

## **Effect of Human Capital Development on Healthcare Delivery of Tertiary Health Institutions in South-East States of Nigeria, 2010-2019**

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### **ABSTRACT**

The Nigeria public expectation from the public service in terms of service delivery and human capital development are in shambles. This is why there is the need for a comprehensive and holistic reform of the public services so as to enhance human capital development to enhance employee's productivity in the areas of welfare, education, agriculture, health and advancement of the public service, particularly the quality of services delivered in Tertiary Health Institutions in South-Eastern Nigeria. This study was an intervention to explore practical approach to the constant organizational human capital failures in many organizations. Therefore, the primary objective of the study was to evaluate the factor affecting the Effect of Human Capital Development on Healthcare Delivery of Tertiary Health Institutions in South-East States of Nigeria. Specifically, the study sought to ascertain the extent collaboration with international medical missions' leads to enhancement in handling complex medical procedures in Tertiary Health Institutions in the South-East States of Nigeria and assess the effect of mentoring practices on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-East States of Nigeria, To accomplish these objectives, descriptive survey research design was employed, a population of 3891 and sample of 1522 respondents from the selected Tertiary Health Institutions were studied and primary data were collected using questionnaire. Descriptive analyses were done using mean and standard deviation. The hypotheses were tested using nominal distribution (z-test). The findings of the study revealed thus: that collaboration with international medical missions positively led to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East States of Nigeria and that mentoring practice had a positive and significant effect on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-East States of Nigeria. The study concluded that the human capital holds the key to the success of any organization. The study recommended among others a paradigm shift in the culture of medical experience in tertiary healthcare institution in South East Nigeria by ensuring that experiences balance training for continued improvement in handling complex medical procedures.

**Keywords:** Human Capital Development, Healthcare Delivery and Tertiary Health Institutions.

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### **INTRODUCTION**

It is difficult to deny the importance of human capital in any organization as people constitute the ultimate assets that make a successful organization [1]. Human capital development involves the identification of needed skills and various methods of learning for the long-range future in relation to explicit corporate and organizational policy. Human capital development encompasses introducing,

eliminating, modifying, directing and guiding processes in such a way that all individuals and teams are equipped with the skills, knowledge and competencies they require to undertake current and future tasks required by the organization. Human capital development is the development that arises from a clear vision about people's abilities and potentials and operatives within the

overall planned framework of the organization [2]. Human capital development takes a broad and long-term view of how human capital development policies and practices can support the achievement of organizational goals. It is objective-led and also part of the learning and development process that is established as part of the overall human resources management approach which flows from organization policies and has a positive role in helping to ensure that the organization attains its goals [3]. The fundamental aim of human capital development is to enhance human resource capability in accordance with the belief that the human capital of an organization is a major source of efficient and effective service delivery.

It is therefore about ensuring that the right quality people are available to meet present and future needs. This is achieved by producing a coherent and comprehensive framework for developing people. The specific objectives of human capital are to develop and in which knowledge is managed systematically [4]. Although human capital development is a goal-led, its policies have to take into account individual aspirations and needs [5]. The importance of increasing employability outside as well as within the organization is an important human capital development consideration.

[6] opine that for Nigeria to overcome the shackles of underdevelopment, the human element therein must be developed to the test of time. Thus, the availability of skilled manpower is a fundamental tool for public service delivery, growth, and national development of any nation in the world. Nigeria may have employees of ability and determination with appropriate equipment and managerial support yet it is far from efficient and effective public service delivery and national development. By and large, the deficiencies are lack of adequate skills, talents, knowledge and techno-scientific wherewithal which are required for efficient and effective public service delivery to propel the nation's economy

from a situation of underdevelopment to a developed economy.

[7] observes that poor investment in human capital in Nigeria has been found to be consistent with the incompetence in public service delivery and a low rate of economic growth. In the words of [8], "Nigeria can only reposition herself as a potent force through the quality of her products from all levels of education (primary, secondary and tertiary) as well as making her manpower relevant in the highly competitive and globalised economy through a structured and tactical planning of her educational institutions." The Human Development Index (HDI) 2018 report revealed that Nigeria was ranked 157 with a value of 0.532 among 189 countries. This is abysmal and a clear indication that investment in human capital is not given the needed priority in Nigeria. [9] give evidence from emerging economies, such as Singapore, South Korea and India and posit that human capital investment has proven to be the real capital. [9] states that Asian tigers have been experiencing economic growth. Thus, they are gradually leaving the class of developing economies. One major reason for their speedy growth is their investment in human capital. The increase in their Gross Domestic Product (GDP) and per capital income can be traced to their investment in human capital. [9] noted that in the past three decades, the Asian tigers have allocated between 25-35 percent of their annual budget for the development of human capital. [9] reiterate that Singapore, a country with relatively little natural resources, has become one of the most developed countries in Asia, primarily due to significant investments in developing its human capital. Thus, human capital is seen as the single most important capital for decades. It invests over 12 percent of Gross Domestic Product (GDP) on education and is ranked as one of the emerging economies in the world [10]

Human capital holds the key to the success of any organization. For this to happen, the Nigerian public service must be able to train and retain their staff. To

do this, will amount to investing huge sums of money to conduct seminars (in-house or outside), collaboration with international medical missions, and developing e-learning technologies [11]. Even when the fund for the training is available, the employees must develop the right mental attitude for the training. The organization must also create the right environment for its employee. Nigeria main problem is the non-availability of the required manpower needed for the efficient and effective service delivery, and the situation was worsened by the drift of our trained personnel to a foreign land in a quest for greener pasture, all resulting to brain drain. Foreign experts are thus required for almost in everything that is done in Nigeria if we must have the manpower needed ([12]. [13] notes that the education offered in our higher institutions are not very enterprising, as a lot of trained university graduate could not get themselves gainfully employed in the economic workforce. Natural resources by itself no longer determine a country's economic power. Emphasis has thus shifted from concentration on the development of natural resources to the development of manpower. Availability of natural resources must be supplied with appropriate manpower capacity in order to achieve an accelerated economic. The national development plan fails, as our nation still relied on the foreign expert to man the industrial sector in the economy [14]. While the body of theoretical and empirical studies about issues pertaining to organization and institutions has grown considerably since the 1950s, current thinking in the West is still very much ethnocentric and promotes a culturally determined and foreign view of the world [15]. Therefore, the problem to be addressed in this study is the fact that there is a current lack of academic research in human capital development and manpower requirements in enterprises in Nigeria.

It is difficult therefore to deny the importance of human capital in any organization as people are ultimately the assets and contributors that make a

successful organization [1]. Many benefits can be reaped through proper human capital development programmes. [16] opines that human capital development is vital to organization successes and high productivity. He stated that human capital development increases the performance level of employees facilitates employee job satisfaction, reduces redundancy among the employees, improves service delivery, preserves organizational culture and image, makes employees take proactive actions to solve problems, and reduces lateness and absenteeism. [17] notes that skills development, employee productivity, training and staff development, training and development programmes implementation, and training needs assessment are superlative human capital development processes necessary for quality, timely, cost-effective and frequent delivery of public goods and services in any progressive economy. Unfortunately, the Nigeria public sector organizations do not properly exploit human capital development. This contributes to the high level of inefficiency and ineffectiveness among a great number of public servants in Nigeria, coupled with lack of drive and generally low performance.

[18], argues that lack of proper application of human capital development in Nigeria public organizations makes it difficult for public servants to deliver the quality of services expected from them; Tertiary Health Institutions in South-Eastern Nigeria is not exempted. This results in the lack of job satisfaction, truancy and insubordination among the Nigeria public servants. In fact, the lack of proper human capital development strategies in Nigeria public sector organizations demotivate the employees and make them avoid responsibilities.

It is important to state that a proper and regular trained employee is a well-motivated employee and is ready to stay at his duty post or office, seeks for responsibilities and performs commendably [14] It is appalling to see the office clerk and attendant doing the job of office secretary while the secretary

is doing their own job just because the secretary lacks the skill-based competence. This is the case in many public sector organizations in Nigeria, Tertiary Health Institutions in South-Eastern Nigeria, inclusive. It is even more shocking to see some departments engaging the services of outsiders who are not staffed to do a little job which otherwise would have been a secret. Many have witnessed a situation whereby they met a public officer in office and demanded service, only for the public officer to make his way through the back door because he/she lacks the skill-based

#### **Statement of the Problem**

Many organizations understand human capital development as additional cost as well a liability to their operations hence, do not appropriately train and develop them. Where it is possible for some organizations the training and development is not matched with the training needs of the workers. These organizations concentrate more on resources such as materials, machines and money. Their effort is more on how to improve productivity with little or no consideration of the human capital. The problem of incompetence in public service delivery and lack of drive among a great number of workers in Nigeria public organizations has been attributed to a lack of human capital development. The high level of staff redundancy in Nigeria public service is as a result of advancement in technology is an evidence of lack of regular human capital development to match their skills with technological advancement [19]. The idea of hiring consultant in most Nigerian public sector organizations especially the Tertiary Health Institutions even to the management level is a clear indication that Nigeria public sector has less regard for human capital development. The hired consultant acquired the needed skill and expertise through training and development. It is expected that instead of hiring people to do these jobs which bring about staff redundancy, these staff should be exposed to the necessary development programmes.

competencies to deliver the services. This ugly situation in Nigeria public sector organizations as a result of lack of human capital development should not be allowed to continue to pose serious challenges to the public service delivery and public sector performance in general, for which Tertiary Health Institutions in the South-East states of Nigeria, is not an exception. It is against this background that this study is set to examine the Effect of Human Capital Development on Healthcare Delivery of Tertiary Health Institutions in the South East States of Nigeria.

The Nigeria public expectation from the public service in terms of service delivery and human capital development is in shambles. This is why there is the need for a comprehensive and holistic reform of the public services so as to enhance human capital development to enhance employee's productivity in the areas of welfare, education, agriculture, health and advancement of the public service, particularly the quality of services delivered in Tertiary Health Institutions in South-Eastern Nigeria. Worst still, health institutions in South-Eastern Nigeria has not sufficiently developed human capital to address upcoming skill shortage and some managers lack the prerequisite skills to improve human capital productivity. Lack of human capital development in Nigeria public organizations might make it difficult for public servants to deliver the quality of service that more discerning public require, Tertiary Health Institutions in South-Eastern Nigeria is not an exclusion. Currently, in public organizations, the demand for modern technological skills is causing concern among employees and might lead to a new interest in training and development. Again, the constant change in technology means that workers training and development should be on a regular basis to adapt to any new technology. But the Nigeria public sector organizations seem yet to fully adopt the idea of human capital development. This, however, might be responsible for the apparent low performance and quality of

services rendered by public organizations in Nigeria.

Without serious and sustained attention on human capital development in Tertiary Health Institutions in the South-East states Nigeria, employees performance might continue to deteriorate. The absence of human capital development practices such as mentoring, collaborations with international medical

missions, among others may spell doom to organizations including the Tertiary Health Institutions in South-Eastern Nigeria. It is against these backgrounds that the study examined the effect of human capital development on healthcare delivery of Tertiary Health Institutions in the South-Eastern states of Nigeria, the gap in knowledge and learning was what the study filled.

### Objectives of the Study

The broad objective of the research was to examine the Effect of Human Capital Development on Health Care Delivery of Tertiary Health Institutions in the South-Eastern states of Nigeria. The specific objectives were to:

- i. ascertain the extent of collaboration with international medical missions leads to

enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-Eastern states of Nigeria.

- ii. assess the effect of mentoring practice on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-Eastern states of Nigeria.

### Research Questions

The study was guided by the following research questions.

- i. To what extent does the collaboration with international medical missions lead to enhancement in handling complex medical procedures in the Tertiary

Health Institutions in the South-Eastern states of Nigeria?

- ii. What effect does the mentoring practice have on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-Eastern states of Nigeria?

### Statement of Hypotheses

The following alternate hypotheses were formulated to guide the study.

- i. Collaboration with international medical missions to a large extent leads to enhancement in handling complex medical procedures in the Tertiary Health Institutions

in the South Eastern states of Nigeria.

- ii. Mentoring practice has a positive and significant effect on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-Eastern states of Nigeria.

## REVIEW OF RELATED LITERATURE

### Conceptual Review

#### Human Capital

The concept of Human Capital was originally coined by Schultz (1961) [20]. Schultz categorized the sources of all human abilities into two: the abilities that originate from innate sources and those that are acquired from the environment. He then posits that all valuable human abilities or attributes which can be augmented or enhanced by appropriate investment such as training, constitute Human Capital [21]. Similarly, [21], defines human capital as the knowledge,

skills and abilities of the people employed in an organization and it the most important element in an organization's intellectual capital. The concept of Human Capital according to [21] aims to achieve capable individuals that can create, innovate and perform at superior levels. In the modern world, human capital does not just happen. It is planned for and appropriate institutions, structures and environment created to bring it to fruition. The difference between a

developed country and less developed one is the size and quality of human capital available in such countries. A constant feature of all developed nations is the presence of a healthy pool of human capital that drives the economies of such countries [21]. The collection of skills, knowledge or other intangible assets of individuals that can be used to create economic value for the individuals, their employers, or their communities is human capital. [18] defines human capital as the human element in the organization; the combined intelligence, skills and expertise that gives the organization its distinctive character. The human elements of the organization are those that are capable of learning, changing, innovating and providing the creative thrust, which if properly motivated can

ensure the long-run survival of the organization.

[21] defines the human capital as knowledge and skills which individuals possess maintain and use. Armstrong says that people possess innate abilities, behaviour and personal energy and these elements make up the human capital they bring to their work. [21] posits that human capital is typically defined as produced commodities, which are used in the production of other goods and services. In the neoclassical theory of the capital is one of the factors of production and represents the stock of previous investments made in the economy which in turn, required the substitution of current consumption for future consumption. This shall help us to have a better understanding of Human Capital Development.

#### **Human Capital Development**

[22], opined that human capital development is about recruiting, supporting and investing in people through education, training, coaching, mentoring, internships, organizational development and human resource management. Human capital development recognizes the development and growth of people in organizations and business as an important and essential assets to the organization future resources. [23] defined human capital development as the framework for employees develop personal and helping organizational skills, knowledge and ability. According her, human capital to development includes such opportunities for employee training, employee career development, performance management and succession planning, development, coaching, mentoring, key employees' identification, tuition assistance and development. The focus of all organization human capital development is on developing the most workforce superior so that the organization and individual employees can accomplish their work goals in service to customers. Healthy organizations believe in human cover bases, more capital development and importantly, [23] suggests that the can act as a shortage of skilled people limiting factor on

individual organization and on the economy as a whole it is in interest of individual organization and the nation to maximize human resource investing in the skill by of its workforce, its human capital. Human capital is a crucial of an component organization's overall competitiveness. It can be argued that economic growth, employment levels and the availability of a skilled workforce are interrelated. Economic growth creates employment, but economic partly growth depends on skilled human resources organizations. [21] opined that the of human concept capital development encompasses investment in the skill of the labour force, including education and vocational training to develop specific skills. According to [22], human capital development represents all the processes that make it possible to acquire the knowledge, skills and ability that make possible for people to do jobs.

[20] defined the tem human capital development as a key element in improving firm assets and employees in order to increase productivity as well as to sustain competitive advantage. Human capital development involves processes that relate to training, education and other inventions in order to increase the level of knowledge, skills, abilities,

values, and social assets of employees which will lead to the employees satisfaction performance and eventually on firm performance. According to [20] human capital involves increase investment in education and training of the individuals. Individual's abilities can be enhanced through education and training that bring about effective change in Business Administration and Education performance of jobs. He postulates that human capital amounts to an investment in education and training which can be undertaken by individual or group of individual workers of any institution or organization. [24] conceived of human capital as referring to investment in education, training, skills, health, and other values that cannot be separated

#### **Healthcare Delivery**

Health-care delivery is a highly personal activity. In the context of modern health care, it implies a very special relationship between the patient and their caregiver at many levels. This personal relationship is shaped and influenced in ways beyond the specific patient care or scientific discovery goals of the provider and patient. The complexity, cost, and rapid rate of scientific advancement within health care create a complex business model that is affected by delivery governmental, economic, social, and technological influences. Healthcare delivery encompasses the management and delivery of quality and safe health services so that people receive a continuum of health promotion, disease prevention, diagnosis, treatment, disease management, rehabilitation and palliative care services, through the different levels and sites of care within the health system, and according to their needs throughout the life course. Although there are no universal models for good service delivery, there are some well-established requirements. The effective provision requires trained staff working with the right medicines and equipment, and with adequate financing. Success also requires an organizational environment that provides the right incentives to providers and users. The service delivery building block is concerned with how inputs and

from the individual." Human capital is a trait crystallized in an individual that cannot be expunged. [21] states that human capital refers to the abilities and skills of the human resources of a country. In the words of [24] human capital simply refer to the processes that relate to training, education and other professional initiatives in order to increase the levels of knowledge, skills, abilities, values, and social assets of an employee which will lead to the employee's job satisfaction and performance." [20] makes a notation on human capital when he said: Take into account the innate and acquired skills. Those are important and may invest to expand, and will form the human capital.

services are organized and managed, to ensure access, quality, safety and continuity of care across health conditions, across different locations and over time.

Healthcare provision in Nigeria is a concurrent responsibility of the three tiers of government in the country. Private providers of healthcare have a visible role to play in health care delivery. The use of Traditional Medicine (TM) and complementary and alternative medicine (CAM) has increased significantly over the past few years. Health Service Delivery refers to the services rendered by members of the health professions for the benefit of a patient. Health service delivery here denotes a safe, accessible, high quality, people-centered, integrated and critical for moving towards universal health coverage. Health service delivery is responsible for providing health services for patients, persons, families, communities and populations in general, and not only care for patients. It means getting health services as expected and as quick as possible by recipients or patients. To [25], public service delivery is the degree and hallmark of excellence in public service. To [25] it involves considerable human activity, hence human capital development is important as the human element is often the key

ingredients of public service institutions. To these researchers, public service delivery is, therefore, the provision of timely public goods and services to the clients or populace in such a way and manner that the client's expectations are realized and even surpassed while at the same time, the institution or organization's integrity remains stable. Public service delivery is one of the major challenges facing developing countries like Nigeria. This should be a top priority of the government and management of Nigerian tertiary institutions if the country is to make substantial progress in socio-economic development [3]. In Nigeria, a number of problems confront and complicate public service delivery. For example, poor or faulty recruitment policy leads to poor selection of human capital coupled with corruption and decayed infrastructure. [25] opines that the quality and availability of essential services is a major indicator of good governance because public service delivery underpins the social contract between the state and its citizens which in turn portrays a healthy society. [26] note that public service is a service which is provided by the government to people living within its jurisdiction, either directly (through the public sector) or by financing provision of services. The term is associated with a social consensus (usually expressed through democratic elections) that certain services should be available to all, regardless of income, physical ability or mental acuity. Even where public services are neither publicly provided nor publicly financed, for social and political reasons they are usually subject to regulation going beyond that applying to most economic sectors. Public policy when made in the public's interest and motivations can provide public services. Public service is also a course that can be studied at a college or university. Examples of public services

#### **Tertiary Health Institution**

This is a hospital that provides tertiary care, which is a level of health care obtained from Specialists in a large hospital after a referral from the providers of primary care and secondary

are the fire brigade, police, air force, and paramedics. Public services are associated with fundamental human rights (such as the right to water). The Volunteer Fire Department and Ambulance Corps are institutions with the mission of servicing the community. A service is helping others with a specific need or want. Here, service ranges from a doctor curing an illness, to a repair person, to a food pantry [26]. [27], also pointed out that in modern democracies, public service delivery is often performed by employees known as civil servants who are hired by elected officials. Government agencies are not profit-oriented and their employees are motivated very differently. Studies of their work have found contrasting results including both higher levels of effort and fewer hours of work. A survey in the UK found that private-sector hiring managers do not credit government experience as much as private sector experience. Public workers tend to make less in wages when adjusting for education, although that difference is reduced when benefits and hours are included. Public workers have other intangible benefits Such as increased job security. A public service may sometimes have the characteristics of a public good (being non-rivalrous and non-excludable), but most are services which may (according to prevailing social norms) be under-provided by the market. In most cases public services are services, i.e. they do not involve the manufacturing of goods. They may be provided by local or national monopolies, especially in sectors which are natural monopolies. They may involve outputs that are hard to attribute to specific individual effort or hard to measure in terms of key characteristics such as quality. They often require high levels of training and education. They may attract people with a public service ethos who wish to give something to the Wider public or community through their work.

care. Beyond that general definition, there is no precise narrower or more formal definition, but tertiary centres usually include the following:

- i. a major hospital that usually has a full complement of services including paediatrics, obstetrics, general medicine, gynecology, various branches of surgery and psychiatry or
- ii. a specialty hospital dedicated to specific sub-specialty care (pediatric centres, Oncology centres, psychiatric hospitals). Patients will often be referred from smaller hospitals to a tertiary hospital for major operations, consultations with sub-specialists and when sophisticated intensive care facilities are regularly.

Tertiary care is specialized consultative health care, usually for inpatients and on referral from a primary or secondary health professional, in a facility that has personnel and facilities for advanced medical investigation and treatment, such as a tertiary referral hospital. Tertiary healthcare facilities are referral centres, receiving referrals from secondary and primary healthcare centres. They provide the most specialized healthcare administered to patients with complex diseases who may require high risk

medical and surgical procedures with the high-cost technological resource. Tertiary healthcare is provided mostly in university teaching hospitals and specialized hospitals. It requires sophisticated medical technology, multiple specialists and subspecialists, a diagnostic support group and intensive care facility.

In developing countries like Nigeria, tertiary healthcare facilities are usually congested and overcrowded because of the volume of patients admitted [28]. To increase the likelihood of designing facilities that will function well both for patients and staff, healthcare facility administrators and facility planners need to depend on evidence-based design. This would increase the likelihood that new facilities will generate the expected outcomes. Scholars have argued that to implement evidence-based design principles implies utilizing the "best information available from research" when making design decisions. This would, in the end, result in demonstrated improvements in healthcare outcomes, productivity, user satisfaction and economic performance [29].

### **Collaboration**

When it comes to defining collaboration, "for a concept so widely used in everyday language, there is a surprising lack of a clear understanding of what it is to collaborate, and of how best to support and improve collaborative working. Definitions are often tailored to a particular environment". Some definitions in the literature indicate that collaboration. Collaboration involves multiple people interacting to achieve a common goal, it is "an active and ongoing partnership between professionals and institutions with diverse backgrounds and mandates who work together to provide services" [30]. Is a process that involves cooperation, communication, negotiation, trust, respect, understanding to build a synergistic alliance that maximizes the contributions of each participant". It involves constructing both a collective action to address complex patient needs and an inter-professional team relationship involving respect and trust.

Collaboration is a process of working together, negotiating agreement and managing conflict, and both valuing and understanding one another, it involves working together, shared planning over time, functioning cooperatively as colleagues and equals with respect and a view to finding solutions together [31], Is a dynamic, transforming process of creating a power-sharing partnership... for purposeful attention to needs and problems (practice) to achieve likely successful outcomes" [23], and it is "an efficient, effective, and satisfying way to offer health care services.. through a process by which interdependent professionals are structuring a collective action toward patient's care needs. Common themes among these definitions suggest that collaboration is an integration of activities and knowledge that requires a partnership of shared authority and responsibility. Four critical elements described by [23], provide a

useful breakdown of behaviours and attitudes that, together, constitute collaborative practice in health care:

- i. Coordination (working to achieve shared goals)
- ii. Cooperation (contributing to the team, understanding and valuing the contributions of other team members)
- iii. Shared decision-making (relying on negotiation, communication, openness, trust, and a respectful power balance).
- iv. Partnerships (open, respectful relationships cultivated overtime

in which all members work equitably together).

The members of a multifunctional team bring together a range of functional expertise to the task at hand, whether for a one-time project or ongoing operational work [32] This functional expertise may be of a subtler form when members have different perspectives but similar skills and experience or maybe more distinct when the team incorporates a diversity of knowledge, skills, and training. Patients, family members, and other stakeholders ideally participate in the delivery of health care as part of a multifunctional health care team.

### **Mentoring Practice**

There are numerous definitions of mentors, ranging from a person who provides support for career development (e.g., sponsorship, coaching, protection) to psychosocial development (e.g., support, role modeling, counselling) [13, 15,21]. Similar to teaching, mentoring involves the communication of information between people. Mentoring is a relationship in which one person (the mentor)- who is usually more experienced and often more senior-supports another (the learner or mentee) with regular guidance, feedback and confidential discussion so that he or she can become more self-aware, knowledgeable and able to develop their potential and capability. A mentoring relationship can be informal,

or it can be a more formal arrangement between two people who respect and trust each other. It does not usually involve a bringing together of a trainer and a trainee or a line management arrangement, where seniority comes into play. The mentor can be any person with appropriate experience, ability and knowledge. The role of a mentor is to listen, ask questions, probe for facts, act as a source of information and guidance, and signpost opportunities for learning from which the mentee can benefit. The aim of mentoring is to help mentees form their own views, develop different perspectives, grow as a person and work towards or achieve their next, intended goals.

### **Understand Mentoring as Human Capital Development Method**

Mentoring is essentially about helping people to develop more effectively. It is a relationship designed to build confidence and support the mentee so they are able to take control of their own development and work [32]. Mentoring is not the same as training, teaching or coaching, and a mentor doesn't need to be a qualified trainer or an expert in the role the mentee carries out. They need to be able to listen and ask questions that will challenge the mentee to identify the course of action they need to take in regards to their own development. The following definition

provides useful insight: off-line help by one person to another in making significant transactions in knowledge, working or thinking. Off-line means an individual who is not the mentee's direct line manager. A mentor is different from a line manager in that they will not have direct responsibility for the mentee's Work performance but they will be responsible for encouraging the mentee to work towards their own individual objectives and be a motivating guide for the mentee on their journey [32].

## Theoretical Framework

### Human Capital Theory

The study adopted the Human Capital Theory by Gary Becker and Jacob Mincer in the 1950s and 1960s. Dae-bong 2009 opines that Human Capital Theory was developed in the 1950s and 1960s by two economists, Jacob Mincer and Gary Becker, who are considered of a Chicago School" of economics. The theory, however, goes as far back as Adam Smith, who argued that capital does not just consist of machines and real estate, but also of "the acquired and useful abilities of all the inhabitants or members of the society". This notion of human abilities and education as constituting a store of capital which can be invested to produce value was originally applied to analysis of nations as a whole but gradually became a key part of the understanding of how businesses succeed in an age where innovation and intellectual property are as important as lactones and land for creating value in organizations. The human capital theory posits that individuals possess skills, knowledge and abilities which confer on them the status of human capital with which is expressed in their work. These individuals own and control the attributes and may decide to or not manifest them in the workplace. If the employer desires to benefit from the utilization of such human capital in his organization, negotiation and eventual settlement must be reached with the individual concerned [3] sees human capital as a collection of talents, skills, abilities, experience, intelligence, training judgment and wisdom possessed individually and collectively by individuals in a population. The resources are the total capacity of the people that represents a form of wealth which can be directed to accomplish the goals of the nation or state or a portion thereof. [27] states that it is an aggregate economic view of the human being acting within economies, which an attempt to capture the social, biological, cultural and psychological' complexity as they interact in explicit and or economic transactions many theories explicitly

connect investment in human capital development to education and the role of human capital in economic development, productivity growth and innovation has frequently been cited as a justification for government subsidies for education and job skills training.

[26], opines that human capital is vitally important for an organizations success. Human capital increases through education and experience human capital is also important for the success of cities and regions. Components for analysis usually called "intangible" most commonly social capital the sum of social bonds and relationships has come to be recognized, along with many synonyms such as goodwill/brand value or social cohesion or social resilience and related concepts like celebrity or fame as distinct from the talent that an individual (such as an athlete has uniquely) has developed that cannot be passed on to others regardless of effort, and those aspects that can be transferred or taught: Instructional capital less commonly, some analyses conflate good instructions for health with health itself, or good knowledge management habits or system with the instructions they compile and manage. The human capital theory, therefore, conceptualizes workers as embodying a set of skills which can be rented out to the employers in exchange for desired rewards such as wages and salaries. Thus, human capital theory is a means of production into which additional investment yields additional output. Human capital is not substitutable and not transferable like land, labour or fixed capital as an important economic growth factor [28, 31]. Another strength of the human capital theory is that provides a useful lens for understanding how policy can be developed to incentivize individual's investment in their own education pursuing education involves both costs (e.g. forgoing potential earnings in the present) [28].

### Tenets of Human Capital Theory

Five of the key tenets of Human Capital Theory according to [3] are:

- i. Skills, Qualifications, and Education
- ii. Work Experience
- iii. Social and Communication Skills
- iv. Habits and Personality Traits
- v. Individual Fame and Brand Image

#### 1. Skills, Qualifications, and Education:

The productivity of workers is closely tied to their skills, education, and qualifications. Just as factories invest capital in machinery that increases productivity, so workers or companies invest in education and training that increase productivity. This is especially the case in businesses that specialize in services, technology, or intangible products where value is created by innovation and creativity rather than working with physical materials. For example, the key creator of value in a medical practice is the doctors' training and skills, just as law degrees create value in a legal partnership.

**2. Work Experience:** The more experienced employees are, the more they create value. According to the Harvard Business Review, it may take employees anywhere from three months to a year to become productive. Every time an establishment loses an employee to a competitor, layoffs, or retirement, it needs to invest in recruiting and training new staff, something that is just as much an expense as replacing machinery in a manufacturing plant. Thus, work experience can be seen as a form of capital that generates revenue.

**3. Social and Communication Skills:** No matter how much employees know or how

#### Application and Relevance of Human Capital Theory to the Study

The relevance of Human Capital Theory to this study Effect of Human Capital Development on Health Services Delivery in Teliialy Health Institutions in the South-Eastern State of Nigeria is that it helps management to evaluate the relationships between education and training as inputs and economic and social benefits as outputs. Extensive empirical research within the human capital theory framework suggests that increased amounts of schooling are

much they have developed expertise in corporate culture and practices, that knowledge is of little use if they cannot communicate effectively or work well with other employees. The social and communication skills of employees are even more important in areas of service delivery which involve dealing with clientele or clients, as good client service can affect how they respond to service.

**4. Habits and Personality Traits:** For individual employees, habits and personality traits can be a source of value. The worker who is disciplined, punctual, meets deadlines, has a positive outlook, and is a team player generates more value than one who may have the same technical skills but lacks these personal traits and habits.

**5. Individual Fame and Brand Image:** The human image is what makes a business immediately recognizable to potential customers. Often famous individuals, such as Steve Jobs of Apple, can become iconic figures who generate revenue for a brand. Companies that make sporting goods, fashion companies, and retail businesses often rely on personal branding and celebrity spokespeople to attract customers. While many companies have access to similar technology, having the best employees and most recognizable brands can increase productivity and profits. Especially now that services rather than tangible products form an increasing percentage of GDP, human capital is increasingly important for individual workers and businesses.

associated with higher individual wages, GDP growth higher rates of civil participation, lower crime rates, and better health outcomes. Human Capital Theory offers policymakers a lens for evaluating the relative efficiency of public investment in programmes that encourage more human capital development. The first tenet of the theory is on Skills, Qualifications, and Education. Indeed, the service delivery or productivity of employees is closely tied to their skills,

education, and qualifications even in Tertiary Health Institutions in the South-Eastern State of Nigeria. Just as organizations invest capital in machinery that increases productivity, so workers or organizations invest in education and training that increase productivity. This is especially the case in organizations that specialize in services, technology, or intangible products where value is created by innovation and creativity rather than working with physical materials. For example, the key creator of value in a medical practice is the doctors' training and skills, just as law degrees create value in a legal partnership. The second tenets of the theory, call for Work Experience which is a product of Human Capital Development. The more development programmes workers undergo the more experienced they are, the more they create value. Again No matter how much employees know or how corporate culture and practices that knowledge is of little use if they cannot communicate effectively or work well with other employees. The social and communication skills of employees are even more important in area of service

This section of the literature review discussed the existing empirical studies in the subject matter of this study. It explored the existing literature that

#### **Collaboration with international medical missions and enhancement in handling complex medical procedures**

[33] conducted a study on International Medical mission to impact Driven Experiences in Nigeria Health Sector: Ethical Principle to Optimize Community Benefit and Learner Experience. They noted that increasing demand for human capital needs in Nigeria health sector has driven the growth of medical training and educational programs predicated on a model of short medical training abroad. Almost two-thirds of matriculating medical students expect to participate in a global health experience during medical school, continuing into residency and early careers. Despite positive intent, such experiences in global health may improve Nigeria health inequities and even cause benefits. Growing out of the

delivery which involve dealing with clientele or clients as good client service can affect how they respond to service. To this extent, Human Capital Development is relevance in inculcating social and communication skills. Furthermore, to acquire the habits and personality traits demanded by the human capital theory requires Human Capital Development. Also for efficient Public Services Delivery in Tertiary Health Institutions in the South-Eastern State of Nigeria, these habits and personality traits are inevitable. According to the foli tenet of the human capital theory, for individual employees, habits and personality traits can be a source of value. The worker who is disciplined, punctual, meets deadlines, has a positive outlook, and is a team player generates more value than one who may have the same technical skills but lacks these personal traits and habits. There is no doubt therefore that Human Capital Theory offers policymakers a lens for evaluating the relative efficiency of public investment in programmes that encourage more human capital development.

#### **Empirical Review**

applied statistical tools in analyzing the data gathered in the course of the study and to test the guiding hypotheses to make some empirical findings.

medical mission tradition, contemporary participation continues to evolve. Ethical concerns and other disciplinary approaches, such as public health anthropology, can be incorporated to increase effectiveness and sustainability and to shift the culture of medical experience from focusing on trainees and their home institutions to also considering benefits in host communities and nurturing partnerships. The study applied both primary and secondary data with questionnaire as the instrument of data collection, while chi-square ( $\chi^2$ ) was used to present the data collected. The study identified four core principles to guide ethical development of medical staff in Nigeria health sector: (1) skills-

building in cross-cultural effectiveness and cultural humility, (2) bidirectional participatory relationships, (3) local capacity building, and (4) long term sustainability. Application of these principles highlights the need for assessment of data collection that allows transparent comparisons, standards of quality, the directionality of agreements, defined curricula, and ethics that meet both host and sending countries'

standards and needs. To capture the enormous potential of medical experience in Nigeria health sector, a paradigm shift in the culture of medical experience in Nigeria health sector is needed to ensure that these experiences balance training, level, personal competencies, medical and cross-cultural ethics, and educational objectives as minimize harm and maximize benefits for all involved.

**Effect of Mentoring Practice on Capacity Building**

[30] in their study effects of mentoring on employees performance in selected family business in Abuja, Nigeria, states that mentoring has presently become a strategy for human resource management, yet, little is known on how it improves the employees' performance in the family business. The research investigated the effect of mentoring on employees' performance in the family business. The construction industry in Abuja was critically investigated. The study employed a survey research design using both quantitative and qualitative approaches. The population was the construction industry in Abuja. Responses from three hundred and sixty-seven construction employees were analyzed. The data collected were analyzed using Pearson correlation coefficient statistic technique. The findings of the study

revealed that mentoring had positive effects on employees' performance; career support had a more positive effect on employees' performance than psychosocial support. The research concluded that performance among employees respond better to career support in terms of performance. The study concluded that mentorships had a significant relationship with employee performance. The study recommends that for the family business t sustain better employees' performance. The study recommends that for the family business to sustain better employees' performance, the organization should be encouraged to have a mentorship program for the employees of the organization, which will result in better employees' performance for the business to achieve its objectives.

**Gap in Literature**

The empirical review embarked upon shows that studies established inevitability Human Capital Development as a strategy for improving healthcare service delivery. To the best of the

researcher knowledge, the study was carried out in the area of human capital development on healthcare delivery in the Tertiary Health Institutions in South-East Nigeria. This study sought to fill the gap.

**METHODOLOGY**

**Research Design**

[27], defined research design as a detailed outline of how an investigation will be collected. It includes how data will be collected, what instruments will be employed, how the instrument will be used and the intended means for analyzing data collected. The study

applied a survey research design. In using descriptive survey design, opinions of the respondents were ascertained through the administration of the questionnaire and the conducts of the interview. This helped to provide answers to the issues raised in the research questions and hypotheses.

**Sources of Data**

The study adopted two major sources of data in the research work viz:

primary and secondary sources of data.

**Primary Sources of Data**

The primary data were derived from the questionnaire administered on the staff of

tertiary health institutions in the South-Eastern State of Nigeria. Also, an oral

interview was conducted on a wide range of issues on the staff in Tertiary Health Institutions in the South Eastern states of Nigeria and direct observation of what

was going on in the Health Institutions as regards human capital development and health services delivery formed part of the primary data.

#### **Secondary Sources of Data**

The secondary data were sourced from textbooks, newspapers, magazines, seminar papers, Journals and some published books. Also, government publications at various levels relevant for the secondary data were used. The researcher visited many libraries, the

Internet and also accessed the relevant documents and records of the Tertiary Health Institutions in the South Eastern states of Nigeria on human capital development to collect the secondary data for the Study.

#### **The Study Area**

The study area was the Tertiary Health Institutions in the South-East states of Nigeria. The Covered five tertiary health institutions in the South-Eastern states of Nigeria. The states are Enugu, Anambra, Abia, Ebonyi and the Inio States. The hospitals are Federal Medical are Aba Road. Umu Obasi, Umuahia for Abia State.

Nnamdi Azikiwe University Teaching Hospital (NAUTH). Nnewi for Anambra State, Federal Teaching Hospital, Abakiliki for Ebonyi State, National Orthpedics Hospital, Abakpa Junction Abakiliki Road, Enugu for Enugu State and Federal Medical center Owerri for Imo State.

#### **The population of the Study**

[28], defines a population of the study as the members of the universe group or object with common and/ or varying attributes which the researcher has chosen to embrace the needed information for the study. He states that in sampling the population, identifying characteristics which members of the population have in common and those subsumed therein and which will identify each unit as being a member of a particular group is imperative. It is

necessary that the researcher specifies the entire group that embraces the information used in the study. The population of the study was made up of the staff of the five Tertiary health Institutions in the South-East states under investigation. The population of the study was, therefore, three thousand, eight hundred and ninety-one (3891) staff. The population is presented in Table 1 based on Departments in the Hospital under study.

**Table 1: Population Distribution Table**

<b>Hospitals and Departments</b>	<b>Population</b>	<b>Sample Size</b>	<b>Percentage</b>
<b>Federal Medical Centre, Abia state</b>			
General outpatient department	168	66	4.3
Medical records department	52	20	1.3
Surgery department	34	14	0.9
The national health insurance scheme	21	8	0.5
	23	9	0.6
Radiology department	281	110	7.2
Administrative department	41	17	1.1
Account department	157	63	4.1
Works and security			
<b>Total</b>	<b>777</b>	<b>307</b>	<b>20.0</b>
<b>Nnamdi Azikie university Teaching Hospital, Nnewi, Anambra State</b>			
General outpatient department	186	73	4.8
Medical records department	72	29	1.9
Surgery department	31	12	0.8
The national health insurance scheme	22	9	0.6
	36	14	0.9
Radiology department	311	122	8.0
Administrative department	78	30	2.0
Account department	103	40	2.6
Works and security			
<b>Total</b>	<b>839</b>	<b>329</b>	<b>21.6</b>
<b>Federal Teaching Hospital Abakaliki, Ebonyi state</b>			
General outpatient department	102	40	2.6
Medical records department	46	18	1.2
Surgery department	30	12	0.8
The national health insurance scheme	47	18	1.2
	27	11	0.7
Radiology department	181	72	4.7
Administrative department	64	24	1.6
Account department	214	84	5.5
Works and security			
<b>Total</b>	<b>711</b>	<b>279</b>	<b>183</b>
<b>National Orthopaedic Hospital, Abakpa Junction Enugu State</b>			
General outpatient department	126	49	3.2
Medical records department	97	38	2.5
Surgery department	48	18	1.2
The national health insurance scheme	24	9	0.6
	20	8	0.5
Radiology department	283	111	7.3
Administrative department	36	14	0.9
Account department	127	50	3.3
Works and security			
<b>Total</b>	<b>761</b>	<b>294</b>	<b>19.5</b>
<b>Federal Medical Centre, Owerri Imo State</b>			

General outpatient department	176	68	4.5
Medical records department	72	29	1.9
Surgery department	31	12	0.8
The national health insurance scheme	22	9	0.6
Radiology department	37	15	1.0
Administrative department	280	108	7.1
Account department	78	31	2.0
Works and security	106	41	2.7
<b>Total</b>	<b>803</b>	<b>313</b>	<b>20.6</b>
<b>Grand Total</b>	<b>3, 891</b>	<b>1522</b>	<b>100</b>

**Source:** Personnel Unit of the Hospitals under Study, 2019

**Sample Size Determination**

[29], defines sampling as the process of selecting a part (called a sample) from the whole (called a population) in order to make influence about the whole. A sample then is that small part selected from the whole or population. It is a subset of the population. [31], states that a sample is used in studies that involved a large population. The reasons however for sampling include the desire to adequately manipulate the enormous population by

avoiding error due to the calculation of large numbers or figure, the desire to reduce the exorbitant cost of producing questionnaire to cover the entire population. The population of three thousand eight hundred and ninety one (3,891) was considered too large, the researcher applied Yamane (1964) statistical formula cited in [12], to reduce the population to an adequate size. The formula is stated under:

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

Where n = Sample size  
 N = Population size  
 e = Margin of error allowed (5%)  
 1 = Constant

The researcher chose two percent (0.02) as the error margin allowed. The translation of the formula is shown below.

The researcher chose to percent (0.02) as the error of margin allowed. The translation of the formula is shown below.

$$\begin{aligned} \therefore N &= 3891 \\ e &= 2\% \\ n &= ? \\ n &= \frac{3891}{1 + 3891(0.02)^2} \\ n &= \frac{3891}{1 + 3891(0.0004)} \\ n &= \frac{3891}{1 + 1.5564} \\ n &= \frac{3891}{2.5564} \end{aligned}$$

**n** = 1,522,0622750743 =  
 The overall sample size (n) therefore is 1522. To calculate the proportionate sample size, the researcher adopted

1552 approximately  
 Kumar's Formula. To (Kumar, 1976), the proportionate sample is given by the formula

$$N_h = \frac{nN_h}{N}$$

N = The total sample size

### Sampling Technique

The sampling Technique that was used for the selection of the sample size of the study is the cluster sampling technique. [29], informs that cluster sampling technique involves selecting members of a sample in groups rather than individually. The members of the target population are grouped on the basis of the occupational cluster, religious cluster etc. A random sampling method is usually used to select the sample from the identified cluster. In this type the unit of observation is the group and not individuals who make up the group. Cluster sampling is a sampling plan used

when mutually homogeneous yet internally heterogeneous groupings are evident in a statistical population. The researcher preferred the technique because the target area was too large and by implication, it minimized costs and error involved in studying a large population. Conforming to the principle of cluster sampling, South-East has five states as we noted earlier, the tertiary health institutions in each were identified, after which one each was randomly selected to represent each state.

### Method of Data Collection

There are three major methods of primary data collection. These are questionnaire, interview and observation. For the purpose of the study, the researcher employed Questionnaire instrument augmented with an interview. The researcher formulated a total number of thirty (30) questionnaire terms and distributed the same to the sample selected for the study. The researcher used the method of on-the-spot administration and collection of the questionnaire. That was necessary in

order to explain some salient questions and conduct the interview for the respondents. The researcher developed a total of fifteen (15) interview items to guide the interview section. The questionnaire instrument was in a 5-point likert scale structured form (Strongly agree =5, Agree = 4, undecided = 3, Disagree = 2 Strongly disagree = 1). The questionnaire items and the interview guide were drawn from the objectives, research questions and hypotheses developed for the study.

### Validity study of the Instrument

[33], states that the validity of instrument examines the extent to which the instrument measures what it purports to measure. That is, it is the degree to which a test instrument measures what it is intended to measure. The researcher applied a pilot test to establish the validity of the questionnaire items used in the study. [29], informs that pilot testing or study is an experimental activity carried out on a small scale (i.e. small sample in relation to the large one and the entire population) to find out how something on a large Scale will work. He maintained that it is usually highly desirable to run a pilot test on a questionnaire and to revise it based on the results of the exercise. In testing the validity of the instrument, the researcher

administered the questionnaire and the interview guide to a sample of thirty (30) comprising some of the population of the study, different from the people in the population size for the main study and some professionals in public administration. In evaluating the questionnaire, the researcher took an questionnaire sample which she scored ideal in the way she expected every one of the pilot sample group to complete their questionnaire side by side. After, the researcher respondent's compared each questionnaire with her own Scored copy. The researcher scored questionnaire correct any if the respondent had taken a definite position (positive or negative). The researcher discovered that the correct scored copies were twenty-six (26)

representing 86 per cent of the total thirty respondents used for the pilot test. The researcher adopted expert validity. The contents of the questionnaire were validated by experts in the field of

measurement and evaluation before taken to the project supervisor for final approval. The researcher, therefore, claimed the validity of the instrument.

### Reliability of the Instrument

Reliability of an instrument ensures that the results of a measuring instrument are consistent, dependable and reliable. [13], notes that the reliability of an instrument refers to the yielding of the same results when the instrument is used on the same persons a number of times. He also defines it as the property of a measuring instrument that makes possible the obtaining of similar results upon repetition. In establishing the reliability of the questionnaire and the interview guide used in the study, the researcher employed the test-retest method. [13], describes the test-retest method of stability. He states that test-retest is a process of administering an instrument as a group of individuals, at a reasonable time interval and comparing the two sets of scores. With this type of reliability estimate, the researcher can determine how confidently she can generalize from the score a person gets at one time to what the person would get if the test had been given at a different time. The researcher sampled twenty (20) people, some of which were from the population of the study different from the people in the sample size for the main study and others were professionals in public administration. The researcher labeled each element of the reliability sample group with numbers from one to twenty for easy identification. The researcher

distributed the questionnaire on them accordingly.

After collection of the first, scored questionnaire and the interview conducted for the first time, the researcher waited for two weeks before distributing a second batch of the same instrument to the same reliable sample group from one to twenty. When the second batch was collected, the researcher compared it with the first result element of the reliability sample group. That comparison was done using the Correlation Coefficient (r). The correlation coefficient (r) is a statistical measure that calculates the strength of the relationship between the relative movements of two variables. The values range between -1.0 and 1.0. A positive correlation, when the correlation coefficient (r) is greater than 0, signifies that both variables move in the same direction or are correlated. When r is +1, it signifies that the two variables being compared have a perfect positive relationship. The closer the value of r is to +1, the stronger the linear relationship, [22]. After the correlation analysis was completed, the correlation coefficient (r) of 0.7 was obtained, which shows that there was a perfect positive relationship between the first result Clements and the second elements. The researcher, therefore, claimed the reliability of the instruments used in this study.

### Method of Data Presentation and Analyses

Data collected were presented using tables. Descriptive analyses were done using simple percentages, mean and standard deviation. The hypotheses were tested using z-normal distribution (z-test). The use of the normal distribution became necessary following the assumption that the population is normally distributed since the sample  $\mu = \frac{5+4+3+2+1}{5} = \frac{15}{5} = 3$

size of 1200 is above 30. The 5-mean Likert scale value as found to be  $n = 3.0$ . The population mean response was therefore taken as 3.0. The mean of the average responses to the questions as shown in the tables was calculated and standard deviation found. The population mean was as follows

The mean of the responses and the mean of mean (x) were found as follows

$$X = \frac{\sum fw}{\sum f}$$

Where,  $W_i$  =weights from 1-5 and  
 $F_i$  = the number of responses

$X = \frac{\sum x_i}{n}$   $> 3.0$  indicated agreement in all cases

the Z-score was found as

$$z = \frac{x - \mu}{s/n}$$

where

$z$  == standard normal deviate

$X$  == mean of the mean responses

$\mu$  == Population mean

$s$  == standard deviation.

**Decision Rule**

The rule in the use of the z-test criterion was to accept the alternate hypothesis of the calculated z-score if it was higher than the tabulated z-score. The hypothesis was not to be

rejected if the tabulated value was less than the calculated z-value. Critical  $> Z_{cal}$ , do not reject, otherwise accept.

**DATA PRESENTATION AND ANALYSIS**

This section analyzes the data collected from the data collection tools, that is the questionnaire presented. It interprets the data in relation to the research objectives and questions. The findings or results were analyzed using different data analysis methods. The purpose of the analysis was to establish the Effect of Human Capital Development on Health Care Delivery of Tertiary Health Institutions in the South-East states of

Nigeria. Mean scores, standard deviation, Maximum, Maximum, frequencies and percentage scores were used to carry out analysis of data collected Z- test Analysis technique was used to establish the Effect of Human Capital Development on Healthcare Delivery of Tertiary Health Institutions in the South East of Nigeria. The raw data were coded, evaluated and tabulated to depict clearly the results of the problem encountered.

**Response Rate**

The data for the study were collected from employers and employees of healthcare institutions in South-East

Nigeria. The response rate is presented in table 2 below

**Table 2 Response Rate of the Questionnaire**

	RESPONSES
No. of the distributed questionnaire	1522
Returned questionnaire	1211
Returned and usable questionnaire	1200
Returned and excluded questionnaire	11
Questionnaires not returned	311
<b>Usable Response rate</b>	<b>97%</b>

**Sources: Research Data, 2019**

Table 2 indicates that out of the 1522 copies of the questionnaire distributed in the course of data collection, 1211 were returned. This represents 97% of the total questionnaire administered. A careful study of the questionnaire returned reveals that 11 of them were not properly

filled in. This was checked in the process of data cleaning and screening. At the end of data screening and analysis, 1200 copies of the questionnaire were available for further analysis, which represents 96%.

**Table 3: The Descriptive Statistics of Minimum, Mean and Standard Deviation of Response on Extent collaboration with international Medical missions lead to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria**

S/ N		N	Minimu m	Maximu m	Sum	Mean	STD Deviation
1.	My healthcare institution always seek collaboration with international medical missions on a yearly basis	1200	1.00	5.00	4939.00	4.1158	.96861
2	My healthcare institution Collaborate with international medical missions	1200	1.00	5.00	5006.00	4.1717	1.08313
3	Our medical personnel of the healthcare institution participate in international medical programmes frequently	1200	1.00	5.00	5529.00	4.6075	.99546
4	Our healthcare institutions always identify with other health institutions for onward sharing of knowledge and skill development	1200	1.00	5.00	5297.00	4.4142	1.15560
5	Our healthcare institution on a frequent basis collaborate with our international medical mission	1200	1.00	5.00	5199.00	4.3325	1.03013
6	Collaboration with our international medical mission enables our medical personnel to get acquainted with the recent development in the medical world Valid N(list wise)	1200	1.00	5.00	4939.00	4.1158	.96861

**Source: Field Survey 2019; SPSS 22.0 Output**

The responses as presented in table 3 reveals that the listed items on the extent collaboration with international medical missions lead to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-

East states of Nigeria were affirmed (based on tabulated acceptance mean rating of 3.0) The minimum, maximum, Mean and Standard Deviation for the items are indicated. With regards to item number one. The minimum score is 1, the

maximum score is 5, the mean 4.1158 and the standard deviation is 0.9861. As shown by the data, the high mean of 4.1158, it is evident that the respondents agreed that their health institutions always seek collaboration with international medical missions on a yearly basis. From the standard deviation, it is evident that the individual statements standard deviations are close indicating low variations among the respondents' responses. This indicates that the respondents were firm in their view that health institutions always seek collaboration with international medical mission on a yearly basis and that it led to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South East states of Nigeria. For item number two, the minimum is 1, the maximum is 5, the mean is 4.1717 and the standard deviation is 1.08313. As shown by the data, the high mean score of 4.1717, it is evident that the respondents agreed with the proposition that their health institution collaborates with international medical missions in order to improve healthcare delivery in the institution. From the standard deviation. It is evident that the individual statements standard deviations are close indicating low variations among the respondents' responses. This indicates that the respondents viewed the health institutions collaboration with international medical missions in order to improve healthcare delivery in the institution lead to enhancement in handling complex medical procedures in the Tertiary Institutions in the South-East states of Nigeria. For item number three, the minimum is 1, the maximum is 5, the mean is 4.6075 and the standard deviation is 0.99546. As shown by the data, the high mean score of 4.6075, it is evident that the individual statements standard deviation, it is evident that the individual statements standard deviations are close indicating low variation among the respondents' responses. This indicate that the respondents are firm in their the medical personnel of the health institution frequent participation in

international medical programmes lead to the ability to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria.

For item number four, the minimum is 5, the mean is 4.4142 and the standard deviation is 1.038. As shown by the data, the high mean score of 4.4142, it is evident that the respondents agreed that health institutions always identify with other health institutions for onward sharing of knowledge and skill development on a regular basis. From the standard deviation, it is evident that the individual statements standard deviations are close indicating low variations among the respondents' responses. This indicates that the respondents viewed that health institutions a way to identify with other health institutions for onward sharing of knowledge and skills development on a regular basis lead to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria. For item number 5, the minimum is 1, the maximum is 5, the mean score is 4.3325 and the standard deviation is 1.03013. As show by the data, the high mean score of 4.3325, proved that the respondents strongly agreed and more positive that health institution on a frequent basis collaborates with an international medical missions in terms of training and retraining once every year. From the standard deviation, it is evident that the individual statements standard deviations are close indicating low variations among the respondents' responses. This indicates that the respondents viewed that their health institutions mentoring based on Service utilization for MNCH and malaria services, pharmacy management have a strong effect on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-East states of Nigeria. With respect to item number six, the minimum is 1, the maximum is 5, the mean is 4.1158 and the standard deviation is 0.96861. As shown by the data, the high mean score of 4.4158, prove that the respondents agreed that

collaboration with international medical missions enable our medical personnel to get acquainted with the recent development in the medical world. From the standard deviation, it is evident that the individual statements standard deviations are close indicating low variations among the respondents' responses. This indicates that the

respondents viewed the collaboration with international medical missions enable our medical personnel get acquainted with the recent development in the medical world always lead to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria.

**Test of Hypotheses**

To facilitate inferential analysis of the relationship between primary factors of human capital development and Healthcare Delivery of Tertiary Health Institutions in the South-East states of Nigeria, the study adopted the z-test. The

mean of the average responses to the questions as shown in the tables was calculated and standard deviation found.

$$Z = \frac{\bar{x} - \mu}{s/\sqrt{n}}$$

The Z-score was found as -

Where

- Z = standard normal deviation
- X = mean of the mean responses
- μ = Population mean
- S = standard deviation
- e =2% (z-critical = ±2.33)

**Decision Rule**

The rule in the use of the z-test criterion was to accept the alternative hypothesis if the calculate z-score was higher than the tabulated z-score. The hypothesis was not to be rejected if the tabulated value was less than the calculated z-value.

handling complex medical procedures in the Tertiary Health Institutions in the South Eastern states of Nigeria.

Restatement of hypothesis One in null and alternate form

H1: Collaboration with international medical missions to a large extent leads to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South Eastern states of Nigeria.

Ho: Collaboration with international medical missions to a large extent does not lead to enhancement in

**Table 4: Normalizes z-score for mean responses**

S/N		N	Mean	Std Deviation	Z <sub>score</sub>	Z <sub>0.05</sub>	Decision rule for hypothesis
1	My healthcare institution always seek collaboration with international medical missions on a yearly basis	120 0	4.292 9	1.03359	43.38	±2.33	Accepted

**Source: Author's Compilation SPSS Output**

From table 4, the z-score for the responses to the questionnaire items are computed and juxtaposed with the stable value of ±2.33 at 2% significance level. The analysis indicates that the proposition that "Collaboration with

international medical missions can influence the enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria is accepted at 2% significance level as the computed, the z

value of 43.38 exceeds the table value of  $\pm 2.33$ . As seen from Table 4 and the subsequent analysis of result the computed Z-scores for the statements exceed the table z value of  $\pm 2.33$  @ 2% significance level. Therefore, we reject the null hypothesis and accept the research

hypothesis that collaboration with internal medical missions to a large extent leads to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria.

**Test of Hypothesis Two**

Restatement of hypothesis two in null and alternate form

H1: Mentoring practice has a positive effect on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-Eastern states of Nigeria.

Ho: Mentoring practice has no positive effect on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-Eastern states of Nigeria.

**Table 5: Normalizes z-score for mean responses**

S/N		N	Mean	Std Deviation	Z <sub>-score</sub>	Z <sub>0.05</sub>	Decision rule for hypothesis
1	Our healthcare institution use mentoring practice on emergency referral, perinatal intervention	1200	4.3749	1.1048	42.75	$\pm 2.33$	Accepted

**Source: Author's Compilation SPSS 22.0 Output**

From table 5, the z-score for the responses to the questionnaire items are computed and juxtaposed with the stable value of  $\pm 2.33$  at 2% significance level. The analysis indicates that the proposition that "Mentoring practice can influence the capacity building of the medical personnel in the Tertiary Health Institutions in the South-Eastern states of Nigeria. is accepted at 2% significance level as the computed, z value of 42.75 exceeds the table value of  $\pm 2.33$ . As seen

from Table 5 and the subsequent analysis of result the computed Z-scores (42.75) for the statements exceed the table z value of  $\pm 2.33$  @ 2% significance level. Therefore, we reject the null hypothesis and accept the research hypothesis that Mentoring practice can influence the capacity building of the medical personnel in the Tertiary Health Institutions in the South-Eastern states of Nigeria.

**Descriptive statistics**

The overall respondents were 1200 representing 39% of the total population. The sample is adequate to represent the population sequel to recommendations of

other authors. Again, the response rate of the instrument is 98% for the respondents.

**Inferential Statistics**

**The extent of collaboration with international medical missions' lead to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria**

The first hypothesis sought to determine the extent of collaboration with international medical missions' lead to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria. The finding revealed that Collaboration with international medical

missions to a large extent leads to enhancement in handling complex medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria. There is an existence of positive and significant effect between Collaboration with international medical missions and enhancement in handling

complex medical procedures in the Tertiary Health Institutions. The z-score ( $z=43.38$ ,  $z_{cal} = \pm 2.33$ ) means that the independent variables (collaboration) were significant in explaining the variation in the dependent variables (enhancement in handling complex medical procedures). The results of the study indicated that 5% level of significance and 95% level of confidence, Collaboration with international medical missions was significant indicating that they indeed had an effect on enhancement in handling complex

**Effect of mentoring practice on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-East states of Nigeria**

Hypothesis two sought to establish the effect of mentoring practice on the capacity building of the medical personnel in the Tertiary Health Institutions in the South East states of Nigeria. The result of (z-score ( $z=42.75$ ,  $Z_{cal} \pm 2.33$ )) indicated that the independent variables 9 mentoring) are significant in explaining the variation in the dependent variable (capacity building personnel). Mentoring practice had a positive sign indicating and it indeed had an effect on the capacity building of the medical personnel in the Tertiary Health Institutions in the South-East states of

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medical procedures in the Tertiary Health Institutions in the South-East states of Nigeria. The finding is in agreement with [33], who conducted on intellectual Medical Missions to impact driven experiences in Nigeria Healthcare Sector. Ethical Principles to Optimize Community Benefit and Learner Experience. They noted that increasing demand for human capital needs in Nigeria health sector has driven the growth of medical training and educational programs predicate on a model of short medical training abroad.

Nigeria. The result agrees with the findings of [30], in their study effect of mentoring on Employees' Performance in selected family business in Abuja, Nigeria, states that mentoring has presently become a strategy for human resource management, yet little is known on how it improves the employees' performance in family business. The findings of the study revealed that monitoring had positive effects on employees' performance career support had a more positive effect on employees' performance than psychosocial support.

**SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION**

**Summary of Findings**

The study evaluated the effect of Human Capital Development on Healthcare Delivery of Tertiary Health Institutions in South-East states of Nigeria. The study adopted a descriptive research design. Questionnaire instrument was used to collect data for the study. The following were the findings:

1. The collaboration with international medical missions to a large extent led to enhancement in handling complex medical procedures in the Tertiary Health institution in the South-Eastern states of Nigeria. This suggests that identifying best practices through rigorous collaboration

with international health organizations for healthcare professional development improves patient care.

2. It was discovered that monitoring practice had a positive significant effect on the capacity building of the medical personnel in the Tertiary Healthcare institutions in the South-Eastern states of Nigeria. This implies that mentoring practice of these institutions had a strong effect on the capacity building of the medical personnel.

**CONCLUSION**

The study concludes that collaboration with international medical missions and mentoring practice had a positive and

significant effect on healthcare delivery of Tertiary Health Institution in the South-Eastern states of Nigeria.

### RECOMMENDATIONS

The study recommends the following:

- i. A paradigm shift in the culture of medical experience in tertiary health institutions in South East Nigeria to ensure that these experiences balance training for continued improvement in handling complex medical procedures.
- ii. Management of tertiary health institution in South East Nigeria should make mentoring an academic responsibility for certain categories of staff.

### REFERENCES

1. Ming, F.G. (2012). *Human resources management and practice*, London: Coleman Inc.
2. Harrison, F.D.K. (2012). Human capital theory: implications for Nigeria construction industrial development *International Journal of Construction Project Management and Innovation*. 3(1), 464-479.
3. Onwuze, C.A. (2014). Human capital development strategies and manpower requirements in enterprises in Nigeria. *Journal of Business Administration and Management Sciences Research* 3(5), 70-78.
4. Eme, V. (2014). *Human resource development I Bottom line*, Enugu: Otek Publishers Limited.
5. Bloom, D. (2008). *Geography, demography and economic growth in Africa*. Chicago: University of Chicago Press.
6. Enfiok, I.F. & Ibanga, E. (2014). Implications of training and manpower development in employee productivity in Alvan Ikoku Federal College of Education, Owerri, *International Journal of Economics and Business Management* 2(4), 30-39.
7. Bakare, G.S. (2016). *Human capital theoretical and empirical analysis with special reference to education*. 3<sup>rd</sup> Edition. Chicago: The University of Chicago Press Ltd.
8. Kanayo, N.N. (2013). A critical analysis of manpower development in Nigeria. *European Scientific Journal* 8(12), 16-28.
9. Atoyebi, G.O., Iyayi, S.A., Odusola A.F., and Inyang, B.J. (2013). Capacity building: A tool for increased productivity in Nigeria Public sector organizations. *Global Journal of Human Resource management* 2 (3), 45-58.
10. Bergheim, T.B. (2005). Productivity improvement in manufacturing industry using industrial engineering tools. *Journal of Mechanical and Civil Engineering* 6(1), 11-18.
11. Ruiz, J.G. Mintzer, M.J, & Leipzig, R. M (2006). The impact of e-learning in medical education. academic medicine. *Journal of the Association of America Medical Colleges*, 81(3), 2017-217.
12. Obi-Anike, I.N. (1999). *Research methodology in political sciences*, Enugu: Academic publishing Company.
13. Ndibe, B.C. (2014). Effect of Employees training on Organizational performance in soft drinks bottling companies in Enugu State, Nigeria" *International Journal of Human Resources Development* 7(4), 545-551.
14. Ayim, E.A. Oseloka, U.C and Mba, C.K. (2011). Human capital development and economic growth: The Nigeria experience' *International Journal of Academic Research in Business and Social Sciences* 4(4), 72-87.
15. Blunt, I. and Jones, L. (2005). *Human resources management: A contemporary approach*. Essex: Pearson Educational Ltd.
16. Akumolefe, P.J. (2016). The impact of human capital development on economic growth in Nigeria. *International Journal of Humanities and Social Sciences (DHSS)*. 21(3), 31-39.

17. Okafor, H. (2015). *Training and development impact on organizational performance empirical from Oil and Gas Sector of Pakistan*. Journal of Business and Management, 16(1), 67-72.
18. Bontis, D.A., Drayonetti, R. Jobsen, M and Ross, W. (2009). *Industrial price, quantity and productivity indices: The microeconomic theory and application*. New York: Kluwer Academic Publishers.
19. Nwanga, S.O and Akabuilo, I.O. (2014). Government expenditure on human capital development: implications for economic growth in Nigeria. *International, Journal of sustainable Development in Africa* 4(1), 72-80.
20. Schmaltz, A.B.C, (2009). *Home resources management principles and techniques*. New York: Houghton Milffin Company Press.
21. Alan, R.E. (2014). *Human resource planning and development*. New York: Prentice-Hall Inc.
22. Sullivan, R.H. % Stevens, B.S. (2013). *Principles of microeconomics*. 3<sup>rd</sup> Ed. New York: McGraw-Hill/Irvin.
23. Heathfield, A.C. (2011). *Evaluation of human capital development as a strategy for increasing productivity'*. *International Journal of Modern Trends in Social Sciences*, 1(5), 20-30.
24. Marshal, G. (2008). Human capital development in <http://www.encyclopedia.com/doc/1088-HumanCapital>
25. Ofodu, H. (2013). *Local government financial management in Nigeria*. Enugu: Obasi Publications.
26. Crook, T. (2014). (2014). *Human capital theory implications for educational development*. *European Journal of Scientific Research* 24(2), 157-162.
27. Karbiru, A. (2010). An assessment of human capital development in Nigeria through the Lens of Education' *International Journal Letters of Social and Humanistic Sciences* 3(5), 1-14.
28. Ilo, E.U. (2017). Training for entrepreneurship employment in Nigeria: The role of National Directorate of Employment (NDE), *Nigerian Journal of Social Science* 2(8), 102-114.
29. Obasi, I.N. (1999). *Research methodology in political science*. Enugu: Academic Publishing Company.
30. Ofoburuku, T. L. & Nwakoby, P.E (2017). Effects of mentoring on Employees performance in a selected family business in Abuja, Nigeria. *Journal of Public health and Epidemiology* 9(2), 24-30.
31. Okeke, I.F., and Ilo, E.U. (2011). Evaluation of human capital development as a strategy for increased performance. *Akanu ibiam Journal of Politics and Administration* 3(2), 101-113.
32. Philip-Jones, L. (2017). The mantee's guide: hw to have a successful relationship with a mentor: mentoring group, *Journal of Busines Administration and Management Studies*, 20914), 101-122.
33. Enebechi, E. & Okoli, P. (2017). International Medical mission to impact Driven Experiences in Nigeria Health Sector: Ethical Principle to Optimize Community Benefit and Learner Experience.

Iyida, M.N. (2023). Effect of Human Capital Development on Healthcare Delivery of Tertiary Health Institutions in South-East States of Nigeria, 2010-2019. *IAA Journal of Education* 9(2):45-72