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## Nexus between Human Resources Accounting and Corporate Sustainability: Evidence from Listed Consumer Goods Companies in Nigeria

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### **Abstract**

*Lacuna still exist as several authors had in the past examined the relationship between human resources accounting and financial performance with respect to profitability, this study went further investigate the nexus between human resources accounting and corporate sustainability. The study adopted survey method as research design in which primary data with respect to questionnaires were designed to measure the variables of human resources accounting and corporate sustainability. The population of the study was 20 listed firms of consumer goods from which only 9 companies were readily accessible because of the restriction of COVID – 19 through simple sampling technique. 305 questionnaires were distributed and 292 were returned but 289 were found usable. Answers were sought to two research questions, in relation to which two hypotheses were formulated and tested at 5% level of significance. The data collected were presented and analysed using frequency simple tables, means, standard deviation, Levenes test of homogeneity, analysis of variance and ordinary least square method of regression analysis were employed to present and analyze the data. The study revealed that there is a positive relationship between human resources accounting and corporate sustainability with reference to wages and salaries and hiring cost. It was concluded that two dimensions (wages and salaries and hiring cost) of human resource accounting both have significant influence on corporate sustainability. It was therefore recommended that corporate organizations should ensure that wages and salaries and hiring cost were judiciously paid to ensure corporate organizations keeps running and surviving.*

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**Keyword:** *Human resource accounting, wages and salaries, hiring cost, corporate sustainability.*

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**PAPER CLASSIFICATION:** Research Paper

**JEL:** M12, M14, M4, M52

### **1.1 Introduction**

Ogenyi & Oladele, (2015) stated that human resources accounting (HRA) is an accounting tool developed to account for people as organizational resources by providing information on the estimated value and the cost of investment on the human resources in an organization to the stakeholders. Human resource accounting (HRA) helps management frame policies for human resources, especially where it is necessary to identify measure, and disclose data about the people within an organization, where they are recognized as an accounting resource

(Thomas, 2016). The effective optimization of the ability of the human resources in accounting highly contributes to the business success, making human resources the greatest asset at the disposal of the businesses(Enofe, Mgbame, Sunday, & Christopher, 2013). A good number of studies and authors have contended that human resources should be treated as a capital expenditure, but just like every tangible asset, human beings cannot be kept at a place without the tendency to move from organization to organization posited by(Omodero & Ihendinihu, 2017).

The main factors of consideration in accounting for human resources are their skills, knowledge, and experience, which can potentially be applied in the production of useful services. Effectiveness and efficiency in utilization of the accounting human resource largely bound the factors such as the skills possessed, the ability of the human resource, quality of the human resource, and how the human resource perceives issues and its character. For human resources to be an important and vital asset for corporate existence and sustainability, the business enterprise should create value in it through human resource accounting (HRA).

Before the call of human resources accounting in finance and accounting, all human resource expenses are expensed as the transactions occur but never capitalized. But owing to the introduction of human resources accounting agitation, there is the need to capitalized some human resources expenses. Omodero & Ihendinihu, (2017) mentioned that human resources cost are recognized as recruitment cost, training cost, staff welfare cost and pension cost. This research work is not all about encouragement the capitalization or expense all cost of human resource in an entity considering the obvious limitations that are natural, rather this work seeks to ascertain the linkage between human resource and its contribution to corporate sustainability.

## **1.2 Statement of Problem**

Various studies have been conducted on human resources accounting (HRA) and organization performance. It was established that attracting, hiring and employment of competent staff leads to improved human resources accounting of the organization. Anuonye, (2015) investigated the relationship between staff competence and growth of firms in Nigeria. Odhong, Were, & Omolo, (2014) concluded that having specific human management practices affects organizational performance to the extent of obtaining a sustainable competitive edge. Olowolaju & Oluwasesin, (2016) examined the effect of human capital on the profitability of quoted manufacturing companies in Nigeria. Abiola & Adisa, (2020) looked at influence of human resource accounting practices on managerial decision – making. Many authors had investigated to measure the relationship between human resources accounting and financial performance in terms of profitability, this research looked beyond profitability as many corporate organizations are now faced with sustainability. Hence the need to investigate the relationship between human resources accounting and corporate sustainability using selected listed consumer goods firms in Nigeria. This work also used Levene’s test of homogeneity, analysis of variance and ordinary least square method of regression analysis to present and analyze the data to give results.

## **1.3 Objectives of the Study**

The main objective of this research work was to investigate the relationship between human resources accounting and corporate sustainability of listed consumer goods firms in Nigeria while the specific objectives were:

- a. to examine if wages and salaries affects corporate sustainability in Nigeria.
- b. to investigate whether hiring cost affect corporate sustainability in Nigeria

## 1.4 Research Questions

- a. Does wages and salaries affect corporate sustainability in Nigeria?
- b. Does hiring costs affect corporate sustainability in Nigeria?

## 1.5 Research Hypotheses

**H<sub>o1</sub>:** Wages and salaries does not affect corporate sustainability in Nigeria

**H<sub>o2</sub>:** Hiring cost does not affect corporate sustainability in Nigeria

## 2.0 Literature Review

### 2.1 Conceptual Review

#### 2.1.1 Concept of Human Resources Accounting (HRA)

Human resources accounting also known as human asset accounting is information systems that involve the process of identifying, capturing, measuring, and analyzing the potential and the value of human resources in the firm and communicating the resultant information to the stakeholders of the firm. It is the method by which a cost is assigned to every employee when recruited and the value that the employee would generate in the future. It reflects the potential of the human resources of an organization in monetary terms, in its financial statements. Human resources accounting can also be explained as the measurement which helps to recognize the costs and the value of employees as an organizational resource. This definition explains the knowledge and intellectual capabilities of employees which is becoming significant in firm decision making and firm performance. Human resource accounting helps in improving the efficiency of staff. The employees come to know of the cost incurred on them and the return is given by them in form of output, which will motivate them to increase their worth.

The use of human resources accounting information in financial statements has been gradually increasing and has created a great impact on the individual, decision-making processes, and firm performance. Rahaman, Hossain, & Akter, (2013) gave a more specific definition of HRA, which refers to it as the process of measuring the cost incurred by business firms and other organizations to recruit, select, hire, train and develop human assets. This definition gives a view as to what expenditure on human resources should be recognized for valuation and reporting purposes. In other words, HRA involves the measurement of the economic value of people to organizations and plays an important role in internal managerial decision making.

Seth, (2009) defined human resource accounting as "accounting for people" while (Oko, Ijing, Igbaji, & Adie, 2015) defined it as human competency accounting which intimates the complexity in determining the competency of employees. HRA can be defined as the process of identifying and measuring data related to human resources for the development and enhancement of the economic value of interested parties associated with the corresponding organization. According to Amirul-Islam, Kamruzzaman, & Redwanuzzaman, (2013) costs relating to human resource accounting includes social cost, acquisition cost such as cost of recruitment, hiring, selection and placement of staff, job training costs, include staff cost, directors cost, salaries paid to the employees during their probationary period, formal training development costs of staff, separation costs of employees and costs incurred for gravid female employees.

Smita (n.d) identified two aspect of HRA to be human resource cost accounting (HRCA) and human resource value accounting (HRVA) while the former deals with the evaluation and

reporting of human costs incurred to acquire and develop people as organizational resources which also discusses accounting for investments made by an entity in the acquisition and developing personnel as well as the cost of replacing people presently employed while the latter sees it as the measurement of human resources as economic values which looks at the variance between the future and present value and earnings of human resources of two similar entities are due to the difference in their human organization. Hence the economic value of the firm can be determined by obtaining the present value of future earnings.

### **2.1.3 Challenges of Human Resources Accounting**

Oluwatoyin, (2014) stated that many obstacles make the management reluctant to introduce human resources accounting. He outlined some of the attributes to include: there is no proper clear cut and specific procedure or guideline for finding cost and value of human resources of an organization. The systems which are being adopted have certain drawbacks. The period of existence of human resources is uncertain and hence valuing them under uncertainty in the future seems to be unrealistic. The much-needed empirical evidence is yet to be found to support the hypothesis that human resources accounting as a tool of management facilitate better and effective management of human resources. As human resources are incapable of being owned, retained, and utilized, unlike the physical assets, there is a problem for the management to treat them as assets in the strict sense. There is a constant fear of opposition from the trade unions as placing a value on employees would make them claim rewards and compensations based on such valuations. In spite of all its significance and necessity, the tax laws don't recognize human beings as assets. There is no universally accepted method of the valuation of human resources.

From another perspective, Jasrotia, (2004) looked at the trends in the field of HRA and came up with some factors that deter the progress in the area and the application of the concept. The following are some of the problems the researcher uncovered. The level of awareness and acceptance of HRA is still low as many companies take little initiative to make the information available to the shareholders despite having the data. The absence of an industry means that every company has to evolve its own standard, which can become a tedious process considering that most of them are still involved in improving their business. Another aspect working against the acceptance of HRA is the need for extensive research that it entails. Many companies do not want to go into the intricacies of finding the value of their human resources. While it may be affordable for most big companies to dwell into such best practices, it is likely not going to be an economically viable option for small and medium size companies. Certain industries, like the information technology, are very dynamic due to frequent discoveries and technological advancement. In these types of industries, it is very difficult to predict as to what is going to be future requirements and how technology is going to shape in the near future.

### **2.1.4 Corporate Sustainability**

Mohammad, Yusnidah, & Zuaini, (2019) defined corporate sustainability to mean corporate social responsibility (CSR); triple bottom line (TBL) practices: which is aimed at achieving the developmental goals and objectives with balanced emphasis on the economic, social and environmental needs and corporate sustainability practices (CSP) in the literature of management. However, RMIT-University, (2017) identified four areas of corporate sustainability as human, social, economic, and environmental. Although, Anecdotal evidence stated that clarity does not still exist on what corporate sustainability means to researchers and the result is often ambiguity of the corporate sustainability field. Since it is one of the newest concepts in management (Montiel & Delgado-Ceballos, 2014). The most widely

acknowledged definition of sustainability that has emerged over time is the triple bottom line (TBL) consideration of economic viability, social responsibility, and environmental responsibility (Yu & Zhao, 2015). Researchers and practitioners often treat corporate sustainability and corporate social responsibility as being nearly synonymous. This is a common misunderstanding since these two concepts have different backgrounds and different theoretical paths (Przychodzen & Przychodzen, 2013). CSR is limited to socio-environmental aspects of business activities, meaning that CSR commitment contributes only partly to sustainable development. The concept of CS can be seen as a transfer of the overall idea of sustainable development to the business level.

## **2.2 Theoretical Review**

This study is anchored on Resource-Based View and Human Capital Theories.

### **2.2.1 Resource-Based View Theory**

The main emphasis of the RBV is creation of competitive advantage by enterprises and links outsourcing valuable resources (McIvor, McKittrick, & Wall, 2009); (Gottschalk & Solli-Sæther, 2005) with firm performance. The outsourced resource should be capable of adequately improving firm performance in as much as they are rare and inimitable. The RBV advances that any firm seeking for outsourced resource should sufficiently assess the potentiality of outsourcing on improvement of its firm performance (Irwin, Hoffman, & Lamont, 1998). The assessment would be able to reveal the manner in which resource under consideration relates to the firm performance since the core concern of the RBV is the relationship between development of the resources and capabilities for competitive performance (Gainey & Klaas, 2003).

### **2.2.2 Human Capital Theory**

A Dictionary of Sociology refers to Human-capital theory as “a modern extension of Adam Smith's explanation of wage differentials by the so-called net (dis)advantages between different employments. The costs of learning the job are a very important component of net advantage and have led economists such as Gary S. Becker and Jacob Mincer to claim that, other things being equal, personal incomes vary according to the amount of investment in human capital; that is, the education and training undertaken by individuals or groups of workers. A further expectation is that widespread investment in human capital creates in the labour-force the skill base indispensable for economic growth. According to this theory, a workforce that is more educated and possessing the relevant skills makes it easier for a firm to adopt and implement new technologies which in other words means return on investment in employees' education and training, (Izushi & Huggins, 2004). Human capital theorists believe that education is an investment since it enhances productivity. The theory holds that the competence, knowledge, abilities and skills of an organization's workforce contribute to its competitive advantage.

The theory further postulates that for the firm to assess the contributions of the human capital to financial performance, education and practical experience play key roles in the productivity of the human capital (Lazear, 1998). According to HCT, training is important for guaranteeing the sustainability of human capital. Employees with vast knowledge and skills, acquired from training, are considered a valuable resource to the business for they are useful in utilising their firm-specific knowledge for the benefit of the company. Thus, training provides an opportunity for the employees to contribute to the firm's core competence and accordingly the firm is provided with competitive edge over its competitors thereby associating the theory with the firm's resource based view (Barney, 1991).

### 2.3 Empirical Review

Abiola & Adisa, (2020) examined the influence of human resource accounting (HRA) practices on managerial decision-making. The study found that HRA has a significant impact on managerial decision-making of organizations. It was therefore recommended that organizations should be more proactive in the use of HRA to enhance decision-making. Necessary and relevant standards should also be provided on the need for recognizing human resource cost in organizations' statement of financial position in order to enhance adequate decision-making in business organizations premised on fair financial reporting.

Sunil & Priyanka, (2018) examined the human resource accounting and organizational performance. This study comprises of review of seventy research articles related to human resource accounting and its impact on organizational performance. This study is exploratory in nature and qualitative analysis has been done to identify the impact of HRA on organizational performance. This study is entirely depending on secondary resources. Findings of the study are not possible to generalize. But on the basis of available research papers it can be said that whether HRA has positive impact or negative impact on organizational performance.

Oko, (2018) investigated the likely effect of human asset inclusion in the financial reports of firms in Nigeria. The specific objectives of the study were to study the nature and characteristics of human resource investment/expenditure in quoted Nigerian companies, to determine the relevance of human asset accounting model in relation to the quality of financial reporting of quoted companies in Nigeria, to investigate the relationship between human asset accounting and corporate performance (profitability), and to investigate the relationship between human asset accounting measurement and corporate financial position. The study adopted the survey research design. The instrument of data collection was questionnaire designed on a four step likert scale. The hypotheses were tested using simple regression model. The result of the analyses confirmed that there is a significant relationship between human asset accounting and corporate profitability and there is positive significant relationship between human asset accounting measurement and corporate financial position. It concluded that capitalizing human assets would positively impact on performance and financial position of organizations and recommended its disclosure as intangible asset in the balance sheet.

Ofe & David, (2018) examined the effect of human resource accounting on the performance of quoted banks in Nigeria. Their study examined the annual reports of 18 quoted commercial banks from 2009-2017 financial years and the research design adopted was the ex-post facto research design. Using regression analysis, the effect of certain human resource accounting attributes such as staff cost, director remuneration, number of staff and firm size was examined. The results confirm that there is a significant relationship between staff cost, staff strength, and firm size and financial performance. Director remuneration had no significant relationship on financial performance. The study recommended that a better system of communicating employee benefits to the employees of the organization should be adopted. Furthermore, unfair performance appraisal should be discouraged since it diminishes employees' motivation.

Oladele, Aribaba, Ahmodu, & Ajayi, (2018) examined the impact of human resource accounting disclosure on financial performance of selected listed firms in Nigeria. Annual financial report index of the selected firms was used to capture the dependent variable while

the human resource accounting disclosure were proxies by firm profitability, firm size, financial leverage and industry type. The study made use of secondary data in eliciting for the required information needed for this study. The population of the study comprises of 188 manufacturing and non-manufacturing firms in the Nigerian Stock Exchange annual report between the period of 2011 – 2015 out of which 20 were selected. The sample size for this study was ballot system of simple random sampling techniques to select 20 listed manufacturing and non-manufacturing firms from the population. The data collected was analysed using descriptive statistics, correlation and regression. The study revealed that there was a positive co-efficient value of 0.565 between the independent and dependent variables. Based on these findings, the study therefore recommends that the listed firms should imbibe the culture of capitalizing their reports and disclose all the expenditure on human resource so as to improve the productivity of the firms. Also, the regulatory body should set aside a minimum standard of reporting human resource accounting in the financial statement of the listed firms in other to enhance stakeholders' valuation in the statement of financial position and note to the accounts.

Omodero & Ihendinihu, (2017) investigated human resource accounting and financial performance of firms in Nigeria: evidence from selected listed firms on the Nigerian Stock Exchange. The hypotheses formulated were tested at 5% level of significance using SPSS software and multiple regression analysis as the statistical tool. The result revealed that PBC has significant and positive impact on the PAT, while there is a negative impact on the Net Asset. The research therefore concludes that human resources contribution to the financial growth of firms cannot be overemphasized. Firms should have the culture of training, developing and motivating the personnel to put in their best for the financial growth of their organizations. Providing them with infrastructures and a conducive working environment could reduce the rate of job turnover being experienced among firms.

### **3.0 Research Methodology**

This study adopted survey method as research design while structured questionnaires were designed to measure the various variables of human resources accounting and corporate sustainability. The population of this study was 20 listed firms of consumer goods from which only nine companies were readily accessible because of the restriction of COVID- 19 through simple sampling technique. From these nine selected listed companies, 305 questionnaires were distributed but 292 were returned and 289 were found usable. Answers were sought to two research questions, in relation to which two hypotheses were formulated and tested at 5% level of significance. The data collected were presented and analysed using frequency tables, means, standard deviation, levenes test of homogeneity, analysis of variance and ordinary least square method of regression analysis were employed to present and analyse the data.

### **4.1 Result**

Of the three hundred and five (305) questionnaires that were administered, two hundred and ninety two (292) were returned and two hundred and eighty nine (289) were considered to have been satisfactory completed, resulting in a response rate of 94.75%. The study considered this to be representative enough for the data analyses. The summary is provided in table 4.1:

**Table 4.1:** Distribution of copies of questionnaire administered

<u>Copies Administered</u>	<u>Copies Returned</u>	<u>Copies Duly Completed</u>
305	292	289

(Source, Field Survey, 2021)

## 4.2 Presentation of Data

### 4.2.1 Demographic Distribution of Data

Result from Table 4.2 below shows that 87.5% of the respondents were male while 12.5% were female, with a mean and standard deviation of 1.1246 and 0.3308 respectively. This implies that there are more male and female in corporate settings. Also there were more active workforce in the industry as 91.7% of the respondents were between 21-60 years while 8.3% were inactive workforce with a mean and standard deviation of 2.0138 and 0.4247 respectively. This means that there were more active workforce than inactive workforce in corporate settings. On the other hand, 90% of the respondents were married and the remaining 10% were divorce, separated and single with a mean of 1.9446 and standard deviation of 0.3287. This shows a lot of marital responsibilities of the respondents. Likewise, 67.5% of the respondents were above middle level in management hierarchy while the remaining 32.5% were low level staff with mean of 2.0692 and standard deviation of 0.7606. This means that the respondents were more of above middle level than lower level. 85.4% of the respondents had minimum of 5-15 years' work experience and the remaining 14.6% is shared between less than 5 years and above 16 years of experience with mean of 1.9343 and standard deviation of 0.4705. Finally, 81.9% of the respondents has minimum of HND/BSc while the remaining 18.1% has below HND/BSc, with mean and standard deviation of 2.872 and 0.4869 respectively indicating that there were more staff who possessed minimum HND/BSc educational qualification and certification in the industry.

**Table 4.2:** Descriptive Statistics on demographic variables of Gender, Age, Marital Status, Level in Organization, Years of Experience and Educational Qualification.

		Frequency	Percent	Mean	Standard Deviation
Gender	Male	253	87.5	1.1246	0.3308
	Female	36	12.5		
	Total	289	100		
Age Group	Less than 20 years	18	6.2	2.0138	0.4247
	20 - 39 years	255	88.2		
	40 - 59 years	10	3.5		
	60 years and above	6	2.1		
	Total	289	100		
Marital Status	Single	23	8	1.9446	0.3287
	Married	260	90		
	Divorced	5	1.7		
	Separated	1	0.3		
	Total	289	100		



<b>in of Level Organization</b>	Top Level	74	25.6	2.0692	0.7606
	Middle Level	121	41.9		
	Low Level	94	32.5		
	Total	289	100		
<b>Years Experience</b>	1 - 5 years	41	14.2	1.9343	0.4705
	6 - 10 years	227	78.5		
	11 -15 years	20	6.9		
	16 - 20 years	1	0.3		
	Total	289	100		
<b>Educational Qualification</b>	SSCE/GCE	1	0.3	2.872	0.4869
	NCE/ND	51	17.6		
	BSc/HND	222	76.8		
	MBA/MSc	14	4.8		
	PhD and others	1	0.3		
	Total	289	100		

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)

#### 4.2.2 Data Presentation based on Dimensions of Independent and Dependent Variables

##### Descriptive Analysis of Wages and Salaries Dimension

Results in table 4.3 showed an average mean for Wages and salaries dimension of 1.9010. This strongly suggests that, on average, respondents agreed with most of the research items on the high scale as it relates to how consumers goods industry for which they work have embraced and understood wages and salaries as a dimension of human resources accounting. Of the research items, their strongest agreement was on the research item (WS\_4) “Wages and salaries encourages employees to work efficiently.” (Mean= 2.1557), while their least was on the research item (WS\_1) “Wages and salaries are paid to improve standard of living of staff” (Mean = 1.6782).

**Table 4.3: Descriptive analysis of responses on wages and salaries dimension**

	N	Mean	Std. Deviation	Variance
WS_1	289	1.6782	1.0224	1.0450
WS_2	289	1.9481	1.2420	1.5420
WS_3	289	1.7855	1.0716	1.1480
WS_4	289	2.1557	1.2910	1.6670
WS_5	289	1.9377	1.1409	1.3020
Valid (listwise) N	289	1.9010	1.1536	1.3408

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)

(Where WS\_1 represents “Wages and salaries are paid to improve standard of living of staff”; WS\_2 represents Wages and salaries are paid as at when due; WS\_3 represents Wages and salaries enhance our staff to improve organization performance.; WS\_4 represents Wages and salaries encourages employees to work efficiently.; and WS\_5 represents Wages and salaries inspires employees to work effectively.)

#### **Descriptive Analysis of Hiring cost Dimension**

Results in table 4.4 showed a grand mean for hiring cost dimension of 1.8671. This suggests that, on average, the respondents agreed with most of the research items on the high scale as it relates to the cost of recruitment, selection and placement to which they make reference when hiring staff of consumer goods sector. Of the outcome, HC\_4 represents “Recruitment, selection and placement activities are aimed to bring skillful employees for our organization effectively.” has the highest mean of 2.0035 while the lowest is HC\_3 represents “Recruitment, selection and placement activities are aimed to bring qualified employees for our organization turnover.” With mean of 1.7682.

**Table 4.4: Descriptive analysis of responses on Hiring Cost Dimension**

	N	Mean	Std. Deviation	Variance
HC_1	289	1.8512	1.0148	1.0300
HC_2	289	1.8720	1.0074	1.0150
HC_3	289	1.7682	1.0728	1.1510
HC_4	289	2.0035	1.2148	1.4760
HC_5	289	1.8408	1.0908	1.1900
Valid (listwise) N	289	1.8671	1.0801	1.1724

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)

(Where HC\_1 represents “Recruitment, selection and placement activities are aimed to bring skillful employees for our organization efficiency.”; HC\_2 represents “Recruitment, selection and placement activities are aimed to bring experienced employees for our organization performance.”; HC\_3 represents “Recruitment, selection and placement activities are aimed to bring qualified employees for our organization turnover.”; HC\_4 represents “Recruitment, selection and placement activities are aimed to bring skillful employees for our organization

effectively.”; HC\_5 represents “*Recruitment, selection and placement activities are aimed to bring experienced employees for our organization performance.*”.

**Descriptive Analysis on Corporate Sustainability Dimension**

Results in table 4.5 revealed a grand mean for *Corporate Sustainability Dimension* of 2.0000. This suggests that, on average, the respondents agreed with most of the research items on the high scale as it relates to the respondents understood Corporate Sustainability as it relates to human resources. Of the research items, their strongest agreement was on the research item (CS\_1) “*There have been investments in the medical and health related programmes in my organization in the last few years for organization efficiency.*” (Mean= 2.2284), while their least was on the research item (CS\_4) “*Funds have been channel to knowledgeable programmes in my organization from time to time.*” (Mean = 1.9204).

**Table 4.5: Descriptive analysis of responses on Corporate Sustainability Dimension**

	N	Mean	Std. Deviation	Variance
CS_1	289	2.2284	1.3552	1.8370
CS_2	289	1.9619	1.1158	1.2450
CS_3	289	1.9412	1.0607	1.1250
CS_4	289	1.9204	1.0124	1.0250
CS_5	289	1.9481	1.0837	1.1740
Valid N (listwise)	289	2.0000	1.1255	1.2812

(*Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0*)

(Where CS\_1 represents “*There have been investments in the medical and health related programmes in my organization in the last few years for organization efficiency.*”; CS\_2 represents “*My organization has paid staff wages and salaries and higher the competent hands in last couple of years for organization performance.*”; CS\_3 represents “*The access to work services adopted in my place of work is encouraging for staff efficiency.*”; CS\_4 represents “*Funds have been channel to knowledgeable programmes in my organization from time to time.*”; CS\_5 represents “*There has been investment in, seminars and trainings in my organization in the last couple of years.*”)

**4.3 Pre-Estimation Test-Homogeneity of Variance**

The study conducted Levene’s test of homogeneity of variance to know whether or not Analysis of Variance would be a suitable tool in estimating the specified model. The results of the test are provided in tables 4.6 to 4.8.

**Wages and Salaries Dimension**

Results in table 4.6 show that *p*-value of 0.24 is greater than the level of significance of 0.05. These results compel the acceptance of null hypothesis of homogeneity of variance and the rejection of alternative hypothesis of heterogeneity of variance. These results therefore provide evidence that supports the appropriateness of the use of Analysis of Variance using *Wages and Salaries* as one of the independent variables.

**Table 4.6: Results of Test of Homogeneity of Variance on Wages and Salaries Dimension**

	Levene Statistic	df1	df2	Sig.	
WS	Based on Mean	1.386	1	287	0.24
	Based on Median	2.217	1	287	0.138
	Based on Median and with adjusted df	2.217	1	282.429	0.138
	Based on trimmed mean	2.03	1	287	0.155

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)  
 \*\*\* $p$ -value < 0.01; \*\* $p$ -value < 0.05

### Hiring Cost Dimension

Results in table 4.7 show that  $p$ -value of 0.999 is greater than the level of significance of 0.05. These results compel the full acceptance of null hypothesis of homogeneity of variance and the rejection of alternative hypothesis of heterogeneity of variance. These results therefore provide evidence that supports the appropriateness of the use of Analysis of Variance using *Hiring Cost* as one of the independent variables.

**Table 4.7: Results of Test of Homogeneity of Variance on Hiring Cost**

	Levene Statistic	df1	df2	Sig.	
HC	Based on Mean	0	1	287	0.999
	Based on Median	0.181	1	287	0.671
	Based on Median and with adjusted df	0.181	1	282.794	0.671
	Based on trimmed mean	0.053	1	287	0.818

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)  
 \*\*\* $p$ -value < 0.01; \*\* $p$ -value < 0.05

### Corporate Sustainability Dimension

Results in table 4.8 show that  $p$ -value of 0.625 is greater than the level of significance of 0.05. This result compels the acceptance of null hypothesis of homogeneity of variance and the rejection of alternative hypothesis of heterogeneity of variance. These results therefore provide evidence that supports the appropriateness of the use of Analysis of Variance using *corporate sustainability* as one of the dependent variables employed in this study.

**Table 4.8: Results of Test of Homogeneity of Variance on Corporate Sustainability Dimension**

	Levene Statistic	df1	df2	Sig.	
CS	Based on Mean	0.24	1	287	0.625
	Based on Median	0.333	1	287	0.565
	Based on Median and with adjusted df	0.333	1	279.954	0.565
	Based on trimmed mean	0.394	1	287	0.531

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)

\*\*\* $p$ -value < 0.01; \*\* $p$ -value < 0.05

#### 4.4 Test of Reliability

Cronbach's Alpha test of reliability was adopted to determine the reliability of the research measures, especially with respect to the internal consistency of the scale used, and by extension, its appropriateness. The results of the test are as shown in table 4.9 below:

**Table 4.9: Reliability Coefficient for all Research Statements**

Dimensions of Variables	Cronbach's Alpha Coefficient	Number of Items
<b>Dimensions of Human Resources Accounting</b>		
Wages and Salaries	0.829	5
Hiring Costs	0.801	5
<b>Dimensions of Corporate Sustainability</b>		
Corporate Sustainability	0.797	5

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)

From the results in table 4.9, it can be inferred that the scale used in the study is internally consistent, as it shows a coefficient that is above 0.70, a benchmark set by (Nunnally, 1978), cited in (Osuagwu, 2002). This implies that the research measures are considerably reliable.

#### 4.5 Test of Hypotheses

Based on the four research objectives and the four accompanying research questions, four research hypotheses were formulated and tested. The results are presented in tables 4.10 to 4.12

##### Hypothesis One

$H_{01}$ : Wages and salaries does not affect corporate sustainability in Nigeria

$H_1$ : Wages and salaries affect corporate sustainability in Nigeria

Results in table 4.12 revealed that the elasticity coefficient of wages and salaries with respect to corporate sustainability is .283, indicating that wages and salaries has a positive effect on the corporate sustainability of the selected listed consumer goods companies in Nigeria. This coefficient is also statistically significant ( $t=3.204$ ,  $p$ -value < 0.05) to individually influence corporate sustainability of these listed consumer goods companies. With these results, the null hypothesis is rejected, while the alternative hypothesis is accepted. The inference there from is that wages and salaries have a significant effect on the corporate sustainability of listed consumer goods companies in Nigeria.

## Hypothesis Two

**H<sub>02</sub>:** hiring cost does not affect corporate sustainability in Nigeria

**H<sub>2</sub>:** hiring cost affect corporate sustainability in Nigeria.

Results in table 4.12 revealed that the partial elasticity coefficient of hiring costs with respect to corporate sustainability is .272, indicating that hiring costs have a positive effect on the corporate sustainability of the selected listed consumer goods in Nigeria. This coefficient is however not statistically significant ( $t=.3.139$ ,  $p\text{-value}>0.05$ ) to individually influence corporate sustainability of these listed consumer goods companies in Nigeria. With these results, the null hypothesis is also rejected, while the alternative hypothesis is accepted. The inference there from is that hiring cost have a significant effect on corporate sustainability of listed consumer goods in Nigeria.

As noted in table 4.10, the R Square of 51.0% suggests a very strong model. The 51.0% R Square revealed that the total variation in the corporate sustainability of the selected listed consumer goods companies is attributed to human resources accounting, represented by wages and salaries, and hiring cost, while 49.0% of the total variation in the corporate sustainability of the selected listed consumer goods firms is accounted for by other variables not captured in the model. The Durbin Watson statistic of 1.838 in table 4.10 indicates no serious presence of serial correlation as coefficient is approximately equal to 2.

The overall fitness of the model is established based on the results in table 4.11, from which it can be inferred that the two dimensions of Human Resources Accounting have joint significant influence on the Corporate Sustainability of the selected listed firms ( $F= 50.161$ ,  $p\text{-value} =0.000$ ).

**Table 4.10: Model Summary for Hypotheses One and Two**

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate	Durbin-Watson
1	.510 <sup>a</sup>	.260	.255		.96343	1.838

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)

a. Predictors: (Constant), WS, HC.

b. Dependent Variable: CS.

**Table 4.11: Results of Analysis of Variance for Hypotheses One and Two**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	93.119	2	46.559	50.161	.000 <sup>b</sup>
	Residual	265.463	286	.928		
	Total	358.581	288			

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)

a. Dependent Variable: CS

b. Predictors: (Constant), WS, HC

**Table 4.12: Results of Ordinary Least Square for Hypotheses One and Two**

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.

	B	Std. Error	Beta		
1 (Constant)	.957	.115		8.300	.000
WS.	.283	.088	.271	3.204	.002
HC	.272	.087	.266	3.139	.002

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)

a. Dependent Variable: CS.

#### 4.6 Post Estimation Tests

##### 4.6.1 Normality of Residuals

As shown in table 4.13, the mean residual of is 0.0000, indicating that the residuals from the estimated ordinary least square regression are normally distributed and the variance of the residuals is the same for all values of the independent variables.

**Table 4.13: Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.5113	4.2840	1.9619	.56862	289
Residual	-2.28401	3.93415	.00000	.96008	289
Std. Predicted Value	-.793	4.084	.000	1.000	289
Std. Residual	-2.371	4.083	.000	.997	289

(Source: Field Survey, 2021 & Computations aided by SPSS Version 25.0)a.

Dependent Variable: CS

##### 4.6.2 Multi-Collinearity

The results in table 4.14 provided evidence that all the two proxies of Human Resources Accounting have no strong inter-correlations and inter-associations with one another based on the collinearity statistics of Variation Inflation Factor (VIF) which for all the independent variables are between 1 and 10, suggesting no problem of multicollinearity.

**Table 4.14: Results of Collinearity Diagnostics**

Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
WS	.361	2.717
CS	.361	2.717

(Source: Field Survey, 2021 & Computations aided by SPSS Version 24.0)

#### 4.7 Discussion of Findings

Analyses from the previous sections revealed that the nine selected listed consumer goods understood and embraced wages and salaries and hiring cost as dimensions of human resources accounting as it related to corporate sustainability. From hypothesis one, it was revealed that wages and salaries have effect on the corporate sustainability of listed consumer goods in Nigeria. Also, analyses from hypotheses two showed that hiring cost have significant influence on the corporate sustainability of listed consumer goods firms in Nigeria. Although, this empirical study measured the relationship between human resources accounting and corporate sustainability, the findings agree with that of (Oko, 2018), (Ofe & David, 2018), (Oladele, Aribaba, Ahmodu, & Ajayi, 2018), (Omodero & Ihendinihu, 2017), and (Okpako, Atube, & Olufawoye, 2014) revealed that human resource accounting variables

impacted positively to the level of firm performance. Also, the result of Abiola & Adisa, (2020) was in consonance with this as HRA has a significant impact on managerial decision-making of organizations.

## 5.0 Conclusion and Recommendations

It was concluded that the two dimensions (wages and salaries and hiring cost) of human resource accounting both have significant influence on corporate sustainability as revealed from the findings above. The findings revealed that both wages and salaries and hiring cost constitute 51.00% of corporate sustainability while other factors combined were just 49.00%. This implied that for corporate entities to be sustainable for so many years, employees wages and salaries should be paid and structured along with hiring cost. The study therefore recommended that corporate organizations should ensure that wages and salaries be paid to improve the standard of living of staff, paid as at when due, and paid to motivate staff to work effectively and efficiently which would in turn not only period profitability but ensured corporate sustainability. Also hiring cost such as recruitment, selecting and placement activities and cost involved should ensure that skilful, experienced and qualified personnel are employed to work effectively and efficiently which would further ensure the sustainability corporate organizations.

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