of value to pensioners in Zimbabwe after multi-currency adoption. *International Open and Distance Learning Journal*, 1(1).
- Clark, R., Lusardi, A., & Mitchell, O. S. (2017). Employee financial literacy and retirement plan behavior: a case study. *Economic Inquiry*, 55(1), 248-259.
- Dhlembeu, N. T. (2018). *The relationship between retirement planning and financial literacy in South Africa*: University of Pretoria (South Africa).
- Eagers, J., Franklin, R. C., Broome, K., & Yau, M. K. (2019). The experiences of work: Retirees' perspectives and the relationship to the role of occupational therapy in the work-to-retirement transition process. *Work*, 64(2), 341-354.
- Fatoki, O. (2014). The Financial literacy of non-business university students in South Africa. *International Journal of Educational Sciences*, 7(2), 261-267.
- Gallego-Losada, R., Montero-Navarro, A., Rodríguez-Sánchez, J.-L., & González-Torres, T. (2022). Retirement planning and financial literacy, at the crossroads. A bibliometric analysis. *Finance Research Letters*, 44, 102109.
- GoBankingRates. (2016). 1 in 3 Americans Has Saved \$0 for Retirement. Retrieved from <https://money.com/retirement-savings-survey/>
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Fed. Res. Bull.*, 89, 309.
- Huston, S. J. (2010). Measuring financial literacy. *Journal of consumer affairs*, 44(2), 296-316.
- Hutchings, K., Wilkinson, A., & Brewster, C. (2022). Ageing academics do not retire-they just give up their administration and fly away: a study of continuing employment of older academic international business travellers. *The International Journal of Human Resource Management*, 33(7), 1296-1325.
- Klapper, L., & Lusardi, A. (2020). Financial literacy and financial resilience: Evidence from around the world. *Financial Management*, 49(3), 589-614.
- Krekula, C., & Vickerstaff, S. (2020). The 'older worker' and the 'ideal worker': A critical examination of concepts and categorisations in the rhetoric of extending working lives. *Extended working life policies: International gender and health perspectives*, 29-45.
- Lamprecht, L. (2015). Why only 6% of South Africans can Retire comfortably. *Moneyweb*. <https://www.moneyweb.co.za/mymoney/moneyweb-financial-planning/6-south-africans-can-retire-comfortably>.
- Lim, T. S., Osman, Z., A.B.U, Z., Abdul Jamal, A. A., Mohidin, R., & Mail, R. (2013). *Financial Literacy in Southeast Coast of Sabah*.
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. *Journal of Pension Economics & Finance*, 10(4), 509-525.
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *American Economic Journal: Journal of Economic Literature*, 52(1), 5-44.
- Mashizha, M., Maumbe, B., & Sibanda, M. (2019). Financial literacy among small and medium enterprises in Zimbabwe. *The Southern African Journal of Entrepreneurship and Small Business Management*, 11(1), 1-10.
- Mndzebele, Z. W., & Kwenda, F. (2020). The effects of financial literacy on financial preparedness for retirement among academic staff in higher learning institutions in the kingdom of Eswatini. *Acta Universitatis Danubius. Economica*, 16(5).

- Moure, N. G. (2016). Financial literacy and retirement planning in Chile. *Journal of Pension Economics & Finance*, 15(2), 203-223.
- Mourine, A., Ambrose, J., & Fredrick, N. (2017). Financial Literacy and Financial Preparedness for Retirement among Permanent and Pensionable Employees in State Owned Corporations in Nairobi, Kenya. *International Journal of Business and Social Science*, 11(8), 68-82.
- Mullock, K. (2012). Financial literacy and retirement saving.
- Murendo, C., & Mutsonziwa, K. (2017). Financial literacy and savings decisions by adult financial consumers in Zimbabwe. *International Journal of Consumer Studies*, 41(1), 95-103.
- Mutsawu, D. T., & Sarawoi, D. (2016). The pension fund industry experiences during hyperinflation. *Economic Management in a Hyperinflationary Environment: The Political Economy of Zimbabwe, 1980-2008*, 213.
- Niu, G., Zhou, Y., & Gan, H. (2020). Financial literacy and retirement preparation in China. *Pacific-Basin Finance Journal*, 59, 101262.
- Nkoutchou, H., & Eiselen, R. (2012). Retirement saving behaviour of young adults in the financial services sector. *Journal of Economic and Financial Sciences*, 5(1), 31-48.
- OECD. (2011). *Measuring financial literacy: Questionnaire and guidance notes for conducting an internationally comparable survey of financial literacy*. Retrieved from <https://www.oecd.org/finance/financial-education/49319977.pdf>
- OECD. (2023). *Pensions at a Glance 2023: OECD and G20 Indicators*. Retrieved from <https://www.oecd.org/daf/oecd-pensions-at-a-glance-19991363.htm>
- Oseifuah, E. K. (2010). Financial literacy and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies*, 1(2), 164-182.
- Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS*: Routledge.
- Pangestu, S., & Karnadi, E. B. (2020). The effects of financial literacy and materialism on the savings decision of generation Z Indonesians. *Cogent Business & Management*, 7(1), 1743618.
- Reyers, M., Van Schalkwyk, C. H., & Gouws, D. G. (2014). The rationality of retirement preservation decisions: A conceptual model.
- Sekita, S. (2011). Financial literacy and retirement planning in Japan. *Journal of Pension Economics & Finance*, 10(4), 637-656.
- UN. (n.d.). Ageing. Retrieved from <https://www.un.org/en/global-issues/ageing>
- Van Rooij, M. C., Lusardi, A., & Alessie, R. J. (2012). Financial literacy, retirement planning and household wealth. *The Economic Journal*, 122(560), 449-478.