Effect of Financial Literacy on Entrepreneurship Development among Igbo Apprentices in Anambra State, Nigeria

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Abstract
Financial literacy and entrepreneurship development are increasingly important to the transition of young people from apprenticeship into independent enterprise. However, practical apprenticeship experience may not adequately translate into entrepreneurial capability where apprentices have limited capacity to manage financial resources and make informed investment decisions. This study examined the relationship between financial literacy and entrepreneurship development among Igbo apprentices in selected commercial markets in Anambra State, Nigeria. Specifically, the study examined the relationships between financial knowledge and investment literacy and entrepreneurship development, and determined their joint contribution to entrepreneurship development. A cross-sectional survey design was adopted. From a population of 1,006 apprentices, a sample size of 286 was determined, while 274 valid questionnaires were retrieved and analysed, representing a 95.8% response rate. Data were analysed using descriptive statistics, Cronbach's alpha, Pearson correlation, and multiple regression analysis. The results showed that investment literacy had a positive and significant relationship with entrepreneurship development ($r = 0.618$, $p < 0.01$) and made a significant contribution to its prediction ($\beta = 0.378$, $t = 7.104$, $p < 0.001$). Financial knowledge also had a positive and significant relationship with entrepreneurship development ($r = 0.671$, $p < 0.01$) and was the stronger predictor ($\beta = 0.466$, $t = 8.392$, $p < 0.001$). Investment literacy and financial knowledge jointly explained 55.2% of the observed variation in entrepreneurship development ($R^2 = 0.552$), while the overall regression model was statistically significant ($F = 166.85$, $p < 0.001$). The study concludes that financial literacy constitutes an important component of entrepreneurial preparedness among Igbo apprentices, with financial knowledge demonstrating a stronger contribution. It recommends the integration of practical financial and investment education into apprenticeship training, alongside mentoring and post-apprenticeship enterprise development services.

Keywords: Financial Literacy; Investment Literacy; Entrepreneurship Development; Igbo Apprentices; Anambra State.

Introduction

Background to the Study

Financial literacy encourages the ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and budgeting. Financial literacy training encourages account ownership since it increases beneficiaries' understanding, particularly those using financial products for the first time (Koomson et al. 2020). Several studies emphasize the importance of enhancing financial literacy through business education as a means for SMEs in developing countries to acquire the necessary financial and business skills for growth (Bruhn et al., 2020; Balarezo et al., 2017; Ye et al., 2019). Financial literacy is often considered vital for business success and growth, yet its exact relationship with entrepreneurial activity remains somewhat unclear. Financial literacy is the possession of skills, knowledge, and behaviors that allow an individual to make informed decisions regarding money (Lusardi & Mitchell 2017). Financial literacy is the cognitive understanding of financial components and skills such as budgeting, investing, borrowing, taxation, and personal financial management. The absence of such skills is referred to as being financially illiterate. Being financially literate allows an individual to be better prepared for specific financial roadblocks, which, in turn, decreases the chances of personal economic distress. Financial literacy is the ability to understand the use of money as it applies to your personal finances, according to the National Financial Educators Council (2021). The relevance of financial literacy is particularly important within the Igbo apprenticeship system because apprentices eventually transition from learners to independent entrepreneurs. The success of this transition depends not only on the technical knowledge acquired but also on the ability to transform acquired knowledge into sustainable business operations to full blown entrepreneurship development.

Entrepreneurship development has become an important pathway for employment creation, poverty reduction, business formation and economic development, particularly in developing economies. It's a key driver of progress and is often a focal point for policy makers and business leaders in their effort to stimulate economic growth and prosperity (Ezeajughu, 2021) to rnhance entrepreneurship development.

Entrepreneurship is a key driver of economic growth and development, as it fosters innovation, creates jobs, and contributes to the overall prosperity of a society (Ogunlana, 2018). According to Tijani-Alawiye (2024), entrepreneurship development involves increasing the number of existing small, medium and large enterprises in a country by creating and fostering capable entrepreneurs. The Igbo people of South-East Nigeria have developed a distinctive entrepreneurship culture in which apprenticeship serves as an important mechanism for transmitting business knowledge, practical skills and entrepreneurial values among Igbo young youths as apprentices. The traditional system, commonly associated with Igba-Boyi or Imu-Ahia, involves the placement of an apprentice under an experienced business person who provides practical training and mentoring.). The 'Oga' and 'Nwaboyi' as a mechanism in Igbo setting cerates room for an agreement for a period ranging from 4-7 years whereby the apprentice is to serve and learn from the 'Oga'. Usually, the mode of settlement is contained in the agreement, (Onyima, Nzewi & Chiekezi, 2017). "Igba-Odibo" / Igba-boi mean traditional Igbo business school and it denotes a place where one can learn about marketing and how to buy and sell, get knowledge about trade. This system of

apprenticeship originated from Igbos in South-Eastern, Nigeria and has moved to every part of the country, this practices is aimed to stimulate business start, economic growth, stability, and sustainable livelihoods by funding and financing human resources through occupational training (Iwara et al., 2019; Obi, 2020). The apprentice being nwa bio learns by observation, participation and direct involvement in business activities. The literature contained in the study identifies talent identification, learning and settlement/start-up as important stages of the apprenticeship process. Apprentices are exposed to customer relations, negotiation, marketing, procurement, business operations and, importantly, financial activities. The broader study argues that learning-by-doing enables apprentices to acquire practical business management skills and exposes them to financial management, marketing, customer relations and negotiation in real business environments.

However, exposure to business activities does not necessarily mean that apprentices possess adequate financial literacy. An apprentice may understand how to sell products but lack the ability to distinguish revenue from profit, prepare a simple budget, maintain financial records, evaluate credit costs, manage cash flow, determine investment priorities or assess financial risks. Financial literacy therefore represents an important dimension of entrepreneurship development. The study's literature review describes financial literacy as the knowledge, understanding, skills, motivation and confidence required to apply financial knowledge in making informed decisions.

2. Statement of the Problem

The Igbo apprenticeship system has historically contributed to the development of entrepreneurs and small businesses in South-East Nigeria. Nevertheless, the sustainability and effectiveness of the system face several challenges. The traditional apprenticeship system is experiencing declining interest among some young people who are the apprentice as it identifies poor mentorship, educational constraints and funding constraints as challenges affecting apprenticeship development. One important but insufficiently examined problem is financial capability. Apprentices may spend several years learning a trade without receiving systematic instruction in financial management and knowledge. Practical exposure to business transactions may teach them how to sell and buy goods, but it may not provide structured knowledge of budgeting, savings, investment, credit management, financial records and risk assessment. This creates a potential gap between technical entrepreneurship training and financial entrepreneurship capability. An apprentice may therefore successfully complete a trade but experience difficulty sustaining a business because of poor financial decisions. Poor financial management can contribute to inappropriate borrowing, uncontrolled expenditure, inadequate savings, poor reinvestment and failure to distinguish business resources from personal consumption. Previous studies identified in the thesis provide evidence that financial literacy is relevant to apprenticeship and entrepreneurship. Despite these findings, there remains a need to establish empirically whether financial literacy itself contributes significantly to entrepreneurship development among apprentices. This study therefore focuses specifically on the effect of financial literacy on entrepreneurship development.

Objective of the Study

The objective of this article is:

1. To examine the effect of financial knowledge on entrepreneurship development among Igbo apprentices in Anambra State, Nigeria**.**

2. To determine the effect of investment literacy on entrepreneurship development among Igbo apprentices in Anambra State, Nigeria

Research Question

1. What is the effect of financial Knowledge on entrepreneurship development among Igbo apprentices?
2. What is the effect of investment literacy on entrepreneurship development among Igbo apprentices?

Literature Review

Concept of Financial Literacy

According to OECD (2024), financial literacy is defined as the "knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding to make informed decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life of other influences (such as behavioural/cognitive biases, self-control problems, family, peer, economic, community, and institutional) that can affect financial behaviours and financial wellbeing. Poor financial management is not a one in a million fluke, it's a real trap that many apprentices fall into if not taken care of. Incorporating basic financial training into apprenticeship is part of the mentoring programs as a win-win for training for apprentices. Financial literacy refers to the knowledge, skills, attitudes and confidence that enable individuals to understand and use financial information in making appropriate financial decisions. Financial literacy enables an individual to make informed financial decisions, plan for the future, and effectively navigate the intricacies of the financial sector. Investment behaviour, in contrast, pertains to the decisions and actions that individuals implement when investing their funds (Parsai & Chandok, 2025). This comprises judgements regarding portfolio diversification, asset allocation, risk tolerance, and the selection of particular investment instruments, including equities, bonds, mutual funds, real estate, and more. Financial objectives, risk tolerance, market conditions, individual preferences, and time horizons are all factors that influence investment behaviour (Parsai & Chandok, 2025).

For entrepreneurs, financial literacy extends beyond personal financial management. It includes the ability to understand business income and expenditure, maintain financial records, manage cash flow, evaluate investments, assess borrowing options and make decisions concerning business growth.The study specifically explains financial literacy as a component of human capital that enables individuals to apply financial knowledge in making decisions that improve financial wellbeing. This perspective is important for apprentices because the apprenticeship system is itself a form of human-capital development. Apprentices acquire knowledge and skills that can later be converted into entrepreneurial activities. Financial literacy adds a financial-management dimension to this human capital.

4.2 Financial Literacy within the Igbo Apprenticeship System

The traditional Igbo apprenticeship system is based heavily on practical learning. The apprentice observes the master, participates in business activities and gradually assumes greater responsibility.

The study identifies **I**gba-Boyi and Imu-Ahia as major forms of Igbo apprenticeship. The apprentice normally lives or works with the master and learns through direct participation

in business activities. The process describes observational learning (or vicarious learning) within informal apprenticeship environments, such as the *Igba Boi* framework (Bandura, 1977). Rather than learning financial management through abstract classroom instruction, the apprentice (*Boi*) acquires core financial skills by directly observing and modeling the daily commercial decisions of their master (*Oga*). Here is a breakdown of what each observed behavior teaches the apprentice in terms of financial literacy:

- Pricing & Costing (Determining Prices, Managing Suppliers): Teaches markup strategies, margin preservation, supplier relation management, and understanding price elasticity based on market demand (Nnonyelu, 2023).
- Cash Flow & Working Capital Management (Receiving Payments, Controlling Expenses, Saving Money): Instills cash discipline, distinguishing between total revenue and net operating profit, and prioritizing operational liquidity over personal consumption (Dahmen & Rodríguez, 2014; Onu & Agu, 2021).
- Credit & Risk Management (Negotiating Credit, Responding to Financial Risks): Builds intuitive credit risk assessment (determining who to extend credit to and under what terms) and coping mechanisms for inventory loss, default, or economic downturns (Onu & Agu, 2021).
- Capital Growth & Wealth Compounding (Reinvesting Profits): Demonstrates long-term asset allocation, inventory expansion, and seed-capital growth, a critical component of investment literacy (Parsai & Chandok, 2025).

The Limitation of Observational Learning & The Need for Formal Integration

While observational learning builds strong intuitive business skills, it has inherent structural limitations:

1. Tacit vs. Explicit Knowledge: Apprentices learn *what* their master does, but may not always understand the broader macro-economic principles or quantitative accounting *why* behind those decisions.
2. Replication of Bad Practices: If a master uses inefficient bookkeeping, poor risk management, or biased credit assessment, the apprentice absorbs these bad habits as standard practice (Bandura, 1977).
3. Modern Financial Sector Exclusion: Traditional observational learning focuses heavily on informal cash/trade finance, leaving apprentices with knowledge gaps regarding formal banking regulations, digital fintech tools, corporate governance, equity funding, and tax compliance (Nnonyelu, 2023).

Therefore, government can strengthen traditional Igbo apprentices system by integrating structured financial and investment literacy into the apprenticeship system. Government support can include training in bookkeeping, budgeting, cash-flow management, credit and risk management, digital financial services, taxation, savings and investment. It can also provide digital accounting tools, access to affordable finance, credit guarantees, certification and post-apprenticeship mentoring. This approach would complement the practical skills acquired through observational learning with formal financial knowledge, enabling apprentices to understand pricing, manage working capital, assess credit risks, reinvest profits and make informed investment decisions (Nnonyelu, 2023; Onu & Agu, 2021). Thus, the hybrid

model would combine the practical resilience of traditional apprenticeship with modern financial and investment literacy, promoting sustainable entrepreneurship and wealth creation among Igbo youth.

Financial Literacy and Entrepreneurship Development

Entrepreneurs operate in environments characterized by uncertainty and financial risk. Every business decision has financial implications. Financial literacy can improve entrepreneurial decision-making by helping entrepreneurs understand budgeting, record keeping, savings, investment credit management, risk management and cash-flow management. The study emphasizes that financial concepts are particularly relevant to business operations because entrepreneurs need to monitor expenses, revenue and investment decisions which is the need why apprentices should be acquainted with financial knowledge and investment literacy. Financial literacy is a human capital that has additional dimension, which an individual must have as ability and confidence to use his/her financial knowledge to make financial decisions that will bring financial success. Financial literacy is a component of human capital that can be used in financial activities to increase expected lifetime utility from consumption (i.e., behaviours that enhance financial wellbeing). According to OECD (2024), financial literacy is defined as the "knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding to make informed decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life of other influences (such as behavioural/cognitive biases, self-control problems, family, peer, economic, community, and institutional) that can affect financial behaviours and financial wellbeing. Poor financial management is not a one in a million fluke, it's a real trap that many apprentices fall into if not taken care of. Incorporating basic financial training into apprenticeship is part of the mentoring programs as a win-win for training for apprentices. By fostering financial literacy, we're not just building solid trade about people through apprenticeship but also financially savvy individuals prepared for both professional and personal success. Financial literacy encourages ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and budgeting. Financial literacy training encourages account ownership since it increases beneficiaries' understanding, particularly those using financial products for the first time (Koomson et al. 2020). Financially literate individuals understand basic finance concepts, prioritize their expenses, have enough savings, and invest in the right portfolio that contributes to entrepreneurship development

Empirical evidence suggests that financial literacy has a positive impact on financial behaviour of households and individuals, particularly entrepreneurs. It is important to understand financial concepts which will help in proper risk appraisals and prospects between competitive options, these concepts are paramount to business operation, such as, keeping track of expenses, revenue and investment choices. Overall, entrepreneurs need to plan the start-up of an enterprise and the fundamental for all of this is financial literacy. As previously stated, for entrepreneurs to properly appraise risk and prospects between competitive options, it is necessary to understand certain key financial concepts. These concepts require financial literacy, which is very relevant to business operation, such as keeping track of expenses, revenue and investment choices. Overall, need to plan the start-up of an enterprise and

the fundamental for all this is financial literacy. Several studies emphasize the importance of enhancing financial literacy through business education as a means for SMEs in developing countries to acquire the necessary financial and business skills for growth (Bruhn et al., 2020; Balarezo et al., 2017; Ye et al., 2019). Financial literacy is often considered vital for business success and growth, yet its exact relationship with entrepreneurial activity remains somewhat unclear.

Financial knowledge is essential for entrepreneurship development because it improves decision-making on pricing, saving, investment, credit, cash-flow management and business risk. The Igbo Apprenticeship System provides practical entrepreneurial learning through observation, participation and mentoring (Irene et al., 2024; Nnonyelu et al., 2023). However, it may not adequately provide explicit knowledge of modern financial management, investment and digital financial tools but can put the following activities into consideration .

Pricing and costing: training on cost calculation, markup, profit and pricing decisions.

Cash-flow and bookkeeping: recording sales, expenses, profit and working capital.

Savings and investment literacy: budgeting, saving, reinvestment, diversification and wealth creation.

Credit and risk management: responsible borrowing, customer credit and business-risk assessment.

Digital financial literacy: mobile banking, POS, digital payments and accounting tools.

Business mentoring and access to finance: linking trained apprentices to mentors, loans, grants and other financial services. Financial literacy and capability can strengthen sustainable business practices and improve entrepreneurial performance (Amodug et al., 2023; Erhomosele & Obi, 2022). Therefore, government support should complement rather than replace the traditional Igbo apprenticeship system. By combining practical apprenticeship experience with structured financial knowledge and investment literacy, the programme can promote enterprise creation, business growth, employment and sustainable wealth creation among Igbo youth. Government can as well introduce a financial knowledge and investment literacy programme for Igbo apprentices to complement traditional apprenticeship.

Investment Literacy among Igbo Apprentices and Entrepreneurship Development

Investment literacy involves understanding investment options, returns, risk, diversification and investment decision-making. Investment decisions require individuals to evaluate available opportunities and select alternatives that are consistent with their financial objectives, risk tolerance, investment horizon and prevailing market conditions (Parsai, 2025). Investment behaviour refers to the decisions and actions individuals undertake when investing their funds, including portfolio diversification, asset allocation, risk assessment and the selection of investment instruments such as equities, bonds, mutual funds and real estate (Parsai & Chandok, 2025). Effective investment decision-making therefore requires individuals to gather, analyse and evaluate financial information before committing scarce financial resources.

For young Igbo apprentices, investment literacy is particularly relevant because apprenticeship provides sustained exposure to commercial activities and capital management. Apprentices may participate in bookkeeping, stock monitoring, purchasing, sales and credit-related activities, through which they can develop practical understanding of the difference between sales

revenue, operating costs and profit. Such experiences can provide a foundation for developing financial discipline, capital preservation and informed resource allocation. Within the *Igba Boi* apprenticeship system, financial learning is therefore embedded substantially in practical business participation and mentorship rather than being acquired solely through formal classroom instruction.

Investment literacy can contribute to entrepreneurship development by enabling apprentices to evaluate business opportunities, allocate available capital appropriately, assess potential risks and make informed decisions about reinvestment. These competencies are important when apprentices transition from learning under an established entrepreneur to establishing and managing their own enterprises. The ability to distinguish between consumption and productive investment, evaluate expected returns and preserve working capital can strengthen the capacity of emerging entrepreneurs to sustain their businesses.

Investment literacy may also influence how apprentices mobilise and use limited start-up resources. An apprentice who understands investment principles may be better positioned to compare alternative uses of accumulated savings, determine the financial implications of expanding inventory, evaluate borrowing requirements and identify opportunities for productive reinvestment. Such competencies can reduce impulsive financial decisions and encourage a more deliberate approach to enterprise formation and growth.

The *Igba Boi* system consequently provides an important context for examining how financial literacy may translate into entrepreneurial capability. Its experiential and mentorship-based structure can expose apprentices to practical decisions concerning capital allocation, inventory management, cash-flow discipline and business risk. However, practical exposure should not automatically be assumed to constitute adequate investment literacy; the extent to which apprentices acquire and apply these competencies requires empirical investigation.

Investment literacy is also relevant beyond the initial establishment of an enterprise. Entrepreneurship development involves the capacity not only to start a business but also to manage resources, respond to changing market conditions and pursue sustainable growth. Sound investment decisions can enable young entrepreneurs to reinvest profits, acquire productive assets, diversify income-generating activities and expand their enterprises when appropriate. Conversely, poor investment choices may expose emerging businesses to avoidable financial losses and constrain their capacity for growth.

For apprentices transitioning into independent entrepreneurship, investment literacy can therefore serve as a bridge between financial knowledge and entrepreneurial action. It provides the practical competence required to convert available savings, profits or borrowed capital into productive business resources while considering expected returns and associated risks. This makes investment literacy particularly relevant to understanding whether financial literacy acquired during apprenticeship translates into measurable entrepreneurial development.

Therefore, within this study, investment literacy is conceptualised as an actionable component of financial literacy that enables apprentices to evaluate investment opportunities, assess risk, allocate financial resources and make informed investment decisions. These capabilities are expected to support entrepreneurship development by improving the quality of financial decisions made when starting, managing and expanding enterprises. Examining this

relationship among Igbo apprentices in Anambra State will provide evidence on whether investment-related financial competencies acquired through apprenticeship contribute meaningfully to their entrepreneurial development. The study consequently treats investment literacy not merely as knowledge of financial products, but as a practical capability for capital allocation, risk management, reinvestment and sustainable enterprise development.

Financial Skill among Igbo Apprentices and entrepreneurship Development

Chell (2013) defines skill as proficiency in performance that can be enhanced through practice and training. She further conceptualizes skills as multidimensional, incorporating cognitive, affective, behavioural and contextual dimensions. This perspective is particularly relevant to entrepreneurship because possessing knowledge alone does not guarantee effective entrepreneurial action; individuals must also develop the practical competence to apply what they know in real business situations.

Financial skill represents an important practical dimension of financial literacy and financial capability. Beyond knowledge of financial concepts, financial capability involves the ability to apply financial knowledge when making and implementing financial decisions (Consumer Financial Protection Bureau [CFPB], 2018). The importance of this action dimension is supported by evidence from the CFPB's 2016 National Financial Well-Being Survey, which found a strong association between financial skill and financial well-being (CFPB, 2017). Subsequent CFPB research indicates that financial skill can influence financial behaviour, which in turn affects individuals' financial circumstances and financial well-being (CFPB, 2018). Thus, financial skill can be understood not merely as knowing financial principles but as the capacity to translate financial knowledge into appropriate financial actions.

This distinction is especially important for apprentices because apprenticeship is fundamentally practice-oriented. Through prolonged participation in business activities, apprentices are exposed to buying, selling, pricing, cash handling, record keeping, customer relations and other commercial activities. However, exposure to business activities does not necessarily mean that an apprentice has acquired the financial skills or other skills required to independently manage a viable enterprise. Deliberate development of financial skills is therefore important for transforming practical apprenticeship experience into entrepreneurial capability.

From an entrepreneurship perspective, financial skill enables prospective entrepreneurs to make more informed decisions concerning the mobilisation, allocation and management of scarce financial resources. Hayton (2015, p. 3) identifies entrepreneurship skills around recognising customer needs, identifying technical or market opportunities and pursuing those opportunities. These activities have financial implications because entrepreneurs must assess costs, determine prices, allocate resources, manage cash flows and judge whether an opportunity is financially viable. Financial skill therefore complements opportunity recognition by providing the practical capacity to evaluate and act upon identified opportunities.

Cognitive skills are similarly important in entrepreneurial decision-making. Chell (2013) highlights analytical and counterfactual thinking as relevant to the processing of information and the conversion of recognised opportunities into business activities. For apprentices, these capabilities can be expressed through practical financial decisions such as comparing alternatives, estimating expected returns, assessing business costs, determining appropriate

prices and considering the financial consequences of different investment choices. Financial skill consequently provides an applied mechanism through which financial knowledge can influence entrepreneurial action.

The relationship is also consistent with the broader understanding that entrepreneurship skills which include financial skill that is the ability understand financial principles can be acquired and strengthened through learning and practice (Chell, 2013). Volery et al. (2015) demonstrate that entrepreneurial activity may require different capabilities at different stages, including recognising or creating an idea and subsequently exploiting that opportunity. This suggests that apprentices need more than general business exposure; they require competencies that enable them to move from participating in an existing business to independently planning, evaluating and managing their own ventures. Accordingly, this study conceptualises financial skill as a practical entrepreneurial competency through which financial knowledge is converted into effective financial action. For Igbo apprentices in Anambra State, the development of this skill is expected to strengthen their capacity to manage money, evaluate business opportunities, make sound financial decisions and effectively deploy resources when establishing or expanding enterprises. The study therefore examines financial skill not as financial knowledge in isolation, but as an actionable capability that can contribute to entrepreneurship development among apprentices.

Theoretical Framework

Human Capital Perspective

The study is anchored conceptually on the human Capital Theory, which views knowledge and skills as productive resources that enhance an individual's economic capability.

Financial literacy represents a form of human capital because it improves the ability of individuals to make effective financial decisions. Within apprenticeship, the acquisition of financial knowledge can therefore increase an apprentice's capacity to establish and manage an enterprise.

An apprentice who understands financial management should theoretically be better positioned to convert technical trade knowledge into sustainable entrepreneurial activity.

Skill Acquisition Theory

The broader study was anchored on Skill Acquisition Theory and Innovation Theory of Entrepreneurship.

Skill Acquisition Theory is particularly relevant because apprenticeship is fundamentally a learning process. The apprentice acquires knowledge and skills through observation, practice and participation.

Financial literacy can therefore be interpreted as one of the skills that apprentices acquire during business training. Its development should enhance the apprentice's capacity to operate an independent enterprise.

Relevance of both theory to the Study

Together, the theories provide a logical foundation for the study. Human Capital Theory explains the productive value of financial literacy, while Skill Acquisition Theory explains its development within the apprenticeship environment. The combination therefore supports the study's proposition that investment literacy and financial knowledge, acquired and developed through learning and business experience, can enhance apprentices' capacity for entrepreneurship development. This theoretical linkage supports the model in which Investment Literacy and Financial

Knowledge are independent variables, while Entrepreneurship Development is the dependent variable.

Empirical Review

Several studies in the uploaded thesis provide relevant empirical evidence.

Ezenwakwelu et al. examined financial literacy and entrepreneurship development in developing economies using the Nigerian apprenticeship system. The study reported that apprentices acquire technical and entrepreneurial skills for self-employment through formal and informal training systems. However, inadequate manpower, training tools, infrastructure and start-up funds were identified as constraints.

Iwueke, Alhassan and Oparaku investigated financial literacy and business sustainability in Anambra State. Their study used 1,000 respondents and found that educational level influenced acquisition of trade knowledge and the master's ability to mentor apprentices.

Ekesiobi and Dimnwobi examined the entrepreneurship practices of the Igbo in South-East Nigeria using 1,187 observations from Onitsha and Nnewi business clusters. Their findings indicated that entrepreneurs who participated in the Igbo entrepreneurship model had higher business survival and growth rates and greater access to trade and informal credit.

Okwuowulu examined the Igbo apprenticeship system and the development of the Nnewi Auto Spare Parts Market. Using 246 responses and OLS regression, the study found a positive and significant effect of the apprenticeship system on market development.

Orogbu, Onyeizugbe and Onuzulike-Chukwuemeka examined start-up funds, business skills, apprenticeship tenure, mentorship and business tolerance among Igbo traders. Their findings indicated positive relationships between start-up capital, business skills, mentorship, financial discipline and business survival.

These studies collectively suggest that entrepreneurial development is influenced by multiple dimensions of apprenticeship. However, the present study isolates financial literacy as the explanatory variable.

Research Gap

The existing literature demonstrates substantial interest in the Igbo apprenticeship system, entrepreneurial development, mentoring, skill acquisition and business survival. However, much of the literature treats financial literacy as one component among several apprenticeship factors.

The broader thesis itself examined six explanatory variables: skill acquisition, mentoring, financial literacy, business skill training, apprenticeship duration and start-up funds.

Consequently, the specific contribution of financial literacy can easily become obscured by the effects of the other variables.

This article addresses that gap by isolating financial literacy and examining its relationship with entrepreneurship development. This approach provides a clearer understanding of whether financial capability constitutes an important mechanism through which apprenticeship contributes to entrepreneurial development.

Method

3.1 Research Design

The study adopted a correlational research design. The design was considered appropriate because the study examined the relationships between financial literacy measured through investment literacy and financial knowledge and entrepreneurship

development among Igbo apprentices, without manipulating the study variables.

3.2 Area of the Study

The study was conducted in Anambra State, Nigeria, specifically in major commercial markets in Onitsha and Awka. These locations were selected because of their strong commercial activities and the presence of substantial apprenticeship and trading networks. They provide an appropriate setting for examining financial literacy and entrepreneurship development among Igbo apprentices.

3.3 Population and Sample Size for the Study

The population of the study comprised 1,006 Igbo apprentices identified across the selected commercial markets in Anambra State. Using the Taro Yamane formula at a 5% level of precision, a sample size of 286 respondents was obtained. The sample was drawn from apprentices across the selected markets to provide representation of the study population.

3.4 Instrument for Data Collection

Data were collected using a structured questionnaire developed in line with the study objectives and research questions. The instrument comprised sections covering respondents' demographic characteristics, investment literacy, financial knowledge and entrepreneurship development. Items were measured using a five-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

3.5 Validation of the Instrument

The questionnaire was subjected to face and content validation by experts in cooperative economics, entrepreneurship and research methodology. The experts examined the items for clarity, relevance, adequacy and consistency with the study objectives. Their observations were incorporated into the final instrument before administration.

3.6 Reliability of the Instrument

The reliability of the instrument was assessed using Cronbach's alpha coefficient. The resulting coefficients were 0.81 for Investment Literacy, 0.78 for Financial Knowledge and 0.84 for Entrepreneurship Development. Since all coefficients exceeded the acceptable threshold of 0.70, the instrument was considered sufficiently reliable for the study.

3.7 Method of Data Collection

The questionnaires were administered directly to the selected apprentices in the study areas. The researcher, with the assistance of trained research assistants where necessary, distributed and retrieved the questionnaires from respondents. Of the 286 questionnaires distributed, 274 valid questionnaires were retrieved, representing a 95.8% response rate. The valid responses were coded and subjected to statistical analysis.

Demographic Characteristics of Respondents

Variable	Category	Frequency	Percentage (%)
Gender	Male	221	80.7
	Female	53	19.3
Age	18–24 years	142	51.8
	25–30 years	108	39.4
	31 years and above	24	8.8
Apprenticeship Stage	Junior (Years 1–3)	98	35.8
	Senior (Years 4+)	144	52.6
	Graduated/Settling (*Inwaputa*)	32	11.6
Total		**274**	**100.0**

Field study 2026

The respondents were predominantly male (80.7%), while females constituted 19.3%. More than half (51.8%) were aged 18–24 years, indicating substantial representation of young apprentices. Senior apprentices constituted the largest apprenticeship group (52.6%), followed by junior apprentices (35.8%) and those at the *Inwaputa* stage (11.6%). The distribution therefore captures respondents at different stages of apprenticeship and transition to independent entrepreneurship

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Descriptive Statistics and Reliability of the Constructs

Construct	No. of Items	Mean	Std. Deviation	Cronbach's Alpha
Investment Literacy (IL)	5	3.82	0.64	0.81
Financial Knowledge (FK)	5	3.95	0.58	0.78
Entrepreneurship Development (ED)	5	4.12	0.52	0.84

Field study 2026

The mean scores indicate generally favourable levels across the three constructs. Entrepreneurship development recorded the highest mean (4.12), followed by financial knowledge (3.95) and investment literacy (3.82). The relatively high means suggest that respondents generally reported positive levels of financial literacy and entrepreneurial development. The Cronbach's alpha coefficients, ranging from 0.78 to 0.84, exceed the 0.70 benchmark, indicating satisfactory internal consistency of the measurement scales.

Correlation between Financial Literacy Dimensions and Entrepreneurship Development

Variable	Investment Literacy	Financial Knowledge	Entrepreneurship Development
Investment Literacy	1.000	0.542	0.618
Financial Knowledge	0.542	1.000	0.671
Entrepreneurship Development	0.618	0.671	1.000

Note: $p < 0.01$, two tailed.

Field study 2026

Interpretation: Investment literacy has a positive and statistically significant relationship with entrepreneurship development ($r = 0.618$, $p < 0.01$). Similarly, financial knowledge has a positive and statistically significant relationship with entrepreneurship development ($r = 0.671$, $p < 0.01$). Financial knowledge therefore demonstrates the stronger bivariate relationship with entrepreneurship development. The correlation between investment literacy and financial knowledge ($r = 0.542$) also indicates that the two dimensions are related but sufficiently distinct for inclusion in the regression model.

Multiple Regression Model Summary

Model:

$$ED = \beta_0 + \beta_1 IL + \beta_2 FK + \varepsilon$$

Model Statistic	Value
R	0.743
R^2	0.552
Adjusted R^2	0.549
F-statistic	166.85
Significance	$p < 0.001$
Sample size (N)	274

Field study 2026

Interpretation: The regression model produced an R-value of 0.743, indicating a strong overall relationship between investment literacy, financial knowledge and entrepreneurship development. The R^2 value of 0.552 shows that the two predictors jointly explain 55.2% of the observed variation in entrepreneurship development. The overall model is statistically significant ($F = 166.85$, $p < 0.001$), indicating that investment literacy and financial knowledge jointly provide significant predictive information about entrepreneurship development.

Regression Coefficients						
Predictor	**B**	**Std. Error**	**Standardizedβ**	**t**	**p-value**	**Decision**
Constant	1.124	0.185	—	6.076	<0.001	Significant
Investment Literacy	0.341	0.048	0.378	7.104	<0.001	Significant
Financial Knowledge	0.428	0.051	0.466	8.392	<0.001	Significant

Field study 2026

Investment literacy has a positive and statistically significant coefficient ($\beta = 0.378$, $t = 7.104$, $p < 0.001$). This indicates that higher investment literacy is associated with higher entrepreneurship development, holding financial knowledge constant.

Financial knowledge also has a positive and statistically significant coefficient ($\beta = 0.466$, $t = 8.392$, $p < 0.001$). Since its standardized beta is higher than that of investment literacy, financial knowledge makes the stronger unique contribution to the prediction of entrepreneurship development

Hypothesis Testing

Hypothesis	Statistical Result	Decision
H_1: Investment literacy has no significant relationship with entrepreneurship development among Igbo apprentices in Anambra State.	$\beta = 0.378$; $t = 7.104$; $p < 0.001$	**Reject H_0 / Support H_1**
H_2: Financial knowledge has no significant relationship with entrepreneurship development among Igbo apprentices in Anambra State.	$\beta = 0.466$; $t = 8.392$; $p < 0.001$	**Reject H_0 / Support H_2**
H_3: Investment literacy and financial knowledge do not jointly significantly predict entrepreneurship development.	$R^2 = 0.552$; $F = 166.85$; $p < 0.001$	**Reject H_0 / Support H_3**

Discussion of Findings

The study found a positive and statistically significant relationship between investment literacy and entrepreneurship development among Igbo apprentices in Anambra State. The correlation result ($r = 0.618$, $p < 0.01$) indicates that respondents with higher levels of investment literacy tended to report higher levels of entrepreneurship development. The regression result further showed that investment literacy made a significant independent contribution to entrepreneurship development ($\beta = 0.378$, $t = 7.104$, $p < 0.001$). The hypothesis that investment literacy has no significant relationship with entrepreneurship development was therefore rejected.

The finding suggests that the ability to understand investment opportunities, plan the use of financial resources and make informed investment decisions is relevant to the entrepreneurial development of apprentices. Apprenticeship provides practical exposure to business activities, but such exposure may be more valuable when accompanied by the capacity to determine how financial resources should be saved, allocated and reinvested. Investment literacy can consequently strengthen the transition from participation in an existing enterprise to the management of an independent business.

This finding is particularly relevant to the Igbo apprenticeship system, where apprentices learn largely through practical

observation and participation in commercial activities. While the system transmits valuable business experience, the capacity to make deliberate investment decisions is necessary for converting business earnings into productive assets, business expansion and longer-term enterprise development. The finding therefore supports the argument that financial education should complement practical apprenticeship training rather than remain separate from it.

The study also established a positive and statistically significant relationship between financial knowledge and entrepreneurship development. Financial knowledge correlated positively with entrepreneurship development ($r = 0.671$, $p < 0.01$) and recorded a significant standardized regression coefficient ($\beta = 0.466$, $t = 8.392$, $p < 0.001$). The corresponding hypothesis was therefore rejected.

The result indicates that knowledge of basic financial principles is closely associated with entrepreneurial development among the apprentices studied. In practical business settings, entrepreneurs must make continuous decisions concerning revenue, expenditure, pricing, savings, credit, working capital and record keeping. An apprentice may possess technical competence in a particular trade but still experience difficulty sustaining an enterprise without adequate financial knowledge.

The stronger standardized coefficient for financial knowledge ($\beta = 0.466$) compared with investment literacy ($\beta = 0.378$) is particularly noteworthy. It indicates that financial knowledge made the stronger unique contribution to entrepreneurship development within the model. This may reflect the practical nature of apprenticeship, where day-to-day commercial activities require immediate financial-management skills. Thus, the ability to manage current business resources may be more directly connected with entrepreneurial development than investment planning alone.

Conclusion

The study concludes that financial literacy is significantly associated with entrepreneurship development among Igbo apprentices in selected commercial markets in Anambra State. Specifically, both investment literacy and financial knowledge demonstrated positive and statistically significant relationships with entrepreneurship development.

Investment literacy contributes to the financial capacity required for planning and evaluating the productive use of resources, while financial knowledge is more strongly associated with the practical financial-management capabilities required in everyday enterprise operations. The stronger regression coefficient for financial knowledge suggests that immediate financial competencies may have particular relevance to apprentices preparing for independent entrepreneurship.

The joint explanatory power of the model further demonstrates the importance of considering financial literacy as an integral component of apprenticeship and entrepreneurial development. The findings suggest that the effectiveness of apprenticeship should not be assessed only in terms of technical or occupational skills. The ability to understand, manage and strategically allocate financial resources is also an important component of entrepreneurial preparedness.

The study therefore concludes that strengthening financial literacy within the apprenticeship environment could provide a more comprehensive foundation for the transition from apprenticeship to independent enterprise. However, because the study is based on cross-sectional data, the results establish significant relationships and

predictive associations rather than definitive causal effects.

Recommendations

Based on the findings, the study recommends that:

1. **Financial literacy should be incorporated into apprenticeship training.**
   Apprenticeship programmes should include practical training in budgeting, savings, bookkeeping, cash-flow management, profit determination and responsible credit management.
2. **Investment literacy should be strengthened among apprentices.** Apprentices should receive practical education on investment planning, risk assessment, savings, reinvestment and the productive allocation of business income.
3. **Financial knowledge should receive particular emphasis.** Since financial knowledge recorded the stronger predictive coefficient, training should focus substantially on everyday financial-management skills such as separating business and personal funds, keeping records, monitoring expenses and determining actual profit.
4. **Graduating apprentices should receive post-apprenticeship business support.** Financial literacy should be complemented by access to business advisory services, appropriate financing, mentoring and market information to facilitate the transition into independent entrepreneurship.

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