#### Peer-reviewed and Open access journal

ISSN: 1804-5006 | www.academicpublishingplatforms.com The primary version of the journal is the on-line version

**BEH - Business and Economic Horizons** 

Volume 13 | Issue 2 | 2017 | pp.224-236 DOI: http://dx.doi.org/10.15208/beh.2017.17

# Financial literacy and financial planning: Implication for financial well-being of retirees

#### Anokye Mohammed Adam, Siaw Frimpong, Mavis Opoku Boadu

School of Business, University of Cape Coast, Ghana

corresponding e-mail: aadam[at]ucc(dot)edu(dot)gh address: Dept. of Finance, School of Business, University of Cape Coast, Cape Coast, Ghana

#### Abstract:

This study examines how financial literacy, financial behaviour, family support (as another source of income), number of dependents, and retirement planning influence on the financial well-being of retirees in Cape Coast Metropolis of Ghana. A cross-sectional survey strategy was employed on 400 respondents randomly selected from 1500 members of the association to analyze the effect of financial literacy, financial behaviour, family support, number of dependents and retirement planning on financial wellbeing. It then tests their hypothesized relationships with the use of Partial Least Squares (PLS), a structural equation modelling technique.

The results reveal that financial literacy, retirement planning and family support significantly impact the financial well-being of retirees. More importantly, the effect of family support and retirement planning on retirees' financial well-being is stronger than the one of financial literacy. The findings imply that finance literacy and retirement planning should be promoted. In addition to policies aimed at bridging social cohesion and promoting family values should not be ignored the maximizing of financial well-being of retirees. The study contributes to the extant literature on financial literacy and provides evidence on the effect of financial literacy and financial planning on the financial well-being of retirees in a developing country. It has also provided support for the need of social cohesion.

JEL Classifications: H53, H56, I0, J26

Keywords: Financial well-being, financial literacy, family support, financial planning, PLS

Citation: Adam, A. M., Frimpong, S., & Boadu, M.O. (2017). Financial literacy and financial planning: Implication for financial well-being of retirees. Business and Economic Horizons, 13(2), 224-236,

http://dx.doi.org/10.15208/beh.2017.17

#### Introduction

Financial or economic well-being in retirement has been the subject of interest for researchers. The issue is more striking in the context of developing economies where pension benefits are not adequate to meet the basic need of the beneficiaries. For example, in Ghana a category of retirees received as low as GH¢230 (about US\$50) per month as a pension from the Social Security and National Investment Trust (SSNIT, 2015). This definitely pushes the retiree into poverty bracket as defined by World Bank and United Nations. The burden on individuals to seek their financial well-being in retirement requires difficult choices and trade-offs long before retirement age (Boddy, Dokko, Hershbein, & Kearney, 2015).

Financial well-being, on the other hand, is defined as a state of being wherein a person can fully meet the current and ongoing obligation, can feel secure in their financial future, and is able to make choices that allow enjoyment in life (OECD, 2015). It comprises four elements: feeling in control of your finances, having the capacity to absorb financial shock, being on track to achieve financial goals, and having the flexibility to make choices that allow life to be enjoyed. People with high levels of financial well-being have the financial

freedom to make choices that allow them to enjoy life. This flexibility means going on vacation or splurging once in a while and spending money on wants instead of just on needs (CFPB, 2015). Lusardi & Mitchell (2011) show that financial well-being is a function of financial literacy and retirement planning. Little income amidst soaring cost of living makes financial decision prudent for retirees because the decline in income requires that they are financially literate as espoused by the life-cycle theory of consumption and savings. The simplest exposition of the life-cycle model posits maximization of lifetime utility, consumption smoothing, and decision making under certainty. The central predictions of the life-cycle theory rest on the assumptions that individuals are far-sighted and rational and that they are correctly informed about the various factors which determine wealth accumulation.

Acquiring financial experience and the application of this knowledge reduces the likelihood that consumers at any income level will fall prey to unscrupulous salespersons and purchase products or services that are not included in their best interest (Atia, 2012). Since the act of planning may enhance the financial experience, those who want to plan for retirement may invest in attaining financial literacy (Lusardi, 2015). Literature posits that increasing financial literacy is a means to financially empower people and improve their quality of life (Knapp, 1991; Voydanoff, 1990). Lusardi & Mitchell (2011) reported that people who are financially experienced are much more likely to plan for retirement. This reflects the life course perspective theory which stipulates that a retirement experience might be influenced by previous events in life. However, little is known about the financial literacy and financial well-being of retirees. This could be worrying since the retirees who are part of the elderly in the society constitute one of the most vulnerable groups in society (Stewart & Yermo, 2009). Nevertheless, studies on financial literacy and financial well-being have concentrated on the youth and young adults (for instance, Ansong & Gyensare, 2012; Mireku, 2015) at the neglect of retirees. In as much as financial literacy is relevant for retirement planning, little is known about how financially literate individuals perform financially after retirement and how this affects their financial wellbeing. The study, therefore, examines financial literacy and retirement planning effect on the financial well-being of retirees using survey data from Cape Coast Metropolis.

The rest next section of the paper looks at the literature review of the theoretical and empirical relationship between the variables of interest in this study. The review is concluded with research model of the hypothesis to be tested. Next, we present the research methods employed and follow it with results and discussion. The conclusion and implications for practice finally end the paper.

## Literature review

# Financial literacy and financial well-being

The ultimate measure of success for financial literacy efforts should be individual financial well-being. Separate studies on financial literacy and financial well-being have been conducted until now. Joo & Grable (2004) conducted a study aimed at determining factors that influence financial satisfaction. The survey results showed that educational level, financial literacy, risk, financial ability, financial activity, and financial pressures have a direct impact on financial satisfaction. The results showed that in high levels of knowledge and financial skills, the strengthening of the financial behaviors leads to higher levels of financial satisfaction. Therefore, their study indicated that financial literacy had a direct effect on financial well-being. O'Neill, Sorhaindo, Xiao, & Thomas (2005) examined the relationship between financial activities, financial well-being, and health among 3,121 customers of a financial consulting organization. Their results showed that people with higher financial well-being will experience less stress, are more motivated in financial activities, have a better family relationship and are physically and mentally healthier. This

makes pecuniary well-being very necessary in the lives of retirees since they are old and very vulnerable. A little financial stress could affect them either mentally or physically.

Huston (2010) in a study measuring financial literacy showed that a person who is financially literate, that is he/she has the knowledge and the ability to utilise the knowledge, may not exhibit predicted behaviours or increases in financial well-being because of certain influences. Such impacts could come from behavioural/cognitive biases, self-control problems, family, economic, community, and institutional factors. However, Sabri, Cook, & Gudmunson (2012) found that financial literacy significantly influenced students' perceived financial well-being. Taft, Hosein, Mehrizi & Roshan (2013) in their study on financial literacy, financial well-being, and financial concerns revealed that higher financial literacy leads to greater financial well-being. Thus, for financial well-being to be achieved financial literacy is needed.

## Retirement planning and financial well-being of retirees

Financial well-being in retirement entails tough choices and trade-offs long before retirement age. People have to make decisions about how much to spend and how much to save. Research by Lusardi & Mitchell, (2007) indicated that many older Americans may have saved too little to maintain their lifestyles in old age. Their study evaluated whether people sought to figure out how much they had to save for retirement, whether they devised a plan, and whether they succeeded in the plan. It was uncovered that retirement calculations are not an easy task: only 31% of the older people had ever tried to devise a retirement plan, and only two-thirds of these succeeded. For the sample, which comprised of a nationally representative dataset of Americans over the age of 50, only 19% engaged in successful retirement planning. This could influence the financial well-being of the individuals upon retirement.

In 2014, approximately half of non-retired Americans reported being confident that they will have enough money to live comfortably in retirement. Among adults between the ages of 18 and 29, the share was 52%. On the other hand, 45% of adults between 50-64 years old were confident that they will have enough money to live comfortably in retirement. These expectations about financial well-being in retirement vary relatively little across age groups, suggesting that concerns about financial well-being in retirement are pervasive across ages (Gallup, 2014). In the 2015 survey made by the Employee Benefit Research Institute in the United States of America, thirty-seven percent of retirees were very confident about having enough money to live comfortably throughout their retirement years (up from 28 percent in 2014 and 18 percent in 2013) and 33 percent are somewhat confident. This trend could possibly affect the financial well-being of retirees in one of the developed countries in the world. Therefore, achieving financial well-being in retirement requires a certain degree of financial knowledge, but many Americans lack such skills (Boddy, Dokko, Hershbein, & Kearney, 2015); and this could jeopardize one's financial well-being. Similar situations that pertain in developed countries also pertain in Ghana, which is a developing economy. Ghanaians have a poor savings culture and hardly prepare for retirement. Many people assume that social security is enough to maintain their lifestyle for the rest of their lives. It is well known social security in Ghana has failed to provide sufficient income for retirees. Controlling one's choices and making simple planning, will enable an individual to attain the goal of a comfortable retirement.

Retirement planning is in many ways an inventory-taking process in which one must examine the current status and project future needs (AXIS, 2016). Another study in Ghana by Adenutsi (2009) concluded that retirement planning, which involves organising one's finances in order to safeguard oneself against turbulent economic conditions in the uncertain future, is more vital to the overall success of an individual. Especially, with the introduction of defined contribution pension plans to complement the inadequately defined benefit pension scheme in Ghana, workers need good retirement planning to

maximize their financial well-being in retirement. This makes it evident that retirement planning could influence the financial well-being of retirees in Ghana.

## Other predictors of financial well-being

## Number of dependents

A study by Wang & Hesketh (2012) indicated that in the past 20 years retirement researchers have made significant progress in understanding the factors that influence people's well-being in retirement. One of such factors is family related factors which include more dependents and cost related to dependent care. These factors are considered detrimental to the fiscal well-being of people in retirement. The study further revealed that the more dependents a retiree has, the more cost incurred due to the dependent(s), the more likely fiscal well-being in retirement will suffer. A study by Lusardi & Beeler (2006), comparing the savings behaviour of two generations, indicated that having more children leads to lower worth holding. This means that the number of dependents that a retiree has can influence the financial well-being of the retiree.

Related study by Grinstein-Weiss, Wagner, & Sewamala (2005) revealed that economic hardship appears to be higher in families with dependent children compared to other household types. Empirical evidence suggests that families with children also face more difficulties in trying to save than other households. This implies that retirees with dependents will be affected financially since they cannot save enough to sustain them in retirement. Using 1984-1994 data from Michigan Panel Study of Income Dynamics (PSID), Hurst, Lough, & Stafford (1998) found that families with children make more frequent saving deposits than households with no children, yet because the amount deposited is often smaller than for other households, the net worth of households with children is lower.

Retirees no longer have the requirement to spend time in market work. However, they may have increased other responsibilities such as caring for an elderly parent, spouse, or grandchildren (Kalenkoski & Oumtrakool, 2015). Ellis & Simmons (2014) reported that in 2012 about 2.7 million grandparents had primary responsibility for their grandchildren under 18 years of age who were living with them in the American household. This could increase the financial burden of retirees and thereby influence their financial well-being. Caring for young dependents is a major problem facing the elderly in Ghana as highlighted by the findings of a study on pensioners in Ghana by Obiri Yeboah (2002). Traditionally, grandparents are expected to foster their grand-children under various cultural practices (Ghana Statistical Service, 2013), and this increases the financial burden of the aged thereby affecting their financial well-being.

#### Family support

The income status of a retiree has implications for the well-being of the retiree. For instance, when the ageing person (retiree) has the higher income status than the rest of their household members, he/she is depended upon by the extended family for the provision of some of their needs (Ghana Statistical Service, 2013). If such a retiree has no extra income apart from the one from the government, then the retiree will be financially constrained. O'Neill, Sorhaindo, Xiao, & Thomas (2005) conducted a study aimed at examining the relationship between financial activities, financial well-being, and health among 3,121 clients of a financial consulting organization. Their results showed that people with higher income and financial well-being will experience less stress, are more motivated in financial activities, have a better family relationship, and are physically and mentally healthier. A research conducted by the Consumer Financial Protection Bureau

(CFPB, 2015) showed that financial well-being is not strictly aligned with income level. For instance, people seem to have and feel they have a high level of financial well-being, even though they may be far from affluent. On the other hand, people with much higher incomes do not appear to have or feel they have a high level of financial well-being at all. The study described financial well-being as a continuum, ranging from severe financial stress to be highly satisfied with one's financial situation and not strictly on income. Therefore, whether retirees have additional sources of income in the form of family support during retirement or not could influence their financial well-being.

#### Financial behaviour

Garman & Forgue (2006) asserted that financial behaviour could be an important component in defining financial well-being. Joo (2008) indicated that since an individual's financial well-being can be either objective (as measured in terms of income, assets, etc.) or subjective (as measured in terms of financial satisfaction), it makes sense that financial behaviour should improve financial well-being. Therefore, this study controls for financial behaviour in order to ascertain how financial literacy influences financial well-being. Financial behaviour like all other issues have been learned principally from parents through observation and participation in financial experiences like shopping (Falahati & Paim 2011; Adam, 2017).

## Research model and hypotheses

Based on the findings from the literature review, we develop the research model shown in Figure 1. The model links financial literacy, financial behaviour, retirement planning, other sources of income and dependents to financial well-being.

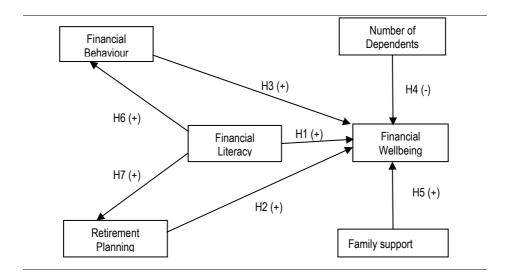


FIGURE 1. RESEARCH MODEL

We accordingly hypothesize that:

- H1. Financial literacy positively influences financial well-being of retirees
- H2. Retirement planning positively influences financial well-being of retirees
- H3. Financial behaviour positively influences financial well-being of retirees
- H4. The higher the number of dependents, the lower the financial well-being of retirees
- H5. Family support positively influences financial well-being of retirees
- H6. Financial literacy positively influences financial behaviour of retirees
- H7. Financial literacy positively influences retirement planning of retirees.

#### Research method

# Study design and sampling procedure

A cross-sectional survey strategy was employed on 400 respondents randomly selected from 1500 members of the association. The sample is distributed as 213 out of 800 males and 187 out of 700 females. The use of random sampling whips down sampling bias to ensure representativeness and generalizability of the study findings. Members of the association are retirees from various occupations who have retired either voluntarily or statutory. The National Pensions Act (2008) of Ghana defines the voluntary retirement age at 55 years and statutory retirement of 60 years. The survey strategy is popular and normally used in business and management research, and is most often used to answer who, what, where, how much and how many questions. Aside from its appropriateness for this study, the survey research has been used in financial literacy studies by ANZ Survey (ANZ, 2015); Mandell & Klein (2009); Chen & Volpe (2002) in prior studies. Again, surveys are popular as they allow the collection of a large amount of data from a sizeable population in a highly economical way, which is often obtained by using a questionnaire administered to a sample. In addition, the survey strategy is perceived as authoritative by people in general and is both comparatively easy to explain and to understand (Saunders et al, 2009). The sample size was arrived at by using the Saunders (2011) sample determination table.

#### Data and data collection

Multiple items were used in the measurement of the latent variables in the model having taken into consideration the existing scales and literature on financial literacy, financial behaviour, retirement planning and financial well-being. To measure financial literacy, nine objective measures of financial literacy from Lusardi & Mitchell (2006) and OECD & INFE (2011) were adapted. Items relating to financial well-being were developed based on the financial well-being definition by Consumer Financial Protection Bureau (2015). Items on financial behaviour were also developed based on the measure for financial behaviour by OECD & INFE (2011). The work of Boisclair, Lusardi, & Michaud (2015) was used to develop the item asking on retiree's preparation towards pension.

The financial literacy was obtained through ten (10) multiple-choice questions on the respondents' general knowledge on budgeting, use of an Automated Teller Machine (ATM), time value of money, account types, cheque handling and insurance. The composite score of each respondent was subsequently used as financial literacy measure. The financial behaviour, retirement planning and financial well-being were measured with statements, measured on a five-point Likert-type scale with "1= not at all true of me and 5= very true of me". All items are presented in Table 1.

TABLE 1. SUMMARY OF MEASUREMENT SCALES

	Mean	SD	Item loading	CR	AVE
FINANCIAL WELL BEING				0.95	0.64
Comfortability with current income	1.65	1.33	0.84		
Comfortability with current debt level	1.64	1.25	0.88	=	
Sufficiency of current finances for upkeep	1.64	1.25	0.91	=	
Sufficiency of monthly income for bill payments	1.59	1.28	0.84	=" _	
Absence of financial problems	1.57	1.15	0.86	_	
Confidence about financial decisions	1.70	1.30	0.89	_	
Ability to absorb financial shocks	1.65	1.31	0.71	_	
Capability of Income for achieving financial goals	1.61	1.29	0.71	_	
Financial freedom	1.61	1.24	0.76	_	
Ability to cover living expenses without borrowing	1.65	1.28	0.75	_	
Satisfaction with overall economic conditions	1.65	1.32	0.71		
FINANCIAL BEHAVIOUR				0.89	0.57
Planned expenditure	2.19	1.45	0.74		
Financial institutions' conditions on loans/credit	2.64	1.16	0.82	='	
Compare interests when savings	2.56	1.18	0.81	=" _	
Seeking financial advice	2.56	1.28	0.70	_	
Insurance policy	1.72	1.23	0.73	_	
Bank interest cross-check	2.00	1.53	0.80		
RETIREMENT PLANNING				0.87	0.63
Investments besides SSNIT	1.93	1.55	0.84		
Established own business before retirement	1.80	1.41	0.85	='	
Special lifetime savings	1.76	1.39	0.65	=" _	
Priority to savings/investments	1.91	1.57	0.82		
FINANCIAL LITERACY				1.00	1.00
Financial literacy	0.51	0.10	1.00		
DEPENDENTS				1.00	1.00
Number of dependents	1.26	0.44	1.00		
OTHER SOURCE OF INCOME				1.00	1.00
Income from other source other than pension benefit	-	-	1.00		

The dependency variable elicited retirees' number of respondents and the other sources of income variable were treated as a dummy variable with "1 = Yes, I have other sources of income apart from monthly pension benefit and 0 = No, I have no other sources of income apart from monthly pension benefit". The questionnaires were administered to 400 randomly selected retirees over a period of one month.

## Data analysis method

We tested the hypothesized model with the use of Partial Least Squares (PLS), a structural equation modelling technique. The SmartPLS version 2.0 M3 software package was used to estimate the path coefficients, composite reliability, average variance extracted (AVE), and  $R^2$ , applying bootstrap re-sampling. The PLS technique is based on an iterative combination of principal components analysis and regression. The objective is to explain the variance of a model's constructs. Its advantage is that it simultaneously estimates all the path coefficients and individual item loadings in the context of a specified model, and

thus enables researchers to avoid biasing and inconsistent parameter estimates. PLS places minimal demands on measurement scales, residual distributions, sample size and allows multiple predictor variables (Frazier et al., 2004; Chin, 1998; Baron & Kenny, 1986).

## Results and discussion

We began the analysis by assessing the measurement model as depicted in Figure 1 for the construct reliability, convergent validity, and discriminant validity. Construct reliability was tested using the composite reliability. The results from Table 1 show that all the constructs have composite reliability above the minimum of 0.7 in all cases, an indication that the constructs are reliable (Straub, 1989). A cursory look at the item loading from Table 1 also proved indicator reliability per the minimum cut-off of 0.7 (Henseler et al., 2009). Fornell & Larcker (1981) recommended a minimum average variance extracted (AVE) of 0.5 for a construct to show convergent validity. This is true for all the constructs of this study; the least AVE is 0.572 (see Table 1). Finally, the adequacy of the discriminant validity is assessed by comparing the square roots of each construct's AVE to the correlations of that construct with all other constructs. According to Fornell & Larcker (1981), for discriminant validity to be adequate, the square roots of each construct's AVE should be higher than the correlations of that construct with all other constructs. The results presented in Table 2 show that non-single items constructs satisfy this condition.

TABLE 1. DISCRIMINANT AND CONVERGENT VALIDITY OF THE CONSTRUCTS.

Constructs	Number of dependents	Family	Financial behaviour	Financial literacy	Financial wellbeing	Retirement planning
Number of dependents	Single item construct	support	Denaviour	шегасу	wellbeilig	piaririirig
Family support	-0.017	Single item construct				
Financial behaviour	0.042	0.627	0.757			
Financial literacy	0.050	0.625	0.084	Single item		
				construct		
Financial wellbeing	0.053	0.741	0.620	0.605	0.802	
Retirement planning						
	0.113	0.600	0.725	0.715	0.670	0.794

Note: For adequate discriminant validity, the square root of the AVE should exceed all correlations with the other latent variables (reported off-diagonal). These conditions are satisfied for all constructs.

Having satisfied that the measurement model results indicate that the constructs satisfy the conditions of construct and indicator reliability as well as the convergent and discriminant validity, we proceed to test the research hypotheses. This task was made by assessing the direction and strength using the path coefficient ( $\beta$ ), level of significance with p-values through 5000 bootstraps, collinearity among the constructs using variance inflation factor (VIF), goodness of fit with coefficient of determination ( $R^2$ ), effect size (  $f^2$ ), predictive relevance of the model ( $Q^2$ ) using the Stone-Giesser's test criterion and the relative impact of the structural model  $(q^2)$  estimated by PLS. Table 3 summarises the results of the hypotheses tested. As posited by Hair et al (2014), collinearity diagnostic is first examined to ensure that the path coefficients are free from bias and reduce significant levels of collinearity among the predictor constructs. The results of the VIF from Table 3

© 2017 Prague Development Center

shows that the paths are free from multicollinearity with maximum VIF of 2.39, lower than the cut-off of 5 proposed by Hair et al (2014).

TABLE 2. SUMMARY OF FINDING
-----------------------------

Independent	Dependent	Path	Standard	t-Stat	P-	$R^2$	$\int f^2$	$Q^2$	$q^2$	VIF
variable	variable	coeff.	error		Value		v	~	•	
Number of	Financial	0.027	0.036	0.738	p>0.05	0.643	0.003	0.402	0.005	1.030
dependents	wellbeing									
Family	Financial	0.481	0.061	7.863	P<0.05	0.643	0.314	0.402	0.136	1.818
support	wellbeing									
Financial	Financial	0.114	0.066	1.728	p>0.05	0.643	0.017	0.402	0.005	2.394
behaviour	wellbeing									
Retirement	Financial	0.294	0.083	3.518	P<0.05	0.643	0.106	0.402	0.038	2.307
planning	wellbeing									
Financial	Financial	0.072	0.033	2.173	P<0.05	0.643	0.036	0.402	0.012	1.028
literacy	wellbeing									
Financial	Financial	0.105	0.072	1.472	P>0.05	0.011	-	0.007	-	1.000
literacy	behaviour									
Financial	Retirement	0.084	0.058	1.457	P>0.05	0.007	-	0.004	-	1.000
literacy	planning									

The hypothesis that financial literacy positively influences financial well-being of retirees is supported by a positive and significant path coefficient between the two constructs  $(\beta = 0.072, p < 0.05)$ . The positive and significant impact finding on financial literacy is consistent with prior expectation and the theoretical proposition of the relationship between financial literacy and financial well-being. Previous empirical studies have observed a positive effect of financial literacy on financial well-being (Sabri, 2011; Sabri, Cook & Gudmunson, 2012; Taft et al., 2013). In particular, Robb & Woodyard (2011) observed that the financial well-being of individuals is incumbent on their actions. Therefore, when people who are financially literate apply the knowledge to manage their income effectively; and as well plan for retirement, then they are most likely to be better off with regards to their financial well-being as retirees. This will enable them to save and consume some of their income to smooth their consumption over the lifetime as posited by the theory. The coefficient of the path between retirement planning and financial wellbeing is significant at 5% significance level ( $\beta = 0.294$ , p < 0.05). This means that the second hypothesis, that retirement planning positively influences financial well-being of retirees, is confirmed. This implies that retirees who plan for retirement are more likely to experience a better financial well-being. Retirement planning is a powerful predictor of wealth accumulation because low wealth can be traced to a lack of retirement planning (Lusardi & Beeler, 2006); and those who plan have more than double the wealth of those who have not done any retirement planning (Lusardi, 2008). This finding is similar to the findings of Wang & Hesketh (2012) who disclosed that retirement planning has a positive effect and it is beneficial to the financial well-being of retirees.

Contrarily to expectation, the third hypothesis (financial behaviour positively influences financial well-being of retirees) and the fourth hypothesis (the higher the number of dependents, the lower the financial well-being of retirees) were not supported. The constructs, financial behaviour of retirees ( $\beta = 0.114$ , p > 0.05) and a number of dependents ( $\beta = 0.027$ , p > 0.05), showed an insignificant relationship with the financial well-being of retirees. Family support, however, proved to be a significant determinant of the financial well-being of retirees ( $\beta = 0.481$ , p < 0.05). This is the indication that the fifth hypothesis (family support positively influences financial well-being of retirees) is

supported. It suggests that retirees who have other sources of income apart from what they receive from the Social Security and National Insurance Trust (SSNIT) will have an improved financial well-being compared to those who do not have such other income. This finding is consistent with the findings of Yoong, See, & Baronovich (2012) who revealed that personal income has a positive effect on personal financial well-being. The finding also sits well with the cultural dynamics of the study area. In Africa, cultural norms are that children are expected to provide care to their parents both materially and otherwise to earn societal respect. And because of poor pension system coupled with low pension income and personal investments, extra support from family members are deemed necessary for the survival of most retirees.

The results of the path relating financial literacy to financial behaviour and retirement planning as contained in the hypotheses (financial literacy positively influences the financial behaviour of retirees and financial literacy positively influence retirement planning of retirees) are not supported. This means that financial literacy does not directly influence retirement planning and financial behaviour of retirees. This finding is quite surprising because one will expect financially literate persons to plan for retirement. However, Moorthy et al. (2012) observed that income levels influence retirement planning and that people with low income are unlikely to plan for retirement. In Ghana, income levels of public sector workers are generally low to meet the high cost of living; forcing people to concentrate on the basic need at the expense of retirement planning.

The model depicted by hypotheses H1-H5 shows that independent variables (financial literacy, retirement planning, financial behaviour, the number of dependents, and family support) explained 64.3% of the variation in financial well-being and considered to be moderated as per Cohen (1998).

The effect size and predictive relevance measure presented in Table 3 shows that family support has a medium effect ( $f^2 = 0.314$ ), retirement planning ( $f^2 = 0.106$ ) and financial literacy ( $f^2 = 0.036$ ) both have a small effect. The number of dependents has the least impact ( $f^2 = 0.003$ ). Judging from Fornell & Cha (1994); Chin (1998); and Götz, Liehr-Gobbers, & Krafft (2010), a test criterion ( $Q^2$ ) that is greater than zero is considered to have a predictive ability. A  $Q^2 = 0.402$  shows that the exogenous constructs (financial literacy, retirement planning, financial behaviour, the number of dependents and other sources of income) have a medium predictive relevance for the endogenous construct (financial well-being) as shown in Table 3.

## Conclusion

With this study, we have analysed the financial well-being of retirees in Cape Coast Metropolis to confirm the relevance of financial literacy, retirement planning and family support in attaining financial well-being of retirees. The findings of the study show that financial literacy, retirement planning and family support positively influence financial wellbeing of the retiree. More importantly, the effect of family support and retirement planning on retirees' financial well-being is stronger than the one of financial literacy. The findings imply that finance literacy and retirement planning should be promoted. In addition to policies aimed at bridging social cohesion and promoting family values should not be ignored a maximization of financial well-being of retirees. It has also been observed that low-income crowds out the importance of financial literacy on retirement planning and financial behaviour.

## References

- Adam, A. M. (2017). Gender disparity in financial literacy: Evidence from homogeneous group. The Journal of Accounting and Management, 7(2), 140-148.
- Adenutsi, D.E., (2009). Retirement planning: Conceptualization, challenges and policy options. MPRA Paper No. 29572.
- Ansong, A., & Gyensare, M.A. (2012). Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana. International Journal of Business and Management, 7(9), 126-133.
- ANZ (2015). ANZ survey of adult financial literacy in Australia. Retrieved January, 11, 2017. https://www.anz.com/resources/5/4/54720a2d-a540-49f0-b0a7-62f1ffb922e6/adultfinancial-literacy-survey-summary.pdf?MOD=AJPERES
- Atia, C. (2012). Building a financially literate society for development: the CAMFED Campaign for Female Education model. Research Report. Retrieved January, 11, 2017 from http://www.uds.edu.gh/docs/2015/ICEIR/2012/Atia,%20Building%20a%20financially% 20literate%20society.pdf
- Baron, R.M., & Kenny, D.A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. Journal of personality and social psychology, 51(6), 1173-1182.
- Boddy, D., Dokko, J., Hershbein, B., & Kearney, M.S. (2015). Ten economic facts about financial wellbeing in retirement. The Hamilton Project, Brookings.
- Boisclair, D., Lusardi, A., & Michaud, P. C. (2015). Financial literacy and retirement planning in Canada. Journal of Pension Economics and Finance, 16(3), 277-296.
- CFPB (2015). Financial well-being: The goal of financial education (Rep.). Iowa City, IA: Consumer Financial Protection Bureau.
- Chin, W.W. (1998). The partial least squares approach for structural equation modelling. In G. A. Marcoulides (Ed.), Modern methods for business research (pp. 295-336.). London: Lawrence Erlbaum Associates.
- Ellis, R. R., & Simmons, T. (2014). Coresident grandparents and their grandchildren: 2012 (Current Population Reports, pp. 20-576). Washington, DC: U.S. Census Bureau
- Hair Jr, J. F., Sarstedt, M., Hopkins, L., & Kuppelwieser, V. (2014). Partial least squares structural equation modelling (PLS-SEM): An emerging tool in business research. European Business Review, 26 (2), 106-121.
- Falahati, L., & Paim, L.H., (2011). Gender differences in financial well-being. Financial socialization and financial knowledge among college students. Life Science Journal-Acta Zhengzhou University Overseas Edition, 8(3), 173-178.
- Fazli Sabri, M., Cook, C.C., & Gudmunson, C.G. (2012). Financial well-being of Malaysian college students. Asian Education and Development Studies, 1(2), 153-170.
- Fornell, C., & Cha, J., (1994). Partial least squares. Advanced methods of marketing research, 40 (3), 52-78.
- Fornell, C., & Larcker, D. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39-50.
- Frazier, P.A., Tix, A.P., & Barron, K.E. (2004). Testing moderator and mediator effects in counselling psychology research. Journal of counselling psychology, 51(1), 115-134.
- Garman, E. T., & Forgue, R. E. (2006). Personal finance (8th ed.). Boston, MA: Houghton Mifflin Company.
- Götz, O., Liehr-Gobbers, K., & Krafft, M., (2010). Evaluation of structural equation models using the partial least squares (PLS) approach. In Handbook of partial least squares (pp. 691-711). Springer Berlin Heidelberg.
- Grinstein-Weiss, M., Wagner, K., & Ssewamala, F.M., (2006). Saving and asset accumulation among low-income families with children in IDAs. Children and Youth Services Review, 28 (2), 193-211.

- Henseler, J., Ringle, C.M., & Sinkovics, R.R., (2009). The use of partial least squares path modelling in international marketing. In *New challenges to international marketing* (pp. 277-319). Emerald Group Publishing Limited.
- Hurst, E., Luogh, M., & Stafford, F. (1998). The wealth dynamics of American families, 1984-1994. *Brookings Papers on Economic Activity*, 1998(1), 267-337.
- Huston, S.J. (2010). Measuring financial literacy. Journal of Consumer Affairs, 44(2), 296-316.
- Joo, S. (2008). Personal financial wellness. In Xiao, J. J. (Ed). Handbook of consumer finance research (pp. 21-33). New York, NY: Springer Science + Business Media.
- Joo, S.H., & Grable, J.E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of family and economic Issues*, 25(1), 25-50.
- Kalenkoski, C.M., & Oumtrakool, E. (2016). The caregiving responsibilities of retirees: what are they and how do they affect retirees' well-being? *Applied Economics*, 49(13), 1298-1310.
- Knapp, J. P. (1991). The benefits of consumer education: A survey report [Brochure]. Michigan Consumer Education Center.
- Lusardi, A., & Beeler, J. (2006). Savings between Cohorts: The Role of Planning (July 2006). Michigan Retirement Research Center Research Paper No. WP 2006-122. Available at SSRN: https://ssrn.com/abstract=1094989
- Lusardi, A., & Mitchell, O.S. (2007). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of monetary Economics*, 54 (1), 205-224.
- Lusardi, A., & Mitchell, O.S. (2011). Financial literacy around the world: An overview, *Journal of Pension Economics and Finance*, 10 (04), 497-508.
- Lusardi, A. (2015). Financial literacy skills for the 21st century: Evidence from PISA, *Journal of Consumer Affairs*, 49 (4), 639-659.
- Mandell, L., & Klein, L. S. (2009). The impact of financial literacy education on subsequent financial behavior. *Financial Counseling and Planning*, 20, 15-24.
- Mireku, K. (2015). Financial literacy among University students: evidence from Ghana (Doctoral dissertation, Department of Accounting and Finance, Kwame Nkrumah University of Science and Technology).
- Moorthy, M.K., Durai, T., Chelliah, L., Sien, C.S., Leong, L.C., Kai, N.Z., Rhu, W.C., & Teng, W.Y. (2012). A Study on the retirement planning behaviour of working individuals in Malaysia. *International Journal of Academic Research in Economics and Management Sciences*, 1(2), 54-72.
- National Pensions Act (2008). Act 766. NPA, Ghana.
- O'Neill, B., Sorhaindo, B., Xiao, J. J., & Garman, E. T. (2005). Financially distressed consumers: Their financial practices, financial well-being, and health. *Financial Counselling and Planning*, 16(1), 73-87.
- Obiri-Yeboah D. A. (2002). Study of Retired Workers/Staff Associations in Ghana, (Unpublished PhD Dissertation). University of Ghana Institute of African Studies, Legon. Ghana
- OECD & INFE (2011). Measuring financial literacy: Core questionnaire in measuring financial literacy. Questionnaire and guidance notes for conducting an internationally comparable survey of financial literacy. Paris: OECD.
- OECD (2005). Improving financial literacy: Analysis of issues and policies. OECD: Paris, France.
- Prawitz, A.D., Garman, E.T., Sorhaindo, B., O'Neill, B., Kim, J., & Drentea, P. (2006). The incharge financial distress/financial well-being scale: Establishing validity and reliability. In Proceedings of the Association for Financial Counselling and Planning Education Conference (pp. 77-89).
- Riou, J., Guyon, H., & Falissard, B. (2016). An introduction to the partial least squares approach to structural equation modelling: a method for exploratory psychiatric research. *Int. J. Methods Psychiatr. Res.*, 25, 220-231.
- Saunders, M. N. (2011). Research methods for business students, 5/e. Pearson Education, India
- SSNIT (2016). SSNIT pension review. Social Security and National Insurance Trust. Retrieved February 10, 2016 from http://www.ssnit.org.gh/news/2016-ssnit-pension-review/.

- Financial literacy and financial planning: Implication for financial well-being of retirees | BEH: www.beh.pradec.eu
- Stewart, F., & Yermo, J. (2009). Pension fund governance. OECD Journal: Financial Market Trends, 2008(2), 1-42.
- Straub, D.W. (1989). Validating instruments in MIS research. MIS quarterly, 13(2), 147-169.
- Taft, M.K., Hosein, Z.Z., Mehrizi, S.M.T., & Roshan, A. (2013). The relation between financial literacy, financial wellbeing and financial concerns. *International Journal of Business and Management*, 8(4), 63-75.
- Voydanoff, P. (1990). Economic distress and family relations: A review of the eighties. *Journal of Marriage and the Family*, 52, 1099-1115.
- Wang, M. and Hesketh, B. (2012). Achieving well-being in retirement: Recommendations from 20 years of research. SIOP White Paper Series, 1(1), 11-22.
- Yoong, F.I., See, B.L., & Baronovich, D.L. (2012). Financial literacy key to retirement planning in Malaysia. *Journal of Management and Sustainability*, 2(1), 75-86.