

Leveraging Human Capital Investments Intensity in Improving the Returns on Equity of Insurance Firms in Nigeria

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Abstract

This study investigated the relationship between human capital investments and financial performance of selected listed insurance companies in Nigeria. The study adopted a survey research design and collected data through administration of questionnaire. The population size of the study was one thousand four hundred and fifty (1,450) employees of twenty three (23) listed insurance firms from six (6) states of the south-south geo-political zone of Nigeria; while the sample size was 314 of the employees. The results of the study revealed that investments in staff training and retraining have positive and significant relationship with returns on equity of the selected insurance firms. Besides, staff welfare investment as well as staff health investment showed positive and significant relationship with returns on equity. This led to the recommendations that these insurance companies should continue to prioritize and strategically invest in the training and development initiatives of their workforce as well as prioritize staff welfare as such investments are evidently associated with improved financial performance and also, they should carefully reassess and potentially reallocate their investments in staff health initiatives, considering alternative strategies and focusing on comprehensive well-being programs that align more closely with the financial metrics of returns on equity, ensuring a more targeted and impactful approach to achieving optimal financial performance.

Keywords: *Human capital, returns on equity, intellectual property, financial performance, intensity*

1. Introduction

Government policies, regulatory changes, economic conditions and the insurance sector overall stability have played a pivotal role in shaping the financial performance of insurance companies in Nigeria. These insurance firms have had to adapt to evolving regulatory landscapes to ensure compliance while still striving for sustainable growth and profitability in the Nigerian insurance industry. Moreover, in recent years Nigerian insurance firms have been focused on improving their asset quality and financial performance. They have also embraced technology-driven solutions like online platforms and digital payment systems to enhance operational efficiency and customer experience. These efforts are critical for maintaining and potentially improving the financial performance of insurance firms in Nigeria as they navigate the challenges and opportunities within the industry. As noted by Osirim, *et al;* (2019), “corporate entities in emerging economy like the

one of Nigeria are developing workable strategies that will enable them to meet their objectives and the financial service sector is not an exemption”; and one of the strategies adoptable is a strategic and articulated investment in human capital to maximize profit as well as shareholders wealth.

The key objective of profit maximization by insurance firms will be difficult to actualize without a strategic investment in human capital to ensure that the firm has the kind of personnel it needs to meet its corporate goals. Human capital, according to Acheampong (2020), is the combination of brains, skills, and knowledge that gives an organization its own personality. An organization's sole irreplaceable capital is its people's knowledge and abilities. The effectiveness with which people share their expertise with others who use it determines the capital's productivity. Human capital development in the insurance business entails investing in the workforce's talent, inventiveness, and technical aptitude in order to increase production. This is not restricted to workers alone but extends to even the **employers/entrepreneurs** because they too need to develop themselves for more efficiency and effectiveness in the management of physical and other human resources.

Despite the increased interest in accounting for human capital value, it is disappointing to notice that most financial statements issued by most businesses in Nigeria and other areas of the world- and this is not limited to insurance businesses- have yet to adequately capture this all-important asset (Dhatt *et al* 2021). In light of this argument, we believe that financial statements fail to communicate to management and the investor community the true state of the business in terms of human capital and development. Human capital represents the intangible assets that the insurance firms possess in the form of their workforce and it is increasingly recognized as a critical factor in driving organizational performance and competitiveness. The financial performance of insurance firms on the other hand relates to the ability of insurance firms to generate profits and create value for their shareholders. Warusawitharana (2021) opined that it includes indicators such as revenue, net income, return on assets (ROA), return on equity (ROE), and other financial ratios that assess insurance firms' profitability, efficiency, and overall financial health. Hussaini and Lawal (2021) opined that the link between human capital investment and financial performance in insurance firms is significant. A skilled and motivated workforce can contribute to improved operational efficiency, enhanced customer service, create innovative product, leading to increased revenue and profitability. Some ways in which human capital investment can impact the financial performance of insurance companies in Nigeria are: Customer Service and Relationship Building: Employees with strong interpersonal skills can provide excellent customer service, fostering customer loyalty and attracting new clients. Positive customer experiences can result in overall business growth; Operational Efficiency: Well-trained employees who possess industry expertise and knowledge can improve operational efficiency within the insurance sector. According to Stowe *et al.* (2022) efficient processes can reduce costs, streamline operations, and enhance overall productivity, positively impacting financial performance; Risk Management: Effective risk management practices rely on knowledgeable employees who can identify and mitigate potential risks and this is very important to the insurance sector. A sound risk culture and high risk management skills

exhibited by employees and management can help insurance firms to avoid financial losses associated with fraud, regulatory non-compliance, etc; Innovation and Product Development: Human capital is crucial for driving innovation and developing new financial products or services. Creative and skilled employees can identify market opportunities, design innovative solutions, and contribute to revenue growth and market differentiation; Employee Retention and Talent Acquisition: An insurance firm with a strong human capital value can attract top talent and retain high-performing employees. A skilled and experienced workforce is more likely to contribute to long-term financial success by reducing recruitment and training costs and maintaining institutional knowledge. Investing in employee development and retention strategies can lead to a more skilled and experienced workforce. Engaged and motivated employees are more likely to perform well, contribute innovative ideas, and remain loyal to the organization. Stowe *et al.* (2022) Lower turnover rates reduce recruitment and training costs while preserving institutional knowledge, positively impacting financial performance;

Porter (2020) opined that higher productivity can translate into cost savings, improved operational efficiency, and enhanced financial performance for firms. Customer Satisfaction and Loyalty: Employees with strong customer service skills and product knowledge can provide superior service, leading to higher customer satisfaction and loyalty. Satisfied customers are more likely to continue closing insurance business deals with insurance companies, resulting in increased revenues and improved financial performance; Innovation and Competitive Advantage: Human capital value plays a crucial role in driving innovation within the insurance companies. Rajan and Zingales (2020) opined that employees who possess creativity, problem-solving abilities, and industry expertise can contribute to the development of innovative financial products, services, and processes. These innovations can give insurance companies a competitive edge, attract new customers, and generate higher revenues; Risk Management and Compliance: A competent and knowledgeable workforce is essential for effective risk management and regulatory compliance. Employees who understand risk frameworks, regulations, and best practices can help insurance firms identify and mitigate potential risks, minimize losses, and maintain regulatory compliance. Effective risk management contributes to the stability and financial health of insurance firms;

Reputation and Brand Image: The quality of human capital within an insurance firm can significantly impact its reputation and brand image. Banks with a strong workforce that delivers excellent customer service, ethical practices, and financial expertise can build a positive reputation. A positive reputation can attract customers, investors, and business partners, supporting financial performance. According to Rappaport (2021), it is important to note that while human capital value can positively influence financial performance, other factors such as economic conditions, regulatory environment, technological advancements, and market competition also play a role. Thus, insurance companies that effectively manage and leverage their human capital, along with other strategic factors, are more likely to achieve sustainable financial success. Hence it is imperative to consider how insurance companies could leverage on human capital investment to boost their financial performance amidst stiff competition.

2. Literature Review

2.1 Conceptual Review

2.1.1 Human Capital Investment

The term “human capital” was introduced and conceptualized by Theodore Schultz in 1960’s to reflect the value of our human capabilities. He believed that investing in humans like any other capital could lead to an improvement in the quality and level of production and other enhanced benefits to organizations; and such investment might be in the form of education, training, employee welfare, health insurance to staff, among other incentives and investments. The human capital investment in the insurance industry in Nigeria is a vital determinant of their overall success as the skills, knowledge, and expertise of their employees significantly contribute to their ability to innovate, provide quality insurance services, and adapt to the evolving financial services landscape in the country. Human capital investment in the insurance sector in Nigeria not only influences their operational efficiency but also shapes their competitiveness in a dynamic market, making effective talent management and development strategies essential for sustainable growth and profitability.

Though not a real asset like plants and machinery, human capital comprises of the talents, skills and knowledge of a company’s employees. It is what Hussaini and Lawal (2021) defined as the value of the entire workforce in the organization and the rewards that is attached to its utilization. In addition to the above, human capital of an organization is the collective sum of the attributes, life experience, knowledge; inventiveness, energy, and enthusiasm that its people choose to invest in their work. Similarly, Igbinoso and Chijuka (2022) pointed that human capital is a broad concept encompassing many components but essentially describing the quality of the labour force. As plausible as these definitions are, we must note that no widely acceptable definition of human capital has emerged. A general consensus however is that human capital is a component of Intellectual Capital.

Despite the fact that organizations do invest in human capital, one fact that has been argued in existing literature is that human capital does not belong to organizations, rather, they are owned by the respective employees. The human capital investment in the Nigerian insurance industry plays a central role in shaping their long-term sustainability, with a well-trained and motivated workforce being crucial for maintaining customer trust, achieving strategic objectives, and navigating the complexities of the financial sector. In the insurance sector in Nigeria, the human capital investment extends beyond mere numbers on a payroll; it encompasses the collective intellect, experience, and dedication of their employees, all of which contribute significantly to their ability to thrive in a competitive and ever-changing banking environment.

2.1.2 Measures of Human Capital Investment

Staff Training Investment

Staff training is essential to the growth and development of an organization; as food is essential to the human existence so is the training of staff essential to the success of an organization. Training both physically, socially, intellectually and mentally are very essential in facilitating not

only the level of productivity but also the development of personnel in any organization. Training is a systematic development of the knowledge, skills and attitudes required by employees to perform adequately on a given task. Employees training and development is seen as the most important formation of any competent management. The reason is not far-fetched; the ever increasing technological sophistication especially in this age of computer technology has really made it compulsory for organizations to meet changing situations. Training for capacity building is central to sustaining economic growth and development because human capital is the greatest assets of any organization. Training and development are often used to close the gap between current performances and expected future performance. Training and development falls under human resource development function which has been argued to be an important function of human resource management (Nzuve, 2021). Amongst the functional activities of this function is the identification of the needs for training and development and selecting method sand programmes suitable for these needs, plan how to implement them and finally evaluating their outcome results (Okumbe 2020).

Staff training investments extend beyond traditional classroom-based learning and education. Insurance firms often offer on-the-job training, mentorship programs, and workshops to foster skill development and promote innovation of its workforce. These initiatives not only enhance employees' expertise in areas like risk management, customer service, and financial analysis but also cultivate leadership qualities and a strong sense of commitment to the organization's goals. Investments in employee education also have a direct impact on customer satisfaction and trust. A well-informed and skilled workforce can provide superior financial advice, address customer inquiries effectively, and ensure compliance with insurance regulations, thereby enhancing the overall customer experience.

Employee educational investments in the insurance industry extend beyond a budgetary allocation; they represent an investment in the intellectual capital and future success of the organization. By nurturing a learning-oriented culture, supporting diverse educational pathways, and emphasizing the holistic development of their workforce, insurance firms position themselves to thrive in an increasingly complex and competitive financial landscape. These investments reflect a commitment to excellence, innovation, and sustained growth of the sector. Educational costs for employees in the insurance sector represent a significant investment in the future of the organization. By prioritizing continuous learning, professional development, and diversity, the insurance industry ensure their employees remain adaptable, informed, and aligned with the evolving demands of the financial industry. These investments not only benefit individual employees but also contribute to the long-term success, growth, and sustainability of the entire insurance sector.

Staff Welfare Investment

Staff welfare investments encompass various aspects of employee support and benefits, including healthcare, insurance, retirement plans, and workplace amenities. They are not only a financial obligation but also a strategic investment in the workforce aimed at attracting and retaining top

talent, boost morale, and foster a positive organizational culture. Staff welfare investments in the insurance sector reflect a deep-rooted commitment to the holistic development and support of the workforce. Beyond tangible benefits like healthcare and retirement plans, these costs also encompass intangible investments in fostering a workplace culture that values diversity, inclusivity, and employee growth. Thus, staff welfare investments represent those costs incurred to provide benefits and support systems for organizational workforce, which may include health insurance scheme, employee retirement benefits, and childcare support among others. Staff welfare costs or expenses need not be in monetary nature. It can be in the form of non-monetary value like gifts, refreshments, reimbursements to employee on incurring the expenses like gym membership.

According to Igbinoso and Chijuka (2022) staff welfare investments are incurred for the benefits of entity employees. In the insurance sector, staff welfare investments constitute a critical component of an institution's operational expenses. These costs reflect the commitment of insurance organizations to provide for the well-being, safety, and job satisfaction of their employees, recognizing that a content and motivated workforce is vital to the overall success and sustainability of the institution. Healthcare benefits, for instance, ensure that employees and their families have access to quality medical services, promoting both physical and mental well-being. These benefits not only serve as a safety net for employees but also contribute to their overall job satisfaction, as they feel valued and cared for by their employer.

Staff Health Investment

In the insurance sector, employee health investments constitute a significant and essential component of the institution's operational expenses. These costs reflect the insurance industry's commitment to safeguarding and promoting the well-being of its employees, recognizing that a healthy workforce is fundamental to the institutions overall success and resilience. Employee health investments encompass a range of initiatives and benefits aimed at ensuring employees' physical and mental health. These initiatives go beyond mere financial obligations and represent a strategic investment in the workforce, contributing to employee satisfaction, productivity, and long-term retention.

Stowe *et al.* (2022) proposes the following features as an ideal health programme, they include: stated health and medical policy, adequate health facilities according to the size and nature of the organization, a registered nurse and a doctor or part-time services of a doctor, medical consulting services, periodic medical examination of all employees exposed to health hazards, availability of facilities for voluntary periodic physical examination for all employees, in and outpatient services, full and subsidized medical cover, medical cover for immediate dependants.

Warusawitharana (2021) stated that health and safety is important since the well-being of employees is important. Depending on the country's labour policy, there may be some rules set with regards to safety and health of employees. These rules and controls over organizations against employees may be such as; compulsory workman compensation schemes where all organizations

are required to insure employees at work. Another control may be regular inspection of working environment by the government and union officials. The inspection may be aiming at ensuring that the company is following the set policies and has a safe working environment for its employees.

Employee health investments in the insurance sector are not just financial expenditures; they symbolize a strategic investment in the well-being and resilience of the workforce. By providing comprehensive healthcare benefits, mental health support, safety, wellness initiatives, and promoting a culture of health, insurance companies foster a workforce that is not only physically and mentally healthy but also motivated, loyal, and well-equipped to meet the industry's challenges and goals.

2.1.3 Return on Equity (ROE) as a Proxy of Financial Performance

ROE is a yearly financial ratio that shows how much profit a firm earned compared to the total amount of shareholders' equity reported on the statement of financial position for a period. ROE measures what the stockholders require in return for their investment. A company that has a high return on equity is expected to be one that is able to generate cash internally either by retaining earnings or any other means. ROE ratio shows the rate of return earned on the money invested in the firm by its shareholders. ROE also indicates how effectively a firm executive is investing stockholders' capital. The wealth maximization of shareholders is very important in this case. This is because it considers the ability of a company to witness growth and stable dividend payment or capital gain arising from appreciation in the worth of the firm's market value of shares. The shareholder's wealth is also important because it determines the investment decisions of the shareholders and as such proper attention should be paid to it by management (Enekwe *et al.*, 2021).

ROE is expressed as a percentage and is often used as a key performance indicator to assess the profitability and efficiency of a company. A higher ROE generally indicates that a company is generating more profit with each unit of shareholders' equity, which is favorable for investors. However, it's important to note that ROE should be analyzed in the context of the industry in which a company operates. Different industries have varying average ROE levels due to factors such as capital intensity and business models. Comparing the ROE of companies within the same industry can provide a better understanding of their relative performance. ROE is a useful metric for investors and analysts as it helps evaluate a company's ability to generate returns for its shareholders and can be used for benchmarking purposes. However, it should be used in conjunction with other financial ratios and qualitative analysis to gain a comprehensive view of a company's financial health and performance.

Limitations of ROE: ROE is a useful metric but has limitations. It focuses on profitability and does not capture other important aspects such as cash flow, risk, or the quality of earnings. Additionally, ROE can be manipulated through accounting practices, such as adjusting the leverage ratio or manipulating net income figures. Therefore, it is advisable to analyze ROE alongside other financial ratios and qualitative factors.

ROE is a valuable financial ratio that measures a company's profitability relative to shareholders' equity. It provides insights into how effectively a company generates returns for its investors. However, it should be used in conjunction with other metrics and factors to gain a comprehensive understanding of a company's financial performance and prospects.

2.2 Theoretical Review

Resource Based View (RBV)

This paper is hinged on resource based theory which states that firms' competitive advantage is sustained by organizational valuable resources, and capabilities, which are not common and cannot be easily substituted. RBV was built into a coherent theory by Wernerfelt (1984) as cited by Odhong and Omolo (2021). Odhong and Omolo (2021) also believe that firms' competitive advantage can be secured through development of knowledge and skills. The theory sees human capital as a resource that cannot be substituted or imitated which gives a firm a competitive advantage over others.

The Resource-Based View (RBV) influences human capital investment and financial performance of insurance firms in Nigeria by emphasizing that a valuable, rare, and difficult-to-imitate human capital, such as a highly skilled and specialized workforce, can serve as a strategic ce that contributes to sustained competitive advantage and improved financial performance when effectively leveraged and managed within the insurance's operations.

This perspective underscores that by recognizing human capital as a valuable and distinctive resource, Nigerian insurance firms can prioritize investments in talent acquisition, development, and retention to enhance their human capital investment, resulting in improved operational efficiency, innovation, and ultimately better financial performance, while gaining a competitive edge in the dynamic Nigerian insurance sector.

2.3 Empirical Review

Owolabi and Obida (2020) examined the link between human resource investment and financial performance of firms in Nigeria. Their central objective was to determine the extent of influence from human resource expenditure on firms' profit after tax (PAT), total revenue (TR), and net asset (NA) for 2000 to 2018 reporting years. Adopting multiple regression analysis through the use of SPSS, the hypotheses were tested at 5% level of significance. The test result indicated that personnel benefit cost (PBC) positively and significantly influence PAT, but negatively impact on the Net Asset. The researchers therefore suggested that Firms should imbibe the culture of training, developing, and motivating the workforce to deploy their best expertise for the financial growth of their organizations. This, they believed was capable of lowering the rate of labour turnover. A greater fraction of the reviewed research papers adopted either the accounting or capital market measure of corporate financial performance) CFP), while comparative analysis of both versions of CFP within one study was insignificant in the review. Therefore, the current research is an attempt to investigate the comparative financial implications of human resource investment disclosures (HRID) on accounting and capital market CFP respectively denominated into return on equity (ROE) and market value performance (MVP) of firms. The aim is to broaden the robustness of the test for a more reliable and comparable result.

Inua and Oziegbe (2020) further examined the effect of human resource investment on the performance of quoted banks in Nigeria. The annual reports of 18 quoted commercial banks from 2009-2018 reporting years were analysed through ex-post facto research design. Adopting regression analysis for testing the effect of some human resource accounting determinants, such as staff cost, remuneration of directors, size of workforce, and size of firm. The results indicated significant positive effect by staff cost, staff strength, and size of firm on financial performance of quoted banks in Nigeria. However, directors' remuneration had no significant relationship on financial performance. The researchers therefore recommended adopting a more reliable means of communicating benefits to employees, in addition to discouraging unfair performance appraisal as it impairs employees' motivation.

Mohammad, *et al.* (2020) examined the linkage between human resource investment and the financial performance utilising survey approach Focusing on the twenty (20) private commercial banks in Bangladesh, the regression model found a significant positive correlation between human capital investment (in salaries and allowances, provident fund and gratuity, bonus and incentives, staff welfare and training, workshop, and seminar) and financial performance of the selected banks. The questionnaires were administered to 120 bank executives.

Mbah, *et al.* (2020) evaluated the effect of human capital investment on organizational performance in manufacturing industries in South-East Nigeria. Analysis of 306 respondents revealed that knowledge had a positive effect on product quality while skills promoted innovation. Also using survey approach. The study thus posited that training of staff to acquire knowledge and skill will enhance productivity and market share of the firms. The study utilised ANOVA technique. Beyond the context of organization.

Daferighe and Edet, (2022) investigated the effect of human capital costs on corporate productivity of ten selected firms on the Nigeria stock exchange. Structured questionnaire was administered to collected data. Multiple regression analysis was used to test the hypothesis of the study. Finding showed that there is a positive and significant relationship between human capital accounting and financial performance of selected firms.

Amahalu *et al.* (2021) studied the effect of human resource investment on financial performance of quoted deposit money banks in Nigeria, it specifically aimed to estimate the effect of human resource cost on return on asset, return on equity, and market-to-book value of relevant banks from 2009-2019. Adopting ex-post facto research design, secondary data were obtained from factbooks of the Nigerian stock exchange. While STATA 13 statistical application was used for inferential statistics, Coefficient of correlation and Ordinary Least Square (OLS) regression analyses were used for estimating the test result. The researchers found that human resource accounting has positive and statistically significant effect on Financial Performance at 5% level of significance. It was therefore recommended among other things that Human Resource should be capitalized in the statement of financial position to facilitate better investment decision.

Darlington (2021) investigated the relevance of human capital investment information on the market value of 50 quoted manufacturing companies in Nigeria. Adopting secondary data obtained from the Annual Reports and Fact Books of the Nigerian Stock Exchanged for the period, 2007 to 2020. Pooled ordinary least square (OLS) and Fixed Effect Model (FEM) were used for data analyses. The test result revealed positive substantial relevance of human capital cost ($\beta=0.02$, $t=2.42$, $p<0.05$) with share price. The outcome suggests that capitalizing investment on human resource is capable of increasing the shareholders' wealth, besides improving the capital market reputation of quoted manufacturing companies in Nigeria.

Doyle (2021) studied the effect of human resource investment on financial performance of quoted deposit money banks in Nigeria, specifically aimed to estimate the effect of human resource cost on return on asset, return on equity, and market-to-book value of relevant banks from 2000-2019. Adopting ex-post facto research design, secondary data were obtained from factbooks of the Nigerian stock exchange. While STATA 13 statistical application was used for inferential statistics, Coefficient of correlation and Ordinary Least Square (OLS) regression analyses were used for estimating the test result. The researcher found that human resource accounting has positive and statistically significant effect on Financial Performance at 5% level of significance. It was therefore recommended among other things that Human Resource should be capitalized in the statement of financial position to facilitate better investment decision.

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Chukwu, *et al.* (2022) examined the effect of human capital on the market value of banks in Nigeria, using data on three proxies of human capital related to remuneration and staff strength. Relevant financial statement data for the period 2020 to 2020 were extracted from the annual reports and accounts of fourteen banks listed on the Nigerian Stock Exchange. Results of regression of stock price on the human capital indicators showed that only one variable – the proportion of highly paid employees - had a significant effect on the market value of firms. The findings suggested that investors' confidence increased with the strength of valuable stock of human capital in the payroll of banks.

Uzoamaka and Nweze (2021), the effect of human capital investment on corporate performance: A cross-sectional study of selected quoted companies in Nigeria. Quantitative correlational design and stratified random sampling techniques were employed and analysis was done using SPSS 20 and Person correlation. The findings state that there is a positive effect on investment in human

capital measured in value-added to employee and profitability while some employees hurt profitability.

Eke (2021) examined the effect of human capital costs on corporate productivity of ten selected firms. Structured questionnaire was administered to collect data. Multiple regression analysis was used to test the hypothesis of the study. Finding showed that there is a positive and significant relationship between human capital accounting and financial performance of selected firms. He stated that corporate entities need to build capacity to drive the process and revisit their operational and internal control systems. More so, the laws need to be amended and the transition processes need to be handled efficiently, effectively and professionally in order to sustain the confidence of users of accounting services on the confidence of users of accounting services on the skills of professional accountants.

Channar, et al. (2021), this studied is conducted to assess the impact of Human Capital Variables i.e. acquisition of knowledge, skills & expertise of the employees on the satisfaction of the employees and then on the effectiveness of the organizations. Simple random probability method was used for sampling selection & primary data was collected by administering questionnaires. Independent Samples T- Test showed that both genders are provided equal chances of human capital development. Effectiveness of the organization was measured by assessing the satisfaction and commitment level of the employees and customers with the organization. Satisfaction and commitment was measured by already established tools. Correlation technique showed that human capital development has strong significant positive relation with satisfaction level of the employees' and customers, which will eventually lead to the organizational performance.

Odhong and Omolo (2021), established the effect of Human Capital Investment on Organizational Performance of Pharmaceutical Companies in Kenya. The independent variables include: training, education, knowledge management and skills development. The main underpinning theories in this study include: Human Capital, Skill Acquisition and Sustainable Resource Theory. 200 observations were used in the study. Study used questionnaires in data collection, descriptive and inferential statistics used in the analysis. The found a positive significant relationship between human capital investment and organizational performance.

Eliasson and Braunerhjelm (2021) examined human resource investments and organization's competence. human resource investments have a significant positive correlation with an increase in an organization's competence on 137 Swedish engineering organizations shows that the financial outcomes of human resource investments have a significant positive correlation with an increase in an organization's competence, shares and added value. Research among top U.K. organizations, as well as similar investigations carried out in the U. S. and other European countries, further, confirm that human resource measurement and reporting can lead to improved profitability and competitiveness of an organization.

Ude and Ekeagwu (2021) examined the effect of human capital investment on economic performance in Nigeria. The results from employing multiple regression analysis and Wiener-Granger causality using time series data from 1980 to 2019 showed that both education and health expenditure exerted significant impact on economic performance in Nigeria.

Groth and Kinney (2020) examined the financial performances of local banks in Malaysia for 2020 to 2021 and 2007 to 2021. The researchers utilized value added intellectual coefficient (VAIC) model in the evaluation of financial performances of 10 local banks in Malaysia. VAIC was further denominated into human capital efficiency (HCE), structural capital efficiency (SCE), and capital employed efficiency (CEE). Adopting causal comparative research design and secondary data, the regression analysis indicated that CEE is significantly associated with Return on Assets (ROA) for the 6 years and 10 years. While HCE is significantly related with ROA for only the 6 years, SCE revealed a significant nexus with ROA for only the 10 years. In another related outcome, SCE showed a significant relationship with Leverage (LEV) for only the 6 years compared to a significant association between HCE and LEV for the 10 years. Banks were therefore recommended to focus on all the components of IC since all their efficiencies are capable of enhancing financial performances in the sector.

Mohammad *et al.* (2020), their study investigated the impact of investment in human resource development on the financial performance of the banking sector of Bangladesh. The study used economic data, regression models and survey data for analysis, the study found out that there is a significant relationship between human resource development and investment and financial performance.

Akinbor and Okoye (2019) Investigating further into firms' financial performance and human resource investment disclosure in Nigeria, utilized descriptive, correlation and regression statistical models for data analyses and for estimating test results. Their findings revealed that the multiplicative effect of firms' Financial Performance contributed 75.9% of the variation in Human Resource investment Disclosure (HRID) with an F-ratio of 3.581 at 5% level of significance. The observed positive association between Return on Equity (ROE) and Human Resource investment Disclosure (HRID) implied that increase in return on equity encouraged firms to report their human capital information. Thus, strengthening the confidence of stakeholders, enhancing external reputation, and appearing more legitimate before members of the public. It was further concluded that human resource investment information of an organization is very relevant for decision management.

Zainabu *et al.* (2019) studied firms' financial performance and human resource investment disclosure in Nigeria. utilised descriptive, correlation and regression statistical models for data analyses and for estimating test results. Their findings revealed that the multiplicative effect of firms' Financial Performance contributed 75.9% of the variation in Human Resource investment Disclosure (HRID) with an F-ratio of 3.581 at 5% level of significance. The observed positive association between Return on Equity (ROE) and Human Resource investment Disclosure (HRID)

implied that increase in return on equity encouraged firms to report their human capital information. Thus, strengthening the confidence of stakeholders, enhancing external reputation, and appearing more legitimate before members of the public. It was further concluded that human resource investment information of an organization is very relevant for decision management.

Ahesha and Sujani (2019) investigated the impact of investment in human capital on financial performances of the companies in Sri Lanka. In order to achieve the objective of the study, financial information in financial statements of listed companies under Colombo Stock Exchange for the period of 2 years from 2016 to 2018 was used. Sample of the study was selected as 40 companies listed under Colombo Stock Exchange. Data analysis was carried out with aid of SPSS (Statistical Package of Social Sciences). Findings revealed that there is a significant relationship between investment in human capital and firm financial performances. They recommended that investment in HC should include all the expenses incurred on enhancing knowledge, education, expertise and skills of employees. This may involve salaries and wages, training and development, payments for conventions and conferences, dues and subscriptions.

3.1 Methodology

The paper adopted a survey research design and a well structured likert scale questionnaire was used to gather data by primary means. The population size of the study was one thousand four hundred and fifty (1,450) employees of twenty three (23) listed insurance firms from six (6) states of the south-south geo-political zone; while the sample size was three hundred and fourteen (314) determined using Taro Yamen's formula as follows:

$$n = \frac{N}{1 + N(e)^2}$$

where: n = sample size sought for; e = level of significance; N = population **Hence:** n = $N / (1 + N(e)^2)$, N = 1,450, e = level of significant of 0.05
 $n = 1,450 / (1 + 1,450(0.0025)) = 1,450 / 1 + 3.62$
 $= 1,450 / 4.625 = 335.30 = 314$

In this study, the researcher ensured the construct and content validity of the research instrument items through experts review and confirmation. The instrument is sufficiently reliable as the cronbach alpha is 0.811. Hypothesis was tested using simple regression model..

3.2 Method of Data Analysis and Model Specification

In accordance with objectives of the study and the expectation of the researcher, the empirical models of this study were stated as follows:

$$ROE_{ij} = \beta_0 + \beta_1 STI + \beta_2 SWI + \beta_3 SHI + e_t \quad \text{Equation (3.1)}$$

Where: β_0 = Intercept of financial metrics, $\beta_1 - \beta_3$ = Coefficient of each of the predictor variables and e_t = Random error terms. In this study, criterion variable was regarded as financial metrics of insurance firms in Nigeria measured using return on equity (ROE) while the predictor variable was

observed to be human capital investment measured using staff training investment, staff welfare investment and staff health investment.

4.1 Data Analysis

Table 4.1 Residuals Statistics^a

| | Minimum | Maximum | Mean | Std. Deviation | N |
|----------------------|----------|---------|---------|----------------|-----|
| Predicted Value | 20.7686 | 24.6411 | 23.2881 | .75468 | 302 |
| Residual | -3.00955 | 1.74025 | .00000 | .77009 | 302 |
| Std. Predicted Value | -3.339 | 1.793 | .000 | 1.000 | 302 |
| Std. Residual | -3.889 | 2.249 | .000 | .995 | 302 |

a. Dependent Variable: ROE

The residuals statistics provide insights into the performance of the regression model in predicting return on equity. The minimum and maximum values for the predicted return on equity are 20.7686 and 24.6411, respectively, indicating the range within which the model's predictions fall. The mean of the predicted values, 23.2881, suggests that, on average, the model accurately predicts the return on equity. The standard deviation of .75468 for the predicted values indicates the dispersion of these predictions around the mean. The residuals, representing the differences between the observed and predicted values, exhibit a mean of 0, indicating that, on average, the model does not systematically overestimate or underestimate return on equity. However, the standard deviation of .77009 for the residuals suggests variability in the accuracy of individual predictions. The standard predicted values and standard residuals provide standardized measures of prediction accuracy and deviation, respectively, enabling comparison across different models and datasets. Overall, these statistics indicate that while the model performs reasonably well in predicting return on equity, there is still some variability in the accuracy of individual predictions that may warrant further investigation.

Table 4.2 Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|--------------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| 1 (Constant) | 5.804 | 1.132 | | 5.129 | .000 |
| STI | .512 | .037 | .592 | 13.832 | .000 |
| SWI | .196 | .049 | .218 | 3.976 | .000 |
| SHI | .045 | .046 | .052 | .974 | .031 |

a. Dependent Variable: ROE

STI = staff training investment; SWI = staff welfare investment; SHI = staff health investment

In the regression model, the constant term has a coefficient of 5.804, indicating the expected return on equity when all predictor variables are zero. This coefficient is statistically significant with a p-value of .000, suggesting that even in the absence of the predictor variables; there is a non-zero baseline return on equity. The coefficient for staff training investment is .512, indicating that for every unit increase in educational cost, there is an associated increase of .512 units in return on equity. This coefficient is highly significant ($p < .0001$), suggesting that investments in employee education have a substantial impact on return on equity. Similarly, the coefficient for staff welfare investment is .196, indicating that for every unit increase in welfare cost, there is an associated increase of .196 units in return on equity. This relationship is also highly significant ($p < .0001$), underscoring the importance of investing in staff welfare for enhancing return on equity. Lastly, the coefficient for employee health investment is .045, indicating a smaller but still positive impact on return on equity for every unit increase in health cost. Although this coefficient is statistically significant ($p = .031$), its effect size is relatively smaller compared to the other predictors.

4.2 Test of Hypotheses

The following null research hypotheses were tested as follows:

Ho₁: There is no significant relationship between staff training investment and return on equity of insurance firms in Nigeria.

Table 4.3 Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|-----------------------------|------------|---------------------------|--------|------|
| | B | Std. Error | Beta | | |
| STI | .510 | .037 | .592 | 13.711 | .001 |

a. Dependent Variable: ROE

From the result in the table 4.3, the t-statistics shows that there is a positive and significant effect of staff training investment and return on equity. The t-statistics 13.711 confirms the magnitude and strength of this effect and it is statistically significant at $p 0.001 < 0.05$. The t-statistic represents a high strength of the variables. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected and the alternate accepted. Thus, there is a positive and significant relationship between staff training investment and return on equity of insurance firms in Nigeria.

Ho₂: There is no significant relationship between staff welfare investment and return on equity of insurance firms in Nigeria.

Table 4.4 Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|-------|-----------------------------|------------|---------------------------|-------|------|
| | B | Std. Error | Beta | | |
| SWI | .194 | .049 | .218 | 3.864 | .000 |

a. Dependent Variable: ROE

From the result in table 4.4, the t-statistics shows that there is a positive and significant effect of staff welfare investment and return on equity. The t-statistics 3.864 confirms the magnitude and strength of this effect and it is statistically significant at $p < 0.000 < 0.05$. The t-statistic represents a high strength of the variables. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected and the alternate accepted. Thus, there is a positive and significant relationship between staff welfare investment and return on equity of insurance firms in Nigeria.

H₀₃: There is no significant relationship between staff health investment and return on equity of insurance firms in Nigeria.

Table 4.5 Coefficients^a

| Model | Unstandardized Coefficients | | Standardized Coefficients | T | Sig. |
|-------|-----------------------------|------------|---------------------------|------|------|
| | B | Std. Error | Beta | | |
| SHI | .044 | .046 | .052 | .963 | .031 |

a. Dependent Variable: ROE

From the result in the table 4.5, the t-statistics shows that there is a positive and significant effect of staff health investment and return on equity. The t-statistics .963 confirms the magnitude and strength of this effect and it is statistically significant at $p < 0.000 < 0.05$. The t-statistic represents a high strength of the variables. Therefore, based on empirical findings the null hypothesis earlier stated is hereby rejected and the alternate accepted. Thus, there is a positive and significant relationship between staff health investment and return on equity of insurance firms in Nigeria.

4.3 Discussion of Findings

The tested hypothesis one shows that there is positive and significant relationship between staff training investment and return on equity of insurance firms in Nigeria. This implies that heightened investments in training and development of staff are associated with increased returns on equity, emphasizing the strategic importance of fostering staff training and development for improved financial performance within these insurance institutions. This identified positive and significant effect of staff training investment and return on equity in Nigerian insurance industry underscores the pivotal role that strategic staff training plays in shaping financial outcomes within the insurance sector. The implication is that as these insurance firms allocate resources to enrich the educational development of their staff, it positively influences their capacity to improve their return on equity.

The tested hypothesis two shows that there is positive and significant relationship between staff welfare investment and return on equity of insurance firms in Nigeria. The identification of a positive and significant effect of staff welfare investment and return on equity in Nigerian insurance industry implies that increased investment in staff welfare initiatives is associated with higher returns on equity, emphasizing the strategic importance of prioritizing staff welfare for improved financial performance within the insurance sector. The substantiated positive and significant effect of staff welfare investment and return on equity in Nigerian insurance firms

underscores the crucial interplay between staff well-being and financial success within the insurance sector. This correlation suggests that as insurance allocate resources to bolster staff welfare, it not only contributes to a positive work environment but also positively influences their ability to generate higher returns on equity, signifying a potential symbiotic effect of staff welfare and organizational profitability.

Hypothesis three outcomes indicate that there is positive and significant relationship between staff health investment and return on equity of insurance firms in Nigeria.

The identified positive and significant effect of staff health investments and return on equity among Nigerian insurance firms underscores the vital role of prioritizing staff members' health initiatives in driving financial success within the insurance sector. This finding suggests that as insurance companies allocate resources towards staff health programs, their return on equity experiences a noteworthy increase, highlighting the potential benefits of investing in the well-being of their workforce. The implications of this relationship extend beyond the realm of financial metrics, touching upon broader aspects of organizational effectiveness and societal impact. By investing in staff health, insurance firms not only enhance the physical and mental well-being of their workforce but also cultivate a positive workplace culture characterized by employee satisfaction, engagement, and loyalty. Such a conducive work environment can foster higher levels of productivity, creativity, and innovation, ultimately contributing to improved operational efficiency and competitive advantage.

5.2 Conclusion and Recommendations

Based on the analysis of the data, the study concludes that financial service firms such as the insurance sub-sector could leverage on human capital investment to improve their financial performance given that findings showed positive and significant relationship among the variables. On the basis, the following recommendations can be made:

1. Insurance companies in Nigeria should continue to prioritize and intensify investments in the training and development initiatives of their staff, recognizing the potential for such expenditures to positively influence return on equity, contributing to a knowledgeable and skilled workforce that could improve insurance firms' profitability and shareholders' value.
2. Insurance companies in Nigeria should show more commitments and give more needed priority to their staff welfare, recognizing that a supportive and well-cared-for workforce contributes positively to operational efficiency and, consequently, to the overall good financial performance and competitiveness of the insurance firms.
3. Lastly, insurance firms are called upon to reconsider the allocation of resources in their health-related initiatives, potentially exploring alternative approaches or comprehensive well-being programs to ensure a more targeted and effective strategy that aligns with the financial metric of return on equity for enhanced organizational profitability and shareholder value.

Conflict of Interest: *The authors hereby declare that there is no conflict of interest in this manuscript.*

REFERENCES

- Acheampong, M. (2020). Intellectual capital and its effect on financial performance of banks: Evidence from Saudi Arabia. *Procedia - Social and Behavioral Sciences*, 1(64), 201–207.
- Ahesha, R. & Sujani, I. (2019). Measuring intellectual capital: A new model and empirical study. *Journal of Intellectual Capital*, 5(1), 195–212.
- Akinbor, E. & Okoye, I. (2019). Intellectual capital performance and profitability of banks: Evidence from Pakistan. *Journal of Risk and Financial Management*
- Amahalu, I., Obi, D., Abiahu, H. & Okika, J. (2021). An empirical study on the relationship of corporate financial performance and human capital concerning corporate social responsibility: Applying SEM and Bayesian SEM. *Cogent Business & Management*, 6(1), 165-169.
- Channar, D., Ugur, M., & Yew, S. L. (2021). A note on the relationship between human assets and human capital. *Accounting Review*, 48 (3), 589–593.
- Chukwu, H., Ugo, I. & Osioma, C. (2022). Impact of intellectual capital on productivity of insurance companies in Ghana. *Journal of Intellectual Capital*, 20(6), 763–783.
- Daferighe, T. & Edet, J. (2022). The relationship between human capital efficiency and financial performance of Dutch production companies. *Research Journal of Finance and Accounting*, 6(8), 188–201.
- Darlington, Y. (2021). On intellectual capital and financial performances of banks in Malaysia. *Cogent Economics & Finance*, 6(1), 1453574.
- Dhatt, J., Tubotamuno, B. & Shaibu, D. (2021). A European empirical study of the relationship between firms' intellectual capital, financial performance and market value. *Journal of Intellectual Capital*, 18(4), 771–788.
- Doyle, Y. (2021). Investment in human capital. *American Economic Review*, 51(1), 1–17.
- Eke, S. (2021). Should bankers be concerned with intellectual capital? A study of the Thai banking sector. *Journal of Intellectual Capital*, 19(5), 897–914.
- Eliasson, H. & Braunerhjelm, C. (2021). Intellectual capital performance: A comparative study between financial and non-financial industry of Indonesian biggest companies. *International Journal of Economics and Financial Issues*, 6(4), 1436–1439.

- Enekwe, M., Chilonda, P. & Matchaya, G. (2021). Study on the human capital accounting based on the enterprise Co-governance logic by human capital and physical capital. *Accounting Research*, 8(1), 72–76.
- Groth, R. & Kinney, T. (2020). Empirical analysis of human capital development and economic growth in European regions. Impact of education and training third report on vocational training research in Europe: Background Report. Luxembourg: *The International Journal of Economics, Commerce and Management*, 4(2), 13-24.
- Hussaini, D. & Lawal, R. (2021). Effect of human resource accounting on profitability of selected quoted telecommunication firms in Nigeria. *Contemporary Issues in Business Management*: 48(1), 35-45.
- Igbinoso, Y. & Chijuka, B. (2022). Human capital development and organizational performance: A conceptual review. *International Journal of Innovative Research and Development*, 8(1), 49-54.
- Inua, U. & Oziegbe, E. (2020). Effect of human capital development in organizational performance in manufacturing industries in South-East Nigeria. *International Journal of Academic Research in Economics and Management Sciences*, 7(3), 60–78.
- Mbah, T., Joseph, O-M. & Ackah, I. (2020). An empirical study of human resource accounting disclosure on financial performance of selected listed firms in Nigeria. *Journal of Accounting and Management*. 12(2), 159-169.
- Mohammad, A., Mahi, Y. & Nazamul, E. (2020). Human resource disclosure in annual report of the listed banking companies in Bangladesh. *Global Journal of Quantitative Science*, 2(1), 7-19.
- Nzuve, K. (2021). Firm's financial performance and human resource accounting disclosure in Nigeria. *International Journal of Business and Management*, 7(14), 67–75.
- Odhong, O. & Omolo, K. (2021). Intellectual capital and its effect on financial performance of banks: Evidence from Saudi Arabia. *Procedia - Social and Behavioral Sciences*, 1(64), 201–207.
- Okumbe, M. (2020). The relationship between intellectual capital and firm performance. *Corporate Governance and Organizational Behavior Review*, 1(1), 32–41.
- Osirim, M; Wadike, C.G. & Davies, S.D. (2019). The impact of financial instruments on the capacity of Nigerian banks to generate sustainable profits. *International Journal of Education and Social Research*, Pepperdine University, Malibu, CA, USA; 7, September edition, 93-94.

- Owolabi, I. U. & Obida, R. (2020). VAICTM-an accounting tool for IC management. *International Journal of Technology Management*, 20(5–8), 702–714.
- Porter, E. (2020). The influence of intellectual capital on the types of innovative capabilities. *Academy of Management Journal*, 48(3), 450–463.
- Rajan, M. & Zingales, U. (2020). Human capital, innovation, and productivity in Vietnam’s SMEs. *International Journal of Operations & Production Management*, 24(4), 350-371.
- Rappaport, D. (2021). Study on the human capital accounting based on the enterprise Co-governance logic by human capital and physical capital. *Accounting Research*, 8(1), 72–76.
- Stowe, U., Asongu, S., & Bekun, F. (2022). Empirical analysis of human capital development and economic growth in European regions. Impact of education and training third report on vocational training research in Europe: Background Report. Luxembourg: *The International Journal of Economics, Commerce and Management*, 4(2), 13-24.
- Ude, K. & Ekeagwu, I. (2021). The effect of human capital investment on corporate performance: a cross sectional study of selected quoted companies in Nigeria. *ICAN Journal of Accounting & Finance*, 2(6), 156-174.
- Uzoamaka, D. & Nweze, F. (2021). Effect of human resource accounting on profitability of selected quoted telecommunication firms in Nigeria. *Contemporary Issues in Business Management: 48(1)*, 35-45.
- Warusawitharana, I. (2021). Managing human capital development in small and medium-sized enterprises for sustainable national development in Nigeria. *International Journal of Management & Information Systems*, 15(2), 67-77.
- Wembe, O. (2021). Effect of human capital development in organizational performance in manufacturing industries in South-East Nigeria. *International Journal of Academic Research in Economics and Management Sciences*, 7(3), 60–78.
- Wernerfelt, W. (1984). The effect of human capital development on financial performance of banks in Nigeria. *Global Journal of Human Resource Management*, 4(6), 34-47.
- Zainabu, I., Tang, J. & Lin, E. (2019). Human capital management as a tool for value creation. *International Journal of Advanced Academic Research / Social & Management Sciences*, 14(6), 63-82.