

Examining factors influencing retirement planning behavior among working individuals from Solwezi in Zambia

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World Journal of Advanced Research and Reviews, 2026, 29(02), 225-241

Publication history: Received on 20 December 2025; revised on 31 January 2026; accepted on 02 February 2026

Article DOI: <https://doi.org/10.30574/wjarr.2026.29.2.0268>

Abstract

This study investigated what influences working people in Solwezi, Zambia, when it comes to retirement planning. Although the value of retirement planning is becoming more widely recognised, a sizable section of the population is still ill-prepared for life after work. To investigate how factors such as financial literacy, family education, materialism, future orientation, and tendency to plan affect saving attitudes. Consequently, retirement planning behaviours. The study uses a mixed-methods approach that integrates qualitative and quantitative data. Structured questionnaires were used to collect data from 275 respondents and statistical techniques such as hierarchical multiple regression and correlation were used to test the proposed relationships. The results show that while financial literacy ($\text{Beta} = -0.037$, $p > 5\%$) and family education ($\text{Beta} = 0.070$, $p > 5\%$) had less direct effects on retirement planning. While, future orientation ($\text{Beta} = 0.396^{***}$, $p < 0.1\%$), materialism ($\text{Beta} = 0.357^{***}$, $p < 0.1\%$), and propensity to plan ($\text{Beta} = 0.259^{***}$, $p < 0.1\%$) all had a significant effect. An important mediating factor that was positively correlated with retirement planning was the attitude toward saving with a coefficient correlation of 0.322. The study emphasises the need for focused interventions to encourage financial literacy of employees and forward-thinking behaviours. Policymakers, employers, and financial institutions can use these insights to help create initiatives that promote long-term financial security and proactive retirement planning.

Keywords: Financial Literacy; Family Education; Retirement Planning; Future Orientation; Materialism and Propensity to Plan

1. Introduction

Since the dawn of time, work has been a vital aspect of human existence and societal growth. To address their own needs and those of the broader society, individuals engage in both informal and formal types of work. For formal employment, there comes a time when one must cease actively seeking jobs; this phase is referred to as retirement (Siame, 2020). Retirement is a fluid concept, as it can signify different things for different individuals and is accompanied by various experiences (Mambwe & Mwape, 2016). However, the fact that retirees often face challenges due to their new status highlights its importance even more. According to Mein et al. (1998), retirement is a stressful transition for many, given the life choices that arise regarding overall life arrangements.

In Zambia, 24.7% of government employees claimed to have attended a retirement planning seminar or workshop two years earlier. Receiving a retirement package can take years, and social security has struggled to provide retirees with adequate income. As of 2019, retirees had waited about 800 days to access their PSPF retirement benefits (Siame, 2020). Retirement is a personal decision, so leaving it to your employer may not produce the results you need for a happy retiree. Since there is life after retirement, millennial workers should begin supplementing their statutory pension with

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personal savings with their first income, according to Phiri (2019). Keep the dream alive for the millennial workforce by ensuring that they begin their retirement savings earlier than the legally required amount (Phiri, 2019).

Adults in Zambia are more likely to have or use electronic payment, money transfer, and / or savings services; The adoption of these services increased from 36.8% and 32.5% in 2015 to 48.7% and 54.8%, respectively. However, access to credit services fell from 22.3% in 2015 to 21.8% in 2016. Utilisation of pension and insurance services increased slightly, from 3.8% and 2.8%, respectively, to 8.2% and 6.3% (Finscope Zambia report, 2020). To cover their expenses, most adults relied primarily on their families and friends, as well as their salaries and wages, at 25.5% (2015, 19.7%) and 25.1% (2015, 14.8%), respectively. This reflects extended family dependency syndrome and the weak economic conditions that have led to job losses. The survey also revealed that 21.2% of the population (down from 22.8% in 2015) depended on farming or fishing for a living (Finscope Zambia report, 2020).

There are concerns about inadequate global retirement planning among individuals (Niu et al., 2020; Reyers et al., 2015). According to the Life Insurance Association of Malaysia (LIAM), less than 5% of Malaysians are adequately prepared for retirement (Moorthy, 2012). Furthermore, only 24% of South Africans actively plan for retirement (Dhlembue et al., 2022), while just 27% in Ghana engage in similar practices (Sarpong-Kumankoma, 2021). Zambia, however, exhibits a weak savings culture and minimal planning for retirement (Siame, 2020). In Zambia, 24.7% of civil servants reported having attended a retirement planning seminar or workshop in the last two years. Furthermore, social security has been insufficient to provide retirees with adequate income, and accessing a retirement package can take several years. Approximately 800 days have elapsed since 2019 for retirees awaiting their PSPF retirement package (Siame, 2020).

Furthermore, Moorthy et al. (2012) found that there is potential for conflict in retirement planning, and attitudes toward retirement and the clarity of retirement goals are the most important predictors of retirement planning behaviour. Kimiyagahlam et al. (2019) discovered that retirement planning behaviour is directly correlated with financial literacy, propensity to plan, and future orientation. Furthermore, the saving attitude mediated these relationships in part. However, retirement planning is not related to materialism or family education (Kimiyaagahlam et al. 2019). Therefore, considering the knowledge gap, this research aims to examine the factors influencing retirement planning behaviour among working people in Solwezi, Zambia.

2. Literature Review and Hypotheses

This chapter assesses the written works by different authors in relation to the area of study. Despite being uncertain or unforeseen in terms of a person's career and life in general, retirement requires planning to guarantee retirees have enough support once they decide to give up their position. The basic needs of a retiree include long-term housing, a budget for daily expenses, medical bills, and assistance. Furthermore, having available savings ensures that people and nations will be supported immediately in times of economic recession and financial crisis (Nurul and Saleh, 2013).

Personal retirement planning is a choice for future preparation and is not required (Kimiyaagahlam et al., 2019). Unfortunately, many people are not prepared for this (Ng et al., 2011). There are numerous factors that discourage people from planning (DeVaney, 1995). Most people believe that retirement planning is only crucial when they are close to retiring or when they are young and have a long time before they will need to start thinking about their golden years. But even if they begin to put money aside for retirement, it will not be enough (Martin, Guillemette, and Browning, 2016).

According to Joo and Grable (2005), several variables significantly influence a person's readiness and capacity for retirement savings. Environmental influences, individual differences, and psychological process factors make up three categories of these variables (Mansor et al., 2015). Instructing children in appropriate behaviour in all aspects of life, including money management, is a crucial part of parents' responsibilities. According to the findings of Kimiyagahlam et al. (2019), children's attitudes toward saving could be formed through prescriptive and proscriptive financial advice. They argued that if saving was significant to parents, then their children might emulate this behaviour and find meaning in it.

Financial behaviour in adulthood was influenced by parents who had good money management skills, and this parent-child relationship is consistent with previous financial research (Kimiyaagahlam et al., 2019). In general, a child's financial outlook is correlated with their parents' outlook. As a result, attitudes can predict prudent financial behaviour. Webley and Nyhus (2006) showed that parents' actions were more strongly associated with children's attitudes than their actions. They showed that parental behaviour, such as discussing money with children, and parental orientation, such as conscientiousness and future orientation, had a negligible impact on kids' financial behaviour. Although parental

financial socialisation continues to have an impact as people age, their propensity to save money started to decline as they grew older (Bucciol and Veronesi, 2014).

The future-time perspective aims to quantify the degree to which a person places more emphasis on the future than the present or the past (Howlett et al., 2008). The future-time perspective might affect people's attitudes towards a particular behaviour, according to Rabinovich et al. (2010). People who thought the future was not far away were more likely to be prepared and engage in saving and planning behaviour. Similar findings were made by Talib and Manaf (2017), who discovered that people with a high future time perspective were more likely to set goals and, as a result, were better at creating retirement plans. However, there are divergent opinions on the impact of planning for and looking at the future. The future-time perspective was not a predictor of planning across any of the planning domains, as demonstrated by Petkoska and Earl (2009) and Mustafa et al. (2017).

Financial literacy is typically viewed as a specific type of consumer skill that refers to how people manage their related financial problems successfully or as a type of human capital that is specific to personal finance (Alba and Hutchinson, 1987).

Retirement can be defined as an individual's exit from the labour force or as an individual who is no longer actively involved in full-time employment. According to Denton and Spencer (2009), retirement is the "withdrawal from paid working life," and the authors demonstrate that retirement is a transition. Duberley et al. (2014) described two types of retirement in another study: retirement as continuity and retirement as change. Retirement as continuity is defined as continuing to work on a smaller scale or doing activities related to one's previous work. This is often accomplished through consulting or volunteer work. Retirement as a change, on the other hand, is when retirees see it as an opportunity to try new things, such as studying for a new degree or starting a business (Dhlembeu et al., 2022).

2.1. Theoretical Background

This section focuses on the theoretical underpinnings and contexts of this study's conceptualisation, highlighting the most relevant and underpinning theories.

2.1.1. Theory of Planned Behaviour

According to the Theory of Planned Behavior (TPB), an individual's intention can best predict their behavior. This is due to the fact that an individual's intention reveals how much effort they are prepared to put forth in order to carry out the behavior. In general, the more strongly a behavior is intended to be performed, the more likely it should be to actually do so (Ajzen, 1991). Numerous academics have employed the theory; for instance, Mwiya et al. (2017) used it in a study to forecast the entrepreneurial intent of university students in Zambia. According to the TPB, there are three precedents for a particular course of action: one's own attitude, a subjective norm, and the perception of a person's ability to control their behavior. First off, a person's "attitude toward the behavior is the degree to which they have a favorable or unfavorable evaluation of the behavior in question" (Ajzen, 1991, p. 188).

2.1.2. Prospect Theory

A behavioral model called prospect theory explains how people choose between options that involve risk and uncertainty, such as the likelihood of experiencing gains or losses. It demonstrates that rather than thinking in terms of absolute results, people think in terms of expected utility relative to a benchmark (such as current wealth). Daniel Kahneman and Amos Tversky created the prospect theory, a behavioral economics and behavioral finance theory, in 1979. People are loss-averse, according to the prospect theory, which was developed by framing risky choices. Since people dislike losses more than equivalent gains, they are more willing to take risks to prevent a loss. The theory produces the following pattern in relation to risk because of loss aversion and the biased weighting of probabilities (see certainty/possibility effects) (Kahneman and Tversky, 1979; Kahneman, 2011).

2.1.3. Theory of Saving

The empirical studies of the life-cycle hypothesis have resulted in a large body of literature. However, studies on the savings behavior of the elderly have been inconclusive in terms of the correspondence between observed savings behavior and the pattern of saving and dissaving predicted by the life-cycle hypothesis. Many studies, which appear to contradict the life-cycle hypothesis, have found that older people continue to save in retirement. Several explanations have been advanced. According to King (1985), if one accounts for people's aversion to uncertainty about the future, saving for retirement is not necessarily incompatible with the life-cycle hypothesis (e.g., how long they will live and future inflation).

2.1.4. Future Time Perspective Theory

The time perspective, which divides human experience into the past, present, and future, is the fundamental aspect of the psychological structure that emerges from the cognitive procedure (Mischel et al., 1989). Indeed, the effects of time on individual actions are central to time perspective theory. The future time perspective theory would explain an individual's cognitive ability to consider both immediate and long-term outcomes of assigning a job in the distant future (Andriessen et al., 2006).

2.1.5. Life Course Theory/Model

The life cycle model will assist workers in better understanding how significant life events influenced their needs for spending, saving, investing, and retirement. According to Moen, Kim, and Hofmeister (2001), the life course emphasises the significance of transitions with the nature of life paths, particularly after retirement. The purpose of this life course theory is to examine how people's lives are influenced by structural, social, and cultural factors.

2.2. Hypotheses Development and Conceptual Framework

2.2.1. Financial literacy and Saving attitude

Research by Mohidin et al. (2013) found that there was a significant positive relationship between financial literacy and saving attitude. Research also shows that Americans are putting enough money in their personal savings account so that they can maintain their life standard in their retirement years (Scholz and Seshadri, 2014). Merican and Bahari (2014) found in their study, a correlation between retirement planning behavior and saving for old age. Peta et al. (2016) found that a positive significant relation between financial literacy and retirement saving would enable individuals to achieve adequate retirement income and relax. In addition, Hassan et al. (2016) revealed that financial literacy is significantly related to retirement savings contributions.

- **Ho:** There is a negative relationship between retirement planning towards saving attitude and financial literacy of working individuals.
- **Ha:** There is a positive relationship between retirement planning towards saving attitude and financial literacy of working individuals.

2.2.2. Saving attitude and family education

There are comprehensive studies that cover the factor of education levels. Most previous studies have found that education level is one of the essential factors that determine the behaviour of pensioners when preparing for their retirement (Hogarth et al 2013; Joo et al., 2012; Faulkner, 2017). Joo and Pauwels (2015) stated that individuals with higher education tend to be more knowledgeable and confident when planning their retirement income. A higher level of education is positively related to a higher probability of confidence in retirement planning. Therefore, a household with more wealth is positively linked with retirement preparedness (Afthanorhan et al., 2020). Consequently, this study hypothesises as follows;

- **Ho:** There is a negative relationship between retirement planning towards a saving attitude and family education of working individuals.
- **Ha:** There is a positive relationship between retirement planning towards saving attitude and family education of working individuals.

2.2.3. Propensity to plan and Saving attitude

The distinction between planning and preparation is crucial for individuals as retirement becomes more common. For instance, a greater emphasis on planning assumes that everyone who embarks on a career intends to finish it by retiring (Watkins, 2015). As a result, it will be impossible to estimate retiree wellbeing from planning if it is conflated with preparation. On the other hand, recent empirical evidence emphasises the important effects of perceived voluntariness of retirement on retiree well-being and employee anxiety (Hershey and Henkens, 2013; van Solinge and Henkens, 2018). This theory is indirectly supported by longitudinal data showing greater life unhappiness during periods of unemployment for people who have higher trait conscientiousness (Boyce et al., 2017). Individuals randomised to a shorter life expectancy indicated intentions for later retirement if they reported insufficient RePlanning, which is the first experimental evidence for its dysfunction to date (Kerry and Embretson, 2017). Consequently, this study hypothesises as follows;

- **Ho:** There is a negative relationship between retirement planning towards saving attitude with propensity to plan of working individuals.
- **Ha:** There is a positive relationship between retirement planning towards saving attitude with propensity to plan of working individuals.

2.2.4. Future orientation and saving attitude

Particularly, those who prioritise the present have lower retirement savings. Similar results are presented by Bernheim, Skinner, and Weinberg (2001), Clark, Hammond, and Khalaf (2019), and Gryphon et al. (2012). They claim that people who perform well on the temporal or time discounting scale enjoy rewards now and care less about future savings or retirement planning. Future time perspective and financial risk tolerance are two constructs that hold significant relevance for the retirement planning domain, according to Kerry (2018), who studies the antecedents of retirement planning. Consequently, this study hypothesises as follows;

- **Ho:** There is a negative relationship between retirement planning towards saving attitude with future orientation of working individuals.
- **Ha:** There is a positive relationship between retirement planning towards a saving attitude and the future orientation of working individuals.

2.2.5. Materialism and saving attitude

The results of Watson (2013) research indicates that highly materialistic people are more likely to view themselves as spenders and have more favorable attitudes toward borrowing than saving. The results of Watson (2013) research indicates that highly materialistic people are more likely to view themselves as spenders and have more favorable attitudes toward borrowing than saving. Andrew et al. (2014); Mahdzan and Tabiani (2013) and Hinga (2012) found individuals who save more frequently exhibit a negative attitude towards materialism compared to those who do not save. Consequently, this study hypothesises as follows;

- **Ho:** There is a negative relationship between retirement planning towards saving attitude with the materialism of working individuals.
- **Ha:** There is a positive relationship between retirement planning towards a saving attitude with the materialism of working individuals.

2.2.6. Saving attitude and Retirement planning

The majority of working individuals have trusted the employee provided fund to decide on what or where to invest their contributions in, as long as their savings increase every year (Ibrahim and Ali, 2012; Mansor et al., 2015). Some people are unwilling to face the complexity and difficulty of the investment system, and they are passive in making their investment choices (Earl et al., 2013). One of the reasons people are not adequately prepared for retirement is a lack of family education Hastings and Mitchell (2020); Nkoutchou and Eiselen (2012); and Gutai (2014) found a positive relation between saving attitude and retirement planning. Consequently, this study hypothesises as follows;

- **H₆:** Saving attitude mediates the influence of financial literacy, family education, propensity to plan, financial orientation and materialism on retirement planning.
- **H_{6a}** Saving attitude mediates the influence of financial literacy on retirement planning.
- **H_{6b}** Saving attitude mediates the influence of family education on retirement planning.
- **H_{6c}** Saving attitude mediates the influence of propensity to plan on retirement planning.
- **H_{6d}** Saving attitude mediates the influence of future orientation on retirement planning.
- **H_{6e}** Saving attitude mediates the influence of materialism on retirement planning.

2.2.7. Conceptual Framework

Based on the foregoing theoretical underpinnings, this study develops the conceptual framework/model for this study as follows:

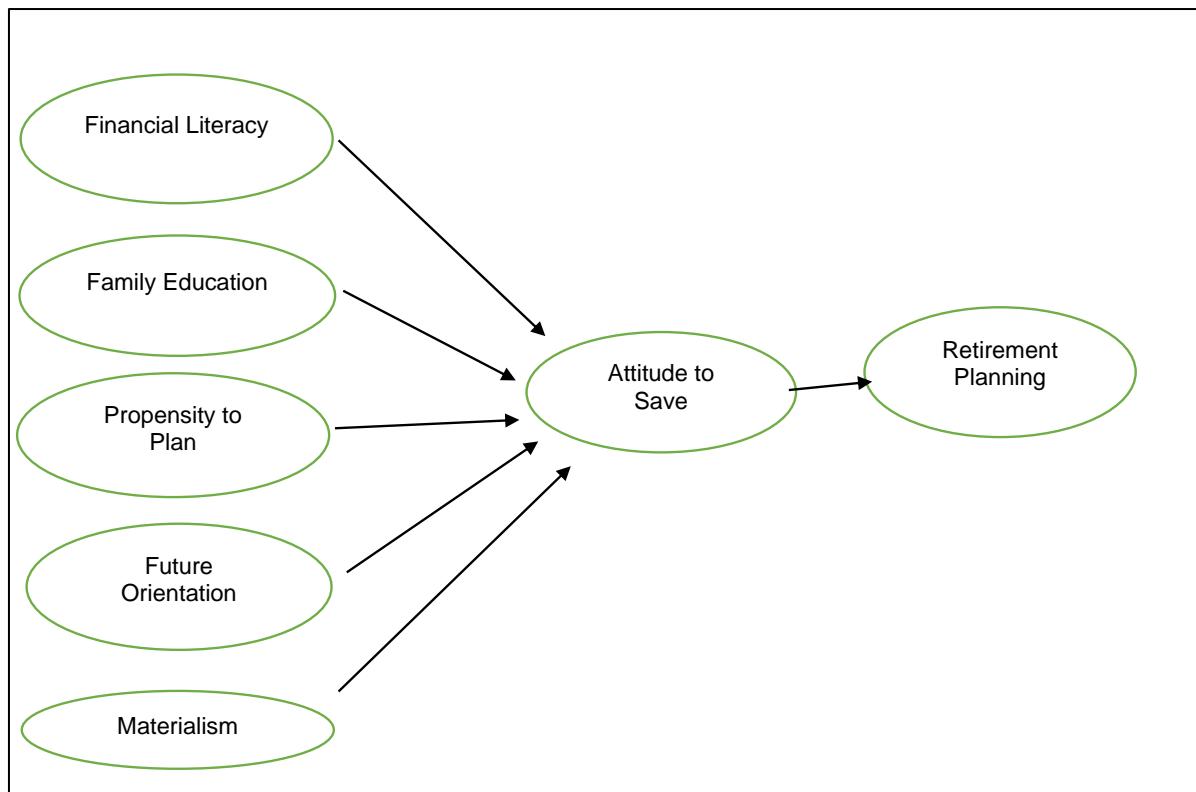


Figure 1 Conceptual Framework

3. Methods and Measurements

Data collection was carried out using a questionnaire, following a quantitative research approach and employing a stratified sampling method. The process will begin with the careful design of the questionnaire to ensure that it aligns with the study objectives and effectively captures the required data. The questionnaire included a mixture of closed-ended questions, such as multiple choice and Likert scale items, to facilitate quantitative analysis (Creswell, 2014). Additionally, demographic questions were incorporated to gather background information about participants. Before full deployment, the questionnaire has undergone pilot testing with a small group of workers to identify and correct any ambiguities or issues, thus refining the instrument for clarity and relevance (Dillman, Smyth & Christian, 2014).

According to the stratified sampling method, the target population of working individuals in the Solwezi district was divided into distinct strata based on specific characteristics, such as work experience, type of industry, and geographical location (Etikan & Bala, 2017). This stratification ensures that all subgroups within the population are adequately represented in the sample. The appropriate sample size has been determined using the above statistical formula to ensure the representativeness of the data. Random sampling was then applied within each stratum to select participants, thereby enhancing the generalisability of the findings (Kumar, 2011).

Data collection involved scheduling visits to selected people at times convenient for the workers to maximise participation. The enumerators introduced the study, explained its purpose, and assured the participants of the confidentiality and anonymity of their responses. Informed consent was obtained from each working individual before proceeding with the questionnaire. The enumerators were then administering the questionnaire either by reading the questions to the workers and recording their responses or by allowing the workers to complete the questionnaire themselves if they prefer (Groves et al., 2009).

Upon completion of the data collection phase, the collected data was entered into a database or rather spreadsheet for analysis. This was followed by a thorough data cleaning process to identify and address any missing or inconsistent responses, ensuring the data set's completeness and accuracy (Pallant, 2016). Statistical analysis was performed using software SPSS and Excel, focusing on descriptive statistics to summarise the data and inferential statistics to explore the relationships between variables (Field, 2013).

Table 1 Sample Profile

Variable	Responses	Frequency	Valid Percentage
Gender	Male	139	50.5
	Female	136	49.5
	Total	275	100
Age range	Below 20 years	3	1.1
	21-30 years	87	31.6
	31-40 years	103	37.5
	41-50 years	58	21.1
	50 years and above	24	8.7
Marital Status	Total	275	100
	Single	94	34.2
	Married	132	48
	Widowed	24	8.7
	Divorced	25	9.1
Academic qualification	Total	275	100
	Grade 12 and below	3	1.1
	Certificate	13	4.7
	Diploma	57	20.7
	Degree	112	40.7
	Masters	65	23.6
	PHD	25	9.1
Monthly Income (ZMW)	Total	275	100
	Below 3,000	21	7.6
	3,000 - 6,000	53	19.3
	6,001 - 9,000	47	17.1
	9,001 - 12,000	45	16.4
	12,001 - 15,000	45	16.4
	15,001 - 20,000	39	14.2
Source of Income	Above 20,001	25	9.1
	Total	275	100
	Business	109	39.6
	Salary	61	22.2
Nuclea/Elementary family	Both	105	38.2
	Total	275	100
	Yes	227	82.5
No	No	48	17.5
	Total	275	100

3.1 Measurement Model and Internal Validity Justification

Table 2 reflects the measurement model, the questionnaire items thereof and the reliability statistics.

Table 2 Measurement model

Variable	Item	Source	Cronbach's alpha
Financial Literacy	If the chance of getting a disease is 10 %, 100 people out of 1,000 would be expected to get the disease. It is less likely that you will lose all your money if you save it in more than one place. If someone offers you the chance to make a lot of money, it is likely that there is also a chance that you will lose a lot of money. High inflation means that the cost of living is increasing rapidly. Considering a long time period (for example 10 or 20 years), stocks asset normally gives the highest return.	(Dhlembeu et al., 2022)	0.614
Family Education	When you were a teenager, your parents had economical behaviour regarding financial issues.	(Kimiayagahlam et al., 2019)	0.895

Variable	Item	Source	Cronbach's alpha
	<p>When you were a teenager, your parents were discussing their personal financial decisions with you.</p> <p>You learned financial knowledge from your parents' behaviour while you were a teenager.</p> <p>When it comes to managing money, I do the same as my parents did in the similar situation.</p> <p>Your parents encouraged you to save your money when you were a teenager.</p> <p>When you think back to your teenager time, your parents had a regular saving for future.</p>		
Future Orientation	<p>I follow the advice to save for a rainy day.</p> <p>I enjoy thinking about how I will live years from now in the future.</p> <p>Planning for distant future is difficult.</p> <p>The future seems very vague and uncertain to me.</p> <p>I have established long-term goals and am working to fulfil them.</p> <p>I think there is no need to sacrifice things now for problems that lie in the future</p>	(Kimiyagahlam et al., 2019)	0.686
Propensity to Plan	<p>I set financial goals for the next 1-2 years for what I want to achieve with my money.</p> <p>I plan earlier how my money will be used in the next 1-2 years.</p> <p>I actively consider the steps I need to take to stick to my financial plan in the next 1-2 years.</p> <p>Reviewing my financial plan during 1-2 years will give me a view of my spending in the future.</p> <p>Having a financial plan for next 1-2 years makes me feel better.</p>	(Kimiyagahlam et al., 2019)	0.886
Materialism	<p>The things I own say a lot about how well I am doing in life.</p> <p>I like to own things that impress people.</p> <p>Buying things give me a lot of pleasure.</p> <p>My life would be better if I owned certain things I do not have.</p> <p>I like to have a lot of luxury in my life.</p> <p>I pay much attention to the amount value of material objects that other people have.</p> <p>I have all the things I really need to enjoy life.</p>	(Kimiyagahlam et al., 2019)	0.890
Saving Attitude	<p>I save money to be more financial independent.</p> <p>Being careful with money is an important character trait.</p> <p>It is important always to save as much as possible and only to spend money on things that are strictly necessary.</p> <p>Having a regular saving in each month is important.</p> <p>People who are successful in saving are also successful in life.</p> <p>I believe that for the better retirement life I should save regularly a portion of my income.</p>	(Kimiyagahlam et al., 2019)	0.892

Variable	Item	Source	Cronbach's alpha
Retirement Planning	I am generally optimistic about my financial future. It is early for me to start thinking about my retirement planning. Making financial provisions for retirement is worthwhile. I have a clear understanding of financial issues for retired people. I spend time for planning and reviewing my finance. I never think about retirement planning. I do not like dealing with money and finances. I feel stressed out when I think about planning for retirement. I am more focused on day-to-day responsibilities than on planning for retirement. Planning for retirement needs too much time and effort. I participate in workshops/seminars on retirement planning. I usually discuss with my families/friends about retirement planning. I am in a position to meet all of my financial goals for retirement. I know the amount of money I will need for retirement time. By the time I retire, I will have sufficient income to ensure the standard of living I need in retirement time.	(Kimiyagahlam et al., 2019)	0.908

The constructs and items that constitute the measurement model for this investigation are listed in Table 2. To ensure internal validity the items used to measure this study were adopted from prior related studies (Dhlembeu et al., 2022; Kimiyagahlam et al., 2019). The questionnaire included five items for financial literacy. Family education had six items; future orientation had six items; materialism had seven items; propensity to plan had five items; saving attitude had six items and, finally retirement planning had fifteen items. A 5-point Likert scale was used for each item to allow respondents to express their level of agreement with these issues (1 represents strongly disagree and 5 represents strongly agree).

Reliability and internal consistency of the measurement tool were conducted using Cronbach's alpha through the statistical package for social sciences (SPSS). Cronbach's alpha is an internal consistency measure that determines how closely connected a group of items are. A high alpha dependability coefficient of 0.70 or higher is often used as evidence that the items measure the desired objective. However, according to George and Mallory (2018), a Cronbach Alpha of 0.60 is likewise acceptable in social sciences.

4. Research Findings, Interpretation and Discussion

The research findings are explained and interpreted before delving into the discussion, contributions to knowledge, limitations of the study and directions for future research.

4.1. Correlation Analyses

Table 3 shows that retirement planning and saving attitude have a significant positive relationship ($r = 0.322$, $p < 0.01$). On the other hand, this correlation has a medium effect size, this means that if people develop and have a saving attitude, they will be more likely to save and plan for retirement. In Table 3, all five antecedents of retirement planning are significant and positively correlated (Propensity to plan ($r = 0.521^{**}$, $p < 0.01$), financial literacy ($r = 0.525^{**}$, $p < 0.01$), materialism ($r = 0.613^{**}$, $p < 0.01$) family education ($r = 0.617^{**}$, $p < 0.01$) and future orientation ($r = 0.750^{**}$, $p < 0.01$) all in the strong range) suggesting that all independent variables are individually relate to retirement planning. Cohen

(1988) criteria are used to interpret the correlation data, which are small= 0.10 to 0.29, medium= 0.30 to 0.49, and large= 0.50 to 1.00 (Mwiya et al., 2017).

Table 3 Correlation among all Variables

No	Variable	Mean	Std. Dev	N	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Retirement Planning	3.5602	0.89716	275	-												
2	Saving Attitude	4.323	0.7501	275	.322**	-											
3	Gender	1.49	0.501	275	-.012	0.052	-										
4	Age range	3.05	0.96	275	.257**	.234**	-.170**	-									
5	Marital status	1.93	0.889	275	.356**	.200**	-.0116	.659**	-								
6	Academic qualification	4.08	1.045	275	0.071	.166**	-.163**	.444**	.372**	-							
7	Monthly income (ZMW)	3.93	1.785	275	0.082	.236**	-.245**	.552**	.457**	.657**	-						
8	Source of income	1.99	0.884	275	0.039	-.043	-.066	.242**	.222**	.266**	.208**	-					
9	Nuclear/elementary family	1.17	0.38	275	-.065	0.004	0.063	-.423**	-.470**	-.230**	-.193**	-.144*	-				
10	Propensity to Plan	4.1135	0.77361	275	.521**	.547**	-.089	.169**	.174**	.199**	.249**	0.02	0.022	-			
11	Financial Literacy	3.8335	0.74386	275	.525**	.501**	-.013	.179**	.281**	.175**	.272**	-.025	0.005	.499**	-		
12	Materialism	2.7958	1.09089	275	.613**	-.0111	0.035	0.115	.221**	-.0108	-.075	0.034	-.082	0.072	.259**	-	
13	Family Education	3.6418	1.0053	275	.617**	.508**	0.049	.211**	.307**	.147*	.166**	0.003	0.048	.591**	.655**	.341**	-
14	Future Orientation	3.6885	0.72991	275	.750**	.495**	0.067	.215**	.308**	.124*	.150*	0.067	0.01	.521**	.707**	.474**	.676**

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

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

4.2. Hypotheses Testing Results and Interpretation

The results of the hypothesis tests, as interpreted using multiple regression analysis, are discussed here under.

Table 4 shows the multiple hierarchical regression performed to test the influence of control and independent variables on the dependent variable. Retirement planning is the dependent variable. Age, sex, marital status, academic qualification, monthly income, source of income, and family are all control variables. Finally, the independent variables are propensity to plan, financial literacy, materialism, family education and future orientation. Furthermore, the significance of these effects is denoted as ***sig< 0.001 (0.1%), **sig< 0.01 (1%), and *sig< 0.05 (5%). The R values represent the total effect of the variables in each model.

When using a small sample, the R² value in the sample tends to be an overestimation of the true value in the population. The adjusted R² statistic corrects this value to estimate the true population value more accurately (Pallant, 2020). Thus, the adjusted R² value is reported in this study.

Table 4 Hierarchical Multiple Regression Analyses with Retirement Planning as the outcome

	Model 1 Beta	Model 1 SE (1)	Model 2 Beta	Model 2 SE (2)	Model 3 Beta	Model 3 SE (3)	Model 4 Beta	Model 4 SE (4)	Model 5 Beta	Model 5 SE (5)	Model 6 Beta	Model 6 SE (6)	VIF
Control Variable													
Gender	0.012	0.104	0.028	0.089	0.006	0.084	0.004	0.066	-0.007	0.066	-0.036	0.062	1.107
Age range	0.141	0.077	0.125	0.066	0.146*	0.062	0.103	0.049	0.094	0.049	0.07	0.045	2.2
Marital status	0.409***	0.080	0.345***	0.068	0.261***	0.066	0.150**	0.053	0.129*	0.053	0.106*	0.049	2.234
Academic qualification	-0.008	0.066	-0.046	0.056	-0.040	0.053	0.036	0.042	0.027	0.042	0.012	0.039	1.901
Monthly income (ZMW)	-0.138	0.042	-0.215**	0.036	-0.262***	0.034	-0.162**	0.027	-0.146**	0.027	-0.112*	0.025	2.341
Source of income	-0.032	0.060	-0.006	0.051	0.020	0.048	-0.006	0.038	-0.004	0.038	-0.027	0.035	1.132
Nuclear/elementary family	0.153*	0.154	0.084	0.132	0.053	0.125	0.056	0.099	0.037	0.100	0.0100	0.093	1.443
Independent Variable													
Propensity to Plan		0.504***	0.058	0.362***	0.061	0.383***	0.049	0.334***	0.054	0.259***	0.051	1.816	
Financial Literacy				0.324***	0.066	0.184***	0.054	0.132**	0.060	-0.037	0.062	2.493	
Materialism						0.489***	0.032	0.465***	0.033	0.357***	0.033	1.505	
Family Education								0.135*	0.050	0.070	0.047	2.556	
Future Orientation										0.396***	0.070	3.049	
F	7.181***		21.296***		25.274***		51.599***		48.292***		56.244***		
F Change	7.181***		101.225***		35.201***		155.718***		5.812*		48.259***		
R	0.398		0.625		0.680		0.813		0.818		0.849		
R Square	0.158		0.390		0.462		0.662		0.669		0.720		
R Square Adjusted	0.136		0.372		0.444		0.649		0.655		0.708		
R Square Change	0.158		0.232		0.071		0.200		0.007		0.052		

*Significant at 5%

**Significant at 1%

*** Significant at 0.1%

Model 1 is built with the 7 control variables. All control variables are not significant except marital status and nuclear / elemental family, which explain 13.6% (R²= 0.136*100) of the variance in retirement planning. Marital status records a

higher positive beta value (Beta= 0.167**) compared to age (Beta= 0.149**, p< 1%). Implying that those with some entrepreneurial knowledge are likely to start a business (Mwiya, 2014).

The propensity to plan is entered in model 2 in addition to the control variables. Table 4.3 shows that the propensity to plan (Beta= 0.504***, p< 0.1%) has a statistically significant influence on retirement planning. Additionally, model 2 explains 37.2% ($R^2= 0.372*100$) of the variance in retirement planning. Furthermore, the value of F ($F = 21.296***$, p< 0.1%) indicates that model 2 as a whole is significant despite the change in F also being significant (F Change= 101.225***, p< 0.1%). Furthermore, the model has a combined strong effect size ($R = 0.625$).

In Model 3, in addition to the control variables and the propensity to plan, financial literacy is introduced. Both the propensity to plan (Beta= 0.362***, p< 0.1%) and financial knowledge (Beta = 0.0324***, p< 0.1%) have a significant influence on retirement planning. The variation in retirement planning generated by model 3 is 44.4% ($R^2= 0.444*100$). Furthermore, model 3 is significant ($F=25.274***$, p< 0.1%). The overall correlation effect is strong and positive ($R= 0.680$), ranging from 0.50 to 1 (Cohen, 1988; Cohen, 2013).

Model 4 includes materialism in addition to control variables, propensity to, and plan financial literacy. The entire model is significant ($F= 51.599***$, p< 0.1%, F Change= 155.718***, p< 0.1%) and explains 64.9% ($R^2= 0.649*100$) of the variation in retirement planning. Furthermore, it reports that materialism is extremely significant and has a positive relationship with retirement planning (Beta= 0.489***, p< 0.1%). Furthermore, the total correlation shows a strong effect size ($R= 0.813$).

Model 5 includes family education in addition to control variables, propensity to plan, financial literacy, and materialism. The entire model is significant ($F= 48.292***$, p< 0.1%, F Change= 5.812*, p< 5%) and explains 65.5% ($R^2= 0.665*100$) of the variation in retirement planning. Furthermore, it reports that family education is extremely significant and has a positive relationship with retirement planning (Beta= 0.135*, p< 5%). Additionally, the total correlation shows a strong effect size ($R= 0.818$). The results imply that the form of education of family members influences an individual's retirement planning (Bucciol & Veronesi, 2014).

In the final model, apart from control variables, propensity to plan, financial literacy, materialism, and family education, future orientation is included. Model 6 is significant ($F= 56.244***$, p<0.1%) and attributes 70.8% ($R^2 =0.849*100$) of the variation in retirement planning. Additionally, model 6 has a strong relationship with retirement planning ($R= 0.849$). Furthermore, Table 4.3 shows that financial literacy (Beta= -0.037, p> 5%) and family education (Beta= 0.070, p> 5%) are insignificant. However, the propensity to plan (Beta= 0.259***, p< 0.1%), materialism (Beta= 0.357***, p< 0.1%), and future orientation (Beta= 0.396***, p< 0.1%) have a significant influence on retirement planning.

4.2.1. Regression analysis between Saving Attitude and Retirement Planning

The saving attitude has a positive influence on retirement, as seen in Table 4.2, with a coefficient correlation of 0.322. According to Pallant (2016), the correlation of this variable will be the same as its Beta in simple regression. Beta is 0.322***, indicating a substantial effect size. This suggests that the higher the saving attitude of working individuals, the more likely they are to plan for retirement. Thus, the hypotheses according to the results are as follows:

- H₁: There is a positive relationship between retirement planning towards saving attitude with financial literacy of working individuals. The hypothesis is not supported;
- H₂: There is a positive relationship between retirement planning towards a saving attitude and family education of working individuals. The hypothesis is not supported;
- H₃: There is a positive relationship between retirement planning towards saving attitude with propensity to plan of working individuals. This hypothesis is positively and significantly supported;
- H₄: There is a positive relationship between retirement planning toward saving attitude with future orientation of working individuals. This hypothesis is positively and significantly supported;
- H₅: There is a positive relationship between retirement planning towards a saving attitude with the materialism of working individuals. This hypothesis is positively and significantly supported;
- H₆: Savings attitude positively relates to retirement planning. This hypothesis is positively and significantly supported.

Table 4 shows that monthly income and source of income are negative in model 1 to model 7 and academic qualification is negative in models 1,2 and 3. In addition, financial literacy is negative in model 6. According to mediation scholars (Mwiya et al., 2019; Zhao et al., 2010), the change in sign denotes possible mediation effects of other variables. This requires further investigation of the relationship among variables.

5. Discussion

Propensity to plan, financial literacy, and materialism are examples of these factors. The findings show that propensity to plan, materialism and future orientation, the mediation of saving attitude, are all significant. However, financial literacy and family education are insignificant. Previous research has yielded similar results, for example, in Nigeria (Dauda et al., 2017) and Malaysia (Mustafa et al., 2017).

Six conclusions can be drawn from the findings of this study. First, this study finds that the propensity to plan is significantly related to retirement planning ($\text{Beta} = 0.259^{***}$, $p < 0.1\%$). The majority of human behaviour as embodied by influential models of behaviour is planned and controlled by conscious intentions (Ajzen & Fishbein, 1980). A study in Malaysia also reports that propensity to plan influences retirement planning (Kimiyaagahlam et al., 2019).

Second, the findings suggest that financial literacy has a negative insignificant relationship with retirement planning ($\text{Beta} = -0.037$, $p > 5\%$). This negative relationship could be attributed to some probable mediation effects of other variables (Zhao et al., 2010; Mwiya et al., 2019). Because it exhibits a positive association in model 2 to 5 and the bivariate correlation matrix. Therefore, further studies should consider exploring mediation analyses. This finding was supported by previous studies that found the effects of financial literacy on planning behaviour to be insignificant (Xiao & O'Neill, 2016; Xiao & Porto, 2017). Tan and Singaravelloo (2020) also discovered no correlation between retirement planning and financial literacy, nor a mediating role. Fernandes et al. (2014) found that financial literacy interventions have weaker effects in low-income samples and only account for 0.1% of the variation in financial behaviours. However, Kimiyagahlam et al. (2019) in Malaysia found that financial literacy has a positive significant influence on retirement planning. Financial literacy was found to have a significant positive relationship with retirement planning in a study conducted in Ghana as well (Sarpong-Kumankoma 2021).

Third, according to research by Garoarsdottir and Dittmar (2012), people who identify as materialistic have worse money management skills and a higher propensity for compulsive shopping and spending. This study finds that materialism is significantly related to retirement planning ($\text{Beta} = 0.357^{***}$, $p > 5\%$). However, in Malaysia, Kimiyagahlam et al. (2019) found that materialism is a motivating factor that has no influence on one's desire to plan for retirement. A study in Iran also states that educational support is significantly related to EI (Gelard and Saleh, 2011). Dew (2014) demonstrated the inverse relationship between materialism and retirement planning. Financial stress appears to be the only connection between materialism and retirement savings.

Fourth, financial behaviour in adulthood was influenced by parents who had good money management skills, and this parent-child relationship is consistent with previous financial research. Children's financial behaviour was only moderately influenced by parental behaviour (such as discussing money with kids) and parental orientation (conscientiousness and future orientation) (Kimiyaagahlam et al., 2019). Although parental financial socialisation continues to have an impact as people age, saving tendencies start to decline as people get older (Bucciol & Veronesi, 2014). This finding that family education is not related to retirement planning ($\text{Beta} = 0.070$, $p > 5\%$). However, Kimiyagahlam et al. (2019) and Mansor et al. (2015) in Malaysia report that the informal network is not significantly related to entrepreneurial intention.

Fifth, the future-time perspective aims to quantify how much a person emphasises the future over the past or the present (Howlett et al., 2008). According to Rabinovich, Morton, and Postmes (2010), people's attitudes towards a particular behaviour may be influenced by their perspective on the future. The findings of this study suggest that future orientation is significantly related to retirement planning ($\text{Beta} = 0.396^{***}$, $p < 0.1\%$). Therefore, the future time perspective is a determinant of retirement planning (Kimiyaagahlam et al., 2019).

Finally, according to Joo and Grable (2005), several variables significantly influence a person's readiness and capacity for retirement savings. Environmental influences, individual differences, and psychological process factors can be divided into three categories (Engel, Blackwell, & Miniard, 1990). The findings of this study show that the attitude towards saving positively and significantly influences the retirement planning behaviour of working people in Solwezi, Zambia ($\text{Beta} = 0.322^{***}$, $p < 0.1\%$).

5.1. Summary of Research Conclusion

Table 5 shows that propensity to plan, materialism, future orientation, and saving attitude are supported in the Zambian context. However, financial literacy and family education are not supported.

Table 5 Results of Hypothesis Testing

No	Hypothesis	Statistic	Test	Result
H_1 :	There is a positive relationship between retirement planning towards to saving attitude with financial literacy of working individuals	Beta= -0.037	Regression	Not Supported
H_2 :	There is a positive relationship between retirement planning towards to saving attitude with family education of working individuals	Beta= 0.070	Regression	Not Supported
H_3 :	There is a positive relationship between retirement planning towards to saving attitude with propensity to plan of working individuals	Beta= 0.259***	Regression	Supported
H_4 :	There is a positive relationship between retirement planning towards to saving attitude with future orientation of working individuals	Beta= 0.396***	Regression	Supported
H_5 :	There is a positive relationship between retirement planning towards to saving attitude with materialism of working individuals	Beta= 0.357***	Regression	Supported
H_6 :	Saving attitude positively relates to retirement planning.	R= 0.322***	Correlation	Supported
*Significant at 5%		**Significant at 1%	*** Significant at 0.1%	

Table 5 shows that propensity to plan, materialism and future orientation and saving attitude are supported in the Zambian context. Nevertheless, financial literacy and family education is not supported.

5.2. Contribution to Knowledge

The findings of this study serve as a foundation for future scholars in Zambia to generalise this issue. This study will bridge a contextual gap in previous research by being conducted in Zambia with Zambian respondents, allowing it to determine whether previous conclusions (Kimiyaagahlam et al., 2019; Mansor et al., 2015) were correct or not. Policymakers, practitioners, scholars, and stakeholders will benefit in the following ways; Practitioners can use the information to increase their understanding on retirement planning behaviour and indulge in it more so as to be prepared for retirement and reduce dependency on government social welfare.

Recommendations of the study

In this study, the relationship between three key retirement planning domains was examined in the context of working individuals. By examining the impact of behavioural factors, this research adds to the body of knowledge regarding retirement planning. The framework of this study explains 70.9% of the variance in retirement planning, which is considered significant and can serve as a useful guide for further study. Findings that demonstrate a causal link between attitude and behaviour provide a deeper understanding of the complexities of human behaviour. As a result, the theory of planned behaviour's model of attitude-to-behaviour may offer a more comprehensive framework and potentially present a wide range of research opportunities.

The idea of attitude has been crucial in both academic and popular attempts to comprehend human thought and behaviour. This study demonstrates how a person's behavioural attitude can influence how they choose to act. The results of the present study supported the previous conclusion (Kimiyaagahlam et al., 2019; Mansor et al., 2015; Mustafa et al., 2017) and may offer valuable guidance for future research on developing the theory of planned behaviour.

The findings suggest that parents/guardians may have a big impact on their kids' behaviour from the standpoint of practical implications. Teachers of family life and money management should use this idea to inform parents through their lesson plans. Parents should be aware that their approach to handling money matters and their savings habits may serve as their children's first financial lessons. To offer their expert services on financial planning for retirement planning strategies, financial advisors and planners should instead pinpoint their niche market. Financial planners' predictions about how people will respond to incentives will be improved once they are aware of an individual's behavioural influences.

The findings of this study can be useful to policy makers. The correlation matrix and the regression models 2 to 5 show that the results emphasise the importance of financial literacy in retirement planning. Since it inspires a wider culture of financial education and influences the entire population, it is crucial to promote financial education and increase awareness at the national level. Any policy that aims to improve retirement planning must consider the fact that "one size does not fit all" and that, as a result, various approaches should be developed for various target groups.

Future Directions and Conclusions of the Study

The limitations of this study provide a foundation for future research. Although the objectives of this study are focused on variables influencing retirement planning behaviour among working people in Solwezi, Zambia, future studies may also examine other variables.

6. Conclusion

In conclusion, the analysis of the data reveals that saving behaviour mediates the relationships between plan propensity, materialism, future orientation, and retirement planning behaviour. However, family education and financial literacy do not directly influence how people plan for retirement.

References

- [1] Alavinia, S. M., and A. Burdorf. (2008). Unemployment and Retirement and Ill-health: A Cross-sectional Analysis across European Countries. *International Archives of Occupational and Environmental Health* 82 (1): 39–45. <https://doi.org/10.1007/s00420-008-0304-6>.
- [2] Alba, J. W., & Hutchinson, J. W. (1987). Dimensions of consumer expertise. *Journal of Consumer Research*, 12(4), 411–454. doi:10.1086/209080.
- [3] Antoni, X. L., M. Saayman, and 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.
- [4] Boisclair, D., A. Lusardi, and Michaud. P. C. (2017). Financial Literacy and Retirement Planning in Canada. *Journal of Pension Economics and Finance* 16 (3): 277–296. <https://doi.org/10.1017/S1474747215000311>.
- [5] Bearden, W. O., & Haws, K. L. (2012). How low spending control harms consumers. *Journal of the Academy of Marketing Science*, 40(1), 181–193. doi:10.1007/s11747-011-0282-1
- [6] Brown, M., and R. Graf. (2013). Financial Literacy and Retirement Planning in Switzerland. *Numeracy* 6 (2): 1–21. <https://doi.org/10.5038/1936-4660.6.2.6>.
- [7] Benartzi, S., and Thaler. R. H. (2013). Behavioral Economics and the Retirement Savings Crisis. *Science* 339 (6124): 1152–1153. <https://doi.org/10.1126/science.1231320>.
- [8] Asebedo, S. D., and Seay, M. C. (2014). Positive psychological attributes and retirement satisfaction. *Journal of Financial Counseling and Planning*, 25(2), 161–173
- [9] AARP Public Policy, (1985). Washington, DC: AARP Public Policy Institute.
- [10] Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control* (pp. 11–39). Berlin, Heidelberg: Springer Publishing.
- [11] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. doi:10.1016/0749-5978(91)90020-T
- [12] Ajzen, I., and Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall.
- [13] Creswell, J. (2012). *Educational Research: Planning, Conducting, and Evaluating Qualitative Research*, 4th ed., Pearson education, Los Angeles California.
- [14] Creswell, J.. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods, Qualitative, Quantitative, and Mixed Methods Approaches*, Pearson education, Los Angeles California.
- [15] Crossan, D., D. Feslier, and Hurnard. R. (2011). Financial Literacy and Retirement Planning in New Zealand. *Journal of Pension Economics and Finance* 10 (4): 619–635. <https://doi.org/10.1017/S1474747211000515>.
- [16] De Bassa Scheresberg, C. (2013). Financial Literacy and Financial Behavior among Young Adults: Evidence and Implications. *Numeracy* 6 (2): 1–21. <https://doi.org/10.5038/1936-4660.6.2.5>.
- [17] De Beckker, K., K. de Witte, and van Campenhout. C. (2019). Identifying Financially Illiterate Groups: An International Comparison. *International Journal of Consumer Studies* 43 (5): 490–501. <https://doi.org/10.1111/ijcs.12534>.

- [18] Denton, F.T., and B. Spencer. G. (2009). What is Retirement? A Review and Assessment of Alternative Concepts and Measures. *Canadian Journal on Aging/La revue canadienne du vieillissement* 28 (1): 63-76. <https://doi.org/10.1017/S0714980809090047>.
- [19] Duberley, J., Carmichael, F., and Szmigin, I. (2014). Exploring women's Retirement: Continuity, Context and Career Transition. *Gender, Work and Organization* 21 (1): 71-90. <https://doi.org/10.1111/gwao.12013>.
- [20] FinScope Zambia Cooperating Partners: (2020). Survey Report. Bank of Zambia.
- [21] Gathergood, J., and Disney, R. (2011). Financial Literacy and Indebtedness: New Evidence for U.K. Consumers. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1851343>.
- [22] Howlett, E., Jeremy, K., and Elyria Kemp. (2008). The Role of Self-Regulation, Future Orientation, and Financial Knowledge in Long-Term Financial Decisions. *Journal of Consumer Affairs*, 42 (Summer): 223-242.
- [23] Hastings, J., and Mitchell, O. S. (2020). How Financial Literacy and Impatience Shape Retirement Wealth and Investment Behaviors. *Journal of Pension Economics and Finance* 19 (1): 1-20. <https://doi.org/10.1017/S1474747218000227>.
- [24] Hussain, I., and Sajjad, S. (2016). Significance of Financial Literacy and its Implications: A Discussion. *Journal of Business Strategies* 10 (2): 141-154. <https://search.proquest.com/scholarly-journals/significance-financial-literacy-implications/docview/1880683834/se-2?accountid=14717>.
- [25] Habib, S. (2007). Counting on the nest egg. Available from <http://thestar.com.my/news/story.asp?file=/2007/5/27/nation/17754089&sec=nation> [Accessed 31st October, 2022].
- [26] HSBC Global report. (2015). The future of retirement: A balancing act. London, England: HSBC Holding Public Limited Company (PLC).
- [27] Higgs, P. (1995). Citizenship and old age: The end of the road. *Ageing and Society*, 15, 335-550.
- [28] Keizai, T (2006). Governing Insecurity in Japan: The Domestic Discourse and Policy Response. Routledge.
- [29] Kahneman, D. (2011). Thinking, fast and slow. London: Allen Lane.
- [30] Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, 47, 263-291.
- [31] Kimiyagahlam, F., Safari, M., and Mansoric, S. (2019). Influential Behavioral Factors on Retirement Planning Behavior: The Case of Malaysia. *Journal of Financial Counseling and Planning*, Volume 30, Number 2.
- [32] Klapper, L., and Lusardi, A. (2019). Financial Literacy and Financial Resilience: Evidence from Around the World. *Financial Management* 49: 589-614 <https://doi.org/10.1111/fima.12283>.
- [33] Klapper, L., and Panos, G. A. (2011). Financial Literacy and Retirement Planning: The Russian Case. *Journal of Pension Economics and Finance* 10 (4): 599-618. <https://doi.org/10.1017/S1474747211000503>.
- [34] 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>.
- [35] Lumsdaine, R. L., and S. J. Vermeer. (2015). Retirement Timing of Women and the Role of Care Responsibilities for Grandchildren. *Demography* 52 (2): 433-454. <https://doi.org/10.1007/s13524-015-0382-5>.
- [36] Lusardi, A., and O. Mitchell, (2007), Baby boomers retirement security: The role of planning, financial literacy and housing wealth, *Journal of Monetary Economics*, 54, 205-224.
- [37] Lusardi, A., and O. Mitchell, (2008), Planning and financial literacy: How do women fare? *American Economic Review*, 98, 413-417.
- [38] Mullock, K., & Turcotte, J. (2012). Financial literacy and retirement saving (Working Paper 2012-01). Retrieved February 20, 2013, from <http://www.fin.gc.ca/wp/2012-01-eng.asp>.
- [39] Moorthy, M. K., Chelliah, T. D., Sien, C. S., Leong, L. C., Kai, N. Z., Rhu, W. C., and Teng, W. Y. (2012). A Study on the Retirement Planning Behaviour of Working Individual in Malaysia. *International Journal of Academic Research in Economics and Management Science*, 1(2), 54-72.
- [40] Mambwe, R., and Mwape, C. (2016). An assessment of preparation level, survival skills, and entrepreneurial knowledge among retired teachers in Zambia. *Ajote* Vol. 5, No. 1.

[41] Myers, J.E., & Salmon, H.E. (1984). Counseling program for older person: status, shortcomings, and potentialities. *The Counseling Psychologist*, 12(2): 39-53.

[42] Murendo, C., and Mutsonziwa. K. (2017). Financial Literacy and Savings Decisions by Adult Financial Consumers in Zimbabwe. *International Journal of Consumer Studies* 41 (1): 95–103. <https://doi.org/10.1111/ijcs.12318>.

[43] Nurul. S. M. and Saleh. T. (2013). The Impact of Financial Literacy on individual saving: An Exploratory Study in Malaysian Context, *Transformation in Business and Economist* 12(1(28)): 41-45.

[44] Nansubuga, F. (2018). The Role of Self-Efficacy in Explaining Psychological and Financial Preparation for Retirement: A Behavioural Study of Retirement Transitioning in Uganda." *Journal of Adult Development* 25 (4): 297–308. <https://doi.org/10.1007/s10804-017-9268-7>.

[45] Niu, G., Zhou. Y., and Gan. H. (2020). "Financial Literacy and Retirement Preparation in China." *Pacific-Basin Finance Journal* 59: 101262. <https://doi.org/10.1016/j.pacfin.2020.101262>.

[46] Nkoutchou, H., and Eiselen. R. (2012). "Retirement Saving Behaviour of Young Adults in the Financial Services Sector." *Journal of Economic and Financial Sciences* 5 (1): 31–48. <https://doi.org/10.4102/jef.v5i1.304>.

[47] Noone, J., Alpass. F., and Stephens. C. (2010). "Do Men and Women Differ in their Retirement Planning? Testing a Theoretical Model of Gendered Pathways to Retirement Preparation." *Research on Aging* 32 (6): 715–738. <https://doi.org/10.1177%2F0164027510383531>.

[48] Old Mutual Wealth. (2012). "Why we Don't Save enough." Old Mutual.

[49] Pangestu, S., and Karnadi. E. B. (2020) "The Effects of Financial Literacy and Materialism on the Savings Decision of Generation Z Indonesians." *Cogent Business and Management* 7 (1): 1–18. <https://doi.org/10.1080/23311975.2020.1743618>.

[50] Pollan, S.M., & Levine, M. (1995). The rise and fall of retirement worth. *Disember/Januari*: 64- 74.

[51] Phirir. M. (2019). Make your own personal retirement plan. *Zambia Daily Mail*. Available from <http://www.dailymail.co.zm/make-your-own-personal-retirement-plan/>. [Accessed 31st October, 2022].

[52] Petkoska, J., & Earl, J. K. (2009). Understanding the influence of demographic and psychological variables on retirement planning. *Psychology and Aging*, 24(1), 245–251. doi:10.1037/a0014096.

[53] Refera, M. K., Dhaliwal. N. K., and Kaur. J. (2016). "Financial Literacy for Developing Countries in Africa: A Review of Concept, Significance and Research Opportunities." *Journal of African Studies and Development* 8 (1): 1–12. <https://doi.org/10.5897/JASD2015.0331>.

[54] Reyers, M. (2016). "The Role of Financial Literacy and Advice in Financial Decision Making." *Southern African Business Review* 20 (1): 388–413. <https://doi.org/10.25159/1998-8125/6057>.

[55] Riker, H. C. and Myers, J. E. (1990). *Retirement Counseling: A Practical Guide for Action*. New York: Hemisphere Pub. Corp. (New York).

[56] Reyers, M., van Schalkwyk. C. H., and Gouws. D. G. (2015). "Rational and Behavioural Predictors of Pre-retirement Cash-outs." *Journal of Economic Psychology* 47: 23–33. <https://doi.org/10.1016/j.joep.2015.01.005>.

[57] Sanlam. (2021) "Sanlam Benchmark Insights." Accessed April 18, 2021. <https://www.sanlam.co.za/corporate/retirement/benchmarksurvey/Documents/ResearchInsights-Report-2021.pdf>.

[58] Sarpong-Kumankoma, E. (2021). "Financial Literacy and Retirement Planning in Ghana." *Review of Behavioral Finance*, 1940–5979. <https://doi.org/10.1108/RBF-05-2020-0110>.

[59] Shambare, R., and Rugimbana. R. (2012). "Financial Literacy among the Educated: An Exploratory Study of Selected University Students in South Africa." *Thunderbird International Business Review* 54 (4): 581–590. <https://doi.org/10.1002/tie.21485>.

[60] Siame. W. (2020). A study on the effects of financial literacy on retirement planning: a case study of civil servants under PSPF. University of Zambia.

[61] Shim. S, Barber. B, Card. N, Xiao. J and Serido. J (2010). Financial Socialization of First-Year College Students: The Roles of Parents, Work, and Education. *Journal of youth and adolescence*. Vl. 39. DOI: 10.1007/s10964-009-9432-x.

- [62] Sharma, P., Chrisman, J. J., & Chua, J. H. (2003). Succession planning as planned behavior: Some empirical results. *Family Business Review*, 16(1), 1–15. doi:10.1111/j.1741-6248.2003.00001.x
- [63] Talib. N. F. M and Manaf. A. H. (2017). Attitude towards Retirement Planning Behaviour among Employee's. *Journal of Business and Management* 1 (1): 15-21.
- [64] Tan, S., and Singaravelloo. K. (2020). "Financial Literacy and Retirement Planning among Government Officers in Malaysia." *International Journal of Public Administration* 43 (6): 486–498. <https://doi.org/10.1080/01900692.2019.1672078>.
- [65] Ubangha, M. B., & Akinyemi, B. A. (2005). The relationship between attitude to retirement planning and retirement anxiety among teachers. *The Counsellor*, 21, 156-163.
- [66] Van Rooji, M. C., Lusardi, A., & Alessie, R. J. (2011). Financial literacy and retirement planning in the Netherlands. *Journal of Economic Psychology*, 32(4), 593–608. doi:10.1016/j.joep.2011.02.004.
- [67] Xu, L., and Zia. B. (2012). "Financial Literacy around the World: An Overview of the Evidence with Practical Suggestions for the Way Forward." *The World Bank*. <https://doi.org/10.1596/1813-9450-6107>.
- [68] Zeka, B. (2017). "Exploring the Retirement Attitudes of Pre-retired Individuals in the Eastern Cape, South Africa." *International Journal of Management and Applied Science (IJMAS)*, 3 (9): 19–24. <https://doi.org/10.20472/IAC.2016.024.101>.