Human Capital Development on Employee Performance
(A Case Study of Ignatius Ajuru University of Education and University of Port-Harcourt Choba, River State)

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Abstract
This research work examined the Human Capital Development on Employee Performance of Ignatius Ajuru University of Education and University of Port-Harcourt Choba, River State its impact on workers performance. The objective of the study was to establish the kind of association that existed between human capital development and employee performance in the university. The study has one research question and one hypothesis - There is no significant association between effective training and increased employee productivity. To what extent does effective training increase employee productivity? Descriptive survey design method was used. The study obtained sample data from 3000 employees. Data were analyzed using chi-square method. The study revealed that there is a significant association between effective training and increased employee productivity. Significant among was that staff at the universities generally received advice on their assigned jobs when it comes as part of the process of mentoring. The recommendation was that, there is the need for the various departments under the universities to work towards improving the training of human capital development programmes, there is the need for improvement in the methods of human capital development delivery. This will require adequate investment in technology for delivery of training, including e-learning platforms to facilitate the training process.

Key Words: Human capital development, Employee Performance, human capital development delivery.
1. Introduction

Human capital is the stock of competencies, knowledge, social and personality attributes, including creativity, embodied in the ability to perform labour so as to produce economic value. It is an aggregate economic view of the human being acting within economies at the macro level and within organizations at the micro level, which is an attempt to capture the social, biological, cultural and psychological complexity as they interact in explicit economic transactions. Many theories which explicitly connect investment in human capital development, productivity, growth, and innovation have frequently been cited as a justification for government subsidies for education and job skills training. (Becker, 1993).

The use of the term in the modern neoclassical economic literature dates back to Jacob Mincer’s article “Investment in Human Capital and Personal Income Distribution” in The Journal of Political Economy in 1958. Then T.W. Schultz also contributed to the development of the subject matter. The best-known application of the idea of “human capital” in economics is that of Mincer and Gary Becker of the Chicago School of economics. Becker’s book entitled Human Capital; Published in 1964 and later revised in 1993, and became a standard reference for many years. In this view, human capital is similar to physical means of production, e.g., factories and machines: ore can invest in human capital (through education, training, medical treatment etc) and one’s outputs depend partly on the rate of return on the human capital one owns.

Thus, human capital is a means of production, into which additional investment yields additional output. Human capital is substitutable, but not transferable like land, labour, or fixed capital. We need note that modern growth theory sees human capital as an important growth factor. (Bowles & Gintis ;1975) noted that in some way, the idea of human capital is similar to Karl Marx’s concept of labor power: he thought in capitalism workers sold their labor power in order to receive income (wages and salaries). But long before Mincer or Becker wrote, Marx pointed to two disagreeably frustrating facts with theories that equate wages or salaries with the interest on human capital. The worker must actually work, exert his or her mind and body, to earn this interest. Marx strongly distinguished between one’s capacity to work i.e labor power, and the activity of working. A free worker cannot sell his human capital in one go; it is far from being a liquid asset, even more illiquid than shares and land. He does not sell his skills, but contracts to utilize those skills, in the same way that an industrialist sells his produce, not his machinery. The expectations here are slaves, whose human capital can be sold, though the slave does not earn an income himself. An employer must be receiving a profit from his operations, so that workers must be producing what Marx (under the labor theory of value) perceived as surplus-value, i.e., doing work beyond that necessary to maintain their labor power. Though having “human capital” gives workers some benefits, they are still dependent on the owners of
non-human wealth for their livelihood. As noted by (Bowles & Gintis; 1975), the term appeared in Marx’s article in the New-York Daily tribune titled “The Emancipation Questions,” January 17 and 22, 1859, although the term was used to describe humans who act like a capital to the producers, rather than in the modern sense of “knowledge capital” endowed to or acquired by humans. Neo-Marxist economists such as Bowles have argued that education does not lead to higher wages by increasing human capital, but rather by making workers more compliant and reliable in a corporate environment.

It is remarkable to state that many organizations acknowledge the vitality and importance of human capital development as an effective strategy to enhance employee performance and overall organizational productivity, while a few merely pay lip service to it. Ironically, some knowledge-based organizations like the tertiary institutions do not allocate a significant proportion of their annual budget to personnel training programmes and human capital development. Even when outside bodies like the Education Trust Fund allocates funds to universities for the purpose of human capital development, such funds are hardly allocated to staff based on human development needs but politicized leading to the misappropriation of such funds. Many organizations prefer to allocate funds or budget to infrastructural development, advertising, publicity, marketing and other departments of the organization. The truth, however, is that human beings remain the greatest asset of any organization and human capital investment is the greatest investment any organization can make. This research study seeks to appraise or evaluate the human capital development policies of these institutions and ascertain if there is any relationship between human capital development and employee performance in the institutions of ease study.

2. Literature Review

Human capital is the stock of competencies, knowledge, social and personality attributes, including creativity, embodied in the ability to perform labour so as to produce economic value. It is an aggregate economic view of the human being acting within economies at the macro level and within organizations at the micro level, which is an attempt to capture the social, biological, cultural and psychological complexity as they interact in explicit economic transactions. Many theories which explicitly connect investment in human capital development, productivity, growth, and innovation have frequently been cited as a justification for government subsidies for education and job skills training. (Becker, 1993).

It was assumed in early economic theories, reflecting the context in which the secondary sector of the economy was producing much more than the tertiary sector was able to produce at the time in most countries-to be a fungible resource, homogeneous, and easily interchangeable, and it was referred to simply as workforce or labour, one of three factors of production (the others being land, money and physical equipment). Just as land became
recognized as natural capital and an asset in itself, so human factors of production were raise from this simple mechanistic analysis to human capital. In modern technical financial analysis, the term balanced growth refers to the goal of equal growth of both aggregate human capabilities and physical assets that produce goods and services.

The assumption that labour or workforces could be easily modeled in aggregates began to be challenged in 1950s when the tertiary sector, which demanded creativity, begun to produce more than the secondary sector was producing at the time in the most developed countries in the world. Accordingly, much more attention was paid to factors that led to success versus failure where human management was concerned. The role of leadership, talent and even celebrity was explored. (Becker, 1993).

Most theories we examined in the course of this literature review attempted to break down human capital into one or more components for analysis. These include, social capital, the sum of social bonds and relationships, which has come to be recognized, along with many synonyms such as goodwill or brand value or social cohesion or social resilience and related concepts like celebrity or fame, as distinct from the talent that an individual has developed and which cannot be passed on to others regardless of effort, and those aspects that can be transferred or taught like instructional capital. Less commonly, some authors’ analyses conflate good instructions for health with health itself, or good knowledge management habits or systems with the instructions they compile and manage, or the intellectual capital of teams—a reflection of their social and instructional capacities, with some assumptions about their individual uniqueness in the context in which they work. In general these analyses acknowledge that individual trained bodies, teachable ideas or skills, and social influence or persuasion power, are different.

Management accounting is the branch of management often concerned with questions of how to model human beings as capital assets. However, it is broken down or defined, human capital is vitally important for an organization’s success (Crook et al, 2011): and increases through education and experience. Human capital is also important for the success of cities and regions: A 2011 study from the Federal Reserve Bank of New York examined how the production of university degrees and research and development activities of educational institutions are related to the human capital of metropolitan areas in which they’re located.

In 2010, the OECD (the organization of Economic Cooperation and Development) encouraged the governments of advanced economics to embrace policies to increase innovation and knowledge in products and services as an economical path to continued prosperity. International policies also often address human capital flight, which is the loss of

“Fourthly, of the acquired and useful abilities of all the inhabitants or members of the society; the acquisition of such talents, by the maintenance of the acquirer during his education, study, or apprenticeship, always costs a real expense, which is a capital fixed and realized, as
it were, so do they likewise that of the society to which he belongs. The improved dexterity of a workman may be considered in the same light as a machine or instrument of trade which facilitates and abridges labour, and which, though it costs a certain expense, repays that expense with a profit”.

We need also note that Smith in (Rossilah &hJamil, 2004) equally argued that the productive power of labour are both dependent on the division of labour: “The greatest improvement in the productive powers of labour, and the greater part of the skill, dexterity, and judgment with which it is any where directed, or applied, seem to have been the effects of the division of labour”. Therefore, there is a complex relationship between the division of labour and human capital as posited by Adam Smith.

Investments in human capital are inputs in education, health care, professional qualification and other activities which allow people to be more economically efficient. (Therodore W. Schultz (2008) defined human capital theory as knowledge and skills obtained by people as capital in the process of vocational and technical education. Therefore capital is a product of well-considered investments and it generates income (fitzsimmons, 1999). Human capital theory reveals that individuals and the whole society gain economic benefits from investments in people. (Sweetland, 1996). Based upon the work of (Schultz, 1971), human capital theory rests on the assumption that formal education is highly instrumental and even necessary to improve the production capacity of a population. In short, the human capital theorists argue that an educated population is a productive population (Olaniyan and Okemakinde, 2008).

Human capital theory emphasizes how education increases the productivity and efficiency of workers by increasing the level of cognition stock of economically productive human capability which is a product of innate abilities and investment in human beings. The rationality behind investment in human capital is based on three arguments.

Becker emphasizes that one of the most effective theoretical concepts in human capital analysis is a difference between general and specific training and knowledge. This difference helps to understand why employees with good specific skills rarely tend to quit work and are the last to be fired in the situation of economic recession. The difference also reveals why usually existing internal cadre are promoted instead of attracting new employees from outside, (Becker, 1992).

As (Mahroum, 2007) noted, the concept of Human capital has relatively more importance in labour-surplus countries. These countries are naturally endowed with more of labour due to high birth rate under the given climatic conditions. The surplus labour in these countries is the human resource available in more abundance than the tangible capital resource. This human resource can be transformed into human capital with effective inputs of education, health and
moral values. The transformation of raw human resource into highly productive human resource with these inputs is the process of human capital formation. The problem of scarcity of tangible capital in the labour surplus countries can be resolved by accelerating the rate of human capital formation with both private and public investment in education and health sectors of their national economies. The tangible financial capital is an effective instrument of promoting economic growth of the nation. The intangible human capital, on the other hand, is an instrument of promoting comprehensive development of the nation because human capital is directly related to human development, and when there is human development, the qualitative and quantitative progress of the nation is inevitable.

Mahroum further noted that this importance of human capital is explicit in the changed approach of United Nations towards comparative evaluation of economic development of different nations in the world economy. The United Nations publishes Human Development Report on human development in different nations with the objective of evaluating the rate of human capital formation in these nations. The statistical indicator of estimating Human Development in each nation is Human Development Index (HDI). It is the combination of "Life Expectancy Index", "Education Index" and "Income Index".

The Life expectancy index reveals the standard of health of the population in the country; education index reveals the educational standard and the literacy ratio of the population; is about three key capacities, the capacity to develop talent, the capacity to deploy talent, and the capacity to draw talent from elsewhere. Collectively, these three capacities form the backbone of any country's human capital competitiveness.

Also as (Mahroum 2007) noted, human capital is distinctly different from the tangible monetary capital due to the extraordinary characteristic of human capital to grow cumulatively over a long period of time. The growth of tangible monetary capital is not always linear due to the shocks of business cycles. During the period of prosperity, monetary capital grows at relatively higher rate while during the period of recession and depression; there is deceleration of monetary capital.

On the other hand, human capital has uniformly rising rate of growth over a long period of time because the foundation of this human capital is laid down by educational and health inputs. According to him, the current generation is qualitatively developed by the effective inputs of education and health. The future generation is more benefited by the advanced research in the field of education and health, undertaken by the current generation. Therefore, educational and health inputs create more productive impacts upon the future generation and the future generation becomes superior to the current generation. In other words, the productive capacity of future generation increases more than that of current generation. Therefore, rate of human capital formation in the future generation ought to be more than the rate of human capital.
formation in the current generation. This is the cumulative growth of human capital formation generated by superior quality of manpower in the succeeding generation as compared to the preceding generation.

Mahroum posited that in India, rate of human capital formation has consistently increased after independence due to qualitative improvement in each generation. In the second decade of 21st century, the third generation of India's population is active in the workforce of India. This third generation is qualitatively most superior human resource in India. It has developed the service sector of India with the export of financial services, software services, and tourism services and improved the Invisible balance of India's Balance of payments. The rapid growth of Indian economy in response to improvement in the service sector is an evidence of cumulative growth of human capital in India.

Some labor economists have criticized the Chicago-school theory, claiming that it tries to explain all differences in productivity, wages and salaries in terms of human capital. One of the leading alternatives, advanced by Joseph Stigitz, is "Signaling theory". This theory postulates that education does not lead to increased human capital, but rather acts as a mechanism by which workers with superior innate abilities.

Alice (2014) found out in the work assessing the impact of human capital development on effective work performance at selected department in the college of Arts and social science (KNUST). Following objectives were studied under this work. To identify information on human capital development measures at CASS of KNUST and to examines torn impart of human capital development on staff performance at CASS of KNUST. The study found that the various departments under the college have effective system- communicating training specific findings under this study includes mentoring, coaching and shadowing (internship) are being used to improve workers performance.

3. Methodology

3.1 Research Questions

The study made use of one research question and one hypotheses. The research question is to what extent does effective training increase employee productivity? The hypothesis is - There is no significant association between effective training and increased employee productivity.

3.2 Human Capital Model

Human capital model and related investments or inputs and return on investment or production capacity and outputs. He presented a picture where investments or inputs interacted with production capacity and output. Zula and Chermanck, (2007).
It also should be taken into account that education has an impact on welfare of the individuals after education as well as indirectly on the whole society. Indirect impact of education is expressed in sharing and dissemination of knowledge which is characteristic to the working environment of well-educated people thus increasing productivity of each single individual who have gained knowledge from their well-educated colleagues. Besides, the society and individuals benefit from an increasing number of well-educated people due to the decreasing crime level, increasing health conditions, improving democracy process, increasing rule of law and political stability, (McMahon, 1999). The most significant investment in Eastern and Central European countries are made within the formal general education system, but the amount of investments in human resources development in job places is relatively small, (Ederer, Shulzer & Williams, 2007).

While most researches center on manufacturing companies, this research evaluates human capital theory from the view point of knowledge delivery services in higher institutions like universities in Nigeria.

3. Data

In this study made use of data from a sample of 300 lecturers in University of Port and Ignatius Ajuru University of Education all in Obio/Akpor L.G.A of Rivers State Nigeria, regarding their perception of human capital development and employees’ performance. The population of study were made up of a total three thousand lecturers (3000) both male and females in University of Port Harcourt and Ignatius Ajuru, University of Education, Iwofe, all in Rivers State Nigeria. The statistics was obtained from the personnel department of both universities through a formal application process. The stratified sampling methods were used for selection of sample. A total of 300 lecturers representing 100 female lecturers and 200 male lecturers were used as sample in the stratified random sampling formular as given by Taro.
Yamane (Yamane: 1967:258). The sample represents 10% percent of the total population of the study.

The questionnaire has a total fifteen items. The questionnaire for the study is titled: Effects of Human Capital Development on Employee Performance (EHCADEP) to collect data from students. EHCADEP was developed by the researcher on a four point Likert scale questionnaire weighted as follows:

- Strongly Agree (SA) 4 point
- Agree [A] 3 point
- Disagree (D) 2 point
- Strongly Disagree (SD) 1 point

Chi-square ($X^2$) was used to test the hypotheses. Chi-square is used when the researcher want to determine whether a relationship or an association exists between two variables. Chi-square is used for purposes of association when data are in nominal form or there are two variables.

4. Results and Discussion

The hypothesis was tested using chi-square ($X^2$) technique.

Table 4.1 Contingency Table Showing the Relationship between Training and Increased Employee Performance

<table>
<thead>
<tr>
<th>Training</th>
<th>Opinion</th>
<th>High performance</th>
<th>Low performance</th>
<th>Column</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trained</td>
<td>98(78.4)</td>
<td>42(61.6)</td>
<td>140</td>
<td></td>
</tr>
<tr>
<td>Untrained</td>
<td>70(89.6)</td>
<td>90(70.4)</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>168</td>
<td>132</td>
<td>300</td>
<td></td>
</tr>
</tbody>
</table>

Source: Survey data, 2015.

$E = \text{Row Total x column total}$

Grand Total

Table 4.1.2 Computation of Test Statistics ($X^2$)

<table>
<thead>
<tr>
<th>Cell</th>
<th>O</th>
<th>E</th>
<th>O-E</th>
<th>$(O-E)^2$</th>
<th>$(O-E)^2/E$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>98</td>
<td>78.4</td>
<td>19.6</td>
<td>384.2</td>
<td>4.90</td>
</tr>
<tr>
<td>2</td>
<td>42</td>
<td>61.6</td>
<td>19.6</td>
<td>384.1</td>
<td>6.24</td>
</tr>
<tr>
<td>3</td>
<td>70</td>
<td>89.6</td>
<td>19.6</td>
<td>384.16</td>
<td>4.3</td>
</tr>
<tr>
<td>4</td>
<td>90</td>
<td>70.4</td>
<td>19.6</td>
<td>384.2</td>
<td>5.5</td>
</tr>
</tbody>
</table>

Computation of Degree of freedom (d.f)

d.f = (r-1)(c-1)

= (3-1)(3-1)

= 2x2

= 4

Critical value $X^2$ at

$X^2 = X^2 (4, 0.05)$
\[ = 9.488 \]

### 4.1 Decision

Since \( X^2_c > X^2_t \), \( H_0 \) is hereby rejected and \( H_1 \) accepted. That is, the null hypothesis is rejected and the alternate hypothesis accepted. This means that there is a significant association between effective training and increased employee performance.

In terms of training, since \( X^2_c > X^2_t \), \( H_{01} \) is hereby rejected and \( H_1 \) accepted. That is, the null hypothesis is rejected and the alternate hypothesis accepted. This means that there is a significant association between effective training and increased employee performance. \( X^2_C = 20.94 \) is greater than \( X^2_t = 9.488 \).

The study therefore revealed that the two universities have effective training and development programmes. Human capital forms an organization’s critical resource base and is most vital to every institution. It is important that for an institution to be able to add value to its ability to solve problems and make vital decisions under complex and innovative circumstances there will be need for adequate investment in human capital development.

### 5. Conclusions and Recommendations

The study investigated human capital development at the Ignatius Ajuru and University of Port-Harcourt, River State Nigeria and how it impact on workers performance, and recommended that there is need for the various departments in the two Universities under study to work towards improving the timing of human capital development programmes. This is in respect of the findings that staff at the various departments in the Universities training programmes as not regular at work. It is also essential to improve the methods of human capital development delivery in line with adequate investment in technology for delivery of training, e-learning platforms to facilitate the training process.

### References


