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Financial Knowledge as a Mediating Mechanism between Socioeconomic Determinants and Household Saving Behavior in the Pru East District, Ghana

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Abstract

The primary focus of the study was to explore how financial knowledge mediates the relationship between socioeconomic factors and saving behavior of households in Pru East District. A descriptive cross-sectional study design was employed. The population consisted of all household heads in Pru East District. A multi-stage cluster sampling and Stratified sampling techniques were used to select a sample of 365 households using structured questionnaires. Structured equation modeling (SEM) was used to assess both the direct and indirect pathways connecting financial knowledge, socioeconomic factors, financial literacy and saving behavior of households. The study's findings indicated that financial knowledge partially mediates and has an indirect significant association between socioeconomic factors and saving behavior of households. The model demonstrated a strong explanatory power ($R^2 = 0.728$). The study concluded that financial knowledge is a crucial means through which socioeconomic factors shape household saving behavior. Thus, financial literacy should be enhanced to facilitate the extension of the disrupted positive correlation between financial literacy and financial well-being, while also mitigating other detrimental contextual effects associated with specific socioeconomic factors.

Keywords: Financial knowledge, socioeconomic factors, mediation, household saving behavior

Introduction

Household Saving is an avenue for achieving financial stability and sustainable economic development, however, many households in developing countries like Ghana find it very difficult to save consistently (Ackah & Lambon-Quayefio 2023; Prempeh *et al*., 2024) [1, 33]. The connection between savings and economic growth has drawn more attention in a time when economic development is crucial, especially when considering emerging economies (Govdeli, 2022; Šubová *et al*., 2024) [15, 39]. In both macro and micro economies, savings play a number of essential roles. At the household level, savings offer a safety net that enables individuals and families to keep spending on durables, health care, and education while balancing consumption over time. Savings are a vital source of capital for investment at the national level, allowing for capital accumulation, higher production capacity, and long-term economic growth. Higher savings levels also contribute to overall economic stability and resilience by assisting economies in absorbing shocks and lowering reliance on foreign borrowing (Wanzala, & Obokoh, 2024) [43].

Persistent issues including substantial income inequality and high economic dependency, which affect household welfare and resource allocation, define Ghana's unique socioeconomic situation (Afful *et al*., 2019) [2]. However, many Ghanaians still lack financial literacy, which makes it difficult for them to make wise financial decisions and practice wise saving practices (Osabuohien & Karakara, 2018) [23]. In order to support sustainable economic growth, it is crucial to understand how financial knowledge can mediate the relationship between socioeconomic factors and household saving behavior. Recent research also demonstrates that increasing financial literacy and access to financial information significantly improves household financial well-being (Kuutol *et al*., 2024) [28].

Understanding household propensity to save requires not just identifying socioeconomic factors such as income level or education status of people but it needs to assess how

financial knowledge of households can be transformed into meaningful action. The will not just propel one's propensity to save but will also influence the extent to which his or her saving capacity is successfully utilized. Studies demonstrate that increased financial knowledge and literacy improve people's capacity to plan and save for future objectives, suggesting that knowledge must be put into practice to favorably influence saving behavior (Lusardi, 2008) [29].

Despite the recognized importance of savings in prior studies, the relationship between savings and its socioeconomic determinants such as income level and education attainment and the extent to which this relationship is mediated by financial knowledge remains underexplored especially within the context of Ghana.

Financial literacy and financial knowledge are often used interchangeably (Jonubi & Abad 2013; Cakebread 2014; Mbarire & Ali 2014) [21, 6, 32]. Prior studies have clearly differentiated these concepts. Financial literacy is defined as the measure of an individual's understanding of fundamental financial concepts and the necessary capability and confidence to manage personal finances through short-term decisions and long-term planning, taking into account the economic happenings and varying circumstances (Remund 2010; Suwanaphan 2013) [34, 40]. Financial knowledge on the other hand, refers to financial literacy knowledge and people's self-confidence towards their own financial actions (Huston 2010; Hung *et al*., 2023) [19, 18]. Gustman *et al*., 2012 [16], had a similar view; they saw financial knowledge as individuals' financial awareness about some financial concepts, while financial literacy is the ability to effectively apply financial knowledge and various financial skills.

Financial knowledge mediates the relationship between financial literacy and various aspects of financial management among individuals and households. It is a practical way of putting into practice what people have learnt on financial Literacy and puts into practice how they can easily save and invest. It serves as the buffer between socioeconomic status and decisions and actions concerning saving by empowering people with appropriate techniques for the management of their resources (Huston, 2010) [19].

Financial knowledge mediates the influence of socioeconomic factors on saving behavior. It improves people's capacity to analyze and apply financial data in order to make the proper decision on saving or investments (Klapper *et al*., 2013) [25]. However, the extent to which financial knowledge explains the relationship between socioeconomic factors and saving propensities has not been well investigated, especially in rural Ghana. This general ignorance of these dynamics means that the most effective ways of intervening to support better saving are not properly addressed. Thus, this study contributes to literature in three ways; it introduces financial knowledge as a mediating mechanism in rural Ghana, uses Structural Equation Modeling (SEM) to quantify indirect effects and provides district-level policy evidence for financial inclusion programs.

Objectives of the Study

The objectives of the study were:

1. To analyze how financial knowledge mediates the relationship between socioeconomic factors and household saving behavior.
2. To evaluate the structural relationships between socioeconomic factors, financial literacy, financial knowledge, and household saving behavior.

Review of Related Literature

Financial Knowledge and Saving Behavior

Many studies have shown that people with higher financial knowledge are more likely to engage in desirable financial behaviors, such as savings, deposits, mutual funds, and stocks, than those with lower financial literacy (Yang *et al*., 2024) [45]. Additionally, people with higher financial literacy make more prudent retirement plans (Lusardi and Mitchelli, 2007; Clark *et al*., 2017) [30, 8], engage in self-employment (Rostamkalaei *et al*., 2022) [35], and make sustainable savings and investments (Habidin *et al*., 2020) [17].

This study seeks to establish financial knowledge as a mediator between financial literacy, socioeconomic factors, and household saving behavior. Financial knowledge is therefore the link between financial literacy and financial decisions. It represents the necessary bridge between the theory of finance and the real-life application by making adjustments for practitioners to save.

Amoah *et al*., (2024) [46] examined how financial literacy mediates the effects of economic status on household saving. Using midpoint scores, their studies showed that saving behavior is directly determined by the socioeconomic status, and income level and education level are the most dominant factors affecting it; however, financial knowledge has a mediating effect on this relationship. They noted that based on household income or education level it was seen that higher income group and educated people have better access to enhanced financial literacy regarding saving and investments.

Chu *et al*., (2017) [7] evaluated the effectiveness of financial knowledge in changing the savings behavior in the households and discovered that it enables the ultimatum between practical financial working knowledge and the level of financial literacy. Their study supported the fact that people who have proper financial knowledge and understanding about issues like risk diversification, inflation, and others save more and better way. They also mentioned, 'Socio-economic asset conversion is also required to the financial literacy for saving.'

Xu *et al*., (2022) [44] investigated financial literacy's effect on financial behavior. Their study's result revealed that financial literacy has significant impact on financial behavior of people-this involves their long-term saving and financial planning and its effect varies by level of education. Furthermore, logical financial literacy, an understanding of investment, and financial effects improves people's financial capacity for saving and attaining a higher level of sustainable financial security. However, they posited that financial education efforts should focus on core and higher order knowledge domains for enhancing the capacity of households of all income classes.

Huston (2010) [19] also paid attention to the mediating variable of financial literacy to execute saving decisions. This study distinguishes between financial literacy as the possession of financial knowledge and financial knowledge as the ability to apply that knowledge in managing financial matters. In this capacity, Huston also stressed that people with more banking literacy persevering with their saving

behaviors accordingly to their end goals, irrespective of their incomes.

Atkinson and Messy (2012) [4] also involve cross-country comparison of financial literacy and saving, with focus on the need to close the gap. Lack of basic literacy in finances also confirmed the authors' hypothesis that people from developing countries do not save as frequently as those from developed countries. This study also a pointed out that financial literacy enhances the overall favorable impact of income and education level on saving and, as a result, suggests that financial literacy is a mediator between the socio-economic determinant and saving behavior.

The relationship between financial literacy, financial knowledge and saving behavior was studied by Van Rooij *et al*., (2011) [42] in the Netherlands. According to their study, it was revealed that the higher level of financial literacy does affect the matters of saving and investing for the households. They showed that the strategic and possibly efficient savings of a household and utilization of the resources in a bid to achieve a set goal is dependent on the level of understanding one has in financial markets and products.

Lusardi and Tufano (2015) [31] discussed an aspect of financial literacy. It also emerged that checking financial knowledge increases people's ability to avoid debts and improve their savings. They also noted that financial literacy improves-personal predispositions associated with economic behaviors by making people more aware of the implications of their decisions about saving and spending in the distant future.

Socio-economic factors, financial literacy, financial knowledge and saving behavior are indicated to have a symbiotic relationship in literature. It is important to note that low financial literacy and general lack of financial knowledge throughout growing economies is a fundamental hurdle in promoting household savings. Combining these variables' structural connections, policy makers and practitioners can create coordinated interventions in order to enhance financial status and economic stability.

Improving financial literacy, for instance, in Ghana and other similar developing countries transform the economy. Students' exposure to the practical aspects of finance such as budgeting, goal setting, credit management, and understanding various financial products can equip them to guide their households toward the effective management of scarce resources and the achievement of long-term financial objectives. It is particularly noteworthy that such interventions are relevant in places where consumers' access to borrowing and other financial services is still restricted.

Materials and Methods

The study employed a cross-sectional survey research design to evaluate the mediating role of financial knowledge in the relationship between socioeconomic determinants and household saving behavior within Pru East District, Ghana (Creswell & Creswell, 2018; Bryman, 2016) [11, 5]. Data collection was conducted using structured questionnaires from 385 respondents with a response rate of 92.5%. Stratified random sampling was employed to ensure adequate representation according to gender, age, education, occupation, and income group in the district (Etikan & Bala, 2017) [12]. The target population was household heads and members of working age engaged in farming, trading, fishing, and other economic livelihood activities for household livelihood purposes (GSS, 2021) [14]. The questionnaire contained close and open-ended questions that recorded demographic characteristics, income levels, employment status, and saving behavior (Cohen *et al*., 2002) [10].

Socioeconomic factors and saving behavior of respondents were summarized using descriptive measures such as frequencies, percentages, and means (Kumar, 2019) [27]. To establish the mediating role of financial knowledge between hypothesized associations of socioeconomic characteristics and household saving behavior, Structural Equation Modeling (SEM) to establish both direct and indirect effects. Statistical analyses were carried out with SPSS version 25 and AMOS 24, utilizing $p<0.001$ levels of significance. Adequacy of the model was confirmed through the employment of Chi-square tests, Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), and Root Mean Square Error of Approximation (RMSEA).

Sampling design

The study used the multi-stage sampling technique to sample households from the target population in the Pru East District, Ghana (Sharma, 2017; Taherdoost, 2016) [37, 41]. The first procedure was to segment the district into the urban and rural zone to be able to recruit sufficient numbers of households from both areas. The second stage in this sample involved choosing a random sample of the communities in the each of the stratum drawn by using the probability proportion to size (PPS) so that, the larger communities are likely to be chosen than the smaller ones (Etikan & Bala, 2017) [12]. The third phase was to obtain a target sample of households within each of the selected community through systematic random sampling, whereby one has to pick a sample every 'k' household from a complete list of households in the community (Singh & Masuku, 2014) [38]. The value of k was calculated by dividing the total number of households in that community by the sample number in that particular community. Multi-stage sampling enabled selection of a statistically significant number of households from the target population, and at the same time, geographical dispersion of the sample and variability in socioeconomic status and financial knowledge across the communities in Pru East District.

Sample Size Determination

The sample size was determined using Cochran's formula for categorical data, which is appropriate for estimating sample sizes when the population proportion is unknown (Cochran, 1977; Bartlett *et al*., 2001) [9, 26]. The formula is as follows:

$$n = (Z^2 \times p \times (1-p)) / e^2$$

Where:
n = Sample size
Z = Z-value (e.g., 1.96 for a 95% confidence level)
p = Estimated proportion of the population (0.5 is used as a conservative estimate)
e = Desired level of precision (margin of error)

To calculate the sample size, a confidence level of 95% (Z = 1.96), an estimated population proportion of 0.5, and a desired precision of ±5% (e = 0.05) were used.

Applying the formula:
n = (1.96^2 × 0.5 × (1-0.5)) / 0.05^2
n = (3.8416 × 0.25) / 0.0025
n = 0.9604 / 0.0025
n = 384.16

Utilizing Cochran's formula for sample size determination with categorical data, and based on the total population of 101,545, the minimum sample size of 385 households would be required to achieve a 95% confidence level with a ±5% margin of error (desired level of precision)

Measurement of Variables

A structured survey was used in this study to assess household saving behavior, financial literacy, financial knowledge, and socioeconomic characteristics. To guarantee content validity, all constructs were measured using multi-item reflecting measures that were modified from reputable prior studies of Gedela (2012) [13], Jonubi & Abad (2013) [21], and Jappelli & Padula (2013) [20]. Financial knowledge items were modified from Van Rooij *et al*., (2011) [42] and Klapper *et al*., (2015) [25], while financial literacy measures were taken from Lusardi & Mitchell (2017) [8] and Atkinson & Messy (2012) [4]. The household saving behavior elements were modified from Jonubi, & Abad (2013) [21] & Gedela (2012) [13].

A 7-point Likert scale, which ranges from 1 = Strongly Disagree to 7 = Strongly Agree, was used to measure each item. This scale is suitable for recording perceptual and attitudinal responses in behavioral finance research. Two dimensions were used to operationalize socioeconomic factors: income and employment status and education and development status. These variables included the respondents' employment circumstances, income stability, and educational aptitude to handle financial resources. Basic financial knowledge and financial management abilities were used to measure respondents' financial literacy, which reflected their capacity to understand financial ideas and use them in day-to-day financial decisions, attitudes that represent both saving behaviors and underlying motivating orientations.

The inclusion of several items per construct increased measurement precision and decreased random error in structural equation modeling.

Reliability and Validity of Constructs

The study constructs' validity and reliability tests are shown in Table 1 below. Cronbach's alpha ranges from 0.938 to 0.958 beyond the suggested threshold of 0.70, indicating good internal consistency. The reliability of the assessment scales used in the study is further supported by the fact that all of the constructs' CR values lie between 0.939 and 0.959. Convergent validity is thus supported because all constructions' AVE values, which range from 0.688 to 0.768, are significantly higher than the minimum permissible level of 0.50. This suggests that their latent conceptions are sufficiently captured by the corresponding indicators.

Additionally, discriminant validity is proven. Each construct is empirically distinct from the others if the square root of AVE (√AVE) is greater than both the maximum shared variance (MSV) and the average shared variance (ASV). Overall, the findings show that the measurement model has convergent and discriminant validity in addition to satisfactory reliability, indicating that it is appropriate for further structural study.

Table 1: Reliability and Validity Analysis

Construct	Cronbach's α	CR	AVE	√AVE	MSV	ASV
Socioeconomic Factors	0.950	0.951	0.737	0.858	0.634	0.589
Financial Literacy	0.938	0.939	0.688	0.829	0.659	0.612
Financial Knowledge	0.958	0.959	0.768	0.876	0.582	0.543
Saving Behavior	0.945	0.946	0.715	0.846	0.634	0.595

***Source*:** Field Survey, (2025)

Data Normality and Justification

Kolmogorov-Smirnov and Shapiro-Wilk statistical tests for normality showed that the p-values for all constructs exceeded the significance criterion (p<0.05), thus indicating deviations from normality as shown in table 2. Nevertheless, normality assessments based only on significance statistics may not be entirely dependable, especially when a relatively large sample is involved. Further distributional characteristics of the data in skewness and kurtosis scores are also observed to be within the acceptable bounds of −2 and +2, based on the basis of these factors. Furthermore, it can be sufficiently mentioned that SEM is resistant in the face of non-normality in data distribution, particularly when sample sizes are big enough and the maximum likelihood technique of estimation is used. Because of these factors, the use of SEM in this study is both theoretically and methodologically sound and consistent with empirical practices seen in the literature on financial behavior.

Table 2: Assessment of Data Normality

Variable	Kolmogorov-Smirnov		Shapiro-Wilk	
	Statistic	p-value	Statistic	p-value
Socioeconomic Factors	0.092	0.001	0.947	0.002
Financial Literacy	0.088	0.001	0.952	0.003
Financial Knowledge	0.095	0.001	0.944	0.001
Saving Behavior	0.087	0.001	0.956	0.004

***Source*:** Field Survey, (2025)

Results

Table 3: Bio-data of respondents

Characteristic	Category	Frequency (n)	Percentage (%)	Cumulative (%)
Gender	Male	197	54.0	54.0
	Female	168	46.0	100.0
Age Group	18-30 years	84	23.0	23.0
	31-40 years	99	27.0	50.0
	41-50 years	97	26.5	76.5
	51-60 years	78	21.5	98.0
	Above 60 years	7	2.0	100.0
Education Level	No formal education	60	16.5	16.5
	Primary education	135	37.0	53.5
	JHS/Middle School	170	46.5	100.0

***Source*:** Field Survey (2025)

Table 4: Employment and Experience Profile

Characteristic	Category	Frequency (n)	Percentage (%)	Cumulative (%)
Employment Status	Employed (formal)	95	26.0	26.0
	Self-employed	113	31.0	57.0
	Farmer	75	20.5	77.5
	Unemployed	82	22.5	100.0
Monthly Income	Below GH₵500	113	31.0	31.0
	GH₵500 - GH₵1,000	75	20.5	51.5
	GH₵1,001 - GH₵2,000	97	26.5	78.0
	GH₵2,001 - GH₵3,000	40	11.0	89.0
	Above GH₵3,000	40	11.0	100.0

***Source*:** Field Survey (2025)

Table 5: Household Composition Analysis

Characteristic	Category	Frequency (n)	Percentage (%)	Cumulative (%)
Family Size	1-3 members	82	22.5	22.5
	4-6 members	97	26.5	49.0
	7-9 members	137	37.5	86.5
	Above 9 members	49	13.5	100.0
Dependents	None	75	20.5	20.5
	1-2 dependents	97	26.5	47.0
	3-4 dependents	113	31.0	78.0
	5 or more	80	22.0	100.0

***Source*:** Field Survey, (2025)

The respondents' bio data, employment, and household composition are shown in Tables 3 to 5 above. The sample comprised 54% males and 46% females, indicating a relatively balanced gender distribution. Most respondents were within the economically active age range (31–50 years), suggesting that the analysis largely reflects households with income-earning responsibilities.

Educational level of respondents was generally low, with most of them having no formal education, primary education, or junior high/middle school education, reflecting the educational profile common in rural communities in Ghana. In terms of employment, self-employment and farming dominated, while a notable proportion of respondents reported being unemployed. Income levels were modest, with more than half of the respondents earning GH₵1,000 or less per month.

Family composition data indicates large household sizes and high dependency ratios, which are likely to place significant pressure on household financial resources and constrain saving behavior.

Table 6: Descriptive Statistics of Study Constructs

Construct	Item	Mean	Std. Deviation	Skewness	Kurtosis
Socioeconomic Factors	SEF_IES1	5.34	1.829	-0.584	-0.688
	SEF_IES2	5.48	1.747	-0.687	-0.448
	SEF_IES3	5.43	1.835	-0.744	-0.464
	SEF_IES4	5.52	1.800	-0.919	-0.143
	SEF_EDS1	5.39	1.710	-0.533	-0.604
	SEF_EDS2	5.65	1.581	-0.518	-0.423
	SEF_EDS3	5.62	1.655	-0.402	-0.704
Financial Knowledge	FK_BFK1	5.82	1.834	-0.744	-0.464
	FK_BFK2	5.95	1.800	-0.919	-0.143
	FK_BFK3	5.39	1.710	-0.533	-0.604
	FK_AFK1	5.65	1.581	-0.518	-0.423
	FK_AFK2	5.62	1.655	-0.402	-0.704
	FK_AFK3	5.71	1.628	-0.629	-0.343
	FK_AFK4	5.72	1.648	-0.521	-0.507
Saving Behavior	HSB_SP1	5.70	1.810	-0.613	-0.587
	HSB_SP2	5.75	1.817	-0.559	-0.657
	HSB_SP3	5.80	1.759	-0.575	-0.578
	HSB_SA1	5.98	1.772	-0.827	-0.258
	HSB_SA2	5.76	1.792	-0.590	-0.644
	HSB_SA3	5.93	1.855	-0.698	-0.565
	HSB_SA4	5.93	1.807	-0.646	-0.571

***Source*:** Field Survey, (2025)

The descriptive statistics for the study's constructs are shown in Table 6. Every item in this study has a mean score higher than 5.0, indicating a high level of agreement about socioeconomic characteristics, financial knowledge, and saving behavior of respondents. The allowed range for the standard deviations is between 1.581 and 1.855. All variables have a negative skewness (–0.402 to –0.919), which indicates a preference for larger Likert scale categories. Additionally, all variables are flatter than a normal distribution, as indicated by their negative kurtosis values (–0.143 to –0.704). However, all skewness and kurtosis statistics fall within acceptable bounds, making them suitable for multivariate analysis.

Table 7: Hypothesis Testing Results

Path	Direct Effect	t-value	p-value	R^2	Status
Direct Effects					
H1: SEF → HSB	0.779	17.474	0.000	0.607	Supported
H2: FL → HSB	0.897	28.559	0.000	0.805	Supported
H3: FK → HSB	0.810	19.432	0.000	0.656	Supported
Mediation Analysis					
H4: SEF → FK → HSB	0.511	4.961	0.000	0.728	Supported

***Source*:** Field Survey (2025)

*Notes: SEF=Socioeconomic Factors, FL=Financial Literacy, FK=Financial Knowledge, HSB=Household Saving Behavior. Bold diagonal elements represent square root of AVE. ***p<0.001;*

Table 8: Path Analysis Results Summary

Path Direction	Direct Effect (β)	Indirect Effect	Total Effect	T-Value	P-Value	Significance
SEF → HSB	0.779	-	0.779	17.474	0.000	***
FL → HSB	0.897	-	0.897	28.559	0.000	***
FK → HSB	0.810	-	0.810	19.432	0.000	***
SEF → FK	0.511	-	0.511	4.961	0.000	***
SEF → FK → HSB	-	0.414 (0.511 × 0.810)	1.193	4.228	0.000	***

***Source*:** Field Survey (2025)

The results from table 7 reveal that all hypothesized relationships are statistically significant (p>0.001). Socioeconomic variables positively relate the savings behavior of the household (β = 0.779), explaining 60.7% of the variance, thereby supporting hypothesis H1. The financial literacy variable has the most significant impact on savings behavior (β = 0.897), explaining 80.5% of the variance in the explained variable, thereby supporting hypothesis H2. The financial knowledge variable positively affects the savings behavior of the household (β = 0.810), explaining 65.6% of the variance, thereby supporting hypothesis H3.

Results from the mediation analysis as depicted in table 8, suggest financial knowledge as a significant mediator for the interplay between socioeconomic variables and saving behavior among households with a value of β = 0.511; the model now explains 72.8% of the variation, thus confirming H4. On the whole, the path analysis explains the dominance of financial knowledge as the determinant of variation in saving behavior across households.

Table 9: Model Fit Indices

Index	Estimated Value	Threshold	Status
CMIN/DF	1.246	< 3	Excellent
SRMR	0.014	< 0.08	Excellent
IFI	0.918	> 0.9	Good
TLI	0.908	> 0.9	Good
CFI	0.918	> 0.9	Good
RMSEA	0.025	< 0.08	Excellent

Table 10: Discriminant Validity (Fornell-Larcker Criterion)

Construct	SEF	FL	FK	HSB
Socioeconomic Factors	0.858			
Financial Knowledge	0.763***	0.697***	0.876	
Saving Behavior	0.725***	0.812***	0.810***	0.846

The values of model fit indices shown in Table 9 above indicate a good fitness of the structural model specified. The value of 1.246 for CMIN/DF, SRMR of 0.014, and RMSEA of 0.025 is well within acceptable parameters of fitness, indicating a perfect fitness of the model specified with the data obtained. The incremental fits of the model also indicate fitness since IFI = 0.918, TLI = 0.908, and CFI = 0.918 are above the threshold values of fitness requirements. Discriminant validity, tested via the Fornell-Larcker criterion (Table 10), is also confirmed. For each construct, the square root of AVE (displayed as diagonal elements) is greater than the construct correlations, disclosing that socioeconomic, financial literacy, financial knowledge, as well as saving behavior constructs are distinct. All the above outcomes provide evidence for the adequacy of the structural and measurement models to address the research hypotheses.

Discussion

Financial Knowledge as a Mediator between Socioeconomic Factors and Household Saving Behavior

The results show that financial literacy, financial knowledge and socioeconomic factors are strong predictors of the behavior of savings among the members of a household. In this study, financial literacy was identified as a predictor which accounts for the highest proportion of variation in the behavior of savings, followed by financial knowledge and then socioeconomic factors. The role of financial knowledge was further identified as a mediator in the relation between socioeconomic factors and the savings behavior of the members of the household.

The direct relationship between socioeconomic factors and savings' behavior is supported by previous studies highlighting the significance of stability in income, employment, and education in influencing the capacity to save (Agyei, 2018; Ofori-Abebrese *et al*., 2017) [47, 48]. With reference to this finding, it is argued that household with stable sources of income and higher exposure to education has better financial discipline and planning.

More significantly, the explanatory strength of financial literacy has been reaffirmed by the international evidence supporting savings as a major determinant through financial literacy (Kaiser & Menkhoff, 2017; Sethi & Acharya, 2018) [46, 36]. This is in contrast to the fact that socioeconomic variables mainly measure the ability to save instead of influencing savings directly, as in the case of financial literacy. This difference contributes to the explanation of why the variance in savings, as measured by financial literacy, exceeds the variance measured by socioeconomic variables.

An additional factor that supports the results of Chu *et al*., (2017) [7] and Xu *et al*., (2022) [44] is the mediating effect of financial knowledge, which acts as a mechanism that converts socioeconomic resources into effective financial behaviors through this factor. The findings however, demonstrate that financial knowledge functions as a cognitive transmission channel between structural socioeconomic factors and actual saving behavior, expanding both behavioral finance and life-cycle saving theories, implying that without understanding how to operationalize socioeconomic resources, they are insufficient on their own to guarantee better financial results. The results make clear the difference between financial knowledge, which is a more focused and useful tool for predicting behavioral outcomes, and financial literacy, which is a general competence.

From a policy perspective, the findings suggest that if income enhancement techniques are used separately, financial capability may have little impact on saving behavior. Financial education is another important and successful strategy that could improve saving habits. This may be explained by the fact that it has a direct impact on financial decision-making.

Overall Model Assessment

The measure overall proves to be both highly reliable and valid, which is borne out by the study's testing of the theoretical model in the papers under consideration. Measurement model analysis shows acceptable psychometric evidence based on factor loadings (0.748-0.904); Cronbach's alpha (0.938-0.958); and composite reliability (0.939-0.959) (Amoah *et al*., 2024; Kimiyaghalam & safari, 2015) [46, 25]. Average variance extracted (AVE) values (0.688 to 0.768) are used to show convergent validity, while the Fornell-Larcker criterion test is used to confirm the discriminant validity (Amoah *et al*., 2024; Chu *et al*., 2017; Xu *et al*., 2022) [46, 7, 44].

The CMIN/DF, RMSEA, IFI, TLI, and CFI of structural model are 1.246, 0.025, 0.918, 0.908, and 0.918 respectively, which reflect the satisfactory performance of model specification (Amoah *et al*., 2024; Kaiser & Menkhoff, 2017; Sethi & Acharya, 2018) [46, 22, 36]. Significant direct effects of all key variables and substantial R^2 values underscore the model's explanatory power (Amoah *et al*., 2024; Kimiyaghalam and Safari, 2015) [46, 25]. The study's methodological rigor, including large sample size and sophisticated statistical analysis, enhances result generalizability (Amoah *et al*., 2024; Kimiyaghalam & Safari, 2015; Xu *et al*., 2022) [46, 24, 44].

Major Findings: The following major findings were drawn from each research question:

Mediating Role of Financial Knowledge

1. The study indicated that financial knowledge mediates and has indirect relationship between the socioeconomic factors and the saving behavior among households.
2. The study's results revealed that both basic and advanced financial management knowledge dimension (FMKD) were useful in the effort to transform socioeconomic factors into positive saving benefits.

Structural Relationships between socioeconomic factors, financial literacy, financial knowledge, and household saving behavior

1. The results on the analysis on the structural relationship revealed that socioeconomic factors, financial literacy, financial knowledge and household saving behavior were mediators that embraced an extensive model that enhanced the reliability, validity, and explanation of the study.
2. The results also revealed the relevance and validity of the structural relationships amongst the proposed constructs, underlying the influential direct impacts of these strategic orientations on firm performance as evidenced by important t-values, high R^2 values, and perfect model fit indices.

Recommendations

In order to improve the saving behavior of households, the proposed recommendations in the study are based on evidence at the following three levels:

Policy Level

The Ministry of Finance and the Bank of Ghana may consider strengthening financial literacy initiatives, especially at a national level and through programs for low and middle-income earners.

Institutional Level

The banks and micro-finance institutions could also improve their customer engagement activities by incorporating basic knowledge-based educational elements into the account opening process, online platforms, and savings schemes to enable more enlightened participation.

Household level

Households can gain from functional financial literacy programs that showcase budgeting, goal achievement, and saving by applying financial knowledge to saving behavior.

Conclusion

The study provides a comprehensive framework for understanding saving behaviors in Ghana, demonstrating strong theoretical alignment and practical implications. The findings emphasize the interconnected nature of socioeconomic factors, financial literacy, and knowledge in shaping saving behavior, suggesting opportunities for future research in longitudinal studies and specific intervention strategies. Financial knowledge emerges as a mediating factor that influences the relationship between socioeconomic situations and saving activity in the sample. The financial knowledge enables individuals to translate theoretical financial literacy into practice by developing realistic financial plans, such as setting achievable savings goals, selecting appropriate savings instruments, and minimizing common financial pitfalls. Enhancing financial literacy may help strengthen the positive link between financial literacy and financial well-being and offset adverse contextual factors typically associated with certain socioeconomic conditions.

References

1. Ackah C, Lambon-Quayefio M. Domestic savings in sub-Saharan Africa: The case of Ghana. WIDER Working Paper No. 2023/38. Helsinki: UNU-WIDER; c2023.
2. Afful JB, Nunoo J, Arthur-Biney A. Income and wealth in Ghana: issues of distribution and determinants. UDS International Journal of Development. 2019;6(2):42-78.
3. Tetteh CK, Osei-Bonsu N, Pomeyie P, Ahiabor G, Hughes G, Otchere-Ankrah B, *et al*. Determinants of household saving behaviour in Ghana. Cogent Economics & Finance. 2024;12(1):2420220.
4. Atkinson A, Messy FA. Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study. OECD Working Papers on Finance, Insurance and Private Pensions, No. 15. Paris: OECD Publishing; c2012.
5. Bryman A. Social research methods. 5th ed. Oxford: Oxford University Press; c2016.
6. Cakebread C. Why Should Employers Care About Financial Literacy?. Plans & Trusts. 2014;32(3).
7. Chu Z, Wang Z, Xiao JJ, Zhang W. Financial literacy, portfolio choice and financial well-being. Social Indicators Research. 2017;132(2):799-820.
8. Clark R, Lusardi A, Mitchell OS. Employee financial

literacy and retirement plan behavior: a case study. Economic Inquiry. 2017;55(1):248-259.
9. Cochran WG. Sampling techniques. 3rd ed. New York: John Wiley & Sons; c1977.
10. Cohen L, Manion L, Morrison K. Research methods in education. 5th ed. London: Routledge; c2002.
11. Creswell JW, Creswell JD. Research design: Qualitative, quantitative, and mixed methods approaches. 5th ed. Thousand Oaks: SAGE; c2018.
12. Etikan I, Bala K. Sampling and sampling methods. Biometrics & Biostatistics International Journal. 2017;5(6):215–217. Available from: https://doi.org/10.15406/bbij.2017.05.00149
13. Gedela SPR. Determinants of saving behaviour in rural and tribal households (An empirical analysis of Visakhapatnam District). International Journal of Research in Social Sciences. 2012;2(3):108-128.
14. Ghana Statistical Service (GSS). 2021 Population and Housing Census: General Report. Accra: GSS; c2021.
15. Govdeli T. Economic growth, domestic savings and fixed capital investments: analysis for Caucasus and central asian countries. Montenegrin Journal of Economics. 2022;18(3):145-153.
16. Gustman AL, Steinmeier TL, Tabatabai N. Financial knowledge and financial literacy at the household level. American Economic Review. 2012;102(3):309-313.
17. Habidin NF, Zubir AFM, Fuzi NM, Salleh MI. The relationship between sustainable manufacturing practices, lean improvement and performance. World Review of Entrepreneurship, Management and Sustainable Development. 2020;16(1):92-107.
18. Hung TK, Tian M, Lee SL. The relationship between characteristics of the source of knowledge and knowledge transfer performance: moderated mediation examination of political skill. Management Decision. 2023;61(5):1132-1155.
19. Huston SJ. Measuring financial literacy. Journal of Consumer Affairs. 2010;44(2):296-316.
20. Jappelli T, Padula M. Investment in financial literacy and saving decisions. Journal of Banking & Finance. 2013;37(8):2779-2792.
21. Jonubi A, Abad S. The impact of financial literacy on individual saving: An exploratory study in the Malaysian context. Transformations in Business & Economics. 2013;12(1):28.
22. Kaiser T, Menkhoff L. Does financial education impact financial literacy and financial behavior, and if so, when?. The World Bank Economic Review. 2017;31(3):611-630.
23. Karakara AAW, Sebu J, Dasmani I. Financial literacy, financial distress and socioeconomic characteristics of individuals in Ghana. African Journal of Economic and Management Studies. 2022;13(1):29-48.
24. Kimiyaghalam F, Safari M. Review papers on definition of financial literacy and its measurement. SEGi Review. 2015;8(July):81-94.
25. Klapper L, Lusardi A, Panos GA. Financial literacy and its consequences: Evidence from Russia during the financial crisis. Journal of Banking & Finance. 2013;37(10):3904-3923.
26. Kotrlik JW, Higgins CC. Organizational research: Determining appropriate sample size in survey research. Information Technology, Learning, and Performance Journal. 2001;19(1):43.
27. Kumar R. Research methodology: A step-by-step guide for beginners. 5th ed. London: SAGE; c2019.
28. Kuutol PK, Mbonigaba J, Garidzirai R. Financial Literacy and Financial Well-Being in Rural Households in Ghana: The Role of Financial Information Consumption. Sustainability. 2024;16(19):8380.
29. Lusardi A. Household saving behavior: The role of financial literacy, information, and financial education programs. NBER Working Paper No. w13824. Cambridge: National Bureau of Economic Research; c2008.
30. Lusardi A, Mitchelli OS. Financial literacy and retirement preparedness: Evidence and implications for financial education: The problems are serious, and remedies are not simple. Business Economics. 2007;42(1):35-44.
31. Lusardi A, Tufano P. Debt literacy, financial experiences, and overindebtedness. Journal of Pension Economics & Finance. 2015;14(4):332-368.
32. Mbarire TT, Ali AI. Determinants of financial literacy levels among employees of Kenya Ports Authority in Kenya. Research Journal of Finance and Accounting. 2014;5(16):44-52.
33. Prempeh A, Osei B, Osei F. Financial literacy and saving behaviour among tertiary students. Journal of Business Management and Accounting (JBMA). 2024;14(1):115-142.
34. Remund DL. Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. Journal of Consumer Affairs. 2010;44(2):276-295.
35. Rostamkalaei A, Nitani M, Riding A. Self-employment, financial knowledge, and retirement planning. Journal of Small Business Management. 2022;60(1):63-92.
36. Sethi D, Acharya D. Financial inclusion and economic growth linkage: Some cross country evidence. Journal of Financial Economic Policy. 2018;10(3):369-385.
37. Sharma G. Pros and cons of different sampling techniques. International Journal of Applied Research. 2017;3(7):749-752.
38. Singh AS, Masuku MB. Sampling techniques & determination of sample size in applied statistics research: An overview. International Journal of Economics, Commerce and Management. 2014;2(11):1-22.
39. Šubová N, Buleca J, Affuso E, Mixon Jr FG. The link between household savings rates and GDP: Evidence from the Visegrád group. Post-Communist Economies. 2024;36(2):197-221.
40. Suwanaphan S. Personal Financial Literacy of Academic Support-Employee in Chiang Mai University. In: Active Citizenship by Knowledge Management & Innovation: Proceedings of the Management, Knowledge and Learning International Conference 2013. ToKnowPress; c2013. p. 1061-1065.
41. Taherdoost H. Sampling methods in research methodology; how to choose a sampling technique for research. International Journal of Academic Research in Management (IJARM). 2016;5(2):18-27.
42. Van Rooij M, Lusardi A, Alessie R. Financial literacy

and stock market participation. Journal of Financial Economics. 2011;101(2):449-472.
43. Wanzala RW, Obokoh LO. Savings and sustainable economic growth nexus: A South African perspective. Sustainability. 2024;16(20):8755.
44. Xu S, Yang Z, Ali ST, Li Y, Cui J. Does financial literacy affect household financial behavior? The role of limited attention. Frontiers in Psychology. 2022;13:906153.
45. Yang TY, Tsai PH, Chiang TF. The effect of financial knowledge on ass*et al*location for Chinese households. Pacific Economic Review. 2024;29(4):442-468.
46. Amoah DK. Gender inequality in legislative representation: the case of women representation in Ghana's Parliament. SN Social Sciences. 2024;4(7):138.
47. Agyei SK. Culture, financial literacy, and SME performance in Ghana. Cogent Economics & Finance. 2018;6(1):1463813.
48. Ofori-Abebrese J, Pickson RB, Ofori-Abebrese G. Commodity prices, exchange rate and economic growth in West Africa: Case study of Cote dIvoire and Ghana. Journal of Development and Agricultural Economics. 2017;9(9):269-277.