

Exploring the imperative of human capital development as a pathway for the achievement of sustainable development: A theoretical discourse

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Abstract

The greatness of any nation is a function of the availability of a critical mass of well educated, trained, skilled, and developed human resources that provide a reliable labour supply to patriotically drive the political economy at the macro-economies level. The quality of human resources/capital at the disposal of any society serves as the fulcrum for transforming and sustaining the society from an underdeveloped/developing nation to a developed society. The capability to exploit resources in the environment, and to build and sustain what has been built for the continuous benefit of mankind and the environment without harm, is a product of man's capacity and skills generated to engender collective social progress, which is an upshot of human capital development. Therefore, this paper examined the imperative of human capital development for the achievement of sustainable development. A descriptive content analysis research approach was adopted in the study. The finding demonstrates that for a society to develop and sustain its development, it must, first of all, develop its human capital/resource so as to generate the needed capacity and skills required to develop a society at large. This is a desideratum since it is a developed people that develop society and sustain it.

Keywords: Human capital/resource, human capital development, sustainable development, resource-based view, development.

Introduction

Right from time immemorial, man's journey on earth has been a chronology of historic representation of his ability to advance his well-being via making social and technical progress, building and developing socio-political and economic relations and institutions, as he interfaces with people and the environment. Mensah & Casadevall (2019) noted that humans eke out a living by judiciously using the scarce resources in the environment, which according to Currie-Alder (2016) involves development in the history of human existence. Similarly, Onah, Aduma, & Obi (2021) averred that for man to stay alive and thrive in the environment, he engages one another in building socio-economic activities cum relations, resulting in the creation of institutions and capacity that drives development right from the dawn of civilization to this modern era. In man's quest to develop himself and the environment, man encounters ubiquitous challenges needed to be conquered for the attainment, advancement, and sustenance of his goals. Some of these developmental challenges facing man in the environment were tackled through the evolutionary process (Du Pisani, 2006 cited in Mensah & Casadevall, 2019) while some according to Sima et al. (2020), and Currie-Alder (2016) were conquered through a revolutionarily process as recorded in the history of the development of human society.

Development both at the levels of individuals and society when properly combined and maintained consistently leads to sustainable development. Sustainable development cares for the well-being of both the present and the unborn future generations while providing and sustaining "a productive economy, ecological friendliness, and a balanced social system", being the three pillars of sustainable development goals (Taylor, 2016; World Commission on Environment and Development, 1987; Mensah & Enu-Kwesi, 2018; Mohammed, 2013; Tjarve, & Zemite, 2016; Onah, 2018; Thomas, 2015). Every form of development targets man and the environment, hence both are at the receiving end of every outcome of development – be it good or bad outcome (Onah, 2018). This resulted in the emergence of the concept, principles, pillars, and goals of sustainable development as popularized and accepted by the World through the UN, which serves as the latest paradigm globally in development. This is evident in the trends and movements from the 8-millennium development goals (MDGs), to the ongoing 17 sustainable development goals (SDGs) championed by the UN and domesticated by every member country of the UN around the globe (UN, 2015).

From the foregoing, it can be deduced that the seed of development whether at the individual level or societal level should be planted and nurtured to grow and mature, to be able to serve human needs consistently – sustainability that emphasizes ecosystem friendliness without jeopardizing human life and the environment. To achieve this, strategic, systematic, pragmatic,

effective, and efficient human capital development is not just essential but a prerequisite. Hence, human capital according to Gruzina et al. (2021) is dynamic and the realization of the potentials inherent in human development, which is the key to economic development (Piwowar-Sulej 2021; Stock et al. 2018). Human capital development (HCD) is progressive, incremental, multi-faceted, dynamic, and evolutionary. Human capital development needs constant individual improvements which aggregate to societal development that calls for sustenance. Human capital development and sustainable development share one indispensable and unique quality – “development” which means to improve, to make progress, and change for the better, higher income or better living standard (Abah, 2007). The nature of development according to Olewe (2001: 67) “is a constant process of transformation. It is a dynamic concept denoting a state of ceaseless change.”

When human capital is eventually developed and is operating at its fullest capacity, thereby producing desired results, it behooves man as the architect of development and upon whom development revolves around, both the good and the bad aspects, to control and sustain development within the context and knowledge of his human capital, thereby conserving/preserving what he built over the years. But failure to do so, that is, on account of the inability to sustain the development achieved, mankind stands at risk of losing its precious life, possessions, and environment. This is epitomized in World War II which devastated Europe and retrogressed her to the status of an underdeveloped continent, until the Marshall Plan was introduced in Europe by the U.S., leading to swift recovery of the European economy from the aftermaths of the war (Leffler, 2018; World Development Report, 2011; Reinert, 2015; Judt, 2006; Deepak & Sarath, 2007). Hence, Europeans learned their hard lessons and have been sustaining their development since then.

To this end, it is imperative to understand the place of peace, security, freedom, and justice as indispensable paths to the development of man and society. Onu (2017), attested that peace and prosperity correlate because the most peaceful societies as seen in the West are the most developed, while Africa which is engulfed with violent social conflicts is the most underdeveloped continent in the world. This according to Onah & Asadu (2019), is because it requires a peaceful mind, environment, and security to develop and sustain what is developed. This study, therefore, analytically attempted to x-ray the nexus between human capital development and sustainable development, with a view to establishing that human capital development potentially drives sustainable development. Hence, human capital should be adequately developed and protected to ensure the development and sustainability of other resources and the environment.

Materials and methodology

The study adopted a qualitative and descriptive approach. Through secondary sources, germane data based on extant literature on human capital development and sustainable development were generated and analyzed by utilizing a contextual-explanatory-analysis approach. To ensure the validity and reliability of the data used, the researchers relied mainly on secondary data

generated from the UN agencies and other reputable international organizations' research works and surveys, textbooks, and peer-reviewed journal articles written by scholars on human capital and sustainable development. The materials were all juxtaposed and descriptively content analyzed within the spectra of the resource-based view theoretical framework, dynamics of human capital in a perspective, the origins and dimensions of sustainable development in a perspective, human capital development questions, and finally, the conclusion.

Theoretical framework

Resource-based View (RBV) theory is leveraged in the analysis of this work. Resource-based view theory according to Armstrong (2009) is the organizational resources, human resources or capital inclusive, which generate a special edge that enables organizations to compete favorably. It acknowledges that human capital is a resource that other resources depend on. Thus, human capital should be given serious attention in order to develop it to the fullest (Onah, Aduma, & Amujiri, 2023), thereby engendering a competitive advantage that repositions society. It's the importance of fostering competitive advantage according to Freeman et al. (2021) that led to RBV undergoing constant refinement. The continuous refinement of the RBV is due to its centrality and broad perspective in the management of all resources.

Resource-based view theory and human capital theory are offspring of the same species or parents (i.e., resources) with the resource-based view being broader as it recognizes other resources like land, capital (cash/money), machine, and building as assets but emphasizes more on human resource/capital as the highest form of assets/resources. Whereas human capital theory according to Onah, Aduma, & Amujiri (2023) only emphasizes people's skills, knowledge, education, experience, and abilities as the drivers of development that need to be properly harnessed, managed, and developed to generate more values that ensure sustainable development. However, Gerhart & Feng (2021) remarked that both theories (resource-based view and human capital) correlate, intersect and cut across many spectra in the field of human resource management.

Armstrong (2009), Collins (2020), Becker & Gerhart, (1996), and Barney (1991, 1986) posit that human capital theory leverages RBV to advocate gaining sustainable competitive advantage which is achieved when an organization or country has a human resource pool that cannot be imitated or substituted by its competitors. To have a sustainable competitive advantage emphasizes developing a unique workforce with a special edge that rivals cannot get easily. The process for this is strategically incremental and focused-driven. To gain human capital advantage for sustainable development, it must be consistently planned and built over a long period of time. Thus, it is strategically designed to align with other objectives of national or organizational development plans and must be vigorously pursued (Eze, 2005).

Resource-based view theory is multipronged and cuts across a broader spectrum of organizational or societal management because, everything useful is a resource of its own, and

must not be ignored. Hence, every resource should be harnessed, and integrated at the overall strategic level of management towards gaining congruence. This is to ensure proper alignments and utilization of all resources both in the short and long term. More so, it is because RBV cuts across human capital that appropriate profits and points at stakeholders' theory perspective (Barney, 2018) which Freedom et al. (2021) suggest offer development through people, sustainability, normativity, and cooperation. Gunnigle & Moore (1994) perceived the roadmap as strategic management which is making and implementing policy decisions and actions that touch all aspects of the organization with the aim of positioning the organization to handle effectively its environment.

The application of RBV theory in the analysis of human capital development as an upshot for the achievement of sustainable development anchors on strategic integration, alignment, and congruence in using human resources to develop and sustain development. Its broadness resulted in Jiang & Messersmith's (2018) meta-review of some conceptual and analytical frameworks in strategic human resource development which identified that the use of RBV is central and is also the most mentioned theoretical lens among the 64 conceptual meta-reviews and 4 analytical reviews, conducted respectively. Away from that, Walker (1992) identified three (3) processes used in the formulation and implementation of effective human capital development which involves an integrated process, an aligned process, and a separate process. Each is an approach that can be implemented individually or jointly in pursuit of developing competent human capital that drives and sustains development. When this is realized, the strategic fit is assured, and building on it consistently paves the way for the achievement of sustainable development.

Dynamics of human capital in perspective

The concept of human capital, in a nutshell, presupposes that human labour is an inestimable asset; that is, a factor of production on which all other productive assets or resources are dependent and are activated to serve their useful purposes. All developments witnessed by a man right from civilization to the first and to the fourth industrial revolutions are products of advancements in human capital development – knowledge, skills, education, training, and talents properly harnessed and utilized for the benefit of mankind and the advancement of society. Troya (2021) observed that past industrial revolutions coincide with the 4th industrial revolution as seen in the U.S., whereas Gruzina et al. (2021) noted that all stages of development or progress of human society whether industrial, post-industrial, knowledge economy or the evolutionary trends in the information cycle of development were all dependent on human capital as the central variable.

Human beings, therefore, as the determinants of what becomes of them and the environment need to engage in constant training, education, learning, and skill acquisition in the bid to acquire capacities and experiences needed for the transformation or development of society (environment), for a better living. Remarkably, Li et al. (2017), and Abah (2007) posited that improvement in human capital increases workers' outputs thereby transcending into increments in other vital areas of human life such as health, employment, and education. According to

Gruzina et al. (2021), the improvement of human capital manifest in the general well-being of the individuals following the investments in developing the capacity of the individuals, and not focusing only on investments in collectives. To this end, modern economists see human capital as a stock as well as income generation or stream in their allocations of assets/resources (Nureyev, 2013).

Eze (2005), Armstrong (2009), and Barney (1991) assert that on the macro level, that is, the societal level, the most valued resource of any nation is skillful human resource popularly called human capital. Abah (2007:67) corroborates this when he posits that “effective use of physical capital itself is dependent upon human capital.” The concept of “human capital” has also been analyzed by Schultz (1961, 1981), Becker (1962, 1964), and Rosen (1976). Schultz categorized all sources of human abilities into two: innate (in-born or inherent) abilities and learned (acquired or developed) abilities from the environment. Schultz further asserts that human capital encompasses those aptitudes acquired by training and investing in the development of human potentials to kinetic potentials readily deployed to activate and set things in motion. Other scholars who contributed to the development of the concept and theorization of human capital are Adams Smith (1776) who first mentioned the concept of human capital in his magnum opus titled “An Inquiry into the Nature and Causes of the Wealth of Nations”, Kuznets (1955) through his Kuznets Curve, and Schumpeter through his entrepreneurship innovative theory demonstrate further that development at whatever level or type is not possible until human capital is developed to drive other forms of development desired by man.

The traditional and popular three (3) “Ms” of management according to Sherman, Bohlander, & Chruden (1988) known as Man, Materials, and Money are highly sought after at the micro and macro levels of organizations and society. The long-aged erroneously held assumption that material resources or natural resources like gold, crude oil, building, timber, land, finance, machine, etc. are primary assets to national development has been challenged and refuted by the emergence of a paradigm shift to human capital as the greatest resource of any nation (Gruzina, 2021; Hassan et al. 2019; Subramony et al. 2018; Onah, 2011; Piwowar-Sulej 2021; Kotsantonis & Serafeim, 2020). Thus, it has been argued by scholars in human resource management that for a nation to develop, it must first develop/transform the citizens (human capital) who in turn will build up the nation with their acquired/developed skills, health, knowledge, experience, abilities, training, and education. Accordingly, Eze (2005) cited in Onah (2017) noted that the real wealth of any nation is the totality of its skillfully trained and knowledgeable human capital that constitutes the workforce at the macroeconomics level. Thus, the richness of nations, arguably, is not determined by their land mass, vegetation, mineral resources, climate, or geographical disposition but by the totality of the critical mass of quality of the population (Eze, 2005). If not, Africa would have been the richest continent on earth today, because it has an abundance of natural resources and a large human population more than the developed continents of the world (Onah, 2011). Despite the abundance of resources in Africa, the result today especially in the Sub-Saharan Africa is massive poverty and underdevelopment blamed on global capitalism, elite

misgovernance, corruption, and poor quality or underdevelopment of human potential (Onah & Amujiri, 2023; Onah, Asadu, & Amujiri, 2022).

Therefore, in recent times and especially from the 20th Century till the 21st Century global development economies, no country or organization has been successful solely because of the large number of its population or workforce, but because of the high quality of the human population or its workforce. Having a large population of a people often matters not when it comes to requirements for mobilization and for development, rather what matters most is the quality of the number of the population (Onah, 2023). Even in democracy and governance of society, scholars argued that it is the few/minority elites that control the majority of the population through public policies, because the elites are trained, educated, skilled, and wealthy (that is, human capital development) thereby easily controlling the malleable masses (Mba, 2014; Nwaofia, et al. 2018; Dye, et al. 1990).

Human capital development is therefore, all those productive efforts (training, education, skills, health, and learning) that people undergo to acquire and deepen their abilities, expertise, and knowledge base in order to fulfill positive personal aspirations and consequently contribute to organizational and national developments. These skills, expertise, abilities, and knowledge base are often not innate, and as such, require acquisition and constant advancement to ensure that they remain relevant and sustained in the scheme of things, not to go into moribund or extinction after acquisition. Whatever people do to improve on their abilities towards delivering values constitutes a dimension of human capital development. Human capital is therefore strategic. According to Dessler (2008), the strategic aspect of human capital focuses on the identification and implementation of processes and plan, by developing abilities in line with the requirements of the environment of operation and its ecosystem sustainability and friendliness. Udeh (2014) attests that most development scholars are of the view that material resources are a must but not the only mandatory condition for development, while Isong (1985) captures succinctly that genuine development is the development of the man who is the originator and pillar of other development.

The Origin and Dimensions of sustainable development in a brief Perspective

According to the World Commission on Environment and Development (WCED) as popularized by the Brundtland Report of India, sustainable development is “development that meets the needs of the present without compromising the ability of the future generations to meet their own needs” (WCED, 1987). James (1993) cited in Olewe (2001) posits that sustainable development entails the improvement of socioeconomic development of human society through security for all and helping people meet their aspirations with full respect for human dignity, and without jeopardizing the needs of the future generation. Mohammed (2013) posits that sustainable development is how a country’s resources are conserved by the government for the use of the people collectively and the ability to preserve the resources for future generations.

The principles of sustainable development are wrapped up on the valid hypothesis that human life and health should be strongly observed with total compliance to the environmental impact assessments (EIAs) while carrying out development (Kozie'n, 2021; Klarin, 2018; Emas, 2015; Mohammed, 2013). The underlining reasons are to guarantee proper allotment, utilization, and preservation of the ecosystem for the overall benefit of mankind both present and for the unborn generations, within the spectra and adherence to the goals of sustainable development and the three main pillars of sustainable development (Mensah & Casadevall, 2019; Thompson, 2017; Purvis, Mao, & Robinson, 2018; UNDP, 2015; Arushanyan et al. 2017; Boyer et al. 2016; UN, 2012; Halisçelik & Soytaş, 2019).

The desire of mankind to develop should be consciously planned, strategically and administratively implemented, and systematically sustained with the utmost sense of duty and responsibility, as underscored by principles and theories of administration of development and development administration (see Juneja, 2020; Crossman, 2020; Rathod, 2010). These should be done specifically within the purview of ethical development; serving as the basics for the realization of integrated and balanced development, elevation of social justice, fair play, a good conscience, equity, and humanity (Luetz & Walid, 2019; Onah, 2018; UNDP, n.d.), if mankind's aspiration to develop will be achieved and sustained. The utmost desire of man to develop when achieved certainly paves the way for the need to consistently maintain, preserve/conservate what is achieved thereby necessitating the paramount need for sustainable development. Sustainable development lays emphasis on the proper utilization of human and natural resources, implementation, and quests for development to be in line with ecosystem friendliness, for the benefit of the citizens living today and of future generations (Mensah & Casadevall, 2019; Mohammed, 2013; Kroll, Warchold, & Pradhan, 2019; Onah, Amujiri, Asogwa, Okafor, & Onuchukwu, 2023; WCED, 1987).

Development is broad, and thus goal and action-oriented towards harnessing each aspect to specific ends – benefits of mankind and the environment. Sustainable development, therefore, requires holistic integration of the variously scattered forces and factors inducing and inhibiting environmental receptivity for development. The aim is to provide and enhance peace, harmony, security, democracy, and its tenets that create the peaceful environment required for development to take place. Onu (2017), Onah & Asadu (2019), and Byanyima (2015) rightly pointed out that peace and security correlate and are preconditions for development and sustainability.

Whatever level of economic development and improvement in quality of life generally that is achieved by compromising and abusing the natural resources and the environment will not be sustainable or last long. Invariably, the achievement or development so to say will vanish with the passage of time, constitute a threat to man, fail to serve their purpose, and become underutilized when the repercussions inherent in the abuse of the natural environment begin to occur, such as we are witnessing today on the effects of the depletion of the ozone layer on human health, loss of biodiversity, pollution, extinction of non-renewable energy resources like drying up of lakes and rivers, extinction of wildlife and plants of inestimable values by illegal

poaching and deforestation (Onah, Amujiri, Asogwa, Okafor, & Onuchukwu, 2023). Sustainable development canvasses for a thorough evaluation of every activity of man in the ecosystem. That is, to take cognizance of the need to conduct Environmental Impact Assessment (EIA) in all that man does and in making sure that they are sustainably in tandem with the harmonious existence of the ecosystem both now and in the future.

Sustainable development is an approach to development that seeks to put together all varied and scattered positive and negative elements of development in society into consideration. That is, to strike a balance in order to ensure the utmost utilization of the development value chain in all human endeavors is maximized both in the present and future. It advocates community participation and a holistic approach to development by making sure that today's activities of development by mankind do not in any way obstruct or trigger a negative effect or impact to man and the environment, either in the present or in the future (Onah, 2017; 2018). Consequently, human capital development and sustainable development advocate developing man to ensure that man develops and sustains developments and the environment. That is, to develop the developers - humans. To achieve development and sustain it revolves around human capital formation which according to Jhingan (2011), does not depend on the size of a population but on the "efficiency" of the labour force.

Human capital development questions

Man according to Aristotle is the measure of all things. Consequently, human beings have to be trained and outfitted with intellectual, social, and organizational capitals which are components of human capital (Armstrong, 2009). For a consequential and sustainable development to take place at individual and societal levels, it requires the combinations and mastery of the above three constituents and their applications, as and when due. To develop at any capacity, intellectual capital is desirable in the form of knowledge which fundamentally equips one with the invisible principal tool for creativity; social capital which consists of the networks of interactions, associations, and relationships created and nurtured for the understanding of humanity for easy navigations over issues of life. These issues which Putnam (1996) refers to as 'the features of social life – networks, norms, and trust – enable participants to act together more effectively to work for common objectives.

It is important to take into account social capital considerations; they are the ways in which knowledge is developed through interaction between people (Armstrong, 2009). Also, needed is organizational capital which is a pool of knowledge, skills, and abilities available at the group level and used jointly for the accomplishment of a goal. Human capital at the macro level according to Okojie (1995) is the abilities and skills of human resources of a country. It is the aggregated skills, knowledge, and ability of the citizens which drive the productive forces of a nation. Human capital is not about the number of humans but the quality achieved through education, training, and development. One of the basic assumptions of normative models of

human resource management cited in Eze (2005) is that people are social capital capable of development (but in the old practice, people were regarded as variable cost).

Human capital development has a futuristic dimension that aligns with the vision, mission, aim, and purpose of man on earth at micro, macro, and global levels that result in the development of Strategic Human Resource Management (SHRM) that cuts across strategic management, strategic process, strategic planning, strategic implementation, strategic principle, strategic integration, strategic fit, strategic alignment, strategic goals, etc. geared towards building a developed and sustainable system. Eze (2005) sees Strategic Human Resource Management (SHRM) as a modern approach to people management that is firmly rooted in the assumptions that human resource strategy contributes to and is justified by business strategy. Its validity depends on the extent to which it is believed that the workforce is both an asset (rather than cost) and the basis for the creation of value and the achievement of competitive advantage and should therefore, be cultivated and treated as a critical strategic resource.

Human capital development is strategic development. Human capital according to Armstrong (2009) embodies the knowledge, skills, and abilities of the people employed in an organization. Bontis et al. (1999) deem human capital as the human factor in the organization, the combined intelligence, skills, and expertise that gives the organization its unique status. 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-term survival of the organization. Davenport (1999) posits that people are endowed with inborn abilities, traits, and individual drives that constitute human capital deployed at work. Thus, people are at large extent masters of their abilities and are in a better position to determine where to invest their abilities by the choices they make, which influence the employers and reconfigure the organization to be a mutual entity between the employer and the employee.

Human capital development questions therefore stem from the irrefutable reality that human resource is the most precious asset of any nation which according to Eze (2005) is not a commodity that can be bought off-the-shelf. It takes time, sound human resource management practices, and colossal investments to create and cultivate human capital. It cuts across human capital advantage and human capital process. Human capital development questions tend to seek reasons why people should be developed, which are as follows:

- Man by nature is born tabula rasa, and as such, no doubt requires some degree of learning to survive and function well in society as a social being. Through this learning, he is developing his human capital for personal and societal development.
- Human capital is the highest asset in individuals, organizations, countries, and the world. Therefore, it must be cultivated, nurtured, and guided appropriately for its return on investment is large.

- Rapid technological revolution: Our society today is awash with technological revolution precipitated by breakthroughs in Information and Communication Technology (ICT). Thus, to cope in the present day society, steady personal developments by acquisitions of know-how on the manipulations of these technological devices are sine qua non. So, human capital development helps us to change with the changing realities of the world.
- Competition: Economic liberalization policies, advanced marketing research, and consumerism have created intense competition among firms scrambling for market shares of their products and services, and the best skills to ensure competitive advantage has made the development of human capital irresistible by individuals, organizations, and nations.
- Social change: We live in a dynamic society that is always in a state of flux, where forces of change are swiping away many things and ushering in so many things, rapidly at the same time. For one to remain relevant; not be left out, one has to develop a matching ability that blends with the trends of the changing circumstances.
- Globalization: The world is now a global village, and therefore, human capital development is a must for one to become a global citizen and actively participate in the exploration of the gains of globalization.
- Money cannot buy human capital development off-the-shelf, thus it must be acquired through training and sustained to remain relevant in the scheme of things.

Conclusion

Human capital development is very significant for sustainable development. It is the pivotal factor that drives other variables necessary for sustainable development. The quality of human capital at the disposal of any society serves as the gateway for development. The capability to develop and sustain development is a product of human capital development. Thus, countries aspiring for development should enhance their human capital through strategic training and skill acquisition, quality education, improved healthcare, capacity building, and productive value orientation. Therefore, human capital development and sustainable development correlate, thereby shaping and influencing each other. Hence, the pursuit and achievement of one leads to the other, likewise, the neglect of one equally leads to the collapse of the other.

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