Research Journal of Finance and Accounting
ISSN 2222-1697 (Paper) ISSN 2222-2847 (Online)
Vol.16, No.9, 2025

How Financial Risk Tolerance Mediates Between Financial Literacy and Household Wealth of Employees in Ghana

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Abstract
This study explores the role of financial risk tolerance as a mediator between financial literacy and household wealth among employees in Ghana. Adopting a cross-sectional quantitative research design, data were collected using a structured questionnaire with a five-point Likert scale from employees in both public and private sectors. The analysis, conducted through partial least squares structural equation modeling, revealed that financial literacy significantly influences household wealth, both directly and indirectly, through financial risk tolerance. The results demonstrated that financial risk tolerance serves as a complementary mediator, enhancing the effect of financial literacy on household wealth. Specifically, employees with higher financial literacy levels exhibited greater risk tolerance, which in turn positively affected their wealth accumulation. The study also finds that demographic factors, particularly age and education level, significantly control the relationship between financial literacy and household wealth. However, gender was not found to have a significant control effect on this path. This research contributes to the literature by emphasizing the importance of financial risk tolerance in the wealth-building process and offers new insights for policymakers to design strategies that foster both financial literacy and risk tolerance, ultimately promoting financial well-being among employees in Ghana.
Keywords: Financial Risk Tolerance; Financial Literacy; Household Wealth; Financial Well-Being; Financial Education
DOI: 10.7176/RJFA/16-9-03
Publication date: November 30th 2025

1. Introduction

Individuals and households in Ghana face increasingly complex financial decisions as the country's financial markets evolve and diversify. While some economic decisions may rely on personal experience, age, or intuition (de Bruin, Parker, & Fischoff, 2007; Juliusson, Karlsson, & Gärling, 2005), others, such as retirement planning, investment diversification, and wealth creation, demand a higher level of financial literacy and skills. Financial literacy equips individuals with the knowledge to navigate these complexities, helping them make informed decisions that promote economic security. In Ghana, the lack of comprehensive financial education has posed significant challenges for households and individuals seeking to improve their financial well-being. Studies indicate that financial literacy not only enhances individual decision-making but also plays a crucial role in national economic development (Lusardi, 2008; Mandell, 2009). Financial literacy has been shown to positively influence the financial decision-making of families and consumer economic units (Joo and Grable 2004; Balasubramnian and Sargent 2020; Dorhetso, 2024). Low financial literacy levels are linked to suboptimal financial decisions, which can result in inadequate resource management and slow economic growth. A critical shift in global financial management has also been observed, with individuals increasingly bearing the responsibility for financial planning tasks such as retirement savings, insurance acquisition, and long-term investments. Previously managed by governments or employers, these tasks now demand individuals to be financially savvy (Mitchell & Lusardi, 2011). For Ghanaian employees, this shift underscores the importance of financial literacy, especially as the financial ecosystem grows in sophistication. Rapid advancements in financial technologies, or fintech, have further complicated financial decision-making, with challenges like perceived risk and lack of trust influencing behaviors (Dorhetso, 2023).

While global studies highlight the benefits of financial literacy, such as improved retirement planning and savings (Joo & Grable, 2004; Balasubramnian & Sargent, 2020), Ghana-focused research has predominantly targeted youth and young adults (Ansong & Gyensare, 2012; Mireku, 2015). This leaves a significant gap in understanding how financial literacy impacts Ghanaian employees, a vital demographic for economic stability. Employees in Ghana are key contributors to household wealth but remain underrepresented in financial literacy

research. As financial literacy is essential for effective wealth creation and financial planning, understanding its impact on Ghanaian employees' household wealth is vital. Additionally, financial risk tolerance, an individual's ability to endure potential financial losses in pursuit of returns, has the potential to play a mediating role in the relationship between financial literacy and wealth accumulation. The interplay between these variables provides critical insights into how employees can optimize their financial behaviors to build sustainable household wealth. This study investigates the potential mediating role of financial risk tolerance in the relationship between financial literacy and household wealth among employees in Ghana. By leveraging primary data and employing the partial least squares structural equation modeling (PLS-SEM) technique, the study aims to provide valuable insights into how financial literacy and risk tolerance interplay to influence wealth creation. These findings are expected to inform policymakers and researchers on strategies for improving financial literacy and risk management, contributing to the economic well-being of Ghanaian employees.

2.0 Literature Review and Hypotheses

2.1 Theoretical Framework

This study is underpinned by two theories: family financial socialization theory (Gudmunson & Danes, 2011); and economic theory of self-control (Thaler & Shefrin, 1981). The family financial socialization theory suggests that individuals' financial behaviors are shaped by family interactions and characteristics. Through familial communication and practices, individuals gain knowledge about financial systems, which subsequently influences their financial decision-making and wealth management. In the Ghanaian context, where family structures often play a pivotal role in shaping behavior, this theory provides a lens for understanding how employees acquire and apply financial literacy.

The economic theory of self-control emphasizes the dual roles individuals play as farsighted planners and short-sighted actors. It highlights the conflict individuals face when balancing immediate consumption with long-term financial planning. This theory is particularly relevant to Ghanaian employees who must navigate savings decisions amidst competing financial demands, such as high dependency ratios and fluctuating economic conditions. Together, these theories provide a comprehensive framework for analyzing the relationship between financial literacy, risk tolerance, and household wealth.

2.2 Financial Literacy and Determinants

While there is no universal definition of financial literacy, several definitions used by prominent researchers in the field include Lusardi and Mitchell (2007), Lusardi (2008), Mandell (2008), and Schwab et al. (2009). Lusardi and Mitchell (2007) initially defined financial literacy as "the most basic economic concepts needed to make sensible saving and investment decisions." Lusardi (2008) expanded this definition, emphasizing knowledge of basic financial concepts like compounding interest, nominal vs. real values, and risk diversification. According to research (Ahamed, 2025; Schwab et al., 2009), financial literacy is defined as the ability to use financial knowledge and skills to manage financial resources for a lifetime of financial wellbeing. Financial literacy encompasses an understanding of economic principles, money management, saving, and investment decisions. While financial literacy is defined differently by various scholars, it generally involves the ability to understand and evaluate financial tools, manage resources effectively, and make responsible decisions regarding planning, wealth accumulation, and debt (Lusardi & Mitchell, 2007; Lusardi, 2008b; Mandell, 2008; Schwab et al., 2009). This study aims to measure the financial literacy of Ghanaian employees and examine its relationship with household wealth creation.

Numerous studies have examined how demographic factors such as age, gender, education, income, and work experience influence financial literacy (Binswanger & Carman, 2012; Lusardi & Mitchell, 2015). Socio-cultural factors, such as cultural norms and family financial practices, also shape financial literacy. Growing up in an environment where financial responsibility is emphasized can positively impact financial literacy. Psychological factors, including attitudes towards risk and overconfidence in financial knowledge, can also influence financial literacy and decision-making (Fernandes et al., 2014). Higher cognitive abilities, such as numeracy skills, are positively correlated with financial decision-making competence (Lusardi & Mitchell, 2011).

2.3 Financial Risk Tolerance and Determinants

Financial risk tolerance refers to an individual's capacity to endure fluctuations in financial returns and the level of uncertainty they are willing to accept when making financial decisions (Grable & Lytton, 1999). It reflects an

individual's comfort with taking risks in investments, savings, and other financial choices. Understanding financial risk tolerance is essential for determining the right investment strategies and wealth-building approaches that align with personal financial goals (Joo & Grable, 2004; Hastings, & Mitchell, 2020). Financial risk tolerance is not static; it fluctuates depending on a range of factors. These factors can be broadly categorized into demographic, social, economic, psychological, and behavioral influences. Additionally, an individual's risk perceptions and behaviors are shaped by contextual factors such as market conditions, past experiences, and access to financial education. In Ghana, understanding the determinants of financial risk tolerance is particularly important, given the unique economic challenges and the evolving nature of financial markets in the country.

Key determinants of financial risk tolerance include financial goals, time horizons, and the prevailing economic environment. Individuals saving for long-term goals, such as retirement or education, typically exhibit higher risk tolerance, as they can afford to wait out short-term market volatility in pursuit of long-term returns. Conversely, individuals saving for short-term goals, such as purchasing a home or financing a child's education, may prefer safer, more stable investments. This distinction is crucial in the Ghanaian context, where economic instability and market volatility often lead to lower overall risk tolerance, especially for those with limited financial resources and access to financial markets. Another key determinant is the economic environment. During periods of economic uncertainty, financial crises, or market volatility, individuals tend to become more risk-averse. In Ghana, where inflation rates and currency depreciation are relatively high, individuals may exhibit lower risk tolerance due to concerns about the future stability of the financial market and their income sources (Ayiah-Mensah, et al., 2023). Conversely, favorable economic conditions, such as periods of growth and low inflation, may encourage individuals to take on more risk in hopes of higher returns. Previous financial experiences also play a crucial role in shaping financial risk tolerance. Individuals who have had positive experiences with investments tend to exhibit a higher risk tolerance in subsequent decisions (Grable & Lytton, 1999). In contrast, those who have faced financial losses may become more conservative, fearing further risk. In Ghana, where financial markets are less developed and where many individuals rely on informal savings and investment mechanisms, past experiences with both formal and informal financial products influence the willingness to take risks (Ansong, 2024).

Psychological factors, such as personality traits and emotional resilience, further shape financial risk tolerance. For example, risk-seeking individuals may be more inclined to invest in volatile assets like stocks or mutual funds, while more risk-averse individuals may opt for safer assets like savings accounts or government bonds. Understanding the psychological underpinnings of financial risk tolerance can help tailor financial education programs and interventions aimed at improving financial decision-making, particularly in countries like Ghana, where access to financial services and education is limited. Finally, an individual's level of financial literacy is a key determinant of financial risk tolerance. Those with higher financial literacy tend to have a better understanding of the risks and rewards associated with various investment options, which enables them to make informed decisions. In Ghana, where financial literacy is low, many individuals may be unaware of the risks involved in certain investments, which can lead to overly conservative behavior or missed opportunities for wealth accumulation. Addressing this gap in financial literacy is crucial for improving financial risk tolerance and fostering more informed financial decision-making (Mireku, 2015).

2.4 Household Wealth and Determinants

Household wealth refers to the total value of assets owned by a household, minus any liabilities or debts. It includes a wide range of financial and non-financial assets, such as real estate, savings, stocks, and bonds, as well as liabilities like mortgages, loans, and credit card debt. Household wealth is a crucial indicator of financial well-being, providing individuals with the means to achieve financial goals, invest in future opportunities, and maintain financial stability over time. In Ghana, where wealth inequality is prevalent, household wealth is a key determinant of social mobility and economic security. Wealth accumulation is influenced by several factors, including individual savings behaviors, investment choices, and levels of financial literacy. Income is a critical determinant, as higher income allows individuals to save and invest more, facilitating wealth creation. However, income alone is not sufficient for wealth accumulation; the ability to manage that income effectively through savings, budgeting, and prudent investment decisions is equally important. Financially literate individuals are more likely to make informed decisions regarding their savings, investments, and overall wealth-building strategies (Lusardi & Mitchell, 2011).

In Ghana, where informal sector employment is widespread, many individuals face challenges in accessing formal savings instruments, such as pensions or investment accounts, which makes wealth accumulation more

difficult. Moreover, the lack of financial education limits the ability of individuals to navigate formal financial markets, exacerbating wealth inequality across different segments of the population (Twumasi et al., 2022). Demographic factors, such as age, family structure, and gender, also play a significant role in household wealth accumulation. Younger individuals, for instance, may have less wealth due to shorter savings periods and fewer assets, while older individuals have had more time to accumulate wealth. Gender disparities in wealth accumulation are also prevalent, with women often experiencing lower wealth accumulation due to factors such as wage gaps, caregiving responsibilities, and social norms. Addressing these gender-based disparities is critical to ensuring more equitable wealth accumulation opportunities, especially in the context of Ghana's socio-cultural and economic dynamics (Ussher et al., 2022).

Debt management is another key factor influencing household wealth. While some forms of debt, such as mortgages, can facilitate wealth creation by enabling individuals to purchase assets, excessive debt can severely hinder wealth accumulation. Households with high levels of unsecured debt may struggle to build wealth, as a significant portion of their income is spent on debt repayment rather than savings or investments. Effective debt management is, therefore, essential for achieving long-term wealth growth. Economic conditions and broader market stability also affect household wealth accumulation. In periods of economic growth and financial stability, individuals are more likely to make sound investment decisions and accumulate wealth. Conversely, during times of economic instability, inflation, or market downturns, individuals may become more risk-averse, limiting their investment opportunities and, consequently, their wealth accumulation. Understanding the relationship between broader economic conditions and household wealth accumulation is crucial for improving financial well-being in Ghana, where economic volatility is a common feature.

2.5 Conceptual Framework and Hypotheses

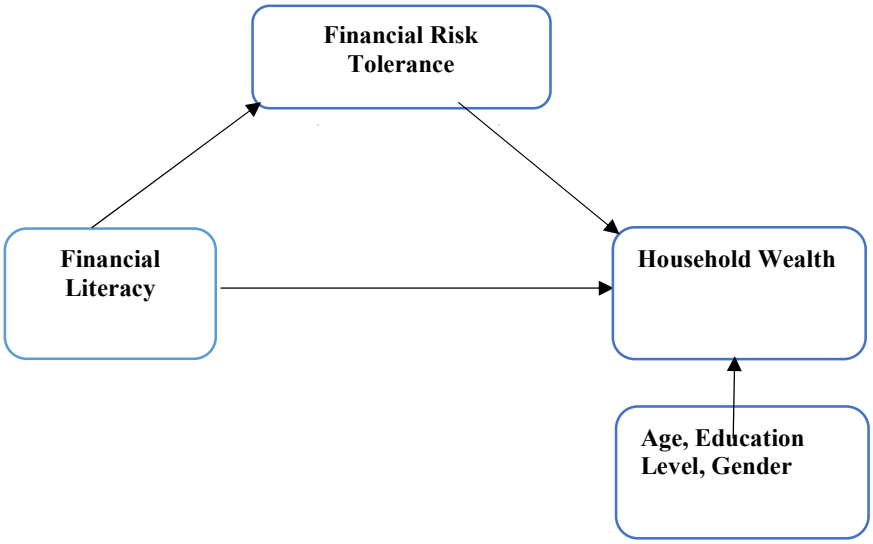

Figure 1.: Conceptual Framework of the Study

Taking account of the theoretical and empirical reviews of literature, the study sought to test the following hypothesis:

Hypothesis 1

H_{1a}: *Financial risk tolerance significantly mediates the relationship between financial literacy and household wealth.*

H_{1o} *Financial risk tolerance does not mediate the relationship between financial literacy and household wealth.*

Hypothesis 2

H_{2a}: *The mediating effect of financial risk tolerance on the relationship between financial literacy and household wealth varies significantly across demographic factors such as age, education level, and gender.*

H_{20} *The mediating effect of financial risk tolerance on the relationship between financial literacy and household wealth does not vary across demographic factors such as age, education level, and gender.*

3. Research Methodology

This study used a cross-sectional design, and a quantitative study was employed to analyse the mediating effect of financial risk tolerance between financial literacy and household wealth of employees in Ghana. Copies of a questionnaire structured with a five point Likert scale were used to gather data from both public and private employees in Ghana. In this study, financial literacy was measured through an individual's: understanding of basic financial concepts; budgeting practices; savings behaviour; investment knowledge; and debt management understanding. Also, financial risk tolerance was assessed through an individual's: risk preference; investment risk choices; response to financial uncertainty; risk tolerance in investments; and risk and reward perception. Finally, household wealth was gauged through an individual's: asset ownership; liabilities; household income/savings; net worth estimation; and wealth (bonds securities) growth over time. The data were analysed with PLS-SEM. The demographic characteristics of the respondents, which provide context and insight into the diversity of the study's sample, are summarized in Table 1. These characteristics are crucial for interpreting the findings and ensuring the generalizability of the study's conclusions across different employee groups.

Table 1: Demographic Characteristics of Respondents

Category	Subcategory	Frequency	Percentage (%)
Age Group	18–25	28	6.0
	26–35	178	38.2
	36–45	138	29.6
	46–55	94	20.2
	56 and above	28	6.0
	Total	**466**	**100.0**
Gender	Male	298	63.9
	Female	168	36.1
	Total	**466**	**100.0**
Level of Education	Secondary	12	2.6
	Tertiary	432	92.7
	Other	22	4.7
	Total	**466**	**100.0**
Marital Status	Single	158	33.9
	Married	276	59.2
	Divorced	20	4.3
	Widowed	12	2.6
	Total	**466**	**100.0**
Employment Sector	Service	271	58.2
	Manufacturing	116	24.9
	Agriculture	79	16.9
	Total	**466**	**100.0**

Source: Field data, 2024

3.1 Model of the Study

To assess the impact of mediation of financial risk tolerance between financial literacy and household wealth, the following equations were used:

HW= f (FL, FRT) ……..…… (1)

HW= f (FL, FRT, Age, EdL, Ge) ……..…... (2)

Where:

HW = Household Wealth

FRT = Financial Risk Tolerance

FL = Financial Literacy

EdL= Education Level

Ge = Gender

The above equations (1) and (2) can be revised econometrically in their functional forms as:

$HW = \beta_0 + \beta_1 FLt + \beta_2 FRTt + C$……..… (3)

$HW = \beta_0 + \beta_1 FLt + \beta_2 FRTt + \beta_3 Aget + \beta_4 EdLt + \beta_5 Get + C$……..… (4)

β_0 is the intercept, β_1, β_2, β_3, β_4 and β_5 represent the coefficients for the components of the independent, mediating, and control variables, measured by FL, FRT, Age, EdL and Ge, and C is the constant of the regression. The data were analyzed with Smart PLS-SEM 3.

4. Results and Discussion

The analysis was conducted in two stages: first, the measurement model (assessment of validity and reliability) was evaluated, followed by an examination of the structural model. The measurement model assessment focused on the relationships between the latent constructs (financial literacy, financial risk tolerance, and household wealth) and their respective indicators (survey items). The structural model was then used to examine the relationships between the constructs, as well as the mediating role of financial risk tolerance.

4.1 Assessment of Measurement Model

The primary goal of this assessment is to examine how well the survey items (indicators) reflect the latent constructs, specifically financial literacy, financial risk tolerance, and household wealth. This is achieved by assessing the unidirectional predictive relationships between each latent construct and its associated observable indicator (Hair et al., 2014). In PLS-SEM, the outer model is typically assessed using reflective and formative models. For this study, a reflective measurement model was employed, as the latent constructs are assumed to be reflected in the indicators (survey responses). The evaluation of the reflective model focuses on several key tests to ensure that the model's items adequately represent their respective constructs. These include internal consistency reliability, construct validity, convergent validity, and discriminant validity assessments of the constructs used in the study.

4.1.1 Indicator Reliability

The evaluation of the reflective measurement model begins with assessing indicator loadings. Hair et al. (2017) propose that loadings exceeding 0.708 are ideal, as they signify that a construct explains more than half of the variance in its indicators, thus ensuring sufficient indicator reliability. As detailed in Table 2, several indicators exhibited acceptable loadings, while some failed to meet the required threshold. Specifically, indicators for Financial Literacy (FL1, FL2, FL3, FL4, FL5), Financial Risk Tolerance (FRT1, FRT3, FRT5), and Household Wealth (HW1, HW3, HW5) demonstrated reliability. Conversely, indicators such as FRT2 and FRT4 were excluded due to loadings below the acceptable range. To enhance the model's robustness, constructs like Age Group, Education Level, and Gender were incorporated. These constructs were analyzed within the structural model using bootstrapping to evaluate their control and direct effects. The revised results for indicator reliability are presented in Table 3.

Table 2: Outer Loadings of Indicators

S/N	Indicator	Financial Literacy	Financial Risk Tolerance	Household Wealth
1	FL1	0.659		
2	FL2	0.698		
3	FL3	0.732		
4	FL4	0.612		
5	FL5	0.769		
6	FRT1		0.732	
7	FRT2		-0.326	
8	FRT3		0.784	
9	FRT4		-0.53	
10	FRT5		0.641	
11	HW1			0.592
12	HW2			0.289
13	HW3			0.623
14	HW4			0.365
15	HW5			0.823

Table 3: Outer Loadings of Indicators (Revised)

S/N	Age Group	Education Level	Financial Literacy	Financial Risk Tolerance	Gender	Household Wealth
1	AgeRange	1.000				
2	EducationLevel	1.000				
3	FL1		0.681			
4	FL2		0.694			
5	FL3		0.718			
6	FL4		0.609			
7	FL5		0.771			
8	FRT1			0.768		
9	FRT3			0.782		
10	FRT5			0.652		
11	Gender				1.000	
12	HW1					0.707
13	HW3					0.743
14	HW5					0.709

4.1.2. Internal Consistency Reliability

Internal consistency reliability was assessed using Cronbach's Alpha and Composite Reliability. Values between 0.60 and 0.70 are acceptable for exploratory research, while values between 0.70 and 0.90 are deemed satisfactory. However, values exceeding 0.95 suggest redundancy and reduced construct validity (Diamantopoulos et al., 2012). As shown in Table 4, the reliability metrics for constructs in this study were within an acceptable range, indicating satisfactory to good internal consistency. Constructs including financial literacy, financial risk tolerance, and household wealth showed strong reliability.

Table 4: Construct Reliability and Validity Results

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Financial Literacy	0.733	0.742	0.824	0.485
Financial Risk Tolerance	0.578	0.585	0.779	0.542
Household Wealth	0.538	0.538	0.763	0.518

4.1.3 Convergent Validity

Convergent validity examines the extent to which a construct explains the variance of its indicators. An Average Variance Extracted (AVE) value of 0.50 or higher is required for adequate validity. As detailed in Table 4, all constructs, including Financial Literacy, Financial Risk Tolerance, and Household Wealth, achieved AVE values above 0.50, confirming adequate convergent validity.

4.1.4 Discriminant Validity

Discriminant validity assesses the degree to which the constructs in a study are empirically distinct from each other. It ensures that measures of different concepts are not overly correlated, thereby confirming that the constructs represent unique aspects of the study (Rönkkö & Cho, 2022). In this study, two methods—Fornell and Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT)—were employed to establish discriminant validity.

Fornell and Larcker Criterion

The Fornell & Larcker (1981) criterion posits that discriminant validity is established when the square root of the average variance extracted (AVE) for a construct is greater than its correlation with other constructs. The results in Table 5 demonstrate that the square root of AVE (indicated in bold along the diagonal) for each construct exceeds its correlations with all other constructs. This confirms strong evidence of discriminant validity in this study.

Table 5: Discriminant Validity (Fornell & Larcker Criterion) Results

Construct	Financial Literacy	Financial Risk Tolerance	Household Wealth
Financial Literacy	0.697	0.465	0.468
Financial Risk Tolerance	0.465	0.736	0.406
Household Wealth	0.468	0.406	0.720

Heterotrait-Monotrait Ratio (HTMT)

The HTMT ratio is another method for assessing discriminant validity. It represents the average value of item correlations across constructs relative to the geometric mean of the average correlations for indicators measuring the same construct. To establish discriminant validity, the upper bound of the 95% confidence interval of HTMT should be lower than 0.90 or 0.85. As shown in Table 6, all HTMT values are below the threshold of 0.85, indicating no issues with discriminant validity in the constructs used for this study. These results from both Fornell and Larcker Criterion and HTMT confirm the constructs in this study are empirically distinct, thereby validating the study's discriminant validity.

Table 6: Discriminant Validity (HTMT) Results

Construct	Financial Literacy	Financial Risk Tolerance	Household Wealth
Financial Literacy			
Financial Risk Tolerance	0.709		
Household Wealth	0.731	0.695	

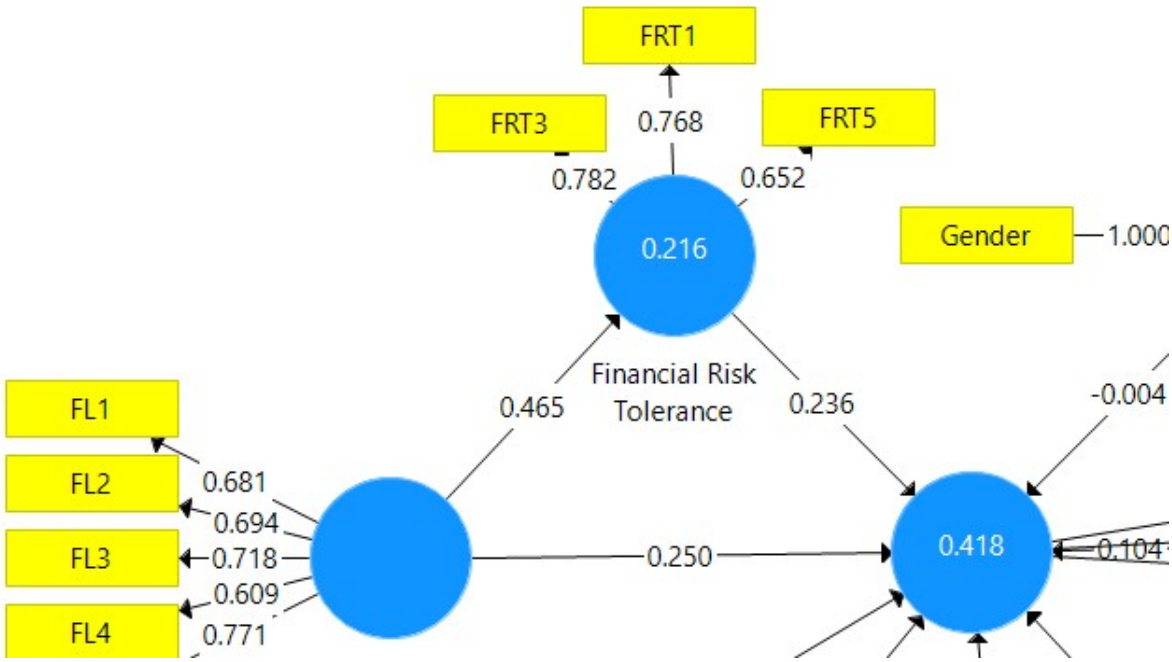

Figure 1.: Structural Model of the Study

4.2. Assessment of Structural Model

The structural model assessment examines the relationships between constructs, their explanatory power, and predictive accuracy. This stage is crucial for validating the research model and ensuring its reliability for theoretical and practical applications. The evaluation process involves analyzing collinearity, R^2values, Q^2 values, and the statistical significance and relevance of path coefficients.

4.2.1 Assessment of Collinearity

Collinearity arises when predictor constructs in a model are highly correlated, which can distort regression coefficient estimates and compromise the validity of the results. The variance inflation factor (VIF) was employed to identify potential collinearity issues. Thresholds for VIF suggest that values above 5 indicate problematic collinearity, although some studies recommend a more conservative threshold of 3. In this study, all VIF values, as presented in Table 7, were below 3, indicating that multicollinearity was not a concern. This ensured that the regression estimates in the model are reliable and unbiased.

Table 7: Collinearity Statistics (VIF)

S/N	Indicator	VIF
1	AgeRange	1
2	EducationLevel	1
3	FL1	1.341
4	FL2	1.469
5	FL3	1.437
6	FL4	1.239
7	FL5	1.494
8	FRT1	1.194
9	FRT3	1.334
10	FRT5	1.154
11	Gender	1
12	HW1	1.183
13	HW3	1.143
14	HW5	1.113

4.2.2 Assessment of R^2

The R^2, or coefficient of determination, represents the proportion of variance in the dependent variable that is explained by the independent variables. Higher R^2 values indicate greater explanatory power. In exploratory studies, R^2 values as low as 0.10 may still be considered adequate. The results without control variables, presented in Table 8, show that financial risk tolerance has an R^2value of 0.215, and household wealth has an R^2value of 0.305. These values indicate that the model explains 21.5% and 30.5% of the variance in financial risk tolerance and household wealth, respectively. When control variables were included, as shown in the table, the R^2 for household wealth increased to 0.408, or 40.8%. This improvement highlights the significant role the control variables play in explaining variations in household wealth.

Table 8: R^2 Statistics

	Without Control Variables		**With Control Variables**	
	R Square	R Square Adjusted	R Square	R Square Adjusted
Financial Risk Tolerance	0.217	0.215	0.216	0.215
Household Wealth	0.308	0.305	0.418	0.408

4.2.3. Assessment of Q^2

The Q^2 value evaluates the model's predictive accuracy using the blindfolding procedure. Unlike R^2, which focuses on in-sample explanatory power, Q^2 measures the model's out-of-sample predictive relevance. Values greater than zero indicate predictive relevance, while values of 0.25 or higher suggest medium predictive relevance, and values exceeding 0.50 indicate large predictive relevance. In this study, as shown in Table 9, the Q^2 values without control variables for financial risk tolerance and household wealth were 0.115 and 0.141, respectively, indicating small to medium predictive accuracy. When control variables were included, as shown in the table, the Q^2 value for household wealth increased to 0.206, further supporting the role of control variables in enhancing the model's predictive relevance.

Table 9: Q^2 Statistics

	Without Control Variables			**With Control Variables**		
	SSO	SSE	Q^2 (=1-SSE/SSO)	SSO	SSE	Q^2 (=1-SSE/SSO)
Financial Risk Tolerance	1398	1237.043	0.115	1398	1237.641	0.115
Household Wealth	1398	1201.44	0.141	1398	1110.375	0.206

4.2.4. Assessment of Statistical Significance and Relevance of Path Coefficients

Path coefficients measure the strength and direction of relationships between constructs. To assess their statistical significance, bootstrapping, a non-parametric resampling technique, was applied. The evaluation of significance was based on t-statistics and p-values. A t-statistic greater than 1.96 or a p-value below 0.05 indicates statistical significance at the 95% confidence level. The size of the coefficients was also examined, with expected values typically ranging between -1 and +1. The results without control variables, shown in Table 10, reveal statistically significant ($p<0.05$) paths from financial literacy to financial risk, tolerance financial literacy to household wealth, and financial risk tolerance to household wealth. These findings confirm that financial literacy and financial risk tolerance significantly influence household wealth. When control variables were introduced, as shown in the table, significant paths included age group to household wealth and education level to household wealth. These results emphasize the importance of demographic factors, such as age group and education level, in shaping household wealth.

Specific Indirect Effects

The indirect effects in the model illustrate the mediating role of constructs. For instance, financial literacy indirectly impacts household wealth through financial risk tolerance. The results without control variables, presented in Table 11, demonstrate a significant indirect effect of Financial Literacy on Household Wealth via Financial Risk Tolerance. This effect remained significant when control variables were included, as shown in Table 4.4i. These findings underscore the robustness of the mediating relationship and the importance of financial risk tolerance as a conduit through which financial literacy affects household wealth.

Table 10: Bootstrapping Results of the Statistical Significance of Path Coefficients

Path	Effect Size	Sample Mean	Standard Deviation	T Statistics	P Value
Without Control Variables					
Financial Literacy -> Financial Risk Tolerance	0.466	0.47	0.039	11.83	0
Financial Literacy -> Household Wealth	0.392	0.393	0.047	8.303	0
Financial Risk Tolerance -> Household Wealth	0.251	0.253	0.044	5.681	0
With Control Variables					
Age Group -> Household Wealth	0.345	0.349	0.038	9.056	0
Education Level -> Household Wealth	0.104	0.103	0.037	2.825	0.005
Financial Literacy -> Financial Risk Tolerance	0.465	0.468	0.037	12.506	0
Financial Literacy -> Household Wealth	0.25	0.25	0.048	5.172	0
Financial Risk Tolerance -> Household Wealth	0.236	0.235	0.041	5.749	0
Gender -> Household Wealth	-0.004	-0.005	0.036	0.112	0.911
Control Effect 1 -> Household Wealth	0.041	0.041	0.037	1.088	0.277

Control Effect 2 -> Household Wealth	-0.056	-0.057	0.026	2.153	0.032
Control Effect 3 -> Household Wealth	0.12	0.12	0.04	3.015	0.003

Table 11: Bootstrapping Results of the Specific Indirect Effects

Path	**Effect Size**	**Sample Mean**	**Standard Deviation**	**T Statistics**	**P Value**
Without Control Variables					
Financial Literacy -> Financial Risk Tolerance -> Household Wealth	0.117	0.119	0.024	4.805	0
With Control Variables					
Financial Literacy -> Financial Risk Tolerance -> Household Wealth	0.11	0.111	0.024	4.645	0

4.3. Discussion of Hypotheses Results

The bootstrapping results presented in Table 10 show that financial literacy has a direct, positive, and statistically significant (p = 0.000) effect on household wealth with an effect size of **f =** 0.392. Moreover, the results presented in Table 11 indicate that the indirect effect of financial literacy on household wealth through financial risk tolerance is significant (p = 0.000), with an effect size of f = 0.117. Therefore, H_{1a} is supported, demonstrating that financial risk tolerance complementarily partially mediates the relationship between financial literacy and wealth accumulation. This finding is consistent with research works such as Lusardi & Mitchell (2011), Lusardi et al. (2015), and Behrman et al., which showed that financial literacy can increase individuals' willingness to take financial risks, leading to greater wealth. However, in environments with limited access to financial products, the mediating effect of financial risk tolerance may be less significant. In the context of Ghana, this study suggests that financial literacy plays a significant role in enhancing financial risk tolerance, ultimately contributing to greater wealth accumulation. This emphasizes the importance of improving financial literacy, which in turn helps individuals navigate the complexities of risk and wealth-building opportunities in the Ghanaian financial landscape.

Regarding the second hypothesis, bootstrapping results presented in Table 11 show that financial risk tolerance mediates the relationship between financial literacy and household wealth across demographic groups. The mediating effect is significant for age (p = 0.000) and education level (p = 0.005), but there is no significant variation by gender (p = 0.911). This provides partial support for H_{2a}, indicating that age and education level play a significant role in moderating the mediating effect of financial risk tolerance. Gender, however, does not appear to significantly influence this relationship. These findings align with existing research that emphasizes the role of demographic factors in shaping financial behaviors. For example, Behrman et al. (2010) found that individuals with higher education tend to exhibit stronger financial decision-making skills, including higher risk tolerance, which facilitates wealth accumulation. Similarly, studies by Mitchell and Lusardi (2011) have shown that age influences financial decision-making, with younger individuals often displaying greater risk tolerance. In the context of Ghana, this study highlights how education and age can significantly influence how financial literacy and risk tolerance contribute to household wealth.

5. Conclusion

This study explored the mediating role of financial risk tolerance between financial literacy and household wealth among employees in Ghana. Using a cross-sectional design, the study collected data from both public and private sector employees through structured questionnaires, employing PLS-SEM for data analysis. The findings indicate that financial literacy has a direct positive effect on household wealth, and this effect is significantly

mediated by financial risk tolerance. Employees with higher levels of financial literacy are more likely to engage in risk-taking financial behaviors, thereby contributing to greater wealth accumulation. Furthermore, the study revealed that demographic factors such as age, education level, and gender influence both financial literacy and financial risk tolerance, which in turn impact household wealth. These findings emphasize the importance of considering these variables when designing financial education programs and policies. The results underscore that financial literacy alone is not sufficient for wealth creation; financial risk tolerance plays a crucial role in bridging the gap between financial knowledge and wealth accumulation. To foster greater financial well-being, initiatives aimed at improving financial literacy should also focus on enhancing individuals' risk tolerance, enabling more informed and confident financial decision-making. In conclusion, this study provides a deeper understanding of the complex relationships between financial literacy, financial risk tolerance, and household wealth among employees in Ghana. The findings suggest that both financial education and the development of risk tolerance are key to improving the financial security of employees. Policymakers and financial institutions should consider incorporating strategies that enhance both aspects to promote better financial outcomes. Future research could examine longitudinal effects and explore the impact of specific financial education programs on financial risk tolerance and wealth-building behaviors

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