

# The Effect of Financial Literacy on Participation in the Informal Sector Personal Pension Scheme in Accra, Ghana

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## Abstract

The informal sector contributes significantly to the Ghanaian economy. It contributes for more than 71.3 percent to employment creation and 70 percent to GDP in Ghana. However, the sector is the least covered in any form of pension. In addressing this, the government of Ghana introduced the Informal Sector Personal Pension Scheme in 2008 (Act 766), but after more a decade of its introduction, participation of the informal sector workers in the scheme is significantly low and the factors that will enhance increased participation have received little attention. This study sets out to assess the financial literacy of the informal sector workers and investigate whether financial literacy affects the participation of the informal sector workers in the personal pension scheme. This study used a descriptive survey design. Self-administered questionnaires were used to collect primary data of which 420 informal sector workers were sampled and used in the study. The Binary Logit Model was used to determine the probability of the informal sector workers to participate in the personal pension scheme given financial literacy. The study found that financial literacy among the informal sector workers is extremely low. It, was however, revealed that there is significant relationship between financial literacy and participation of the informal sector workers in the personal pension scheme. The policy implications proposed in the study were that the government, the National Pensions Regulatory Authority (NPRA), and Corporate Trustees should pay particular attention to financial literacy and provide financial literacy education and training for the informal sector workers.

## Keywords

Financial Literacy, Informal Sector, Participation, Personal Pension Scheme

## 1. Introduction

When the issue of old age is being discussed, one of the things that comes to mind is pension. Pension as a social security measure is not a new concept. It is one of the key issues that attracted the attention of global leaders and continues to do that till today. Historically, during the 1948 Declaration of Human Rights, pension was considered as a basic human right. It is argued that social security is a prerequisite for social peace, which is necessary for steady and sustainable growth. Economic support is the primary tenet of social security, and the better the economy, the better the conditions for a public social security. In light of this, social security itself may play a role in determining whether or not sustainable development is achieved (Razvan-Dorin, 2012). Since the 1980s, the role of pensions in the socioeconomic development of nations has attracted debates and discussions in social and economic spheres (Barrientos, 2003). In this regard, pensions have been recognised by governments of most countries as a tool for accelerated socioeconomic development and poverty reduction (Butare & Kaseke, 2010). In developing countries for instance, pensions are used to protect the people from dangers or contingencies that cannot be overcome by the people themselves (Haaf & Haan, 1997). Whilst in developed countries pensions are used by governments as socioeconomic development tools to stabilise the demand for goods in times of crisis (Davis, 1998). It is asserted that a properly designed pensions system can reduce violence resulting from economic depression (Kayitare, 2016). Likewise, Holzmann (2000) argues that pensions can act as functions for the avoidance of cost associated with risks and ensure labour efficiency.

The justifications of the socioeconomic benefits of pensions are the main reasons for reforming pension systems in various jurisdictions of nations and in effect, it is that pensions effectively perform significant role in the economic development of nations (Kayitare, 2016). For instance, in recognition to the importance of pensions in the socioeconomic development of nations World Summit was convened in Denmark in 1995 to stress the need for promoting pensions as well as other social security benefits. The participants at the Summit resolved to develop and implement policies and programmes that would guarantee and ensure that individuals get adequate economic empowerment when they are old (International Labour Office, 2012). Later in 2011 the African Union Commission convened a meeting in Yaoundé in Cameroun during which participants agreed that there was the need to develop and implement social security systems for the informal sector workers (African Union Commission, 2011). In effect, developing an efficient social security schemes, helps in enhancing the capacity of the working people in seizing economic opportunities, ensuring access to secured income as well as good health (Bijlsma et al., 2018).

In Africa, most workers in the informal sector work without any form of social protection (UNDP, 2021). According to International Labour Office (2017), in sub-Saharan Africa more than 90 percent of the people in the informal sector

is excluded from social protection and do not participate in any forms of Pensions (UNDP, 2021). According to Masanyiwa et al. (2020), the informal sector is characterised by large number of self-employed and small businesses with low level of capital, low skills of labour, lack of market, irregular and low income, unregistered businesses and unsafe working conditions. In Ghana, the **National Pensions Act 2008 (Act 766)** defines the informal sector as a unit of production that engages in a legitimate business transaction which normally operates at a low level of organisation, with little or no division between labour and capital which operates on a small scale (**National Pension Act 2008: p. 89**).

In addressing the social protection exclusion in the informal sector and in response to the World Bank's recommendations on social security provisions, the Ghanaian government has established the Informal Sector Social Personal Pension Scheme (ISPPS) under the Third Tier or the 3-Tier Pension Scheme which is backed by the **National Pensions Act 2008 (Act 766)** as amended. The 3-Tier Pension Scheme has gone through some circulated reforms. As part of the reforms, there was the introduction of the 1<sup>st</sup> Tier and 2<sup>nd</sup> Tier which are mandatory pensions for workers in the formal sector with optional participation by workers in the informal sector. The 1<sup>st</sup> Tier is aimed at eradicating poverty and broadening coverage to include the informal sector while the 2<sup>nd</sup> Tier seeks to reduce relative poverty. The 3-Tier Pension Scheme has been designed to reach out for the self-employed and workers in the informal sector and to serve as income replacement (**National Pensions Regulatory Authority (NPRA), 2016**). The arrangement under the **National Pensions Act 2008 (Act 766)** as amended allows the self-employed and workers in the informal sector enjoy both lump as well as monthly pension benefits just as workers in the formal sector. In accordance with Section 5 (1) of the Act, the National Pensions Regulatory Authority was established to oversee the implementation and compliance of the Act so as to achieve its purpose of providing pension benefits for workers in both public and private/informal sectors of the economy. Since the establishment of the Act in 2008 and subsequent implementation of the Act in 2010, the ISPPS has not adequately responded to the need for all-inclusiveness of social protection system to ensure significant participation of the population in the informal sector (**Ansah, 2013**).

Financial literacy plays an important role in personal financial decision making. Financial literacy has been defined as the ability to make informed decision, judgement and take effective action on how to use and manage money (**Mahdzan & Tabiani, 2013**). On the other hand, **Remund (2010)** defines financial literacy as a measure of how an individual understands key financial concepts and applies the concepts in taking actions that affect the individual's wellbeing. From these definitions, it can be induced that financial literate person is able to make quality decisions and take actions appropriately on issues that affect the finances and wellbeing of the individual.

In effect, **OECD (2008)** asserts that finances of individuals change over time

due to changing financial needs and the age and strength the individuals. This, according to OECD (2008), necessitates the need for individuals to be financially literate in order to contribute meaningfully in terms of pensions towards their old age and that, pensions have wide social coverage and long-term and complex.

Furthermore, financial literacy influences the behavioural setup of individuals towards savings and it has positive impact on participation in pension schemes (Agunga, Jaon, & Adede, 2017). In addition, financial literacy reduces debt burden, accumulates wealth and helps in managing personal wealth effectively (Agunga, Jaon, & Adede, 2017). According to Choi, Laibson, & Madrian (2005), with financial literacy, an individual is able to understand how a pension scheme operates and make well-informed and quality decision leading to effective participation in the scheme. It is therefore, against this backdrop that the study sought to examine the effect of financial literacy on participation in the informal sector personal pension scheme in Accra Ghana.

### 1.1. Statement of the Problem

The informal sector plays a pivotal role in the Ghanaian economy and it contributes about 71.3 percent to employment creation and about 70 percent to GDP in Ghana (Ghana Statistical Service, 2019). However, the informal sector is the lowest in terms of pension coverage in Ghana. The conventional pension schemes such as the Social Security and National Insurance Trust (SSNIT) have not been able to attract the informal sector into contributing to pension schemes. Despite the introduction of the Informal Sector Personal Pension Scheme since, 2008, there is still low participation in the scheme. Thus, participation of the sector in any form of pension schemes in Ghana is significantly low (Kumah, Bortsie, Boachie, & Adu-Brobbey, 2017); For instance, only 3.51 percent of the 9 million informal sector workers in Ghana, have subscribed to the Tier 3 Personal Pension Scheme (NPRA, 2020).

The low participation in the personal pension scheme implies that majority of the aged in the informal sector will not benefit from any pension scheme, a situation that could affect their access to healthcare and increases their dependency on the government (Help Age International, 2016). More so, the elderly in the informal sector are now being taken care of by their younger generation (adult children). However, the burden of care-giving and home-keeping has become heavier for the adult children making it financially burdensome for the children (Guyen, 2019). Apart from this, the situation also puts significant financial burden on the government's fiscal budget. Already the government's social intervention such the Livelihood Empowerment Against Poverty (LEAP) Programme which also caters for the aged in the society is constrained by financial resources (Handa, Park, Darko, Osei-Akoto, Davis, & Diadone, 2014). This cannot be allowed to continue because pension is considered as one of the key factors for socioeconomic development (Kayitare, 2016).

The low participation in the personal pension scheme raises a question as to whether financial literacy can play a role in increasing participation in the scheme. Even though there have been extant literature on pensions and the informal sector in Ghana, there is still a paucity of knowledge on the nexus between financial literacy and participation of the informal sector workers in the personal pension scheme in Ghana. Among the studies include Collins-Sowah, (2013); Kumah et al., (2017) focused on the willingness of the informal sector workers to participate in the personal pension scheme, Dovie (2017) focused on the preparation of the informal sector workers toward retirement while Kumah et al. (2017) studied the coverage of the scheme among informal sector workers in Ghana. This study sought to bridge this gap by examining how financial literacy influences participation in the informal sector personal pension scheme in Ghana.

### 1.2. Objectives of the Study

The main objective of the study is to examine the effect of financial literacy on participation in personal pension scheme: evidence from the informal sector in Ghana. The specific objectives are to:

- 1) Assess the level of financial literacy among informal sector workers in Accra Ghana;
- 2) Examine the relationship between financial literacy and participation in the informal sector personal pension scheme in Accra Ghana.

### 1.3. Hypotheses

- 1) There is low level of financial literacy among the informal sector workers in Accra Ghana.
- 2) There is significant positive relationship between financial literacy and participation in the informal sector personal pension scheme in Accra Ghana.

### 1.4. Literature Review

The theory underlying this study is the empowerment theory. The Empowerment theory originates from American community psychology and associated with social scientist Rappaport (1981). However, the roots of empowerment theory extend further into history and are linked to Marxist sociology. The theory has been mostly applied in women and developmental discourse. According to the *Empowerment Theory*, financial resources, knowledge, skills, social and political opportunities are out of reach to the poor in the informal sector (Narayan, 2005). The assumption of empowerment theory is that providing the poor the knowledge and financial power help them to solve their own problems and direct their own lives (Bhushan & Medury, 2013).

Empowerment is related to the word power. Power can be defined as control over material assets, intellectual resources and ideology. Material assets can be physical, human or financial; intellectual resources are knowledge, information and ideas; and control over ideology signifies the ability to generate, propagate,

sustain and institutionalize specific sets of beliefs, values, attitudes and behavior. Thus, power accumulates to those who control or are able to influence the distribution of material resources, knowledge and the ideology that govern social relations in both public and private life. The extent of power held by individuals or groups is proportionate to the number of kinds of resources they can control, and the extent to which they can shape prevailing social, religious or political ideologies. This control is in turn relative to the power of decision making (Tandon, 2016). Empowerment approach comes from women group who seek to empower themselves through greater self-reliance. Women seek to influence their own change and the right to determine their own choice in the life. It seems from the empowerment view that woman need appropriate resources to achieve self-sufficiency.

The limitation of financial empowerment theory is that although the supply of financial services has been reported by many researchers to be good, information about access and usage or about why people do or not use formal services is still inadequate (Thouraya & Faye, 2013). Promoting greater access to financial services for low-income households and firms is a core part of their overall strategies for economic and financial development, however, there remains uncertainty as to whether financial inclusion results in financial stability (Morgan & Pontines, 2014).

On the basis of the empowerment theory, this study argues that any attempt to introduce pensions to informal sector cannot be sustainable if the workers and the people in the informal sector are not empowered. This study argues that people may have the willingness to participate in any pension system but if the means of contributing to the pension system is not sustainable, then continuous participation cannot be assured. Also, the assumption of this study is that for pension system for the informal sector to be sustainable it must ensure the empowerment of the people in the informal sector majority of whom are poor to ensure that they are able in generating more income in excess of costs (which also include taxes, pension and other social security contributions). This therefore justifies the decision to apply the empowerment theory to this study.

According to a study by Uthira & Manohar (2009), the factors that alienate the informal sector workers from formal pension system are the continuous nature of how they change jobs, opting for self-employment, temporary nature of employment, illiteracy and unfamiliar about pensions, little experience in interacting with formal institutions. Thereby the authors suggested that the most appropriate pension for the informal sector workers is micro-pension schemes. Uthira & Manohar (2009) posited that micro-pensions support regular, small and sustainable savings by low-income earners in the informal sector so as to ensure regular source of income during their old-age.

Dullemen & Bruijin (2011) viewed the pension for the informal sector workers as smart forms of savings and insurance. Dullemen & Bruijin (2011) argue that the decisions to participate in the informal sector personal pension scheme

depends mainly on the extent of awareness of the benefits and in this case perceived level of utility that the participant will gain from participating (Adhikari et al., 2003). Before an individual will be able to weigh the cost and benefits of two alternatives in taking decision as to which alternative to choose, the individual needs to gain some level of knowledge about the alternatives. To do this, the individual needs to be empowered with the requisite information for improving the individual's financial know-how and ability to make the right decision (Asitik, 2015). With the requisite financial knowledge, the individual is able to weigh the utilities of two alternatives and select the alternative that gives the highest level of utility as against the other (Castel, 2006).

The expected present value of pension benefits and cost of contributing to the pension is significant factor in determining the willingness of workers in the informal sector to participate in the pension scheme. In effect, participation in pension scheme is based on financial indicators that reflect costs and benefits which requires financial knowledge (Lusardi et al., 2010).

Agunga, Jaongo, & Adede (2017) studied financial literacy and financial preparedness for retirement and found that without moderation for the independent and dependent variables, financial literacy has no effect on financial preparedness. However, their studies revealed that when they incorporated demographic dimensions into the multiple regression model, financial literacy statistically affect financial preparedness for retirement.

According to Lusardi & Mitchell (2014), lack of financial knowledge is the major cause of households not saving or investing towards retirement. Over a decade, Lusardi & Mitchell (2006), have devoted to establishing the influence of financial knowledge and skills on retirement planning and they found that significant positive relationship between financial literacy and retirement planning. Furthermore, using a National Survey to explore how individuals make financial decisions and use their resources, Lusardi & Mitchell (2007) asserted that women who have less financial literacy are less likely to plan towards their retirement.

Bucher-Koenen & Lusardi (2011) did a comparative study on financial literacy and retirement wealth among women in East Germany and West Germany using data obtained from the SAVE survey. The study found that women with high financial literacy accumulate more retirement wealth than those with low financial literacy. It concluded that financial knowledge has significant positive impact on retirement planning.

In other studies, Mahdzan & Tabiani (2013); Aluodi, Njuguna, & Ombio (2017), it was found that households with financial literacy are more likely to participate in pension scheme actively than those with low financial literacy. For instance, Agunga et al. (2017) opined that low financial literacy negatively affects the attitudes of the people towards preparation and participation in pension schemes. Also, in Lusardi & Mitchell (2007) it was found that financial literacy is significant in predicting financial behaviour toward planning for retirement and

that it is important predictor for accumulating wealth for life in old age. As the actual mechanism by which education changes decisions for retirement is unclear, Maki (2001) provides three likely options. Thus, first all financial education could increase household savings in a manner that can cause the family to reduce its discount rate. Second, it can also increase knowledge that could lead the family to become less risk averse and subsequently increase investment in assets and expected return. Thirdly, financial education could alter the family's knowledge of its investment plan.

Furthermore, the finding on financial literacy and participation is also related to studies such as Mullock & Turcotte (2012) where they argue that financial literate person is more confident and tend to understand retirement better and in effect, accumulate wealth through savings and investments by means of preparing towards retirement. Lusardi & Mitchell (2014) also found similarly that financial literacy and retirement planning are positively related and explained that less financial literate person is less likely to make retirement plan (Bucher-Koenen & Lusardi, 2011).

### 1.5. Conceptual Framework

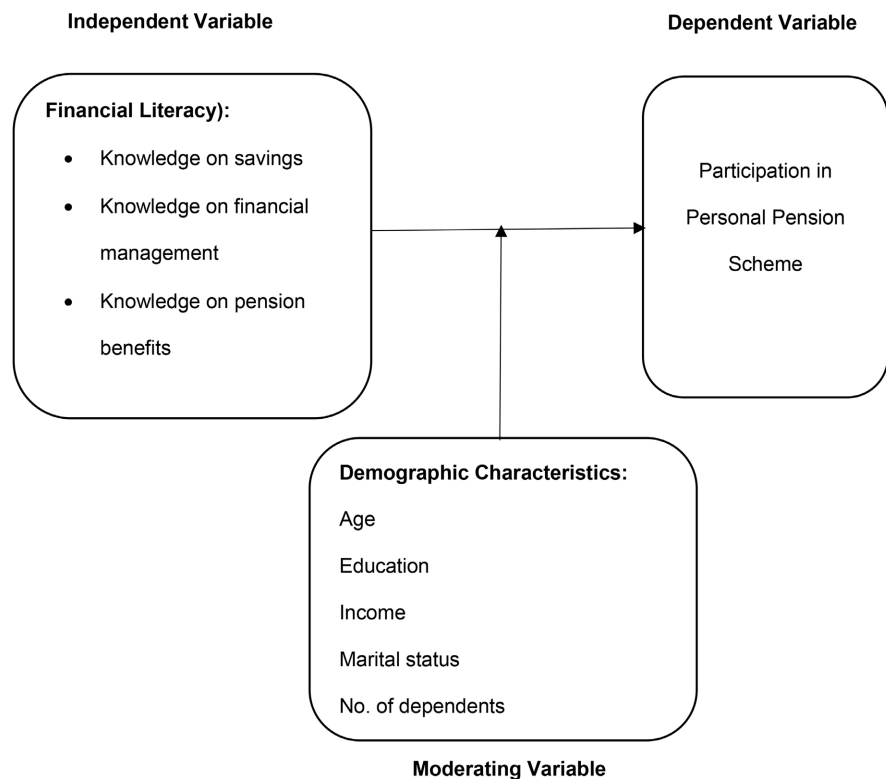
Figure 1 illustrates the conceptual framework for the study and it shows that financial literacy influences participation in the personal pension scheme with demographic characteristics as moderating variables.

## 2. Methodology

The study used descriptive research design in order to examine the effect of financial literacy on participation in the informal sector personal pension scheme. Descriptive research is concerns finding out what, who, why, and how of a given phenomenon (Cooper & Schindler, 2006). The descriptive study allowed for in-depth description of the effect of financial literacy on participation in the personal pension scheme. According to Creswell (1994), descriptive research enables researchers to record, describe, analyse, and report on how a phenomenon exists or existed.

The study used the informal sector workers in Accra as the population in this category. Accra is an urban area and capital town of Ghana. It was used because there is persistence and significant number of informal economic activities in this city. A greater number of economically active people migrate from the rural areas of the country to seek for greener pastures in the urban areas (Anuwah-Amah, 2017). According to the Ghana Living Standards Survey by the Ghana Statistical Service (2019), more than 71.3 percent of the working population in Ghana is in the informal sector. Also, 84.1 percent of the informally employed population aged between 15 years and older in Ghana are in the urban sector (Ghana Statistical Service, 2019). Urban informal sector workers do not enjoy much or no social protection from the state (Ofori, 2009). The selection of Accra as an urban city is based on the population density, distribution of businesses





**Figure 1.** Conceptual framework.

in the informal sector and likelihood of access to spontaneous workforce in the informal sector (Ghana Statistical Service, 2019). Furthermore, according to Anuwa-Amarh (2017), “the rapid spatial expansion of urban boundaries has led to the encroaching of rural areas in Accra” (Anuwa-Amarh, 2017: p. 14). Accra has the most vibrant informal sector economy and hotspot for economic activities attracting millions of people from and beyond the other regions. According to Anuwa-Amarh (2017), the concentration of commercial and industrial activities in Accra is the main reason for the relatively high proportion of the urban population in Accra. Furthermore, studies conducted on Ghana’s informal sector revealed that characteristics of the informal sector in Ghana are the same irrespective of the geographic area (Osei-Boateng & Ampratwum, 2011).

In order to ensure operational manageability and improved quality of the study considering resource and time constraints, 420 informal sector workers were used for questionnaires. This approach was employed by similar studies on the informal sector in Ghana. For instance in a study conducted by Anuwa-Amarh (2017) on the subject “Understanding the Urban Informal Economy in Ghana: A Survey Report”, sponsored by Friedrich Ebert Stiftung Ghana, used a sample size of 500 as a representative of informal sector workers in Ghana. Also, Dovie (2017) used 221 as the sample size for informal sector workers in the Tema Metropolitan Assembly. Likewise, Kumah et al. (2017) used 450 represent informal sectors workers in Kumasi. Also, Adzawla et al. (2015) used 150 informal sector

workers in Tamale while Collins-Sowah et al. (2013) used 400 as their sample size. The study employed stratified sampling in selecting the participants for this study. Stratified sampling was used because of the heterogeneous nature of the population. The urban informal sector in Ghana is remarkably heterogeneous in operation and scope (Osei-Boateng & Ampratwum, 2011).

The data for the study were generated through questionnaires and structured using the Likertscale and dichotomous type of questioning. The variables used to design the questions regarding financial literacy and participation were obtained from Lusardi & Mitchell (2014); Adzawla et al. (2015); and World Bank et al. (2009). The variables were carefully selected to ensure that the research objectives are addressed. Also, the questionnaire was pre-tested and thus it was used to conduct a pilot study so as to achieve the validity of the data.

The questionnaire was pre-tested with 48 respondents with 4 questionnaires each being administered to each of the 12 selected associations in Accra. The main purpose of the pre-testing or pilot study was to ascertain the feasibility of the main study. It also helped in testing the reliability and validity, practicality, appropriateness of the research instruments, trustworthiness, and understandability of the respondents for the purpose of the main study. In achieving reliability criteria, instruments were designed to allow for triangulation in terms of the responses of the participants to the questions. The dimensions were subjected to vigorous validity and reliability testing by employing factor analysis and Cronbach's Alpha and this was done to remove any variable or item that did not load highly in the factor extractions.

The data were analysed using descriptive and inferential statistics. The descriptive statistics helped in understanding the characteristics of the respondents while the inferential statistics were used to examine the relationship between financial literacy and participation in the personal pension scheme. The inferential statistics were done through multiple regression analysis using a confidence interval of 95 percent. The overall statistical model was tested using the F-test in the Analysis of Variance (ANOVA).

In measuring financial literacy, the study used 3 items and factor rotation was conducted using Varimax technique to identify the item that loads high on each of the 3 extracted factors. The results on the factor rotation are shown in **Table 1** and it indicate that all the 3 items loaded high on factor 1 and the values are greater than 0.6.

The decision to participate in the informal sector personal pension scheme is a dichotomous (Kumah et al., 2017). This therefore suggests the use of Binary Logit Model in investigating the factors influencing participation in the informal sector personal pension scheme. The essence of Binary Logit Model is to determine the probability to participate in the scheme. The empirical model for willingness to participate in the pension scheme (Adzawla et al., 2015) is expressed as follows:

**Table 1.** Demographic disposition of the respondents.

Demographic Variable	Percentage (%)	
Gender	Male	59
	Female	41
Age	21 - 40	38.6
	41 - 60	43.7
	61+	17.6
Education	Junior High School	23.1
	Senior High School	55
	Diploma	10.5
	First Degree	11.4
	Other	0.0
Income	Less than GHS1000	23.1
	GHS1000 - GHS1500	55
	GHS1600 - GHS2000	10.5
	More than GHS2100	11.4
Marital Status	Married	74.1
	Single	21.8
	Widowed	4
No. of Dependents	Less than 3	27.3
	3 - 5	54.4
	More than 5	18.3

Source: Field Survey, 2022.

$$\log\left(\frac{P_i}{1-P_i}\right) = \alpha_0 + \beta_1 KSV_i + \beta_2 KFM_i + \beta_3 KPB_i + \beta_5 DCH_i + \varepsilon_i \quad (1)$$

where  $\log\left(\frac{P_i}{1-P_i}\right)$  above denotes log of probability of participating in the scheme;

*KSV* denotes knowledge on savings; *KFM* denotes knowledge on financial management; *KPB* denotes knowledge on pension benefits; while *DCH* represents demographic characteristics. The  $\alpha$  is the alpha or constant term, and  $\beta$  is the coefficient of the independent variable;  $i^{th}$  represents informal sector worker; and  $\varepsilon$  denotes the error term.

### 3. Results and Discussions

The demographic characteristics of the respondents are shown in **Table 1** and this analysis is to find out level of knowledge of the respondent on the subject matter. **Table 1** indicates that most of the respondents involved in this study were males (59%), were aged between 41 and 60 years (43.7), with Senior High

School (55%), had average income of less than GHS1000 per month, married (74.1%), and having 3 to 5 dependents (54.4%).

### 3.1. Level of Financial Literacy among the Informal Sector Workers

One of the objectives of the study is to assess the level of financial literacy among the informal sector workers in Accra Ghana. In order to address this objective, the study used 6-point Likert scale of the financial literacy variables, thus, knowledge on savings; knowledge on financial management; and knowledge on benefits of scheme. The indicators for the measurement are: 0 for “not all”, 1 for “extremely low”, 2 for “to a moderate low”, 3 for “Average”, 4 for “moderately high”, and 5 for “extremely high”. The results generated from the questionnaire are shown in **Table 2** and the results indicate that the overall mean for financial literacy among the informal sector workers is 2.05 suggesting that the level of financial literacy is moderately low. However, in terms of individual variables, knowledge on savings is average (3.23), knowledge on financial management is extremely low (1.75) and knowledge on the benefits of the scheme is also extremely low (1.18). Majority of this category of the respondents are those whose educational attainments are first degree (11.4%) and diploma (10.5%). From these results, it is evidently sufficient to suggest that there is low level of financial literacy among the informal sector workers in Accra Ghana.

### 3.2. Logistic Results

The second of objective of the study examine the relationship between financial literacy and participation in the informal sector personal pension scheme in Accra Ghana. This section sought to assess the effect of financial literacy on participation of the informal sector workers in the personal pension scheme. In address this goal, the study hypothesised that “*there is significant positive relationship between financial literacy and participation of the informal sector workers in personal pension scheme in Ghana.*”

In order to address this objective and further provide evidence to deciding on the hypothesis, the study used dichotomous scaling with 0 representing “not willing to participate” and 1 representing “willing to participate”. The respondents were given the option to decide whether they would participate in the informal sector personal pension scheme given that they are provided with financial literacy on savings (how to save towards retirement even with financial constraints), financial management (how to manage financial resources) and benefits of the scheme (partial withdrawal, ploughing back interest on scheme savings).

The logistic regression results are shown in **Table 3**. The Table presents the financial literacy variables in other words the dimensions of financial literacy and these are knowledge on savings (KnoSav); knowledge on financial management (KnoFinMan); knowledge on benefits of the scheme (KnoBen) and demographic characteristics (DCH). According to **Table 3**, B (coefficients) of all the

**Table 2.** Descriptive statistics.

	Min.	Max.	Mean	Std. Deviation
Knowledge on savings	0.00	5.00	3.23	1.41
Knowledge on financial management	0.00	5.00	1.75	1.38
Knowledge on benefits of scheme (retirement)	0.00	5.00	1.18	1.37
Valid N (420)	Overall Mean		<b>2.05</b>	

Source: Field Survey, 2022.

**Table 3.** Financial literacy variables in the equation.

Step 1 <sup>a</sup>	B	S.E.	Wald	df	Sig.	Exp(B)	95.0% C.I. for EXP(B)	
							Lower	Upper
KnoSav	0.475	0.035	41.084	1	0.003	5.607	1.014	2.547
KnoFinMan	0.186	0.024	5.586	1	0.000	7.830	0.515	1.338
KnoBen	0.140	0.042	1.334	1	0.000	11.150	0.716	1.848
DCH	0.027	0.245	12.012	1	0.001	12.973	0.602	1.573
Constant	0.583	0.628	32.862	1	0.003	0.558		

The “a” means an annotation for constant included in the estimation at step 1.

independent variables: knowledge on savings; knowledge on financial management; knowledge on benefits of the scheme; and financial advice have positive coefficients and their Exp(B) values are greater than 1 and are all significant ( $p < 0.000$ ). This finding seeks to suggest financial literacy provide significant influence on the informal sector workers to participate in the personal pension scheme. In this regard therefore, the study accepts that “*there is significant positive relationship between financial literacy and participation of the informal sector workers in personal pension scheme in Ghana*” but the null hypothesis is rejected. These results provide evidence to support the argument that there is significant relationship between financial literacy and participation of the informal sector workers in the personal pension scheme. The finding shows that having financial literacy, thus good understanding of how to save towards retirement even with financial constraints), financial management (how to manage financial resources) and benefits of the scheme (partial withdrawal, ploughing back interest on scheme savings) contributes significantly to increasing participation in the personal pension scheme. This finding supports the empowerment theory which asserts that provision of education, experience and training have the potential in enhancing people’s capability to develop their knowledge and skills and these will lead to increasing the value of human capital (Asitik, 2015). Therefore, providing financial literacy skills play significant role in helping the people in the informal sec-

tor to empower themselves leading to making decisions about saving for their old age and this case contributing to pension scheme.

It is imperative to note from the that financial literacy influences participation in the scheme hence providing the informal sector workers education in financial skills will empower them to take quality decision on their finances. It must further be stated that the workers in the informal sector have irregular income and most of them are having financial constraints. Furthermore, other issue that touches on the scheme in term of making partial withdrawals during the period of contributions. According to the Section 106 of the Pension Act 2008 (Act 766), contributions are put into two separate accounts namely personal savings account and retirement account. Per the Law, a contributor who has not attained the legal retirement age is permitted to withdraw either all or part of accrued benefits that the scheme has yielded after five years of contribution in case of personal pension scheme for the informal sector workers. According to the [National Pensions Act 2008 \(Act 766\)](#), the retirement account remains untouched until the retirement of the contributor. However, the Act provides that after contributing for five years, contributors are allowed to withdraw from the savings account of the pension contributions. In essence, increase in empowerment will lead to increase in participation. In effect, the findings mean that empowering the poor is necessary for improving the financial know-how and ability of the informal sector workers and these consequently result in improved income and wellbeing. Thus, any attempt to introduce pensions to informal sector cannot be successful if the workers and the people in the informal sector are not empowered. This finding therefore supports the theory of empowerment. People may have the willingness to participate in any pension system but if the means of contributing to the pension system is not successful, then continuous participation cannot be assured. This therefore seeks to suggest that empowering the poor plays an important role in ensuring increase participation in the informal sector pensions.

Providing them with financial literacy will empower them to improve their income and be able to save some part of their income towards their pension. For instance, with regards to impact of empowerment on poverty reduction, [Narayan \(2005\)](#) stated that empowerment provides expansion or increased freedom of choices and actions in shaping one's life. This perhaps implies that empowerment provide the control over one's decisions and resources. Also, [Masanywa et al. \(2020\)](#) asserted that a good pension scheme for the informal sector is one that ensures adequate and sufficient benefits for preventing old-age poverty; and that which is within the financial capability of the state and individuals which ensures sustainability over time under different situations and scenarios, and able to resist major setbacks.

#### 4. Conclusion

It sets out to examine the effect of financial literacy on participation in the in-

formal sector personal pension scheme in Accra Ghana. Data were obtained from the informal sector workers in Accra and were analysed in order to address the objectives of the study. The first objective is to assess the level of financial literacy of the informal sector workers in Accra. The study showed that in terms of individual variables, knowledge on savings is average (3.23), knowledge on financial management is extremely low (1.75) and knowledge on the benefits of the scheme is also extremely low (1.18). The results show that 13.97 percentage of the respondents are financially literate. With regards to the second objective, the study examines the effect of financial literacy on participation of the informal sector workers in the personal pension scheme. In this regard, the results revealed that there is significant relationship between financial literacy and participation of the informal sector workers in the personal pension scheme. In effect, knowledge on how to save towards one's pension; how to manage one's finances; and knowledge on the pension benefits (earnings/yields) of the scheme have significant positive influence on participation in the personal pension scheme.

The low level of financial literacy necessitates the need to provide financial education for the informal sector workers and this will empower them with the requisite knowledge about how save towards their pensions and manage their financial resources. The implication of this finding is that in order to encourage participation in the pension scheme there is the need for Service Providers to provide financial literacy for the workers in the informal sector. This would offer them the opportunity to make good decisions about their current situations and future survival needs during old age. There is therefore the need to enlarge the choices of the people by empowering them so that they live a long-health and enjoy decent and fulfilling standard of living.

In conclusion, it is important to reiterate that empowerment in terms of financial knowledge plays an important role in making the informal sector workers more self-independent to make informed financial decision. Thus, financial literacy is a key factor in expanding their ability to increase their freedom of choices and actions in shaping their lives and helping them in having control over their decisions and resources.

Based on the foregoing findings, the study recommends that the National Pensions Regulatory Authority (NPRA) and Corporate Trustees should provide financial literacy education and training for the informal sector workers. The education should be tailored to savings, financial management, and financial benefits of the personal pension scheme.

Moreover, the government should develop a special educational programme for the informal sector workers and this can be done through workshops and seminars on the personal pension scheme. This programme should be evaluated on regularly so as to assess effects on the beneficiaries. It must be aimed at improving the financial literacy among the informal sector workers in the country. In order to make effective, the programme should be rolled out through the informal sector member associations in the country.

Furthermore, in coming up with its findings, certain interesting ideas emerged which requires further research. Thus, it has been shown that the empowering the informal sector workers through the provision of financial literacy and influence participation in the scheme. Therefore, future researchers should direct efforts at ascertaining how empowerment (financial) of the informal sector workers affects their pension contributions in terms of amounts and retirement funds. Furthermore, it is important for future studies to look at how financial literacy impacts on risk aversion and savings behaviour toward personal pension scheme among the informal sector workers.

### Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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