Special Issue

The Deepening youth unemployment crisis in Africa occassioned by Covid-19 Pandemic:
What options available for the rescue?

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JOURNAL DESCRIPTION

The Journal of African Employment, Entrepreneurship, and Skills Development (JAEESD) is an interdisciplinary, continental, and peer-reviewed Academic and Research Journal with the objective of publishing insightful, persuasive, original articles that have constructive evidence-based analysis on the subject of employment, entrepreneurship, innovation and skills development across the continent of Africa. The ARUA, Centre of Excellence for Unemployment and Skills Development Centre (ARUA, CoE-USD) engenders strong collaboration among researchers and experts in Africa and globally with the primary interest of resolving the menace of unemployment (especially youth unemployment) by leveraging entrepreneurship, innovation, and skills development research outputs to galvanize opportunities for decent jobs in Africa. At present, ARUA, CoE-USD is funded by the UKRI through the Partnership, Research, and Capacity-Building for Youth Unemployment Solutions in Africa (PRAC-4-YUSA). The Centre is passionate about researches that explore methods and techniques that can equip the African youth and its entire populace with the indispensable and phenomenal innovative skills, risk taking abilities, creativity and business management skills that will help African youth become employers of labour rather than employees of labour.

AIMS AND SCOPE

It is the aim of JAEESD to publish articles that focus on deepening understanding of the youth unemployment crisis in Africa, with strong research outputs that proffer innovative policy solutions while leveraging the tools of entrepreneurship and innovation for enhanced skills development across the continent of Africa. JAEESD accepts rigorous research papers, case studies, research letters and research notes that are qualitative or quantitative and examine any of the following areas of research focus:

- Unemployment in Africa
- Youth unemployment in Africa
- Entrepreneurship, skills development, and Sustainable Development Goals (SDGs)
- Innovation and Technopreneurship
- International entrepreneurship, business development, and born global
- Family business, small and medium enterprises (SMEs), and gender entrepreneurship
- Micro financing, angel financing, and Venture Capital
- Social entrepreneurship and informal sector
- Employment relations, Graduate unemployment, and Talent Management
- Agropreneurship, Healthpreneurship, and Artpreneurship
- Future of Work and Decent Jobs
- The 4th Industrial Revolution

MANUSCRIPT REQUIREMENTS

Articles to be considered for publication must conform to the following requirements:

- Abstract should range between 300 and maximum of 450 word-count, with Five keywords that capture the principal topic of the article
- Font size is 12pt, single line spaced, and in Times New Roman fonts
- Ideas must be clearly communicated in English Language
- Full length of article should range between 7,000 and 10,000 (Maximum) words
- Article must be appropriately referenced using the 6th or 7th edition APA referencing style

Editor's Speech

First, I want to congratulate the ARUA, Centre of Excellence for Unemployment and Skills Development Centre (ARUA, CoE-USD) through the funding of UKRI in Partnership with Research, and Capacity-Building for Youth Unemployment Solutions in Africa (PRAC-4-YUSA) for the success of the 1st edition of the ARUA, CoE-USD International Conference which birthed the maiden edition of "The Journal of African Employment, Entrepreneurship, and Skills Development (JAEESD)".

The main theme of the maiden edition of "The Journal of African Employment, Entrepreneurship, and Skills Development (JAEESD)" is centered on employment, entrepreneurship, innovation and skills development across the continent of Africa with the focus on resolving the menace of unemployment by leveraging entrepreneurship, innovation, and skills development research outputs to galvanize opportunities for decent jobs in Africa. There is no doubt that entrepreneurship is an emerging area of discourse the world over, and JAEESD is the best journal to acquaint youths and all stakeholders interested in economic growth with the best practices in this area of entrepreneurship development for sustainable Africa.

Thus, JAEESD addresses different but relevant areas of significance of skills development, entrepreneurship, and innovation for sustainable economic development in Africa and the world at large. The best 10 articles that made the maiden edition of JAEESD focus on how entrepreneurship and innovations can salvage the deepening youth unemployment crisis in Africa and beyond.

It is important to stress here that the JAEESD maiden edition went through rigorous assessment and all the assessors are scholars from across the world such as North America, South America, Africa, and Europe. Each article went through double blind review. I want to seize this opportunity to thank all our assessors and reviewers for a job well-done. I also want to appreciate the co-editor in chief, the managing editor, and editorial advisory board for their diligence and assiduousness in making this journal available to us today.

I earnestly appreciate and acknowledge the hard work of the authors of the fantastic 10 articles that made the maiden edition of this journal. Your scholarly contributions to this journal are of international standard with great relevance to the world discourse on current issues. I hope that the articles published in this edition will give our readers, especially youth, students, practitioners, professionals, politicians, entrepreneurs, governments and scholarly minded populace, new and disruptive ideas that can make Africa economy great and sustainable for global competitiveness. We welcome helpful and constructive criticism that can assist us to improve our subsequent JAEESD journal editions.

Associate Professor S.A. Adebisi

Editor

Table of Content

Underdevelopment, Unemployment, Migration, and Racism: The Nexus

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Abstract

This paper examines the more philosophical issue of the connection between underdevelopment, unemployment, migration and racism. The underlying argument is that anti-African racism is predicated on the economic superiority of the racist. The corollary argument is that conceptions of skin colour are consequences rather than causes of anti-African racism: racism does not arise because the African is Black-skinned, but because the Black skin has been associated with society-level underdevelopment for a very long period of time in history. The argument is in fact extended to posit that the topography of the racist relationship would be reversed if the economic tables were also reversed. The conclusion is that the relationship between racism and economic inequality is, therefore, more significant than the relationship between racism and skin colour. In this matrix, Africa's underdevelopment reinforces racist presuppositions and motivations. And the unusually high migration, being an aspect of underdevelopment and unemployment, is not an exception.

Keywords: Migration, Racism, Underdevelopment, Unemployment

Introduction

Prevailing conceptions of racism assume that Caucasians (being white in skin colour) look down on people of darker colour simply because of the darker shades in skin colour. In this paper I contest this assumption by arguing that racism is predicated on the economic superiority of the Caucasian race (the Whites) over the Asian and Black African races. I defend my position by presenting data showing the economic topography of the different races. If my argument is correct, then it means that the manifestations of economic underdevelopment (which include extremely high levels of migration to White-controlled economies) exacerbate anti-Asian and anti-Black African racism. The only effective way to minimize the feelings of White supremacy is for Asians and Africans to build their economies to the point where their youth lose the desire to migrate *en masse* to White-controlled economies.

The central argument of this paper arises from two factors: (1) the collective GDP per capita of countries in categories of race; (2) the economic income of the average member of each race in a comprehensively diverse sample country (such as the USA); and (3) data showing the degrees in the intensity of racism directed by Caucasians against members of other races (such as Latinos, Asians and Black Africans).

In section 1, I suggest that in view of the sensitive nature of racism, it is best to find out what motivates anti-Black racism by looking at evidence in the external world. In sections 2 and 3, I show that the biggest evidence out there is economic inequality. In section 4, I present data showing that the Black African is the most discriminated against. In section 5, I argue that the correlation between economy and racism is so strong that the racism table would be reversed if the economic table were also reversed. In section 6, I show that Caucasians do not hate the colour black, but rather love it in a number of instances and for many reasons; and in section 7, I argue that this suggests that discrimination against the Black African cannot be simply based on colour alone. In section 8, I analyse what this all means for migration and unemployment in Africa, as well as what our attitude to these problems should be.

How to Know What Causes Racism

Racism is a sensitive topic. The researcher does not believe that members of the Caucasian race will be sincere regarding what motivates their feelings of superiority, whether it is their skin colour or some other factor. Due to the sensitivity of the topic, the best way to investigate the motivation behind racism is to study facts in the external world; and such study reveals that racism is based on economic factors.

There have been some investigations of the correlation between skin colour and discrimination, and the correlation is found to be very high. Klonoff and Landrine (2000) found that darker-skinned people are far more likely to be discriminated against, compared to lighter-skinned people. Nancy Boyd-Franklin (2003) found that skin colour causes a lot of anxiety among African Americans. Joung and Hatch (2020) found that more than 46% of hate crimes in the USA are based on conceptions of skin colour. Li et al (2008) did a comprehensive study in Asian countries and found that Asians regard light skin as superior. In fact, skin-based discrimination is called colourism (Bagalini, 2020) and "sales of skin-lightening products are projected to reach $8.9 billion by 2024" (Bagalini, 2020: par 1). Also, "A recent study by the University of Cape Town suggests that one woman in three in South Africa bleaches her skin" (Fihlani, 2013). All of these attitudes are predicated on the notion that darker skin colours are not as good as lighter ones. I will show in this article that these views are misleading, and understanding the true picture actually offers us vital insights about developing the economies of Black African societies. My investigations show that it is not about skin colour *alone,* but *consistent economic perceptions* of skin colour.

The first scholars to be particularly interested in economic conditions and their influence on social conditions are Karl Marx (1998, 2013) and Frederick Engels (2008). They interpreted history in materialist terms (historical materialism), an economic conception of history. Although they were focused on the transition from feudalism to capitalism and from capitalism to socialism, the idea that struck me is that economic conditions determine social conditions. The history of human relations *always* and consistently vindicates this idea. In interpersonal relationships, the richer partner tends to wield more social power in relation to the poorer partner (whether in marital, business, or political relationships). Similarly, in the relationships between countries (or societies), the richer countries wield more political power in relation to the poorer countries. I can, therefore, take it that the principle of economic relations is true and applies across the board in human interactions. My basic assumption for this paper is, therefore, that economic condition is the greatest influence on social relationships and transactions.

Having adopted this assumption, my task in this paper is to show that the economic conditions or positions of different races are related to the amount or level of respect accorded to them. I will show this by presenting what I call 'economic indicators' (showing that economic condition is the major cause of racism).

Economic Indicators

Here I present computation (in the form of tables) showing that economic capacity correlates with the global topography of racial discrimination, and that economic condition or position is the major cause of racism. My computation of racial economic capacity is according to countries (or economies) controlled by members of different races. This comprises Caucasian-controlled economies, Latino-controlled economies, Asian-controlled economies, and Black African-controlled economies.

I classified the USA and Canada as the Caucasian-controlled economies in North America. The rest of the North American countries and the Central American ones have witnessed long-standing mixing of races, but Caucasians have been politically and economically in charge of the USA and Canada. The South American countries have the same feature of deep racial mixing.

Caucasian-controlled economies include Western and Eastern Europe, USA and Canada in North America, and Australia and New Zealand in Australasia.

Asian economies include Japan, China, Thailand, Korea, India, Singapore, Malaysia, Indonesia, Philippines, Vietnam and Pakistan, as well as all the Arab and other neighbouring economies that are neither Caucasian- nor African-controlled. Sub-Saharan African economies exclude North Africa. The researcher would have included South Africa among Caucasian controlled economies, because the political leaders of South Africa are largely ceremonial heads, and in any case are not responsible for the stature of the South African economy, having only recently won political control of the country. However, for fairness and political correctness, the researcher will include South Africa among Black-African-controlled economies.

Table 1: North American economies 2019 (Compiled from Worldometer, 2020)

Economy	**Gross Domestic Product (US$)**	**GDP Per Capita (PPP) (US$)**	**Population**
USA (Caucasian controlled)	21.4 trillion	65,111.6	332 million
Canada (Caucasian controlled)	1.7 trillion	50,757.4	38 million
Latino controlled North and Central American economies (Mexico, Puerto Rico, Dominican Republic, Guatemala, Panama, Costa Rica, El Salvador, Honduras, Trinidad and Tobago, Jamaica, The Bahamas, Nicaragua, Haiti, Barbados, Aruba, Belize, St Lucia, Antigua and Barbuda, Grenada, St. Kitts and Nevis, St Vincent and the Grenadines, Dominica	1.76 trillion	18,811.6	212 million

One can see from Table 1 that the combined economic strength of all 22 Latino controlled economies in North and Central America is only 7.6% of the economic strength of only two White-controlled economies (USA and Canada). When we add 12 South American economies, the total Latin American economies are 40, and their combined economic strength is 8.6 trillion US dollars, which is just 37% of USA and Canada's 23.2 trillion.

Table 2: South American economies 2019 (Compiled from Worldometer, 2020)

Economy	**Gross Domestic Product (US$)**	**GDP Per Capita (PPP) (US$)**	**Population**
Latino controlled economies (Brazil, Argentina, Colombia, Chile, Peru, Ecuador, Venezuela, Uruguay, Bolivia, Paraguay, Guyana, Suriname	6.8 trillion	16,041.1	433 million

Strictly speaking, Latin-American countries are also White-controlled economies, except that their racial mix-up makes it more difficult to get a Latin American of pure White blood, and therefore makes it difficult to categorize them as White-controlled economies. There is, however, no consensus that Latinos are a race of their own, and White Latinos generally see themselves as Caucasians. To avoid unnecessary debate, I will exclude Latino economic power from White economic power. But this exclusion does not even slightly dent the economic superiority of the Caucasian race. Let me now turn to the mainstay of Caucasian economic power, Europe.

Table 3: European Economic Power (all Caucasian controlled) (Compiled from Worldometer, 2020)

Economy	**Gross Domestic Product (US$)**	**GDP Per Capita (PPP) (US$)**	**Population**
Europe (Germany, United Kingdom, France, Italy, Spain, Netherlands, Turkey, Switzerland, Poland, Sweden, Belgium, Austria, Norway, Ireland, Denmark, Finland, Czechia, Romania, Portugal, Greece, Hungary, Slovakia, Luxemburg, Bulgaria, Croatia, Lithuania, Slovenia, Latvia, Serbia, Estonia, Cyprus, Iceland, Bosnia and Herzegovina, Albania, Malta, North Macedonia, Liechtenstein, Montenegro, Russia, Ukraine, Belarus, Kosovo)	20.4 trillion	46,467.5	748 million

Table 4: Caucasian economies in Australasia 2019 (Compiled from Worldometer, 2020)

Economy	**Gross Domestic Product (US$)**	**GDP Per Capita (PPP) (US$)**	**Population**
Australia, New Zealand	1.8 trillion	56,431	31.53 million

Table 5: Asian-controlled economies (Compiled from Worldometer (2020))

Economy	**Gross Domestic Product (US$)**	**GDP Per Capita (PPP) (US$)**	**Population**
Asia (Afghanistan, Armenia, Azerbaijan, Bahrain, Bangladesh, Bhutan, Brunei, Cyprus, Myanmar, Cambodia, China, Hong Kong (PRC), Georgia, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, North Korea, South Korea, Kuwait, Kyrgyzstan, Laos, Lebanon, Macau, Malaysia, Maldives, Mongolia, Nepal, Oman, Pakistan, Philippines, Qatar, Saudi Arabia, Singapore, Sri Lanka, Syria, Taiwan [ROC], Tajikistan, Thailand, Timor-Leste, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Vietnam, Yemen)	65.4 trillion	7,351	4.6 trillion

Table 5 shows that Asian economies have a combined strength of 65 trillion US$, but with over 60% of the world's population, Asia has a per capita GDP of 7 thousand dollars per annum, compared to 55 thousand dollars for combined Caucasian economies.

Table 6: Black-African controlled economies (Compiled from Worldometer (2020))

Economy	Gross Domestic Product	GDP Per Capita (PPP) (US$)	Population
Black-Africa (Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Congo (Brazzaville) Congo (Democratic Republic), Cote d'Ivoire, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, Somalia, South Africa, Tanzania, Togo, Uganda, Zaire, Zambia, Zimbabwe)	1.76 trillion	1,585.4	1.12 trillion

From all these tables, it is evident that the average per capita income of anyone living in all the Caucasian economies scattered around the globe (USA, Canada, Western and Eastern Europe, Australia, New Zealand) is approximately 55 thousand dollars per annum. We already have that of Asian economies as approximately 7 thousand dollars and Sub-Saharan Africa as 1.6 thousand dollars. It means the average person in a Caucasian economy is 34 times as rich as someone in an African economy, and a person in an Asian economy is four times as rich as someone in an African economy. The economic value chain has the Caucasians at the top, the Asians at the middle, and the Africans at the bottom.

Let me at this point respond to a potential objection. It may be argued that the above statistics are not good estimates of European, Asian and African economic power, because there are Africans working in European and Asian economies, Europeans working in Asian and African economies, and Asians working in European and African economies. My response to this objection is that what really matters is who *designs* an economy and *decides* how such an economy should be built, not whose sweat was used to build it. African slave labour was used to build America into economic prominence in the 18th century, but Caucasians designed it to be so. There is abundant labour in Africa, but designing and other decision-making are problematic at the political level.

Intra-National Economic Disparities by Race

We not only see superior Caucasian economic power by comparing groups of countries, but by looking at the economic data from different races living and working within a single sample country. The most ideal case study is USA, where we have the most diversity in terms of spread or number of cultures. According to research on racial economic inequality in the USA, "the median White family has 41 times more wealth than the median Black family and 22 times more wealth than the median Latino family" (Inequality.Org 2020; par 8).

Research Findings on Racial Discrimination

In 2001, the American National Research Council put together what it called a "Panel on Methods for Assessing Discrimination". The work of this panel has been published as a book titled *Measuring Racial Discrimination* (2004). According to the research, the Black African race is the most discriminated against. I have already cited literature showing that much of discrimination around the world is colour-related (even though I have argued that it is about financial perceptions of skin colour).

Analysing all the Data

When we examine the topography of racial discrimination in existing research, and consider this in the light of the topography of economic positions revealed in the international and intra-national data on racial economic inequality, we find ourselves looking at a few conclusions:

(1) The racial respect value chain is identical to the economic value chain.

(2) The richest race is the most respected globally and the poorest most disrespected.

Respect value chain is a *human reality.* We see it in the relationship between the business tycoon and his driver, a Professor and her student, even between former schoolmates who have become economically unequal, and between economically unequal spouses. The most respected international passports are those from well performing economies, and vice versa for the least powerful passports. Another example of economic power is that the US government has not paid any reparations to African-Americans for slavery (Davis, 2014), but paid reparations to Japanese-Americans for their incarceration during World War II (Yamamoto, Chon, Kang, Izumi, & Wu, 2001). What is the difference between the Japanese and African societies? It is that the economic stature of the Japanese society is a source of deterrence and caution to Americans?

Is Skin Colour the Cause of Racism?

There are indicators that skin colour is by itself not the major cause of racism. History does not show that black is an inferior colour. In Japanese culture, black stands for seniority and experience. In fashion designing, black denotes depth, and many fashion designers have dedicated their careers to unpacking this depth (Bateman 2020; par 3). A well-known French artist, Pierre-Auguste Renoir, had this to say, "I've spent 40 years discovering that the queen of all colours is Black" (Ibid, par 14). In the words of Louise Nevelson, "I feel in love with black; it contained all color. It wasn't a negation of color…Black is the most aristocratic color of all…You can be quiet, and it contains the whole thing" (Uddin 2020; par 20). Ricardo Tisci had this to say, "Black is always elegant. It is the most complete color in the whole world, made of all the colors in the palette" (Uddin 2020; par 15). And according to Ann Demeulemeester, "Black is not sad. Bright colours are what depresses me. They're so…empty…" (Bateman 2020: par 15). "According to CarMax, the largest used car retailer in the US, black was the best-selling car color last year, accounting for 22.25 percent of sales, followed closely by white at 19.34 percent of sales, gray (17.63 percent), and silver (14.64 percent)" (Tahaney 2020: par 1). Black is also the official colour for the entourage of most of the world's Heads of State; evidence that it is regarded as the most *mature* of all colours. Most of all, Caucasians have a penchant for black colour (black suits, black cars, black shoes, black TVs and home theatres, black computers [both desk tops and lap tops]. Indeed, the stereotypical Caucasian conception of a handsome man irrespective of race is a 'tall, dark and handsome' man, a phrase that originated with upper class Europeans in the 17th century, and became synonymous with Hollywood leading men, along with "the thrilling dark hero" (Smith 2020).

Analysis of Findings

In the face of this overwhelming evidence, could colour solely explain the disrespect for Black Africans? The other pieces of evidence I have canvassed show that Black Africans are disrespected because their societies have been too strongly associated with underdevelopment. Colour alone is not a source of racism; it is what the colour is associated with. For Black Africans, the association of colour with underdevelopment continues to wreak psychological havoc.

Anti-African racism is, therefore, predicated on the economic superiority of the racist. The corollary argument is that conceptions of skin colour are consequences rather than causes of anti-African racism: racism does not arise because the African is black-skinned, but because the black skin has been associated with society-level underdevelopment for a very long period of time in history. Indeed, the evidence suggests that the topography of the racist relationship would be reversed if the economic tables were also reversed. The conclusion is that the relationship between racism and economic inequality is, therefore, more significant than the relationship between racism and skin colour. If we accept this argument, it means Africa's underdevelopment reinforces racist presuppositions and motivations.

If we accept the argument that racism is based more on economic condition than skin colour, then we need to face up to some serious implications. Skin colour is from Mother Nature, but economic inequality is man-made. Because we previously assumed that skin colour (and just skin colour) was the cause of racism, our response was to simply protest and say "Stop discriminating based on skin colour." But accepting that racism has more to do with economic condition means that such a moral protest is ineffective, because a racist is an economic bully. We know how we overcame our bullies in elementary school. You do not stop a bully by saying, "Please stop bullying me!" We stopped being bullied by *outgrowing* our bullies (we grew taller, bigger, stronger, and so on). It means we need to grow out of underdevelopment to lessen the racists' insults. The difference between biological and economic growth is that the former is automatic but the latter needs to be *decided* and executed with commitment.

The evidence for the economic condition also suggests that there are things we do to intensify racism, such as borrowing money from Caucasian countries, preferring to save our money in Caucasian banks, employing Caucasian engineers for our most important projects, preferring Caucasian schools, and of course, the mass migration of our unemployed youth. That brings us to the subject of unemployment and migration. These are indices of underdevelopment. The unusually high migration, being an aspect of underdevelopment, encourages anti-African racism (I call it racism-generating behaviour). Extraordinary levels of migration lead to "go back home" reactions from destination indigenes. Local examples abound. When the migration of Nigerians to Ghana spiked up in the 1960s, it led to "Go back home" protests by Ghanaians, and the Busia government put this demand into action by deporting a large number of Nigerians (Aremu and Ajayi, 2014). The reverse happened when Ghanaians fleeing from high-level corruption in Ghana came to Nigeria in large numbers, leading to the "Ghana must go" mantra, and the exit of many Ghanaians from Nigeria (Lawal, 2020). This drama replayed itself when Nigerian migration to South Africa spiked, leading to xenophobic and hostile reactions from South African indigenes (DW, 2020). During President Trump's campaign in 2015, one of the placards of his supporters read "Go back to Africa". In sum, then, excessive migration leads to the emergence of nationalist and racist leaders and political parties in destination countries (see Davis and Deole, 2017).

The best response to racism is to develop, and ultimately, reduce unemployment. This research debunks pessimism about African development by citing Kwame Nkrumah's reference to Africa's resources. According to Nkrumah, Africa had (at Nkrumah's time) 66% of the world's cocoa, 65% of the world's palm oil, 58% of global sisal, 14% of global coffee, 26% of global groundnut, and 11% of global olive oil. Africa has an even bigger share of the world's minerals, with 96% of the world's diamond, 69% of the world's cobalt, 63% of the world's gold, 48% in antimony, 37% in manganese, 34% in chromite, 32% of the world's phosphate, 24% in copper, 19% of the world's asbestos, 15% of the world's tin, 4% of the world's iron, and 4% of the world's bauxite (Nkrumah, 1998: 150-151). In terms of human resources, Africa has among the best technocrats in the world. What is needed is good leadership; and what is needed for good leadership is to protest bad leadership. So protesting bad local leadership is in fact the beginning of the most effective way to protest external racism.

The Role of Today's Migration and Unemployment

One of the biggest effects of underdevelopment is unemployment. This fuels unusual rates of migration, which in turn reinforces racist presuppositions. Factors that could humble the racist's arrogance and negate racist presuppositions include the economic development of Africa, the reduction in Africa's external dependence, a consequent reduction in the historically unusually high rate of migration of existentially embattled African youths, and ultimately the financial independence of African countries. This research does not engage in the technical development of employment solutions, but explores the more philosophical ramifications of unemployment in Africa in the context of anti-African racism. The intentionality of the research is largely motivational: to spur a speedier approach to development and more satisfactory rates of employment of African youths and, ultimately, the financial independence of African countries.

Conclusion

This research explores the correlation between racism and economic conditions and finds the correlation to be very strong. This realization ought to introduce a greater sense of urgency in the attitudes of Black Africa's governments toward developing their societies. The findings suggest that the high rates of migration, which result from high rates of unemployment, feed into racism; and development must be taken more seriously, with the added motivation of reducing our own contributions to anti-Black racism.

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Insurance and Youth Unemployment in Nigeria: A Take-away from the #EndSars Protest

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Abstract

The economic and psychological impact of unemployment to the society and the individual cannot be overemphasized. The constant reverberation of low penetration of insurance and youth unemployment are both issues that have been discussed in Nigeria. While both constructs have at various times been viewed separately, in Nigeria, like many African countries, the nexus between insurance penetration and youth unemployment have not been entirely valued. Resolving the perennial issue of youth unemployment is a very appealing notion, yet very contentious. This study employed secondary data to examine the issues of youth unemployment, the massive losses suffered during the recent #EndSars protest in Nigeria, and insurance penetration. The study results showed the existence of an abundant youth population with the power of co-ordination that can be harnessed. The study thus concluded that abundant wealth in terms of human capital and unemployed youths has a positive role in the quest for insurance penetration in Nigeria. The study recommended, amongst others, that the Nigerian insurance industry put in place strategies and modalities of inclusion for the booming population of unemployed youths. They should also create opportunities to harness the influence exercised by these youths in their individual catchment areas, in a bid to help boost insurance penetration.

Keywords: Insurance, Youth Unemployment, #EndSars, Penetration

Introduction

Unemployment has been identified over the years as a major problem in any society, and one which greatly impacts the economy at large. The rate of unemployment in Nigeria seems to have increased due to a wide range of socio-economic issues, and has become alarming in its intensity due to the increased growth in population and rising youth numbers.

The government has pushed for the option of entrepreneurship as the solution to the perennial problem of youth unemployment. While this is a laudable idea, it has yet to achieve the desired effect. In view of the continued expansion of the population, there is an expeditious need to seek additional options within the formal sector to complement the entrepreneurship option, whilst still giving the youth the feeling of freedom associated with entrepreneurship.

According to Adejumola and Tayo-Olajubulu (2009), one of the major side-effects of unemployment includes social vices. In recent times, there have been quite a number of adverse socio-economic and political developments which have been as a result of youth unemployment, exemplified by major societal vices such as armed robbery, kidnapping and most recently the #EndSars protest, which culminated in the civil commotion and riot that led to massive destruction of lives and properties. While the best definition of unemployment is yet to be fully agreed upon, the International Labour Organization (ILO) defines it as a situation where the number of the population who are economically active and available for work, are without work (World Bank, 1998).

Various countries, both developed and developing, have over the years attempted to figure out which policies are best suited to tackle this major issue. Nigeria is a country with an estimated population of more than 140 million and an estimated 350 ethnic nationalities (Adeyemi, Oribabor & Adeyemi, 2012), with an estimated 23.1% of this number unemployed. This potentially makes it a herculean task for formulation of a policy that will enhance development. The concept of youth empowerment is an opportunity for the youths within a community to overcome certain socio-economic dispositions. It is

an intervention strategy which confronts the youths within these localities and thus promotes sustainable community and national development (Aruma, 2011). Unfortunately, over time, and despite the critical role these youths have to play in the development of a nation, it seems they have been left behind, as implied from the huge figures of unemployment. Thus, there seems to have become a need for other sectors of the economy to join the government in finding a solution to the problem of youth unemployment, and the insurance industry is not exempt.

Insurance has existed for many years across the globe, and in Nigeria has been in operation for over 60 years. Despite its long history, insurance penetration is still negligible in the list of challenges facing the industry. As at 2019, insurance penetration in Nigeria stood at 0.3%, which is abysmally low when compared with its counterparts around the world (NIA, 2019). The need to increase insurance penetration, grow the contribution to Gross Domestic Product (GDP), and improve the financial inclusion ratio in line with the mandate of financial institutions, have all been ongoing discussions within the industry.

Insurance provides comfort for both organisations and individuals. It gives an opportunity for a quality of life that is better than what is presently obtainable, both in the immediate and long-term future when viewed from the individual's personal financial capacity. According to Anaesoronye (2010), insurance is an arrangement between the insured and the insurer, in which the insured pays a slight consideration termed premium to cover the risk. Despite the huge importance of insurance, there has been an abysmally low adoption of same by the Nigerian populace. Over the years, there has been a constant array of discussions on how to change the status quo concerning this deficit, ranging from compulsory insurances, increasing branch presence, market development and restructuring initiative (MDRI), micro insurance and so on, but the problem still persists. Central to increased insurance penetration, is the need to increase one-on-one contact as a means of reaching more potential consumers. A major implication of this notion may be interpreted to mean changing focus from the traditional marketing system and instead deploying youths who are technology-savvy with a wide network of reach.

This paper thus sets out to review the issue of youth unemployment, with the focus on the recent #EndSars protest and insurance penetration in Nigeria, with specific emphasis on integration of the youth in the drive for penetration.

Justification of the study

According to the African Development Bank Group 2016 report, youths are the greatest assets of Africa. The report notes that if the youth is properly harnessed, the continent will witness an increase in production and economic growth. The problem of unemployment creates a vacuum, as it seems these highly intelligent and creative people are left idle. There is, therefore, an urgent need to create opportunities for the youth. The National Youth Development Policy (2001) affirms the youth as society's foundation. Their vigour, orientation, character and ingenuity outline the pattern of development of a nation (Ajufo, 2013). The recent #EndSars protest gave an insight into the creativity and dynamic capability of the Nigerian youth, their networking capacity, and the co-ordination as well as the huge chain reaction of their interactions. These attributes are positives that, when harnessed, may impact the nation generally, and insurance specifically.

Blunden and Thirlwell (2010) described the insurance contract as one of fortuity that is dependent on an unforeseen event occurring over which the insured exercises little or no control. The Nigerian insurance industry currently contributes about 1.9% to GDP with penetration at 0.3% (Coronation, 2019). When compared with her peers on the continent, Nigeria has the lowest insurance penetration level. This has been a recurrent challenge within the industry. Changing the dynamic of the traditional model of insurance has perhaps become imperative. Harnessing the creativity, networking and chain interactions of the unemployed youth seems to have become a narrative that needs to be discussed. For

the Nigerian insurance industry, reviewing its business model and syncing with the massive number of unemployed youths may bring about an impact on the economy as well as bring to fruition the dream of an increased penetration rate. This study utilised data derived from secondary sources of previous research work, and analysis of industry data, newspapers and journal articles that are related to the study.

Theoretical Framework

Systems Theory

The underpinning theory of this study is the systems theory. Aristotle described the significance of considering a system as a whole and introduced the notion that the whole is greater than the sum of its parts (Cordon, 2013). Going further, it describes a system as a group of people or devices that form a network for the specific aim of serving a common goal. According to Flood and Jackson (1991), a system is a collection of parts that are interrelated and are acting in unison to achieve set goals existent within the environment.

Chikere and Nwoka (2015) noted that systems theory emphasises on the relationships between parts, the arrangement existing therein, their functionality and interaction, as these all determine the properties. Von Bertalanffy (1973) observed that every organisation requires an interaction with its external environment. This belief was recognised worldwide as an approach for the effectiveness and efficiency of a work system. It emphasised the need for organisations to exercise sensitivity to their environment across social, economic and technological systems, as a means of survival.

Rather than the conventional approach, systems theory suggests that to understand the nature of a problem, its solution must also be sought. It has a way of ensuring that existing practice is rationalised and methods for improvement suggested (Stewart & Ayres, 2001). When viewed in the context of this study, the system herein is a combination of the insurance industry and the youth populace; the problem is youth unemployment and insurance penetration, while the solution is harnessing the extensive capabilities and network of the youths. With both working together, it is possible to engage the youth, dispel idleness, sensitize the public on the importance of insurance, and achieve set goals of increasing penetration, while at the same time create employment, a source of income for the youth and boost the economy.

Youth Unemployment

The National Youth Development Policy (2001) describes the youth as those between the ages of 18 years and 35 years. Coincidentally, theis age group constitutes an estimated 40% of the total Nigerian population (Ajufo, 2013). In 2016, the Bureau of Statistics noted that 38% of society's employable population were unemployed (Olawale, 2017). In 2020, the estimated youth unemployment rate in Nigeria was about 14.2% (Pletcher, 2020). Existing literature (Mcgrath, 1999, Oladele, Akeke & Oladunjoye, 2011) has attributed this to a lot of factors, ranging from rural-urban migration and an obsolete curriculum, to a mismatch of skills and lack of appropriate skillsets, amongst others.

According to the United States Bureau of Labour Statistics, unemployment occurs when an actively job-seeking individual is unable to find employment. It is a common measure of an economy's health. In 2019, the highest unemployment rates in the world ranged between 28.2% (Lesotho) and 24.8% (Mozambique) (Walters, 2020). According to the world ranking on youth unemployment, Nigeria currently stands in 6th position and 4th in Africa, behind Angola, Namibia and South Africa.

In the wake of the Covid-19 pandemic, these figures have the propensity to change, thus the need to pay attention to the issue. Barnier (2020) noted that unemployment is commonly categorised into voluntary and involuntary. An individual is said to be voluntarily unemployed if he left the

employment willingly, while involuntary unemployment refers to a job loss as a result of redundancy or lay-off. However, these two broad categories can be further broken down.

Types of Unemployment

Literature (Uddin & Uddin, 2013; Olawale, 2017) identified different types of unemployment, namely:

(i) Residual unemployment

(ii) Frictional unemployment

(iii)Structural unemployment

Residual unemployment: refers to unemployment as a result of personal factors, such as ageing, disability, inadequate training and/or attitude.

Frictional unemployment: refers to unemployment caused by industrial friction. This type of unemployment is usually a function of the prosperity of the economy.

Structural unemployment: This is caused as a result of a mismatch between the skills of employable individuals and the required skillset. This is sometimes referred to as technological unemployment, as the most common cause in some cases results from a change in technology.

Costs of Unemployment

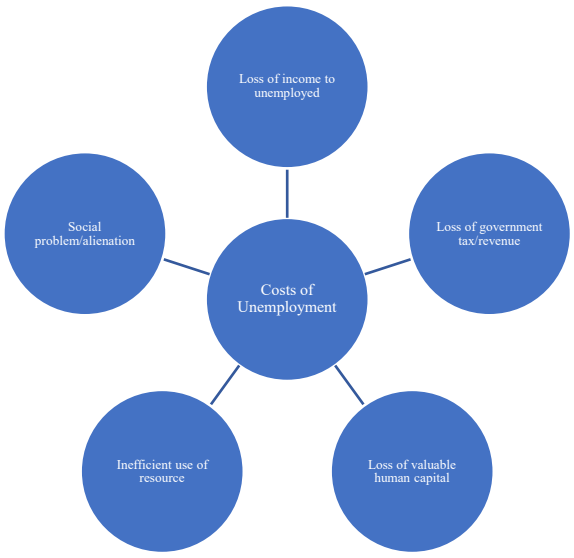
Unemployment has costs to the society and economy (Pettinger, 2019),some of which are:

(i) Cost to the individual: The individual loses income, faces financial hardship and possible health issues, and truncates their career; which may lead to depression.

(ii) Cost to the government: The government loses revenue in the form of income tax, thus depleting resources, affecting budgets and possibly leading to increased borrowing.

(iii) Cost to the society: The society on its part suffers political instability, lower GDP and an increase in societal ills/problems.

Figure 1: Cost of Unemployment



***Source**: adopted from www.economicshelp.org*

Considering that the costs of unemployment not only affect the individual but also the society at large, it has become necessary that not only the government, but other sectors of the economy as well, become involved in finding a resolution to this issue – and the insurance industry is not exempt.

Insurance Penetration

Insurance is a major indicator of a nation's wealth and development, and the performance of a nations' insurance sub-sector is a function of the environment (Oba, 2003). Insurance penetration has been one major challenge the industry has grappled with, and which has proved difficult to resolve. However, there is no gainsaying that to effectively succeed in this endeavour, there is a need to deploy more resources, both human and technological.

a) According to Ernst and Young (2019), the insurance market worldwide is divided into four stages, namely: Establishment and Corporate Assets

b) Early Growth and Compulsory Insurance

c) Retail Expansion

d) Diversified Retail

Nigeria is said to currently be operating in the second stage, together with Uganda, while South Africa is in the fourth stage (EY, 2019). To effectively move from the second to the third stage, there is a need to deepen the penetration.

Insurance penetration rate (IPR) is defined as the amount of the total gross premium income stated as a proportion of the GDP of a country; and the higher the IPR, the more advanced the market (Alhassan & Flador, 2014). The International Association of Insurance Supervisors (IAIS) noted that the IPR is the standard by which to gauge the growth of a nation's insurance market and provides a good measurement for international comparison across jurisdictions (IAIS, 2017).

The Nigerian insurance industry as part of the global insurance market is not isolated from the peculiarities of the market. Though the Nigerian market has grown over the years, a number of challenges still exist, one of which is low penetration. This is even more pronounced when it is compared to the population and the potential for growth. According to industry statistics, the IPR has declined from 0.48% in 2010 and currently stands at 0.3% (Coronation, 2019). This is quite low when compared with other African countries such as Egypt at 0.6%, Angola at 0.8%, Kenya at 2.8% and South Africa, which leads with over 13% (Fatokunbo, 2018).

Over the years, despite several attempts at addressing this, it has become apparent that the current marketing system being adopted by companies in this sector has had no significant effect. Insurance has remained one of the least bought products in the financial market, with only an estimated 10% of the population having any form of insurance (Aghoghovia, 2016). Existing literature has shown that there are a number of factors affecting the penetration rate of insurance, such as accessibility, trust, cultural/religious beliefs, affordability, clarity of wording, prompt claims payment, and perception of the public image of the providers amongst others (Akpan, 2009; Wilson, 2004; Mordi, 1990).

According to Okonkwo and Eche (2019), economic conditions, regulatory interventions and behavioural reactions may have an impact on insurance patronage. Though there are legal and regulatory considerations, market considerations, behavioural patterns and competitiveness should also be looked at. Social media has shown to be a viable means of significantly scaling up products, and insurance can be one of them. Strategic alliances with telecommunications outfits have also been tried in the past by some companies. Micro-insurance has also been touted and viewed by the industry as a means of increasing the IPR (NAICOM, 2018), but they seem to be unable to get a handle on how this should successfully operate.

Youth Unrest and the #EndSars Protest

According to Gleeson (2019), unemployment has a negative effect on the individual and the family, not only financially, but also in terms of health and life expectancy. Youth unrest is one among many consequences of youth unemployment which poses a risk to the society at large. Youth unemployment seems to have consequences across all levels, including the local, state, national and global level. Existing literature has shown that unemployment has consequences not only individually, but also economically and socially, with criminal consequences in some instances (Kleck, Gary, Jackson & Dylan, 2016).

The #EndSars protest which took place in Nigeria across strategic states on the 3rd of October 2020 and climaxed on the 20th of October 2020, started as a protest by youths against police brutality by the Special Anti-Robbery Squad, popularly known as SARS. An endeavour which started out as a peaceful protest, slowly snowballed into violent unrest which saw massive destruction across various locations in Nigeria, but mostly in Lagos, the commercial nerve centre of Nigeria.

Notable about this protest was the identification of the different aspects of the Nigerian youth and the different effects unemployment have had on each. While some were educated, others were not so educated. Some started off peacefully, others turned violent. Either way, the protest was hijacked by some perceived hoodlums and took a violent turn, mostly because the youths were not gainfully engaged. By the time the protest was intercepted by the authorities, people were injured, there was massive destruction, and shops, offices, malls and police stations had been vandalised, set on fire and looted. All these incidents left a trail of huge losses, with quite a number of them being borne by the insurance industry.

Insurance and the #EndSars Protest

The Nigerian Police Force announced that a number of critical national assets as well as corporate and private properties had been burnt and vandalised during the protests. Following the huge losses which occurred as an aftermath of the #EndSars protest, quite a number of individuals, organisations and government entities suffered losses. Buildings were set on fire, shops were looted and goods destroyed, items valued at millions of naira were carted away, and so on. Some of these properties were insured while some were not.

Insurance creates a strong foundation for the smooth and effective running of an organisation and economy. For organisations and individuals that were insured, the claim for losses have started rolling in and the insurance companies are presently still collating the data in order to estimate the quantum of loss. The Nigerian Insurers Association (NIA), the trade body of insurance companies, in their bid to have a clear picture of the estimated losses and the impact on the industry, have sent out questionnaires to all member companies soliciting information as to their individual exposures.

However, when the protest and the publicised losses are reviewed, such as the fire damage to a well-known government parastatal building on Marina, shopping malls, the various police stations set ablaze, telecommunications outfits, banks/ATMs looted and burnt, vehicles belonging to both individuals and corporations that were vandalised and burnt, all of these are just a few of the publicised exposures. An estimated N5.6 billion exposure was placed on the buildings. Banks who had their ATMs looted or burnt have the insurance policies under which they can lodge a claim. One of the supermarket chains had an estimate loss of over N70 million; another estimated N800 million exposure was placed on one of the conglomerates whose vehicles were burnt. All these estimates are not inclusive of goods burnt or destroyed. Other individuals who had their vehicles and properties damaged with valid insurances will also lodge their claims, all based on the value of their sums insured. In total, the industry is currently looking at a tentative estimate of over N100 billion loss exposure.

When the huge financial impact that this will have on the industry is taken into consideration, it has perhaps become even more urgent for the industry to join in seeking a solution to the perennial issue of youth unemployment and creating better opportunities for the youth. This is in order to minimise and, where possible, eliminate, the likelihood of the recurrence of such situations, that could degenerate into violence and lead to losses which will negatively impact the profitability of the companies.

The Take-Away from the #EndSars Protest

With the advent of Fintech and Insurtech, it has in recent times become understandable that technology has a role to play within the insurance sector, not just in boosting penetration but across the whole value chain. So there is lso the need for an increased outreach to the populace. As highlighted in previous literature above, youth unemployment seems to pose a serious risk to the society, and there is a need to address this problem. However, there seems to be a problem with the means of operation in harnessing these two issues. This study set out to examine how both can be solved through an interrelation mechanism.

The #EndSars protest revealed a large population of youths in the country. It also revealed great co-ordination skills, technological knowledge, possibility of accountability, and a large network reach. Funds were raised for the protest by different groups, such as Flutterwave, Feminist Coalition and so on. Food was delivered to protest sites, clean-ups were organised, hospitals and legal fees were paid for when necessary, and the protests were carried out in various locations across states at the same time. An online radio platform named Soro Soke was launched (Ukpe, 2020). These and more went to prove the networking reach and co-ordination of these youths. While the protesters continued claiming they had no leader, one obvious thing in all centres of the protests was the fact that there were area champions/community influencers, and that catchment areas were leveraged upon. In Lagos State, the Lekki Tollgate and Alausa were two notable catchments.

Discussion and Conclusion

This study examined youth unemployment and insurance penetration in Nigeria with a focus on the #EndSars protest. Government has over the years looked at various ways of resolving the perennial problem of youth unemployment, and has deployed various means and programs in a bid to solve this. The insurance industry, for its own part, has battled with a low penetration rate and its negative impact to GDP contribution in Nigeria. The study results revealed the existence of an abundant youth population with the power of co-ordination that can be harnessed for the benefit of both parties. It also recognises the possibility of a synergy between the insurance industry, unemployed youths and insurance penetration, as one of the possible methods of reducing unemployment and ensuring development across the economy.

Following on from this take-away, a large number of youths are technologically savvy. Most have phones, quite a few of which have high-tech contents. The youth are creative and most quite intelligent. This could be seen from the massive social media broadcast of the #EndSars protests. These attributes are valuable assets that could be harnessed by the insurance industry in their quest for an increased penetration rate. According to Okonkwo and Eche (2019), insurance is a business of trust. This was further buttressed by EY (2019) in a recent survey on insurance apathy, noting some of the factors that came up to include, trust, affordability, and guidance through products, as well as ease of accessibility. The strength of each area champion, the access to their locality, understanding of their cultural beliefs and the trust they have in their respective catchment area poses opportunities that may be leveraged upon in the increased awareness of insurance products and the subsequent sales thereof.

The industry could identify the various catchments across different areas where they want to operate and currently have no presence. The area champions/community influencers within each catchment are identified, trained and equipped. The possibility of greater success is guaranteed as they have first-hand knowledge and access to their areas. There is an understanding of the needs and an existing trust between the area champion and the constituents within his catchment. The use of these area champions/community influencers help the insurance companies reduce financial outlay that would have been put down for running costs of creating branches, create a greater outreach than they could possibly have done on their own, and in the long run help boost sales of their products. On the other hand, it creates a cascade of jobs for the unemployed youths, as each area champions/community influencers will require foot soldiers who will work with them. In the long run this will help in reducing the issues of insurance penetration and youth unemployment. A properly executed plan wherein the youth are integrated in the drive for increased insurance penetration has the capacity to generate a positive outcome, and vice versa.

This study agrees with Uddin and Uddin (2013), who opined that the society at large must create an enabling socio-economic and political environment to help battle youth unemployment. It agrees with the study of Olayungbo and Akilo (2016) who noted that insurance penetration has a negative slope and that efforts should be geared towards improved awareness, and also Stewart and Ayres (2001), who noted that in order to fully understand the nature of a problem, rather than adopting the conventional approach, the systems theory should be adopted and that it should be done along with its solution.

The study therefore concluded that the abundant wealth in terms of human capital and unemployed youths has a positive role in the quest for insurance penetration in Nigeria. Where there is a high level of co-ordination between the industry and youths in the different catchments, there is the potential for a corresponding high level of growth for all concerned.

Recommendations

Based on the findings, the study recommends that the Nigerian insurance industry should:

(i) Undertake intelligence to survey areas of non-penetration in the country

(ii) Create strategies and modalities of inclusion of unemployed youths

(iii) Identify possible champions and catchments within these areas and provide the necessary training and skills required to help them push insurance

(iv) Create opportunities to harness the influence exercised by these youths in their individual catchment areas, in a bid to help reduce unemployment and boost insurance penetration

(v) Encourage youths to dream, explore and start small with a focus on growing

(vi) Engage all stakeholders and develop long-term policy frameworks that are monitored, evaluated and updated intermittently to meet ever-changing world circumstances

Limitations and Suggestions for Further Study

This study used secondary data; future studies could benefit more from the use of primary data. The paper made suggestions with regard to including the youths in marketing communications. Future

studies could explore integrating them across other value chains, such as technology development and integration, finance and so on. This study looked at the insurance sector, considering that these youths and their intelligence cuts across various areas of discipline; future studies could look at harnessing these positive attributes across other industries.

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The Sustainable Development Goals (SDGs) 2030 and undergraduate employability in Nigeria: A case study of the University of Lagos, Nigeria

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Abstract

The existing educational system in Africa greatly reduces the chances of students of participating in activities that would prepare them for the workplace. Fortunately, the pursuit of the SDGs by the United Nations (UN) creates a better chance for African youths, who are mostly undergraduates. It supports the realization of goals while creating opportunities for upskilling and forming alliances that could be leveraged to increase professional capital. This study, therefore, examined the impact of sustainable development goals such as SDG 4, SDG 8 and SDG 17 on undergraduates' employability in Africa, using the UNILAG, Nigeria as a case study. The research design employed was descriptive. The study involved 200 undergraduate students randomly sampled from five (5) faculties in the University of Lagos, Nigeria. The instrument for data collection was a structured questionnaire. The results were analysed using percentages and average. Chi-square statistical techniques were used for the hypothesis testing at 0.05% level of significance. The findings of the study revealed that the level of awareness of the undergraduates on the SDGs projects is average (58.7%) and that the majority (69%) agreed that they have heard about the SDGs before, know the full meaning of the SDGs (76%) and that SDGs are global goals (63%), but disagreed that the SDGs have 15 goals and 78 targets. The study also showed that the level of undergraduates' involvement in SDGs projects is average (66.4%) as most (52%) get involved in waste-to-wealth projects and attend the various workshops, conferences and seminars on sustainable development, while many still hardly participate in any of the numerous community projects and charity work. However, the undergraduates encountered many challenges in participating in SDG projects. Many (57%) found the projects uninteresting, noted time clashes with academics/ lecture timetables (66.5%), lack the resources to participate in SDGs projects (74.5%), and have limited understanding and information of the SDGs. All these challenges affect their academic performance, although moderately (48.4%). The result further revealed that the majority (91.5%) of undergraduates agreed that participation in SDGs projects improves undergraduates' existing skills, helps to acquire transferable skills and a broad-based experience (90%), offers opportunities to practice various classroom theories (78%), and have access to relevant employment information. (89.5%). The undergraduates participate in SDGs projects such as Sustainable Development Advocates (SDA) activities, Walk Against Hunger, EDUClean in the Faculty of Education, SDG Engagement by Society of Petroleum Engineers (SPE) Unilag. Premised on the findings, it was recommended that education planners should incorporate sustainable development education into the curriculum. Also, the university should set up a unit that mobilizes students for the realization of the Sustainable Development Goals (SDGs).

Keywords: Africa, Employability, Sustainable Development Goals, Undergraduates, University of Lagos

Introduction

Background Information

Africa is blessed with a teeming and vibrant youth population which is one of the drivers of economic prosperity in the region. International Labour Organization (ILO) expects that, by 2030, the youth

entrant in the region's labour market will increase the size of the labour force to 676 million, representing 20% of the global labour population. Despite this large human resource advantage and in the wake of the pandemic, the countries in the region have had to suffer from increasing youth unemployment as a result of job loss, furlough, forced pay cut, and growing lockdown-induced insecurity.

Ordinarily in Nigeria, youths are being labelled unemployable by the employers of labour. The reason for this can be traced to the quality of experience the youths are exposed to in the various citadels of learning in the country. As the Institute of Education expressed in 2014, employers are displeased with the youth's skills and qualities. Furthermore, Jonck (2014) recognizes the increasing unemployment rate is due to the inadequacy of practical skills and experience of graduates. Edinyang et al. (2015) perceives the bad situation of Nigerian graduates' unemployment and unemployability as worrisome. It was stressed that it is not enough for institutions of higher learning to churn out graduates, the most important thing is for the graduates to meet the employment expectations of the employer in terms of skills and competences. According to Confederation of British Industry (1999), employability is defined as possessing the abilities and skills required to meet the shifting needs of companies and clienteles.

The persistent cries by employers are because, although some graduates are professionally qualified for some roles, they lack the basic skills required to keep employment.

Harvey (2001) and McQuaid and Lindsay (2005) viewed the skills of employability as the skills that are important to getting and keeping a job. These skills, according to them, are general and specific skills required to be able to perform in a work environment, and also included skills related to the management of ones' career, which are divided into career building and self-management skills. Likewise, Yorke (2004) defines employability as a pack of attainments such as competences, personal characteristics and comprehension that increase the chance of graduates to secure employment and be successful in their professional endeavours so as to be of great benefit to themselves, the society and the country as a whole. Employability has four comprehensive and interconnected parts (Knight and Yorke, 2004). These are comprehension, skills deployment, self-belief and self-awareness. Brown and Hesketh (2003) also define employability as the relative odds of securing and preserving diverse types of employment. These researchers stated that employability is not dependent on being able to meet the requirements of specific jobs, but also your position when compared with other job seekers at your level and in your situation.

Furthermore, AACTE (2010) reported that being adaptable to change, being flexible, goals and time management, ability to work alone and in teams, being self-directed, being able to lead projects and achieve results, being able to lead and be led and take responsibilities, are some of the skills students need to thrive in the labour market. These skills are what Ananiadou and Magdalena (2009) call the 21st century skills and competencies. These scholars noted that young people are mandated to have them in order to be relevant and matter in the workforce and the society. Besides, students must be able to make sustainable decisions about their personal life, values, behaviour, attitude, relations and aspirations. ACCI and BCA (2002) views employability skills as necessary requirements to gain employment, and also to progress in a firm in order to be able to grow fully and contribute strategically to enterprise development.

Eurosat (2013) supports the notion that the essence of employability transcends the ability to gain employment. It is more about how well an employee is able to keep the job and seek a new one when necessary. It also depends on information, skills and disposition of the individual and the way the individual presents himself or herself to the potential employer. In similar fashion, the three core elements of employability include being able to gain employment, being able to keep employment and

being able to switch between jobs/roles within an organization or among organizations, and being able to manage organizational changes (Wickramasinghe and Perera, 2010).

The issue of graduate unemployability has been of great concern over the years. It was noted that the current universities' curriculum doesn't empower graduates with the right skills necessary to make them successful in their careers (De la Harpe et al., 2000). According to Sustainable Development Solutions Network Australia/Pacific (2017), the United Nations world leaders signed off on an agenda meant to transform the world through the SDGs in September 2015. The agenda is aimed to achieve a better world by 2030.This is the official follow up to the Millennium Development Goals (MDGs), which tried to resolve the problems of the most deprived nations of the world in 15 years. AQUA (2018) explains how the mission of universities aligns or contributes to the achievement of the SGDS when it reported that higher institutions of learning have the mission to make quality education available to students that will build their competence to meet the needs of the society. Hence, universities have key roles in making students lead change processes and carry out community projects that will ensure the implementation of the SDGs in their professional and personal lives. Generally, the promotion of sustainable development and empowering people to solve developmental challenges require education. Ugoh (2008) sees sustainable development as the ability to meet the present generation's needs without making it impossible to achieve future needs. This means that education ensures that all generations' needs are met without compromise.

Business in the Community (2010) notices that there is an increase in the number of managers looking for professionals with sustainable competencies in all kinds of jobs, as organizations begin to see the need for innovation, social responsibility and sustainability in their business models. AASHE (2017) reports that recent studies showed that the jobs for the future are green, with a propensity to have an increase in jobs around renewable energy and electric vehicles. To this end, it is a no-brainer that students are concerned about the state of their current training, hereby making them show keen interest in sustainable skills development and putting conscious efforts in concepts and practices related to sustainability while at the university (Drayson, 2015).

Sustainable Development Goals

The SDGs are based on the successes and lessons from the Millennium Development Goals (MDGs) that lasted for 15 years. Negotiations on the SDGs ended in 2012 at the Rio+20 after a process of conciliation that lasted three years. However, the SDGs are different from the MDGs in terms of scope and the issues they concern. The SDGs are big on issues like decent work and climate change. The SDGs are global goals that are interconnected and must be tackled with collaboration of stakeholders around the world. Even with the universality of the sustainable development goals, it is expected that governments of specific countries take local approach in their implementation; in essence, each government must have its own targets to address its own specific challenges.

There are five "Ps" (people, prosperity, planet, peace, and partnership) in the SDGs agenda that apply to all countries and individuals around the world. Some of the pressing issues the SDGs set to solve are acute hunger and multidimensional poverty, climate destruction and environmental degradation. The goals aspire to make sure that the people are prosperous, healthy and live fulfilling lives, and promote harmonious and peaceful co-existence (SDGs UNDP, 2018). Nilsson et al. (2016) states that the SDGs accentuate the mutual relationship between the communal, commercial, and ecological aspects of sustainable development, and among the goals themselves. The SDGs have targets necessary for the mobilization of the means essential for the implementation of the SDGs. This includes partnerships, financing and enabling policies. They identify that solving the problems of the SDGs is everyone's duty and specifically call on private individuals, businesses and the tertiary and academic sectors, among others, to work together to achieve the SDGs.

Webb et al. (2017) detect that the sustainable development goals hold an expanded vision of skills for all stakeholders, like the media for making awareness through digital, offline and social media, and the leeway for public servants to participate meaningfully in the delivery of education. According to the UNDP (2015) **the 17 Sustainable Development Goals are:**

Goal 1: No to poverty

Goal 2: Zero hunger, increase the security of food, improve nutrition and promote sustainable agriculture

Goal 3: Good health and well -being for everyone regardless of age

Goal 4: Quality education and lifelong learning for all

Goal 5: Women and girls' empowerment and gender equality

Goal 6: Clean water and sanitation for everyone

Goal 7: Sustainable, clean and modern energy

Goal 8: Decent work and sustainable economic growth

Goal 9: Innovative, inclusive and sustainable industrial development

Goal 10: Improved equality among nations

Goal 11: Inclusive, safe, resilient and sustainable cities and settlements

Goal 12: Sustainable economic activities

Goal 13: Climate protection

Goal 14: Sustainable use of the oceans, seas and marine resources

Goal 15: Sustainable use of terrestrial ecosystems

Goal 16: Peaceful and inclusive societies for all

Goal 17: Global partnership for achieving the goals

Statement of the Problem

Employability of graduates from Nigerian higher institutions has been a huge topic of concern to employees in the last decade. Sodipo (2014) is of the opinion that for students to be able to compete with the few available jobs, there is a need to fill the knowledge gap created by the lack of requisite skillset. Similarly, Muhammad (2014) supports this by emphasizing that student's mastery of needed proficiencies in the workplace is crucial for the development of future employees. He further notes that the present citadels of learning focus on the number of graduates rather than their competence. Everywhere you turn, you will find graduates brandishing certificates, but will take a long search to find the one with the right skillsets for employability. It is now a common theme for students to finish higher education without the knowledge of how to think for themselves and self-reflect, how to form relationships, how to seek answers to the right questions, and how to become valuable to others. Most graduates are unemployable due to lack of appropriate competencies and skills (Emeh etal., 2021). Thus, the growing poverty, social ills such as banditry, stealing, kidnapping, internet frauds, etc. that have impeded sustainable development in the country over the years are caused by unemployment (Dalhatu and Bagaji, 2014). This is why Orr (2015) states that it is the duty of education from the pre-primary, primary, secondary and post-secondary levels to ensure that courses on the environment, economy and social settings are integrated in formal education.

Many studies have been conducted in the area of students' employability, but only a few have been done that relate to the sustainable development goals, such as "The Quality of Higher Education and The Sustainable Development Goals by the Andorran Quality Assurance Agency for Higher Education (AQUA) (2018)". This study concludes that the achievement of the SDGs can be facilitated by universities through the training of students and involvement of students in sustainable development activities at universities as suggested by Winbom (2015) and as well as "Entrepreneurship, Employment and Sustainable Development in Nigeria" (Sunday and Miriam, 2015). It is based on this backdrop, that this study investigates the role of the SDGs in the improvement of undergraduates' employability in Africa, using Nigeria as a point of reference.

Purpose of the Study

This study examines the impact of sustainable development goals on undergraduates' employability in Africa. Therefore, the specific objectives are to:

1. investigate the level of awareness of the undergraduates on the SDGs;
2. determine the level of the undergraduates' involvement in SDGs projects;
3. assess the challenges undergraduates encounter in participating in SDGs projects;
4. determine whether undergraduates' participation in SDGs projects affects their academic performance; and
5. examine the relationship between undergraduates' participation in SDGs projects and their employability.

Research Questions

The following research questions are raised in the study:

1. What is the level of awareness of the undergraduates on the SDGs?
2. What is the level of the undergraduates' involvement in SDGs projects?
3. What challenges do undergraduates encounter in participating in SDGs projects?
4. What effect does undergraduates' participation in SDGs projects have on their academic performance?
5. What is the relationship between undergraduate' participation in SDGs projects and their employability?

Research Hypotheses

The null hypotheses tested for this study were as follows:

H_0: There is no significant relationship between undergraduates' participation in SDGs projects and their academic performance.

H_1: There is a significant relationship between the participation of undergraduates in SDGs projects and their employability.

Theoretical Framework

This study is guided by two sets of theories, namely: Goal Setting Theory by Edwin Lock and Structural Unemployment Theory by Harry Jerome.

The Goal Setting Theory propounded by Edwin Locke in 1968 as cited by Dansabo (2017) stated that a high level of performance is acquired from precise and hard goals rather than generalized ones. This is because people are more inclined to think well on how to achieve harder goals, which will end up leading to greater efficiency and performance. Considering this, he stated further that, certainly, the SDGs are goal oriented and have the capability to reinforce the necessary motivation for governments to achieve them. He sees the SDGs as an agenda that is set forth to attain specific goals, which aligns perfectly with the features of the goal setting theory. These features are goal-specificity, goal-acceptance and goal-difficulty. No doubt both MDGs and SDGs are hard, thought-provoking and realizable. Hence, they are specific, measurable and quantifiable in nature. In his view, the level of acceptability by governments around the world will determine how well and how far reaching the goals are in transforming the lives of people and, in effect, promote the general development of the community. This theory is relevant to the study, in that setting a target to achieve the SDGs has prompted all stakeholders, including the government, school owners, community owners, teachers, students, etc. to put in concerted efforts towards their achievement. This is followed by the rise in students' participation across all kinds of tertiary institutions in SDGs projects.

The Structural Unemployment Theory by Harry Jerome (1934) as cited by Edinyang et al. (2015) posited that the structural unemployment theory captures perfectly the dynamics of graduate employability in Nigeria. In 1934, Harry Jerome wrote a book titled "Mechanization in Industry", where he developed and explained technological unemployment as a concept. Structural unemployment has its foundation in technological unemployment, and its situation in society that makes it difficult for able, willing and ready job seekers to secure employment, because of the skills mismatch between what these eligible job seekers possess and the skills required by employers. Structural unemployment facilitates the spread of multidimensional poverty, which can be resolved by consistent cyclical unemployment – a situation of low aggregate demand. When cyclical unemployment occurs, many of the unemployed become discouraged; diminishing their confidence and making them feel unfulfilled. In the course of waiting to secure a job, their employability skills become obsolete. This theory is related to the study, in that undergraduates' participation in SDGs projects is expected to provide them with the right competencies to get and sustain employment, which will, in turn, increase their self-worth and self-actualization.

Methodology

A descriptive research design was used in this study to describe systematically the role of the Sustainable Development Goals in the improvement of undergraduates' employability in the University of Lagos, Akoka, Lagos state, Nigeria. The population of the study consisted of all undergraduates in the University of Lagos. Akoka, Lagos, Nigeria. The sample for the study consisted of two hundred (200) undergraduate students, comprising both males and females. The sampling technique for the study was a simple random sampling technique, which was employed to randomly choose the students in the faculties of Education, Social Science, Business Administration, Law and Science at the University of Lagos. Forty (40) undergraduates were randomly selected from each faculty. A self-designed structured questionnaire, developed by the researchers, was the instrument used for collecting data for the study. It has two parts (A and B). Part A was based on bio-data of the respondents; while part B had six segments and five items in each segment. It consisted of items which were answered by the respondents to provide answers to the research questions and to test the research hypotheses. The respondents were required to choose options from Strongly Agree, Agree, Disagree and Strongly Disagree, corresponding to their opinions.

The research instrument was validated by the experts in the Department of Arts and Social Sciences Education and Department of Economics, University of Lagos. The reliability of the research instrument was determined using the test-retest reliability method. The research questionnaires were

administered to the respondents by the researchers themselves. Simple percentages and simple charts were used to analyse the data collected. The hypotheses were tested using chi-square.

Where; Chi-square is given as x^2

$$x^2 = \sum \frac{(O_{1j} - E_{1j})^2}{E_{1j}}$$

Where;

$\sum$ = Means Sum of, O_{1j} = Means observed frequency

E_{1j} = Means expected frequency; X^2 = Means Chi-Square

Presentation of Results

Research Question 1: What is the level of awareness of the undergraduates on the SDGs projects?

Table 1: Level of awareness of the undergraduates on the SDGs projects.

Items	Yes (%)	No (%)	Awareness level (%)
I have heard about the SDGs before	138 (69)	62 (31)	69
I know the full meaning of SDGs.	152 (76)	48 (24)	76
I am aware that SDGs have 15 goals.	93 (46.5)	107 (53.5)	53.5
I have heard that the SDGs have 78 targets.	78 (39)	122 (61)	61
I know that the SDGs are global goals.	126 (63)	74 (37)	63
	Total Average		293.5/5 =58.7

Source: Author's computation (2020)

Table 1 shows that the majority of the respondents (69%) agreed that they have heard about the SDGs before and that they know the full meaning of the SDGs (76%), but disagreed that the SDGs have 15 goals and 78 targets. However, the majority (63%) know that the SDGs are global goals. The implication of this is that undergraduates are willing to get involved in SDGs projects, given that they are very much aware about it and they understand its implications on the global economy.

Conclusively, the level of awareness of the undergraduates on the SDGs projects is average (58.7% agreed). The findings here support studies on the awareness of the SDGs conducted by Maryam & Hassan (2018), who found that more than 80% of students have awareness of the SDGs.

Research Question 2: What is the level of the undergraduates' involvement in SDGs projects?

Table 2: Level of the undergraduates' involvement in SDGs projects

Items/Programmes	Yes (%)	No (%)	Level of Involvement (%)
Most undergraduates get involved in WASTE TO WEALTH projects.	104 (52)	96 (48)	52
Few undergraduates attend the various workshops, conferences, seminars in line with sustainable development.	153 (76.5)	47 (23.5)	76.5

Undergraduates hardly participate in the numerous community projects.	127 (63.5)	73 (36.5)	63.5
Most undergraduates prefer to get involved in the school outreaches.	133 (66.5)	67 (33.5)	66.5
The level of undergraduates' participation in charity work is low.	147 (73.5)	53 (26.5)	73.5
	Total Average		332/5 = 66.4

Source: Author's compilation (2020)

The level of the undergraduate involvement in the SDGs projects is presented in Table 2. The result showed that most undergraduates (52%) were involved in the WASTE TO WEALTH project. However, most students (76.5%) agreed that few undergraduates attend the various workshops, conferences and seminars in line with sustainable development, and hardly participate (63.5%) in the numerous community projects such as Impart, Live to Love, I help a soul, etc. in UNILAG. However, most undergraduates (66.5%) prefer to get involved in school outreach such as Teach Sustainable Development Goals (TeachSDGs) and participate less in charity work (73.5%). To support this, University of Gothenburg (2015) asserts that lectures, workshops, moots and seminars about themes on sustainability are organized by the student organizations in the school.

The implication of this is that the workshops and seminars in line with the SDGs are much more student-driven and promote better student participation than the other categories of SDG projects available. Specifically, at the University of Lagos, some of the SDGs programmes students are involved in include: SDG Interim online classes and SDG workshops organized by the Sustainable Development Advocates; Impart by Business Students Association; Exchange programs by AIESEC UNILAG; Walk Against Hunger by Zero Hunger Initiative (a student of Unilag focused Initiative); EDUClean by the Faculty of Education; Waste to Wealth by the University of Lagos; and SDG Engagement by Society of Petroleum Engineers (SPE) Unilag, among others. Students are encouraged to participate in these programs as many departments in UNILAG make it mandatory for the students to attend or make souvenirs or food available at these events.

Conclusively, the level of undergraduates' involvement in SDGs projects is average (66.4%). This assertion is supported by Winbom (2015), who reported that students' participation in sustainable development is increasing among Swedish Universities. Grannon-Leary (2011) discovered that students' efforts to drive real change is affected, as is their participation, if they have a perception that without staff supports, their opinions as students in gatherings and on boards do not matter.

Research Question 3: What are the challenges undergraduates encounter in participating in SDGs projects?

Table 3: Challenges undergraduates encounter in participating in SDGs projects

Items	**Yes (%)**	**No (%)**	**Level of challenges (%)**
Undergraduates find participation in SDGs projects uninteresting.	114 (57)	86 (43)	57
SDGs projects clash with academics/ lecture timetables.	133 (66.5)	67 (33.5)	66.5
Undergraduates lack resources to participate in SDGs projects.	149 (74.5)	51 (25.5)	74.5
Most undergraduates have limited understanding of the SDGs.	160 (80)	40 (20)	80

Getting information about the SDGs projects is a problem to most undergraduates.	149 (74.5)	51(25.5)	74.5
Total Average	352.5/5 =70.5		

Source: Author's compilation (2020)

The challenges undergraduate students encounter in participating in SDGs projects are shown in Table 3. The results indicated that most of the respondents (57%) agreed that they find SDGs projects uninteresting because the time clashes with academic/lecture timetables (67%). Furthermore, most of the respondents (75%) agreed that undergraduates lack resources to participate in SDGs projects and have limited understanding of the SDGs and getting information about the SDGs projects (80%). In support of this, Maryam & Hassan (2018) finds that not discussing topics around the SDGs in Universities could be the reason why students source SDGs-related information primarily on the internet. It also found that students' knowledge about the SDGs, including the number, the launch year and the tenure, was poor. Students' knowledge of the targets and indicators was similarly low. Education plays a key role in the ability of a nation to achieve its sustainable targets, which will necessitate that students and other citizens have knowledge of them (Nnabuo and Asodike, 2017).

This implies that there is still a need to advocate and shed more lights on SDG projects. Knowing about SDGs is not enough, but making students recognize projects in line with the SDGs and making these projects accessible will go a long way towards increasing students' participation in SDGs projects.

Conclusively, the level of challenges undergraduates encounter in participating in SDG projects is high (71%). Likewise, Ejechi (2018) found that many challenges, such as poor publicity of the SDGs programs, lack of funds, high level of corruption/misappropriation of funds, faced Edo State, Nigeria, as regards the SDGs actualization.

Research Question 4: To what extent does undergraduates' participation in SDGs projects affect their academic performance?

Table 4: Undergraduates' participation in SDGs projects and tacademic performance

Items	Yes (%)	No (%)	Degree of effect (%)
Undergraduates' participation in SDGs affect their class attendance.	118 (59)	82 (41)	59
Some undergraduates miss impromptu tests due to their participation in SDGs projects.	115 (57.5)	85 (42.5)	57.7
Undergraduates' participation in SDGs affect their preparation for examinations.	89 (44.5)	111 (55.5)	44.5
The study habits of undergraduates are affected by their participation in SDGs projects.	92 (46)	108 (54)	46
Undergraduates' participation in SDGs affect their CGPA negatively.	70 (35)	130 (65)	35
	Total Average		242.2/5 = 48.44

Source: Author's compilation (2020)

The result (Table 4) shows that most undergraduates (59%) indicated that their participation in SDGs affected their class attendance and caused them to miss impromptu tests (57.7%), but did not affect

their preparation for examinations (55.5%), and also their study habits (54%). However, most respondents (65%) disagreed that undergraduates' participation in SDGs affect their CGPA negatively.

The implication of this is that despite the fact that students encounter clashes in time between their classes and SDGs projects, which at times affects class attendance and missing tests which they have no prior knowledge about, their academic performance is not affected. This finding is in consonance with Ahmad et al. (2015), which showed that students who join in supplementary events outside their normal coursework gain improved examination results, higher standardized test scores and general educational achievements. Furthermore, students acquire relevant skills from participating in club activities in school.

Conclusively, the extent to which undergraduates' participation in SDGs projects affects their academic performance is moderate (48.4%).

Research Question 5: What relationship exists between undergraduates' participation in SDGs projects and their employability?

Table 5: Undergraduates' participation in SDGs projects and their employability

Items	Yes (%)	No (%)	Presence of Relationship (%)
Participation in SDGs projects improves undergraduates' existing skills.	183 (91.5)	17 (8.5)	91.5
Participating in SDGs projects enables undergraduates to acquire transferable skills and a broad-based experience.	180 (90)	20 (10)	90
SDGs projects provide undergraduates with opportunities like internship, part-time work experience, etc.	166 (83)	34 (17)	83
Participation in SDGs projects provides undergraduates with opportunities to practice various classroom theories.	156 (78)	44 (22)	78
Undergraduates meet people and have access to relevant employment information through participation in SDGs projects.	179 (89.5)	21 (10.5)	89.5
	Total Average		432/5 = 86.4

Source: Author's compilation (2020)

Table 5 provides information on the relationship that exists between undergraduates' participation in SDGs projects and their employability. Most respondents (91.5%) agreed that participation in SDGs projects improves undergraduates' existing skills and enables undergraduates to obtain applicable skills and widespread experience. This implies that by participating in SDGs related projects, students sharpen their communication skills, presentation skills, and coordination skills, amongh others. The UK Panel for Education for Sustainable Development (1998) agrees that people are able to make better decisions about themselves and the environment as a result of their exposure to education for sustainable development, which has been proven to provide people with the right knowledge, values, and skills. Moreover, most of the undergraduates (83%) agreed that SDGs projects provide undergraduates with opportunities like placement work experience and opportunities to practice various classroom theories (87%). Many of the respondents (89.5%) also agreed that undergraduates

meet people and have access to relevant employment information through participation in SDGs projects.

Conclusively, the findings indicated that there is a strong relationship (86.4%) between the participation of undergraduates at the University of Lagos in SDGs projects and their future employability. This was supported by findings by AASHE (2017), which showed that the jobs for the future are green, with a propensity to have an increase in jobs around renewable energy and electric vehicles. To this end, it is evident that students are concerned about the state of their current training, making them show keen interest in sustainable skills development and putting conscious effort into concepts and practices related to sustainability while at the university (Drayson, 2015).

Test of Hypotheses

Hypothesis 1

H_o: There is no significant relationship between undergraduates' participation in SDGs projects and their academic performance.

Table 6: Table showing the X^2 Test Result

Observed frequency	**Expected frequency**	**O—E**	**$(O—E)^2$**	**$(O — E/E)^2$**
183	172.8	10.2	104.04	0.602
180	172.8	7.2	51.84	0.300
166	172.8	-6.8	46.24	0.268
156	172.8	-16.8	282.24	1.633
179	172.8	6.2	38.44	0.222
17	27.2	-10.2	104.04	3.825
20	27.2	-7.2	51.84	1.906
34	27.2	6.8	46.24	1.700
44	27.2	16.8	282.24	10.376
21	27.2	-6.2	38.44	1.413
X^2tab = 9.488 Degree of freedom (DF) = 4		**X^2cal =** 22.246 significant level is 0.05		

Source: Author's compilation (2020)

Table 6 shows that the calculated value of X^2 is 22.246, and the tabulated value of X^2 is 9.488 at 4 degree of freedom and 0.05 level of significance. Since, the calculated value of X^2 (22.246) is greater than the tabulated value of X^2 (9.488), the null hypotheses, which states that there is no significant relationship between undergraduates' participation in SDGs projects and their academic performance, is hereby rejected. This implies that participation of undergraduate students in SDGs projects affects their academic performance positively, in agreement with Ahmad et al. (2015).

Hypothesis 2

H_0: There is no significant relationship between undergraduates' participation in SDGs projects and their employability.

Table 7: Table showing the X^2 Test Result

Observed frequency	**Expected frequency**	**O—E**	**(O—E)²**	**(O — E/E)²**
118	96.8	21.2	449.44	4.643
115	96.8	18.2	331.24	3.422
89	96.8	-7.8	60.84	0.629
92	96.8	-4.8	23.04	0.238
70	96.8	-26.8	718.24	7.420
82	103.2	-21.2	449.44	4.355
85	103.2	-18.2	331.24	3.210
111	103.2	7.8	60.84	0.590
108	103.2	4.8	23.04	0.223
130	103.2	26.8	718.24	6.960
X^2tab = 9.488			**X^2cal =** 31.688	
Degree of freedom (DF) = 4		Significant level is 0.05		

Source: Author's compilation (2020)

Table 7 shows that the calculated value of X^2 is 31.688, and the tabulated value of X^2 is 9.488 at 4 degree of freedom at 0.05 level of significance. Since, the calculated value of X^2 (31.688) is greater than the tabulated value of X^2 (9.488), the null hypotheses, which states that there is no significant relationship between undergraduates' participation in SDGs projects and their employability, is hereby rejected. This implies that undergraduate students' participation in SDGs projects provides them with global skills and with the work experience which makes them employable. AQUA (2018) agrees that priority is given to old and new teaching principles, such as creative thinking and learning for change, as well as skills that will prepare students for the future in education for sustainable development.

Discussion of Results

The study found that the level of awareness of the undergraduates in the SDGs projects is average (58.8% agreed). The findings here support studies on the awareness of the SDGs conducted by Maryam & Hassan (2018) who found that more than 80% of the students have awareness of the SDGs. Findings show that there are a couple of SDGs projects at the University of Lagos, such as workshops, seminars and conferences, that are in line with the SDGs. Also, it was found that the SDG charity walks is the project with the least participation of undergraduates. This could be because charity walks are not as popular in UNILAG as the other projects. Also, charity walks involve hiking a significant distance, which could be tiring and demotivating.

It was also found that the level of involvement of undergraduates in SDGs projects is average (64.8%). This assertion agrees with that of Winbom (2015) who reported that students' participation in sustainable development is increasing among Swedish universities. Students are part of the change when making efforts towards the achievement of sustainable development at the university. The students revered by the schools are viewed as active stakeholders to be listened to, which will definitely impact the way students are included in the SDGs drive (Levin, 2000). Weidner (2014) studied the value added of student's involvement in sustainable development and found that students bring energy, new ideas and enthusiasm to the table.

Specifically, at the University of Lagos, some of the SDGs programmes that students are involved in include: SDG Interim online classes and SDG workshops organized by the Sustainable Development Advocates; Impart by Business Students Association ; Exchange programs by AIESEC UNILAG;

Walk Against Hunger by Zero Hunger Initiative (a student of Unilag focused Initiative); EDUClean by the Faculty of Education; Waste to Wealth by the University of Lagos; SDG Engagement by Society of Petroleum Engineers (SPE) Unilag, etc.

Also, it was found that most students (71%) face challenges in participating in SDG projects. This includes SDGs project time clashes with academic/lecture timetables and the lack of resources to participate in SDGs projects. Ejechi (2018) asserted that poor publicity regarding the SDGs and the high level of corruption/misappropriation of funds was revealed to be one of the challenges facing library personnel in Edo state as regards the SDGs actualization. Spira (2012) wrote about the challenges faced by students' organizations working for sustainability. The lack of people, time, funding, knowledge and an efficient internal organization are part of the internal challenges the author proposed.

The study also showed that some undergraduates miss impromptu tests due to their participation in SDGs projects. However, it was found that undergraduates' participation in SDGs doesn't affect their preparation for examinations, their study habits and their CGPA. In support of this, Grubisich (2017) reported that that there was not a significant difference between students who participated in community service and those who did not participate in community service.

It was found that participation in SDGs projects improves undergraduates' existing skills. It enables undergraduates to pick up applicable skills and widespread experience. SDGs projects provide undergraduates with opportunities like internships. In support of this, SDSN Australia/Pacific (2017) stated that education for sustainable development is aimed at reorientating the learning experience of students so that they can develop competencies to face the future and become aware about and responsive to their responsibilities as far as sustainability is concerned.

The two null hypotheses formulated and tested were all rejected as the result revealed that the there is a relationship between undergraduates' participation in SDGs projects and their academic performance. To support this, Ahmad et al. (2015) research results showed that students who join in supplementary events outside their normal coursework gain improved examination results, and higher standardized test scores and general educational achievements. Furthermore, students gain and hone relevant skills from participating in club activities in school.

The second hypothesis showed that respondents agreed that undergraduates' participation in SDGs projects is related to their future employability. This was supported by UNESCO (2017), which stated that the development of key cross-cutting skills is a basic input to efforts to achieve the Sustainable Development Goals (SDGs). Education for sustainable development arms people not only with the information to appreciate the SDGs, but also with the abilities to participate as knowledgeable citizens in the promotion of a more sustainable society. Business in the Community (2010) notices that there is an increase in the number of employers looking for professionals with sustainable skills in all kinds of jobs, as organizations begin to see the need for innovation, social responsibility and sustainability in their business models. AASHE (2017) reports that recent studies showed that the jobs for the future are green, with a propensity to have an increase in jobs around renewable energy and electric vehicles. To this end, it follows that students are concerned about the state of their current training, making them show keen interest in sustainable skills development and putting conscious effort into concepts and practices related to sustainability while at university (Drayson, 2015).

Summary of finding

i. The results of the study revealed that the level of awareness of the undergraduates about the SDGs projects is average, and that the majority (69%) agreed that they have heard about the SDGs

before, know the full meaning of the SDGs (76%) and that SDGs are global goals (63%), but disagreed that the SDGs have 15 goals and 78 targets.

ii. The study also showed that the level of undergraduates' involvement in SDGs projects is average (66.4%), and that most (52%) undergraduates agreed that they get involved in WASTE TO WEALTH projects. Few (76.5%) undergraduates attend the various workshops, conferences and seminars in line with sustainable development. Most (66.5%) undergraduates prefer to get involved in the school outreaches, while the majority of undergraduates hardly participate in the numerous community projects and the charity walk.

iii. The study also showed that the level of challenges undergraduates encounter in participating in SDG projects is high (71%). Most (57%) of the undergraduates agreed that they find participation in SDGs project uninteresting, SDGs project time clashes with academics/lecture timetables (66.5%), undergraduates lack resources to participate in SDGs projects (74.5%), have limited understanding of the SDGs (80%), and getting information about the SDGs projects is a problem for most undergraduates (74.5%).

iv. The study also revealed that the extent to which undergraduates' participation in SDGs projects affects their academic performance is moderate (48.4%). Many (59%) agreed that undergraduates' participation in SDGs affects their class attendance and that some undergraduates miss impromptu tests due to their participation in SDGs projects (57.7%), but disagreed that undergraduates' participation in SDGs affects their preparation for examinations (44.5%), that the study habits of undergraduates is affected by their participation in SDGs projects (54%), and that undergraduates' participation in SDGs affects their CGPA (65%) positively.

v. It can be seen that there is a strong relationship (86.4%) between the participation of undergraduates at the University of Lagos in SDGs projects and their future employability. The majority (91.5%) of undergraduates agreed that participation in SDGs projects: improves undergraduates' existing skills; enables undergraduates to acquire transferable skills and broad-based experience (90%); provides undergraduates with opportunities like internship, part-time work experience, etc. (83%); provides undergraduates with opportunities to practice various classroom theories (78%); and that undergraduates meet people and have access to relevant employment information through participation in SDGs projects (89.5%).

Conclusion

This study found out that the undergraduates are aware of the SDGs and their corresponding projects and participate moderately in them. Despite all the challenges undergraduates face as a result of their participation in SDGs projects, it was found that undergraduates' participation in SDGs doesn't affect their preparation for examinations or their study habits. It was found that participation in SDGs projects affects their academic performance positively, and also their existing skills, enabling undergraduates to acquire applicable skills and widespread experience. Based on these findings, it can be concluded that participation of undergraduates of the University of Lagos in SDGs projects improves their future employability.

Recommendations

Based on the findings of the study, the following recommendations were suggested:

a) The university should set up a special unit that sees to the need to mobilize students towards the realization of the Sustainable Development Goals (SDGs). This will complement the SDG work by the student-led Sustainable Development Advocate (SDA) association and various faculty and departmental associations in the school.

b) Lecturers should support students who actively participate in SDGs projects and encourage others by making them understand the need to work towards the attainment of the SDGs on the planet and their personal development.

c) Students' association should incorporate SDGs projects into their numerous programmes and be at the front of SDGs projects on campuses.

d) Education planners should incorporate sustainable development education into the curriculum just as we have entrepreneurship education.

e) Tertiary institutions should ensure that all students attend conferences and workshops on SDGs by motivating attending students.

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Agropreneurial Value Chain Creation: Small and Medium Scale Industrial Production of Fragrances from Indigenously Cultivated plants

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Abstract

This review explores the impact that small and medium scale industrial production of essential oils (EOs), as a raw material for the production of fragrances and allied products, can have on employment and income generation for Nigerian youths. The statistics available projected the Nigerian population to be at approximately 201 million, of which over 60% are of youthful age. Out of these 120 million youths, 28.6% are underemployed and 34.9% of the youths are unemployed. The implication of this is that more than 44 million productive youths are currently unemployed or underemployed. This review therefore surveyed recent publications and abstracts in Google Scholar and Scopus databases for information on EOs related issues, their production, and entrepreneurial opportunities around them. The demand for EOs is huge and this is met currently through imports. The global demand is valued to be around $10-billion, while Nigeria was reported to have imported $322.72 million worth of essential oils, perfumes, cosmetics, and toiletries in 2017. There are lots of EO yielding plants, like ginger, citrus, garlic, eucalyptus and lemongrass that have been identified by researchers and can be easily cultivated in Nigeria. The quality of most of these plants have been investigated and confirmed. Local farmers and processors can improve their economy by growing and processing EO yielding plants**.** We identified the following gaps that must be addressed to promote agropreneurial value chain creation around EOs: investigation into the most cost effective process for small and medium scale extraction of essential oils from locally available plant materials; mass cultivation of essential oil yielding plants; development of local designs that can be optimized and fabricated into prototype pilot plants; and development of quality assurance/quality control (QC) mechanisms and standard operating procedures (SOPs) for extraction of quality essential oils with desirable physicochemical, functional, and medicinal properties from locally sources plant materials, among others. Therefore**,** designing, fabrication and optimization of small and medium scale distilleries for the extraction of EOs are extant, and indigenous technologies must be promoted to ensure this value chain addition. The planting of the EO plants, the development of their extraction technology, essential oil production and the assurance/control of quality must be leveraged on to meet the local demands for EOs. This will create jobs, value chain development and economic prosperity for the nation.

Keywords: Agropreneurship; Essential Oils; Job Creation; Pilot plant design; Small and Medium Enterprises;

Introduction

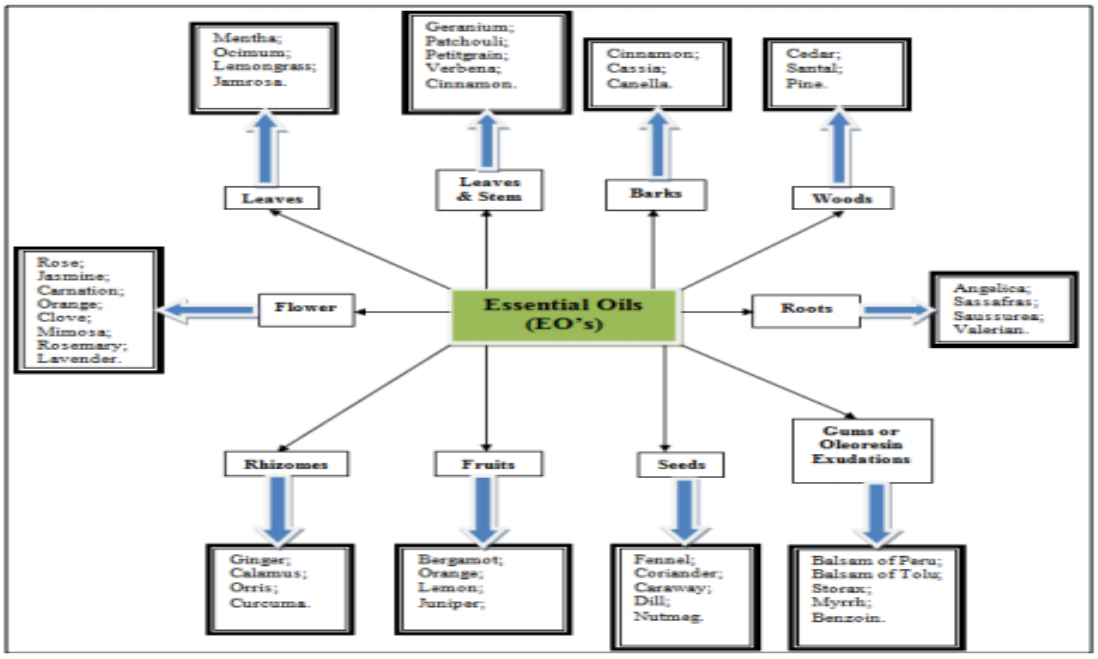
The National Bureau of Statistics (https://nigerianstat.gov.ng/) put the rate of unemployment in Nigeria at 27.1%, the rate of underemployment at 28.6%, and youth unemployment at 34.9% as at the second quarter of 2020. The population of Nigeria was projected in the World Bank database to be at approximately 201 million, of which over 60% are of youthful age. The implication of this is that about 44 million productive youths are currently unemployment/underemployment, which makes the problem worse. This is therefore a problem that must be critically considered and addressed if there

will be stability, security and socioeconomic prosperity in our nation, Nigeria. One of the areas with potential that has currently not been fully explored is the value chain addition in the agricultural sector. A number of agricultural products have been commercially explored for local consumption, but essential oil production has not been fully explored. Nigeria can become a major global player in the essential oils (EOs) industry, which is valued to be around $10-billion globally (Barbieri and Borsotto, 2018). The need to diversify the Nigerian economic base has always been advocated; this has become imperative with the unstable crude oil price in the international market. There is also huge expansion in global EOs' consumer demands and the possibility of establishing small and medium scale enterprises around this product.

There are so many reports of the quality/composition of EO bearing plants in Nigeria. There have been expressions by the agricultural experts that EO yielding plants can be easily cultivated and processed locally in small and medium scale. The Raw Material Research Development Council (RMRDC) of Nigeria has, however, reported that Nigeria has currently not invested significantly in the production of Eos, despite the fact that the basic raw materials, like citrus, guava, garlic, lemon grass, eucalyptus and gardenia, needed for production are locally available or can be easily cultivated. Nigeria is producing only a negligible portion of the EOs used in the country, while a large volume of the EOs in the Nigerian market are imported under HS Code 33, based on industrial applications and product segment. The RMRDC reported that ₦61.1 million and ₦72.6 million worth of orange peels and lemon essential oils were imported into Nigeria in 2016 and 2017, respectively. Other imported EOs include, mentha oil (₦ 222.7 million), mint oil (₦ 22.2 million), citronella oil (₦ 54.7 million) and resinoids (₦ 182.3 million). The uncategorised aqueous distillates imported during the same period were valued at ₦ 566.5 million. The implication of this is that if Nigeria emphasises and promotes investment in essential oil plant farming and EO production, it will be a significant source of income and job creation. The fact that we currently rely on EO importation to meet demand is attributable to the lack of development capacity for the production of raw materials; the processing of the raw material before use; the development of local technology for their extraction; improvement in their packaging and marketing strategies (Yahaya, 2020). Essential oils are very useful in the manufacturing of large varieties of consumer goods in the pharmaceutical industries; food industries; cosmetics, soap and perfume manufacturing industries; among others. The development and growth of the economy of any country is closely related to, and can be measured by, the health of its citizens, their industrial or labour productivity, among others. EOs contribute to healthcare through foods and drugs, which implies that this project has a guaranteed market for its products. There are also great potentials for the export of locally produced, quality EO products to the highly industrialised countries to earn foreign exchange for Nigeria.

According to the United Nations COMTRADE database, Nigeria imported $322.72 million worth of essential oils, perfumes, cosmetics and toiletries in 2017. This is the impetus for studies towards development of commercial scale production of natural products, flavours and fragrances. The EOs industry is considered nationally and internationally as a multimillion dollar value addition opportunities for job creation, agriculture (small and emerging large scale farmers), rural communities' development, and for the commercial and production sectors. Moreover, EOs are essential consumables, which implies they will always be in demand. There are projections that EOs' market demand will be $15 billion by 2026 (Globenewswire, 2019). The understanding of the raw material sources; the principles of their extractions; the standardization of the processes to ensure quality products; development of a standard operating procedure (SOP) to ensure reproducible products; and the development of local industrial capacity at commercial small and medium enterprises (SMEs) level for the production of EO natural products based flavours and fragrances are therefore steps that will bring about great economic values.

Figure 1: Plant Organs containing EOs

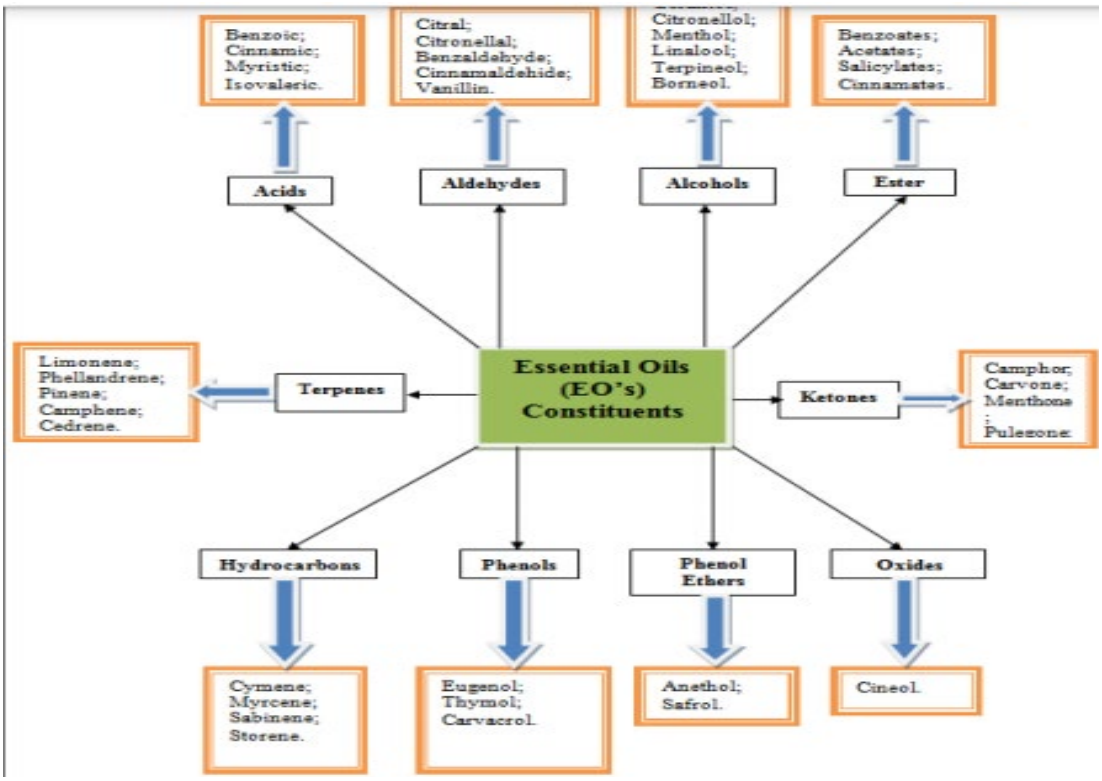


Source: Kumar et al. (2019)

What then are these essential oils? They are the highly concentrated hydrophobic liquids containing volatile aroma found in plants. These oils are made up of compounds of terpene and sesquiterpenes hydrocarbons, and oxygenated organic components. These oils are often found in the tissue of the plant, and referred to as oil glands or glandular hairs in various parts of the plant (Odimegwu *et al*., 2013). Essential oils are often also referred to as ethereal oils or volatile oils with aroma obtained from plants. The oils are obtainable from a wide range of medicinal/herbal plants or other common plants such as orange, peppermint, corn mint, lemon, eucalyptus, garlic and ginger, among others (Tongnuanchan and Benjakul, 2014). The oil may be extracted from different parts of the raw material plant, such as the leaves, stems, fruits, flowers, seeds, roots and other parts of the plant (Figure 1). The value addition potential of essential oils can be measured in the various areas of demand for their applications. They are very important active ingredients in drugs for aromatherapy; in cosmetics and perfumes for aesthetics; and in spices which contribute to fragrance, flavour and preservation of foods. This is because they possess medicinal, antiseptic and antibiotic properties (Sarkic and Stappen, 2018). They have been in use for thousands of years and will continue to be demanded for medicine, aesthetics, aromatherapy, personal beauty care and natural medicine treatments purposes. The driving force for the exploration of essential oils for job creation and value addition is the increasing applications of the EOs and the growing market demand for the products.

The recovery of EOs from plants can be achieved through diverse methods; effleurage, mechanical expression, maceration, steam distillation, water distillation, water and steam distillation and supercritical fluid extraction (Tongnuanchan and Benjakul, 2014). The EO is a complex mixture of widely differing chemical compositions (Figure 2) and boiling points. The chemical compositions are identified by gas chromatography-mass spectroscopy (GC-MS).

Figure 2: Composition of Essential Oils



Source: Kumar et al., (2019)

The Gaps and Opportunities for EO Production in Nigeria

Currently, essential oil production capacity in the Nigeria is yet to be fully tapped. Consequently, the heavy reliance on the importation of high quality brands not only depletes our foreign exchange earnings but deprives the country of achieving her job creation targets. The diminished opportunities of value chain development for the growth and supply of the requisite plants as well as delayed economic empowerment of Nigerian youths in the SMEs that drive the economy, mean that we are unable to set up the production/manufacturing plants to produce essential oils for local use and exports. The essential oils produced locally are yet to meet the industrial needs of the country. The shortfalls in the demand is met by imports, which are affected by volatility in foreign exchange and import duty payments. Large machineries that could be developed to ensure local production are not accessible due to the huge financial requirement for start-up capital and initial operating costs. There are tendencies of adulteration because of high demand, the desire to meet this demand, and the cost of importation. The imported essential oils sold in the market are adulterated to below 70% purity level.

Value chains for essential oil production begin with the cultivation of the plants, where several farmers could benefit. For example, lemon grass cultivation has a harvesting cycle of 3 months, while ginger takes 8 to 10 months, and garlic about 6 months to harvest. This means continuous cultivation and harvesting could happen all through the year, with the opportunity of combining many crops for farming. Other economic and environmental benefits include: waste to wealth conversion of shafts or waste from the production and reduction of waste from orange peelings from the environment, and importantly, hydrosol as an additional product to be harvested. This value chain extends to the job opportunities around the production process, sales of the products and the various areas of the industrial applications of the products.

Therefore, the need for development of affordable, local, indigenous technology for essential oil production that will also address one of the Sustainable Development Goals (SDGs): Cleaner

Production, which is also identified in this review. This will address the problem of importation, create jobs, diversify the Nigerian economy and develop local content. Thus, the advocacy for the concepts of local design, optimization and fabrication of small and medium scale production plants for commercial local essential oil production is key to the improvement of EO production to meet local demand and possibly exportation. This will involve investigation into the most cost effective process for small and medium scale extraction of essential oils from locally available plant materials, development of local designs that can be optimized and fabricated into prototype pilot plants, development of a quality assurance/quality control (QC) mechanism and standard operating procedures (SOPs) for extraction of quality essential oils with desirable physicochemical, functional, and medicinal properties from locally sourced plant materials. It should be noted that the demand for EOs is increasing drastically in fragrance industries (29%); households (16%); food and beverages (35%); and cosmetics, aromatherapy and pharmaceuticals (15%) (Kumar et al., 2019). There have been some published studies that reported the use of spectroscopy in the monitoring of quality of essential oil. Application of Raman spectroscopic to study the quality of essential oils has been documented in literature (Baranska et al., 2005; Strehle et al., 2005). Moreover, Juliani et al., (2006) reported the application of Near-Infra Red spectroscopy in determination of quality of essential oil and in monitoring adulteration. The application of spectroscopy in maintaining quality assurance/quality control is cheaper and more practicable in SMEs in Nigeria.

Locally Available Raw Materials for EOs and their Processing Techniques

The plant materials for production of EOs that are readily available or may be easily cultivated in Nigeria include eucalyptus, lime, lemon grass, rose, spearmint, citronella, citrus, pepper mint, lavender, clove, turmeric, ginger and garlic. These crops can be grown in about 32 states of the federation. A report in one of the Nigerian dailies stated that Kaduna, Nasarawa, Benue, Niger, Gombe, Kano and Kastina states grow the bulk of turmeric, ginger and garlic crops (Hussein, 2020). These raw materials are harvested or procured from the farms; cleaned, dried, weighed and pulverised for further processing. The most profitable plants from which EOs can be extracted for commercial applications include: Basil (*Ocimum basilicum*), Chamomile (*Matricaria chamomilla*), Clove (*Eugenia caryophyllata*), Eucalyptus (*Eucalyptus globulus*), Lavender (*Lavandula angustifolia*), Lemon Oil (*Citruslimon*), Orange Oil, Peppermint (*Mentha piperita*), Rosemary (*Rosmarinus officinalis*) and Sandalwood (*Santalum album*) (Agrifarmingbiz). Most of these aromatic plants can grow very well in the Nigerian soil.

There have been studies on the effects of harvest time (Inan et al., 2011; Walia et al., 2019), drying methods and temperature (Filho, 2016; Njoku et al., 2017), and other raw material handling on the quantity and quality of the EOs produced. Variation in EOs production as a result of drying methods: fresh, oven-drying, air-drying and sun-drying have been reported (Asekun et al., 2007). There are also likely effects of the size reduction (pulverization) on the EOs' production quantity and quality because there are relationships between particle size and rate of reactions. The implications of these is that there must be standardization of the production process and establishment of quality assurance steps, from raw material handling to the final production and product storage/distribution.

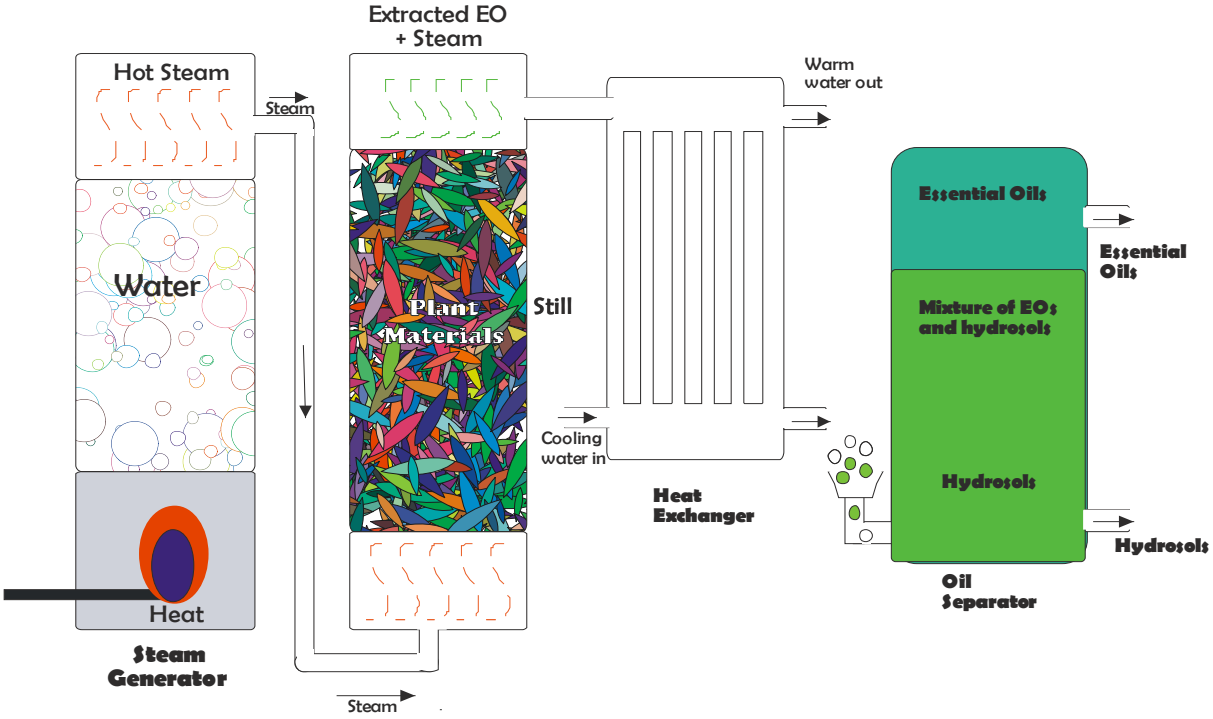
Fabrication of Prototype Pilot Plants and Production Process

The essential oil can be extracted by locally designed and fabricated steam distillation pilot plants (Mu'azu et al., 2019) by means of local technology for designing and fabrication of these pilot plants using stainless steel. The design of the processing plant is made up of four units (Figure 3). The first unit is a boiler for the generation of steam; the heating device for the operation of the boiler may be by gas or any other cost effective means of heat generation. The steam generated is piped into the second unit, which is the reactor still. The pulverized, dried, raw plant materials are stacked in the reactor/extractor and steam distilling may take an average of 4 hours. The plant part(s) of interest are

subjected to the steam, and the oil, being volatile, is extracted along with the steam. The steam/oil mixture is cooled down in the third unit, which is the heat exchanger. There are different types of heat exchanging devices and different modes of operation, such as co-current or counter-current, that may be used. There is need for optimization of the various unit operations and the process variables. Finally, the water is separated from the oil in the fourth unit, the oil separator. The essential oil is collected, and the hydrosol (which is also commercially valuable) is collected. The product quantity and quality are determined by a number of factors, some of which have been previously mentioned. Moreover, oil yield is dependent on a number of factors, such as the plant types used; for example, lemon grass compared with ginger, or the parts of plant materials utilized, such as lemons rind and peel. The EOs are produced in small quantities from bulky plant materials. For instance, if eucalyptus leaves are used, the EO yield is expected to be approximately 80kgs of oil per hectare of the eucalyptus plantation (Wmutenza, 2020).

To avoid quality variations in different production batches, there must be an established standard operating procedure (SOP) which will guide the choice of drying method, distillation process, design and fabrication of the distillery, and the product handling and packaging. In the design and fabrication of the distillery pilot plant, the type of metals used for the units, the operating conditions of the units, and the quality of the water used in the steam generation, are some of the process variables that may affect the product quantity and quality.

Figure 3: Schematic diagram of a prototype steam distillation pilot plant for EO production



Source: Mu'azu et al., 2019

QA/QC Mechanism and Development of SOP

Essential oils contain volatile compounds extractable from plants with heat, and are therefore heat sensitive. The relatively low yield of essential oil extracts from plants and the high commercial value are predisposing factors for the adulteration of some of the existing essential oils in the market. Thus, the quality assurance/control of its production must start with the raw material handling. There must be specifications for the raw materials. This will encourage the farmers to ensure proper handling

during production and harvesting. Moreover, the part of the supply chain that deals with processing of the raw materials before supplying them to the SME must be aware of the quality specification expected for the raw materials that will be supplied, and the SME must test the raw materials to ensure that they meet the required specification for production. The production process must also be optimized and standard operating procedures, such as quantity of raw material load per batch, operating temperature and time, quality of water for steam generation, among others, must be established and measured in QC. The products that have been packaged in appropriate containers for storage and ready for market should also be checked for quality. The common QC parameters and tests on the raw materials and products necessary to ensure product quality are: (i) sensory evaluations such as colour, clarity, and odour; (ii) physicochemical parameters such as density/specific gravity, viscosity, refractive index, optical rotation; and (iii) solubility in dilute alcohol and component identification using GC-MS. All the QA/QC protocols have impacts on the quantity and quality of the final products.

Economic Analysis for Cost effective SME Production of Some EOs

Mu'azu et al (2009) investigated the large scale production of essential oil from leaves of *Eucalyptus citriodora* plant using locally designed and fabricated steam distillation process units. The study investigated and reported the economics of the production process. The study carried out a series of test-runs for process optimization, after which the pilot plant, with installed capacity of 0.864 litres/hour, was fabricated for small scale production of essential oils. The various input costs used in the economic analysis were made at the local market price in 2009. The economic analysis is therefore subject to inflation over the years. The study results reported the total estimated cost of the 0.864 litres/hour capacity pilot plant to be approximately ₦1,453,500, while it annual operating cost (AOC) was projected to be about ₦ 4,026,500. An extra population of these costs with an average annual inflation rate of 9% will put the pilot plant cost at approximately ₦4,088,200 and the AOC at ₦11,325,200 as at the year 2020. The plant was designed to have an installed annual capacity of 840 litres of distilled essential oil, which translated to an annual sales income of ₦ 6,300,000. The resulting profit after tax (PAT) was approximately ₦1,818,800, if the tax rate is 20%. This venture will bring an estimated return on investment (ROI) of 125%, internal rate of return (IRR) of 29.64%, and payback period (PBP) of 0.75 years based on the 2009 projection. With our 2020 projection, based on the assumed annual average inflation rate of 9%, the expected sales income in 2020 was placed at ₦17,719,800 while the PAT was projected to be ₦ 5,115,700, which made our 2020 projected ROI to be 125% and the PBP less than a year. With these economic analyses, the SME production of EOs is a viable agropreneurial venture with short term PBP. A soft loan with and interest rate between 10 – 15% and a tenure of two years can be used to finance the SME venture, barring all other unforeseen events. In another study by the same authors, Mu'azu et al. (2019), they reported another locally designed and fabricated steam distillation pilot plant of 100kg/day capacity for a pilot study on steam extraction of lemon grass EO. The study reported that 0.414 litres of lemon grass essential oil may be produced daily in five batches, with a total production cycle of 1.61 hours per batch. The study documented that 94.3% of the oil was extracted in 60 minutes. The GC-MS analysis of their product revealed that the product was of good quality with the major components of the lemon grass oil being oleic acid (25.69%), neral (19.32%) and citral (15.38%) (Mu'azu et al., 2019). It may be inferred and concluded from these studies and our projections that the process of extracting good quality EOs from local plants can be highly profitable. This study opined that the SME production of EOs is an attractive value addition agropreneurial venture which may be pursued by any potential local investor for job creation.

Moreover, the efficient use of the agricultural wastes and by-products from the production process is another value addition. The transformation of the waste materials generated into other streams of value-added products, is considered as pivotal for an effective bioeconomy strategy for rural development. For instance, citrus includes oranges, lemons, grapefruit and mandarins, and oranges are

one of the most abundant crops produced in the world. Citrus fruits are currently being processed in the canning industry to produce juice, to extract flavonoids and to extract essential oils. They, however, also generate a large volume of agricultural wastes. The effective management of the wastes from citrus processing represents the major challenge in the citrus agropreneurial venture. However, this waste management also currently offers potentially unexploited resources for sustainable rural development (Raimondo et al., 2018). There are a number of authors that have reported studies on the possibility of financially viable ventures for the production of ethanol from citrus biomass wastes (Zhou et al., 2007; Marin, 2007; Lohrasbi et al., 2010). Another cheap source of raw materials or by-products of the process that has been reported to be useful is limonene. It can be recovered as a by-product in high yield. Limonene is useful as an environmentally friendly solvent in cleaning agents; is useful as a degreaser, as a release agent in stains; as part washers, and in dip baths. Thus, waste management as it applies to citrus wastes, can be applied to any other wastes that are obtainable after the extraction of EOs from locally cultivated plants, which can be converted to other valuable and eco-friendly products.

Lessons From Other Countries

In the 1980s, a community in the Dominican Republic, Tobago-East, were amongst the most under-developed on the island, with little to no employment opportunities available. The community turned this problem around through the cultivation of bay leaf trees and the harvesting and processing of the bay leaves for essential oils. There is a demand for this product, which is used in many downstream products in the market, such as cosmetics, culinary products, medicinal products, and insect repellents. At that time, Dominica was the only country in the Caribbean that was producing bay leaf oil for export. The bay oil was exported to buyers in the United States. This was reported to boost the economy of the country (CIDI04066T01).

A study was conducted by Gui et al., (2016) into the production of essential oil from Lavender in Turkey. Lavender is a shrub that is grown primarily because it inflorescence. It is perennial, and the nature of its inflorescence allows for the production of high yield, quality essential oil. The study investigated the production of raw materials and other inputs, the production costs, and how profitable the venture of lavender farming and EO production could be in the Isparta Province of Turkey, which is a significant portion of the country where lavender production is ongoing. The study obtained data through personal interview surveys of 38 farmers and reported that the average yield of lavender EO in each farm was estimated to be 1636.7kg per hectare. The production cost of 1kg of lavender was calculated to be $0.95, while the average sale income was $1.57 per kg. The lavender farming produced a gross payment volume (GPV) of $2,573 per hectare for ever hectare cultivated by these farmers, and a gross profit and net profit of $1,695 and $1,018 respectively were recorded. Lavender farming was thus reported to be a profitable activity in the region. This region of Turkey thus derived job creation and agropreneurial value chain addition from Lavender production, for job creation and as a source of income for all members of the supply value chain. Farmers were therefore organized in order to ensure and maintain production sustainability over years; there were suggestions made to sustain profitability, and mechanisms of resolving farmers' problems were put in place. Some of the recommendations of the study that could also boost EOs' production in Nigeria include: promotions and campaigns for EOs raw material farming by the Agriculture Ministry; ensuring EO related research efforts by research institutions; and governmental, infrastructural and financial supports for EOs' production, leading to improved profitability and job creation. Moreover, establishing producers' unions, cooperative societies and other business support organizations may provide positive effects in farms' costs; improve profitability indicators; and enhance the supply chain management from input procurement to product distribution, marketing and sales. Finally, we can learn that the fact that EOs are medicinal in nature implies that supporting these medical and aromatic plants will help protect the health of the nation, improve biodiversity, and ultimately lead to agropreneurial value chain creation.

Conclusion

The agropreneurial value chain creation opportunities are enormous in respect of the production of essential oils from locally cultivated plants and through small and medium scale industrial enterprises. This is attributable to the multifaceted usefulness of EO products as fragrances or flavours, the increasing global demands for the products, the consumable nature of the products, and available capacity for developing local technology for their large-volume and quality production. The opportunities include employments in raw material cultivation and processing, and wealth and job creation in the production process, marketing and distribution, including the value addition around the applications in food, soaps, drugs and cosmetic products. Beside all of these, it is also expected that the program of reforestation would result in the beautification and environmental enhancement of our communities. This review advocates investment in local production of EOs because of the job creation opportunities for Nigerian youths.

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Innovation and youth employment in sub-Saharan Africa: Does educational quality matter?

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Abstract

The advent of the COVID-19 pandemic has intensified calls for the application of more innovative and technology-based methods of economic activities among many sub-Saharan African (SSA) countries. However, deep segmentations in labour markets for the SSA countries may render innovation based post-Covid production patterns and labour markets more hostile to youth employment access and sustainability. In this study, the effects of innovation on youth employment growth are examined using data for 27 SSA countries, with the role of education considered as intermediary and interactive. Using data analysis and the Generalized Least Squares (GLS) estimation technique, the study found that modernization and technology adoption with innovative systems tends to affect youth employment disproportionately and negatively in the SSA region. In particular, the study showed that the systems of education and innovation (on their own) limit youth employment, although innovation adopted by government is shown to positively boost youth employment. There is also evidence that the relationship between innovation and youth employment is more non-linear, with countries that possess better educational quality and access achieving better influences of innovation on youth employment. The study therefore concludes that for innovation to be relevant to youth employment growth among SSA countries, it must be deepened by government participation and adoption. Moreover, educational development and innovation must go hand in hand in order to ensure effective long-term solutions to the youth unemployment challenges among SSA countries.

Keywords: Youth employment rate, innovation enhancers, educational quality, SSA

JEL Classification: I23, J7, J23, J24, O31

Introduction

A critical social dimension to employment challenges among sub-Saharan African (SSA) countries is the rising informalities in employment and high youth unemployment rates. The employment problem in this region has diverse causes and implications, including structural, demographic, and institutional directions. For instance, deep segmentation in labour markets in SSA countries has implications for demographic distribution of employment (Fields, 2011) and the patterns of policy influences (Adegboye, 2019). In particular, segmentation in the labour markets in SSA economies has been skewed against the younger labour market participants, who have found it more difficult to attain improved employment status or assess required skills (Filmer & Fox, 2014; Fox & Upaasna, 2018; Datta et al, 2018). For instance, the youth employment rate was 41.87% in 2018 compared to a rate of 62.7% for the entire labour market. From the structural perspective, the impact of macroeconomic shocks on youth employment have been found to be asymmetric, with younger individuals disproportionately and negatively affected during periods of economic crisis (Garcia & Fares, 2008; ILO, 2015; UNDESA, 2018). Thus, the effects of the COVID-19 pandemic on SSA economies may have further diminished the fledgling conditions of youth employment among SSA countries (ILO, 2020).

In the face of the current economic crisis among SSA countries occasioned by the COVID-19 pandemic, there have been increased concerns regarding the need for more innovative ways of thinking about production and manufacturing. This has often involved increased application of more technology-based methods of economic activities. There are, however, hidden challenges with these calls. Though many of such creative responses are driven by youth worldwide, there are essential concerns that modernizing production and other service processes could have other negative outcomes for youths, especially in the SSA region where skills are low among the younger generations (ILO, 2020). In the same vein, both physical and human capital stock in the region has consistently been under-modernised, further weakening innovative capacity among SSA countries (Coward et al., 2014). Employment yields from weak human and physical capital outcomes will likely be fragile and unsustainable, especially for the youths (Adegboye, 2019). Thus, employment challenges for the youths in SSA economies embodies two dimensions: difficulty in school-to-work transition (largely due to educational system failure), and inadequate job opportunities for young people to transition into (ILO, 2020; Fox et al., 2020).

Given that economic progress is largely connected with innovation (Muro et al., 2019), stimulating growth among economies in the aftermath of the pandemic requires much innovative capacities. However, innovation in the Schumpeterian perspective relates to creative destruction, which suggest that new ways of production evolve rendering old ones obsolete. Thus, innovation and its enhancers may also ensure better cushioning of macroeconomic shocks on youth employment for many economies. Moreover, the kind of shifts in employment that innovation brings may likely be explained by the level of educational development in an economy. Essentially, technological advances can both mitigate and exacerbate the employment challenges faced by young people in developing economies on the basis of how well-educated the population is. Thus, equipping young people with requisite skills required in order to cope with the different transitions they will experience in the labour markets (e.g. from school to work and between different jobs) is essential, especially for low-income countries (ILO, 2019). An important tool for achieving this goal is quality education

In this study, the effect of innovation on youth employment is examined by considering the intermediary role of education among SSA countries. We acknowledge the peculiarities of SSA labour markets with deep segmentations that align against youth employment, and ask whether youth employment could be enhanced with improvements in educational access and quality. We seek to determine how the work ecosystem can be better repositioned to aid sustainability and improvements in youth employment access in the face of the new dimensions being thrown open in seeking better ways of adjusting to COVID-19. In this study, it is argued that innovation in SSA can only benefit youths when the educational system is taken into cognizance among the economies. It is important to understand the educational systems of SSA countries in terms of whether they constitute effective distortions that impede how innovations improve youth labour market participation.

Education, Employment Environment and Innovation Among Youths in SSA Countries

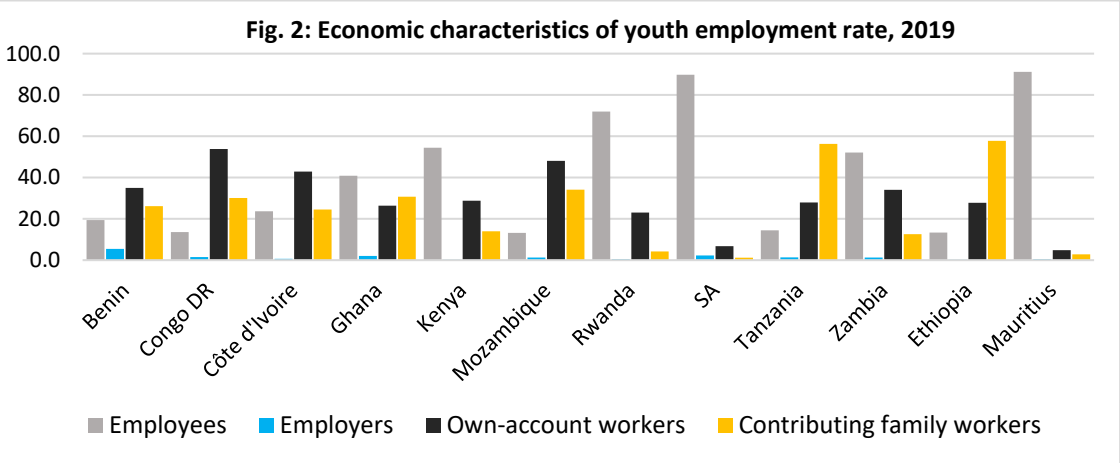
For a group of selected SSA countries, Table 1 shows employment rates for different demographic groups as well as the relative youth employment rates (the difference between adult and youth employment rates). For most of the countries, the relative youth employment rates increased between the periods, essentially due to the sharp increase in turnover from educational institutions since the 1990s among SSA countries (Fox et al., 2020). “As more youths graduate from these institutions, the probability to return to agricultural employment falls, reducing the employment rate of that age group and leaving the persons more prone to general unemployment” (Adegboye, 2020). Seven of the 10 countries (including the regional average) had negative changes and had net increases in the adult employment rate. The study by ILO (2020) shows that there are roughly two youths unemployed for every adult that is unemployed among SSA countries.

Table 1: Age-based Employment Characteristics in Selected SSA Countries

Country	Total employment rate		Youth employment rate		Adult employment rate		Relative youth employment rate	
	2007	Change 2007-18	2007	Change 2007-18	2007	Change 2007-18	2007	Change 2007-18
Côte d'Ivoire	80.0	-1.0	73.6	-1.8	83.7	0.3	10.1	2.1
Ethiopia	67.5	-0.1	39.1	-3.6	81.9	-0.1	42.8	3.5
Ghana	59.4	2.1	32.5	-0.6	75.9	0.0	43.4	0.6
Kenya	72.2	4.9	53.0	-0.9	89.8	1.9	36.8	2.8
Malawi	52.9	0.7	33.3	0.7	58.2	-0.2	24.9	-0.9
Mauritius	52.9	-0.5	32.0	0.8	61.1	1.4	29.1	0.6
Nigeria	84.0	0.7	72.8	-1.3	92.5	-0.6	19.7	0.7
Rwanda	69.3	0.4	58.3	-0.9	75.8	0.3	17.5	1.2
Senegal	40.2	0.0	16.2	-3.7	52.7	-3.7	36.5	0.0
South Africa	69.0	5.5	53.4	1.3	79.3	7.8	25.9	6.5
Uganda	80.0	-1.0	73.6	-1.8	83.7	0.3	10.1	2.1
SSA average	64.8	1.0	47.6	-0.3	74.2	0.9	26.6	0.6

Source: Author's computation (2020)

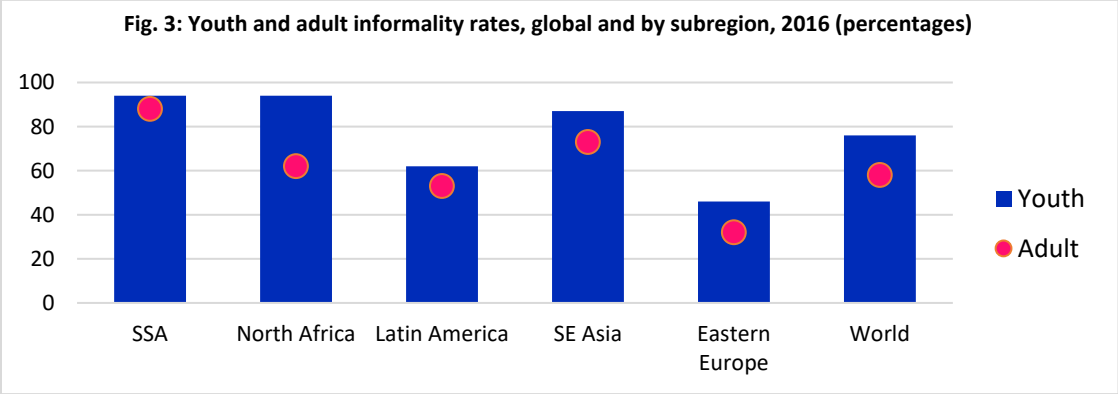
The economic nature of employment is an important consideration for gauging the system of labour market participation among the youth. According to Campbell (2013), the economic nature of employment tends to explain the benefit of overall economic performance for employment conditions. Moreover, "employment status is closely associated with working conditions, providing an indication of job characteristics such as contract type, income security, access to employment benefits and legal and social protection" (ILO, 2020). Figure 2 shows the economic nature of youth employment for selected countries in the SSA region. Employees, own-account workers, and contributing family members dominated the employment system for most of the countries. Own-account workers are essentially self-employed individuals with poor earnings and low productivity (Campbell, 2013). It should also be noted that much of the employees category in the countries are made up of low-paying jobs with highly informal work arrangements. It is also seen that employers (or entrepreneurs) had the smallest share in total employment for each of the countries. Considering the critical role entrepreneurship as a pivot for increasing structural changes and raising income levels for youths, the economic distribution of youth employment in SSA has tended to exhibit vicious characteristics. In market structures where the informal sector is prevalent, own-account workers (or self-employment) can thrive since excess labour can be easily absorbed (Adegboye et al., 2019).



Source: ILO (2020)

In Figure 3, the level of informality (or vulnerability) of employment types for both youths and adults is shown. Informal employments are highly predisposed to vulnerability and precariousness (ILO,

2020). The chart shows that the SSA region had more vulnerable employment than any other region, with youth employment vulnerability reaching 94% in 2016. Indeed, youth employment vulnerability has been higher than 80% since 1991 and the situation does not appear to be slowing down over the period (Adegboye, 2019; ILO, 2020). This is a demonstration of the fundamental issue in employment for the SSA region presented by Fields (2011) and Campbell (2013) that though employment appears to be high in the region, the types of jobs being created are not economically sustainable. High vulnerability in employment is a natural consequence of the excess unproductive employment that pervades SSA economies.

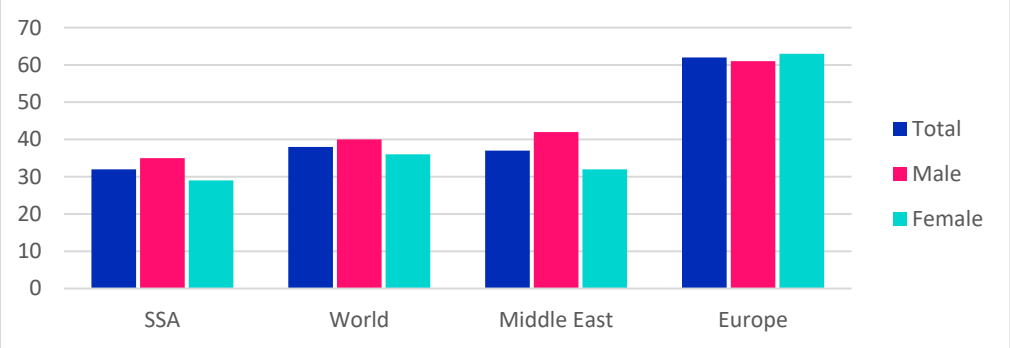


Source: ILO (2020)

According to Elder and Kring (2016), constraints imposed by a limited formal sector and generally inadequate systems of social protection ensure that informality becomes a necessity in many low-income countries. As shown in Figure 3, informality is predominant among the employed youth all over the world, but especially in SSA countries. For this region, informality in employment by youths reached 94% in 2018, while informality in adult employment was lower at 88%. Flaws in the educational environment as well as institutional bottlenecks contribute to their inability to achieve smooth transition from informal to formal work arrangements (Elder & Kring, 2016).

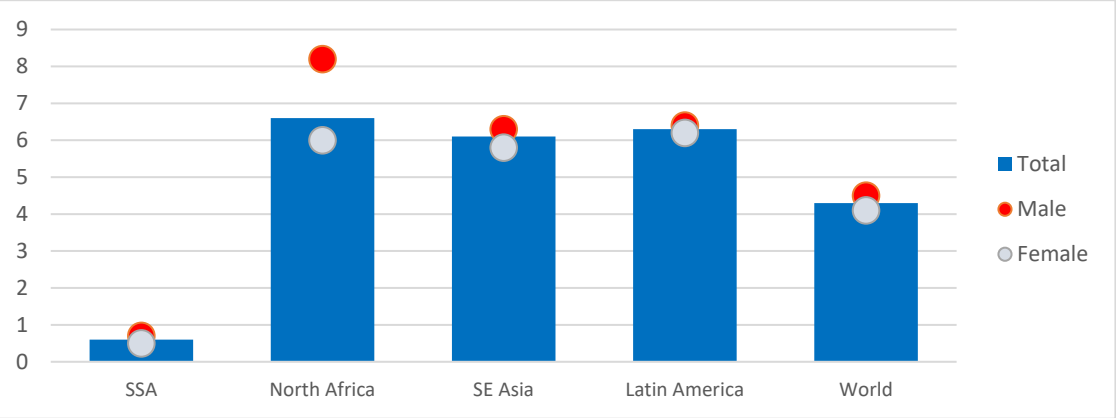
In terms of education among youths in SSA countries, Figure 4a shows that only 33% of the population of young people are in education in the SSA region. This shows that education among young individuals in the SSA region is quite low, which further pushes the region into lesser ability to ensure age transitions into productive and formal employment. Figure 4b also shows the shares of youths enrolled in vocational education. Interestingly, a very low proportion of youths in SSA are involved in vocational training activities, which is appalling and suggests that skills building in the region is essentially low. Combined with the low academic participation of the youth, it is seen that most youths in SSA are not adequately trained and prepared for participation in modern and more formal labour market activities.

Fig. 4a: Share of youth population in education (percentages)



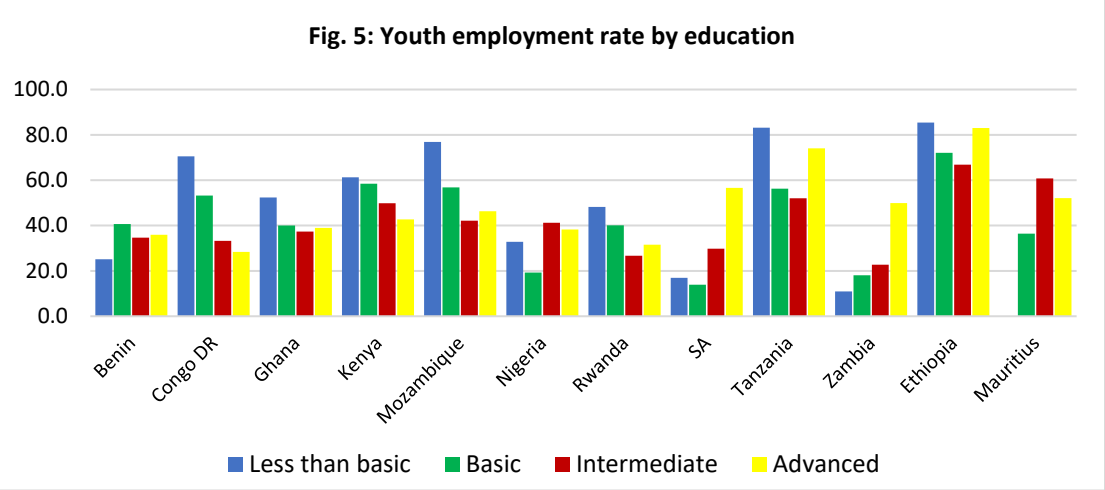
Source: ILO (2020)

Fig. 4b: Share of 15–24-year-olds enrolled in vocational



Source: ILO (2020)

The educational dimensions of the employed youths in the selected SSA countries are presented in Figure 7. The data are provided on the highest level of education completed by the youth employed. For most of the countries, youth in employment possess either less than basic education or just basic education. For South Africa and Ethiopia, many of the youth in employment possess advanced education. The high rate of employed youths with lower educational qualification poses a danger for the types of jobs the youth can be involved in. There is therefore the need to improve educational access for the youth.



Source: ILO (2020)

The patterns of innovation and its enhancers for some selected SSA countries are also presented in Table 2. The measures are calibrated from 1 to 7, with 7 being the best indicator for a country. Innovation capacity among the countries is generally low (almost all countries had scores of less than 3.5 of 7.0) although large gains for most of the countries have led to impressive scores in 2018. On average, however, the scores generally show low innovation capacity for firms in the countries of SSA. R&D spending and university-industry collaboration are the weakest areas of innovation among the economies. Essentially, the Table shows that innovation factors are not impressive for SSA countries and little is being done to change the patterns among the countries.

Table 2: Innovation characteristics in selected SSA countries

Country	innovation capacity		Quality of science research institutions		R&D spending		University-industry collaboration		Government adoption of advanced technology	
	2007	*Change 2007-18*	*2007*	*Change 2007-18*	*2007*	*Change 2007-17*	*2007*	*Change 2007-17*	*2007*	*Change 2007-17*
Ethiopia	2.33	1.37	3.44	0.36	2.15	1.65	2.13	1.67	3.09	0.71
Ghana	2.17	1.93	3.81	-0.11	2.10	1.30	2.44	0.86	2.94	0.66
Kenya	3.18	1.42	4.45	-0.25	3.69	0.41	3.22	1.28	3.82	0.18
Malawi	2.20	1.30	3.50	-0.50	2.50	0.30	3.07	-0.37	3.50	-0.60
Mauritius	2.94	1.36	3.73	-0.13	3.02	0.38	2.90	0.30	3.98	-0.58
Nigeria	3.11	0.89	3.69	-0.99	3.31	-0.31	3.05	-0.35	4.27	-1.37
Rwanda	2.34	1.96	3.12	0.58	2.96	0.34	3.59	-0.29	4.42	-0.02
Senegal	2.79	1.61	3.70	0.60	3.00	0.50	2.70	0.90	3.74	-0.34
South Africa	3.76	0.24	4.72	0.18	4.24	-0.04	4.28	0.12	4.16	-1.26
Uganda	2.83	1.07	4.25	-0.85	3.09	0.01	3.12	0.68	4.04	-0.54

Source: Author's computation (2020)

Modernisation arising from innovations has also had certain patterns of influences on employment characteristics among SSA countries. A major aspect in this regard is the possible job losses that could ensue from automation of jobs, especially in the aftermath of the COVID-19 work environment. A study by ILO (2020) showed that there are clear differences between young people and older people in OECD and low- and middle-income countries in terms of the degree of ease of job automation. The study showed that youths appear to be more susceptible to the risks of automation and the attendant employment challenges in modernized economic life. Moreover, risks of automation for occupations in OECD countries (more educationally advanced economies) were shown to be lower than the risks for low- and middle-income countries (with less educational development). Thus, the level of education in an economy appears to matter in terms of susceptibility to the risks of automation in the system. In the same vein, increased educational attainment is important for exiting the risks of automation that predispose workers to unemployment. This is because higher education is shown to provide "entry to less automatable jobs, while vocational training is associated with more automatable jobs" (ILO, 2020), suggesting that educational attainment provides an effective buffer in avoiding job losses when newer and innovative activities come into play in a country. This is a major aspect where our study provides empirical focus for the SSA sub-region in terms of considering how educational quality and attainment influence the role of innovation in boosting youth employment.

From a different perspective – which gives more credence to the relevance of vocational training for finding entry-level jobs among young people, Biavaschi et al. (2012) found that vocational training based on the dual-apprenticeship system particularly facilitates young people's entry into the labour market in more advanced economies. Moreover, given that different countries demonstrate different approaches to vocational training (especially between advanced economies and developing economies), the role of vocational training may be more impactful in the longer term for less developed countries. In the same vein, vocational training when appropriately deployed in different sectors can also exert strong effects on overall youth employment in developing countries.

Brief Literature Review

Labour Market institutions, Innovation and Employment

Though some empirical studies have found evidence of innovation improving employment, Kleinknecht et al. (2014) and Suseno et al. (2018) have demonstrated that the impacts of innovation on employment essentially depend on the prevailing industrial, social and educational patterns in an economy. The effects of innovation on employment are diverse in terms of channels and quantum. In particular, innovation that relates to pattern of production and service rendering matters for

employment. This therefore gives credence to the findings that production sectors critically influence the way innovation relates to employment. For instance, Coad and Rao (2011) used data for patents and firms' R&D expenditure to examine the effects of innovation on employment growth in the United States, and confirmed that innovation was only significantly associated with employment growth in fast-growing high-tech firms. For SSA countries where low-tech, low productivity sectors are prevalent (Lisi & Malo, 2017), the results suggest that innovation may not effectively influence employment rates. As shown in the discussion of data, youths are predominantly found in low productivity sectors, and thus innovation may not necessarily promote overall employment for this category among SSA countries.

Cirera & Sabetti (2019) examined the effects of innovation on employment in developing countries at the firm level using data from enterprise surveys, and found that process innovation actually limits employment for the countries. On the other hand, Okumu, Bbaale and Guloba (2019) examined relationship between innovation and employment growth using data from manufacturing firms for a group of African countries, obtained from the World Bank Enterprise Survey dataset. The study found that both product and process innovation types promoted employment, although the effects were tempered by the size of manufacturing firm considered. Also, at the firm level, Bogliacino et al. (2012) examined the effect of R&D expenditure on employment for European firms. They found that firms with larger R&D expenditure tended to experience higher employment growth. Similarly, Fukao et al. (2017) found in their study for Japanese firms that R&D expenditure enhanced overall employment patterns among the firms.

Innovation effects can also be considered in terms of assessing the impacts of technology on jobs. A significant aspect of this literature considers how employment prospects respond to shifts in jobs when technology and modernization increase the risk occasioned by automation of production and other service processes. For example, Nedelkoska and Quintini (2018) find that among OECD countries, the risk of automation is has more far reaching effects on youth than on other workers. This is because "young women and men are more likely to be in elementary occupations, which have the highest probability of automation". Muro et al. (2019) also showed that in the US, younger workers make up the bulk of employment in the services sector where automation is more easily employable. For the sector where youths are predominantly employed, Muro et al. (2019) found that close to half of young workers are in "occupational groups deemed to be highly automatable, compared with 34 percent of adult workers". Similarly, Atkinson (2018) finds that the risks of job displacement relating to technological changes are higher for younger workers and suggested that any shock that increases the wave of technological advances in production would lessen the role of lower-skilled employment in the lower market. Thus, the new systems offered by the post COVID-19 system may disproportionately affect young workers and job seekers. For South Korea, Shim et al. (2018) found that the elasticity of substitution between capital and labour inputs is greater for younger workers, because the youths possess less firm-specific human capital and are less costly to dismiss.

Given that innovation (especially technology-based nation-wide innovation systems) is important for employment, it is surprising that only few studies have examined how education and human capital development influence the effects of innovation on employment, especially in SSA countries. Indeed, not many studies have examined innovation and employment in SSA countries, apart from Cirera and Sabetti (2019) and Okumu et al. (2019). The importance of education for innovation is well established in theoretical underpinnings, including the endogenous growth models, such as Romer (1990). In this set of models, human capital formation (through education) is factor-augmenting in the production of knowledge, and knowledge (which is non-rival) creates positive externalities that fuel growth and overall economic conditions. From these conditions, it is seen that quality education, which creates human capital, can improve overall economic performance – including employment (Biasi, et al.,

2020). However, empirical studies on the role of education as a tempering factor for the relationship between innovation and employment have received very little attention in literature.

In considering the nexus between education and innovation, Cornelissen and Dustmann (2019) employed differences in school-entry rules across regions in England to show that schooling improves certain skills that lead to innovative capacities in later life. Education may also provide effective templates for either stimulating or promoting innovation. For instance, Asongu and Nwachukwu (2018) found that there are significant educational quality thresholds at which the technology diffusion becomes accelerated for a sample of 49 SSA countries. Also, Wei et al. (2019) found that the type of education attained has significant effect on innovation outcomes, with higher education having more positive effects. In the same vein, Xiao and Mao (2020) employed the spatial Durbin model to demonstrate that attainment of postgraduate education improves technological innovation in China. Suseno et al. (2018) also found significant influences of human capital development on national innovation performance among countries. Mir-Babayev (2015), however, found no evidence of the relationship between attaining more educational degrees and innovation in the firms where they are employed in Azerbaijan, but that higher education tends to improve innovative capacities of firms' employees. Using a rotating panel data for a group of Danish firms, Junge, Severgnini & Sørensen (2012) were able to link different types of innovations with distinct educational types.

However, apart from the ILO (2020) studies on technology and youth employment, very little research has been conducted on how educational processes affect the role of innovation on employment, especially for Africa economies. The ILO (2020) study showed that higher education provides entry to less automatable jobs, while vocational training is associated with more automatable jobs. Given that most of the studies on innovation and employment used enterprise or firm-level data, it is difficult to capture the role of education in the relationship. This is a major contribution of this study where the linkage between education, innovation and youth employment is considered at the macro-level. In terms of youth employment, most studies focus on the technical feasibility of new automation technologies, which have little economic feasibility, "particularly in low- and middle-income countries" (Kucera, 2017). There is the need to focus on innovation and educational patterns that suit the African system. Finally, many studies on employment have not focused on the youth. Given the high level of segmentation in many SSA labour markets, it would be important to focus on youths, in terms of relating the outcomes of policy and production changes that may occur following the COVID-19 effects on production and employment.

The Model and Methodology

Model Specification

The model specified in this study draws on the framework formulated by Suseno at al. (2018) and Kucera (2017), where the country levels fixed-effects panel regressions of the educational and innovation outcomes on the employment rates are demonstrated. In the first estimation, the effects of educational quality (performance) and innovation on youth employment is specified, where all the explanatory variables are assumed exogenous (following Adegboye, 2019). Indeed, most existing empirical studies on the effects of education on employment do not suggest a significant feedback effect of employment rate on the innovation and educational systems (Asiedu, 2014), especially for a group of developing economies. This is also the case given that only a subsection of employment is considered among the countries. The model is specified as:

$$yemplr_{it} = \beta_0 + \beta_1 edu_{it} + \beta_2 innov_{it} + \beta' X_{it} + u_i + \varepsilon_{it} \quad (1)$$

where *yemplr* is the natural logarithm of the youth employment rate (i.e. youth employed to total employment levels) in country *i* at year *t*, *innov* is the measure of innovation in a country, u_i represents

the unobservable country-specific fixed effects that are time invariant, X represents a vector of other important factors that either directly affect youth employment or improve the effects of either education or innovation on youth employment, and ε_{it} denotes the remainder disturbance which are independently and identically distributed.

In the model, it is argued that educational quality affects youth employment as much as innovation does. It should be noted that educational quality is considered as a policy variable in the role of innovation on youth employment, as in Asongu and Nwachukwu (2018). Four educational quality variables are used in the model, including secondary school enrolment rate (*ser*), pupil to teacher ratio (*ptr*), average school life expectancy (*slxp*), and years of compulsory schooling in a country (*compedu*). Secondary school enrolment is used, given that it is the main education segment where individuals usually tend to stop their education in order to pursue other means of livelihood (Hanushek, 2013). Moreover, data on the tertiary education enrolment rate is inadequate for countries in the region, and secondary enrolment rate shows the level of educational access in a country (Glewwe & Muralidhara, 2016). The years of compulsory schooling in a country also shows the level of access and policy direction of the authorities in educating the society. Pupil to teacher ratio is a strong indicator of educational quality since it captures evaluation learning-related outcomes (Asiedu, 2014). School life expectancy is a measure of efficiency in the school and training system in the economy (Gyimah-Brempong & Asiedu, 2008; Glewwe & Muralidharan, 2016). The education variables are expected to exert positive effects on employment.

Innovation is captured by the level of innovation environment in a country (*innovation*). Moreover, there are innovation enhancers according to WEF (2020) which tend to lead to the pattern of innovation system in a country. These enhancers are also included in the model as contributing to innovation in a country. These include the extent of companies' spending on R&D (*rdspend*), quality of scientific research institutions in a country (*sciencersh_q*), the extent to which the industries and universities collaborate on research and development (*uni-ind*), and level of government adoption of advanced technology (*govt_tech*). Essentially, each of the innovation enhancers is expected to act like innovation effect on employment.

There is a clear indication from literature that education may interact with innovation and produce effects on employment that may not be similar to those of the direct effects (Biasi, Demingi & Moser, 2020; ILO, 2020). Thus, a non-linear version of Equation (1) with a model with interaction between education and innovation is also estimated to consider the pattern of employment responses to varying educational outcomes and shocks or unilateral shifts. A second model is therefore specified to capture the non-linear impact of innovation on youth employment (on the basis of different educational performance among the countries). Again, a country-fixed effect model is specified as:

$$yemplr_{it} = \beta_0 + \beta_1 edu_{it} + \beta_1 innov_{it} + \beta_2 edu*innov_{it} + \beta' X_{it} + u_i + \varepsilon_{it} \qquad (2)$$

In the model, the interaction between education and innovation (captured by *edu*innov*) is expected to produce a better effect of innovation on youth employment. Note that Equations (1) and (2) are estimated using the Generalized Least Squares (GLS) allowing for fixed effects (i.e., country-specific intercepts). This method is appropriate given that no reverse causality is noted between education and youth employment. The GLS estimation is performed by weighting the estimates and correcting for both period heteroskedasticity and general correlation of observations within a given cross-section.

Data and Sources

Annual data for 27 SSA countries that covers the period 2007 to 2018 is used in the study. The data on youth employment is obtained from the *ILO Key Indicators of Labour Market* database. Innovation and its enhancers are considered on a nationwide basis and the data is obtained from the World Economic Forum's (WEF) Global Competitiveness Index (GCI). The indicators are calibrated using

values between 1 and 7, with 7 being the best indicator for a country. Data on educational quality are obtained from the UNESCO Ebsco data on Education. Data on macroeconomic environment, quality of infrastructures, quality of higher education foreign ownership, and FDI technology transfer were also all obtained from the GCI database. Data on labour market flexibility is obtained from the Fraser Institute's Economic Freedom of the World (EFW) database.

Empirical Results

Descriptive Statistics

Table 3: Descriptive statistics

Mean	Mean	Std. Dev.	Max.	Min.
youth employment rate	45.49	17.58	77.60	12.30
innovation capacity	2.94	0.60	5.42	1.78
r&d spending	2.87	0.45	4.24	1.65
uni-ind_collaboration	3.10	0.57	4.62	1.60
quality of science rsch inst	3.37	0.56	4.90	1.74
govt technology acquisition	3.46	0.50	4.81	2.10
foreign ownership of firms	4.68	0.76	6.25	2.60
quality of higher edu	2.98	0.53	4.70	1.92
infrastructural quality	3.30	0.87	5.62	1.55
macro environment	4.22	0.78	6.30	1.00
urban rate (%)	36.50	14.56	67.96	9.86
school life expectancy ratio	6.67	1.20	9.09	4.00
secondary school enrolment rate	45.90	20.17	98.75	15.66
pupil-teacher ratio	43.30	12.49	80.68	7.00
years of compulsory education	7.44	3.17	12.00	0.00
labour market flexibility	6.61	1.39	9.24	2.76

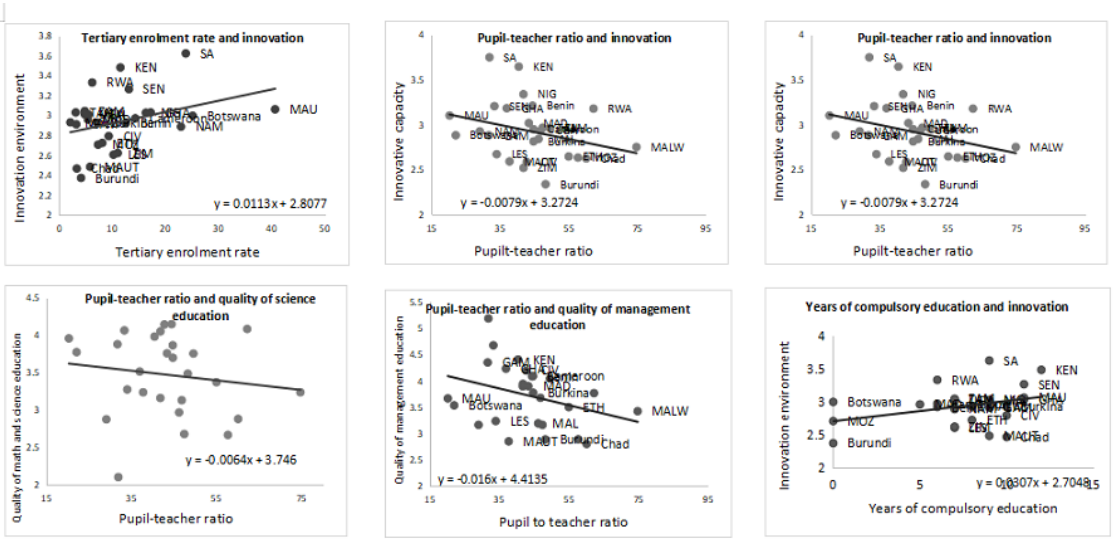
Source: Author's computation (2020)

The summary statistics for the series employed in the estimations in the study are reported for sub-periods in Table 3. Average youth employment rate is 45.49% and has been noted to be low among the SSA countries. Government acquisition and use of advanced technology is the most impressive among the innovation factors, suggesting the huge focus of the public sector in driving innovation among SSA countries. Average secondary school enrolment rate is 45.9% over the period, although the maximum value of 98.75% suggests that some of the countries have performed better. In the same vein, the pupil-teacher ratio at the secondary school level averaged 43.30% for the sample, which is essentially large. The ratio is actually as large as 98.75% for some countries, far exceeding all spectra for measuring quality education. Education life expectancy for the region is also 6.67 years on average, which approximates to years in completing primary education, indicating that most educational attainments relate to primary school attendance in the region. Educational life expectancy is, however, lower than average years of compulsory education (7.44) among the countries. The scores for quality of higher education and quality of infrastructure are both less than 3.5% (the median performance scores) among the countries. The relatively high average score (4.22) for macroeconomic environment indicates that most of the components of the macroeconomy are high, thereby suggesting more susceptibility to instability in the system.

Initial patterns of relationship among education and innovation systems variables are also reported in the regression plots in Figure 11. There is strong positive relationship between tertiary enrolment and innovation variables. A one percentage increase in tertiary enrolment rate is shown to increase innovation by 0.11%. There is a negative relationship between pupil to teacher ratio and innovation variables, showing that the higher the pupil-teacher ratio the lower the innovation that can be

experienced in the economy. Thus, quality of education through adequate school management has a positive relationship with innovation among the countries in the study. The years of compulsory education also has a positive relationship with innovation: one more year of compulsory education tends to boost innovation by up to 3 percent in the economy.

Figures 6a-f: Scatterplots for educational quality (human capital quality) and innovation



Source: Author's computation (2020)

Regression Analysis

The results of the estimated regression models are analysed in this section. The analysis is performed in recursive forms, beginning with focusing on education, then innovation, and later the non-linear results are analysed.

Education and youth employment

The results of the particular effects of education on youth employment is shown in Table 2. In the first panel, only educational development variables are included. The results in the other panels included additional variables in order to improve on the robustness of the estimates. It is seen that the coefficients of educational variables are constant in terms of signs for each of the equations. The coefficient of pupil-teacher ratio (*ptr*) is positive and significant, indicating that higher ratios improve employment. In essence this result suggests that improved educational systems through lower *ptr* tend to lead to reductions in youth employment in the region. The other education variables confirm the outcome, given that the coefficients of all other education variables are negative. This shows that higher secondary enrolment and school life expectancy, or more years of compulsory education, tend to reduce youth employment.

Table 4: Results for innovation and youth employment

Variable	1	2	3	4
constant	3.620** (0.137)	3.762** (0.088)	3.550** (0.103)	5.427** (0.166)
ptr	0.015** (0.001)	0.016** (0.002)	0.015** (0.001)	0.009** (0.001)
ser	-0.008** (0.001)	-0.007** (0.001)	-0.003* (0.001)	-0.005** (0.001)
slxp	-0.049**	-0.046**	-0.044**	-0.075**

	(0.011)	(0.011)	(0.015)	(0.015)
compedu	-0.051** (0.005)	-0.047** (0.005)	-0.036** (0.004)	-0.050** (0.006)
eduq	0.155** (0.046)	0.199** (0.065)	0.132* (0.063)	0.034** (0.012)
prg	0.012** (0.005)	0.013** (0.005)	0.005 (0.004)	0.011** (0.003)
innovation		-0.142* (0.076)		
rdspend			-0.202** (0.070)	
sciencersch_instq			0.143* (0.068)	
uni_ind_colab			0.105 (0.098)	
govt_tech			-0.019 (0.041)	
math_scienceq			0.230** (0.050)	
mgt_schoolq			-0.084* (0.035)	
macroenvr				-0.065** (0.024)
foreign_own				0.185** (0.055)
infrq				-0.017 (0.018)
lurbr				-0.339** (0.035)
lmr				-0.040** (0.006)
adj. r-sq	0.622	0.558	0.633	0.601
f-stat	22.28	21.40	22.14	21.55

Note: * and ** indicate significance at 5% and 1% respectively; standard errors in parentheses.

Source: Author's computation (2020)

The results are similar to findings by Chen and Wu (2007) for China, where educational access alone was seen to actually reduce employment. Essentially, previous studies show that the type of education matters for its influence on employment. For instance, Weiss, Aspinall, and Thompson (2012, p15) found that in the early "phases of dramatic higher education expansion, the newly added colleges and universities typically grow faster than the actual pace of economic growth". On this basis, "the quality of the facilities and teaching provided often fall far short of students' expectations and their future job prospects may be far from secure". Thus, higher access to education may not necessarily improve youth employment in SSA countries. There is also the challenge of the difficulty in the transitioning from education and training to jobs where both low absorptive capacity of the labour market and poor skillsets of school leavers combine to limit the number of youths getting more formal jobs (Fox et al., 2020; African Development Bank [AfDB], 2020; Awad, 2020). The result therefore appears to suggest that the process between education and employment for young individuals in SSA countries requires more interventions that improve skills and overall improvement in economic performance.

For the other variables in the model, the measure of education quality has a significant positive effect on employment in each equation. This shows that educational quality is the critical aspect in terms of boosting youth employment growth among SSA countries. The coefficient of innovation is negative and significant, which indicates that innovation actually reduces youth employment in SSA. This result is in line with findings from the study by ILO (2020) where innovative production was shown to have

the capacity of fostering automation and attendant disproportionate job losses for the youth. For the other innovation enhancing variables, the coefficients of quality of science research, and quality of math and science education, have significant positive impacts on youth employment. This shows that science and research hold strategic tools for innovation that can stimulate youth employment growth in SSA countries.

The coefficients of R&D spending and quality of management education are negative and show that firm innovation activities actually shrink aggregate youth employment. In particular, it should be noted that firm R&D is the strategic harbinger of innovation (Okumu et al., 2019) that creates automation which is highly linked to job losses related to the youth. The coefficient of macroeconomic environment is negative in the result, while that of foreign ownership of resources is positive, suggesting that foreign participation in the economy boosts the youth employment rate in SSA countries. The coefficient of macroeconomic environment, urban population rate and labour market rigidity are all negative and significant, indicating that increased inflows of labour into the urban centres limit youth employment opportunities, while more rigid labour markets tend to also reduce youth employment prospects.

Innovation and youth employment growth

The role of innovation in youth employment is estimated in Table 5. As in previous results, the coefficients of R&D spending by firms and quality of management schools are negative, further emphasising the fact that automation leads to job losses for the youth. Also, science research and math/science education, rather than management education, has effective positive roles in stimulating youth employment among SSA countries. Contrary to the results of R&D spending by firms, the result on government adoption of technology shows that it improves the youth employment rate. This may perhaps be linked to the fact that government's use of technology is more society-oriented (for the benefit of all) than technology use by the private sector. Thus, there is need for governments in SSA countries to invest in projects that boost public sector innovation and technology use. Overall, innovation quality has, however, a significant negative impact on youth employment, which again suggests that economy-wide innovation tends to harm the prospects for youth employment.

Another reason for the poor performance of the innovation factor in that the results can be linked to the prevalent pattern of youth employment in SSA. According to the ILO (2020) study, almost 9 out of every 10 jobs performed by younger people in SSA countries are vulnerable and highly informal. Given that much of the innovation skills and activities are hardly required for informal jobs (McGuinness et al., 2018), a significant disconnect is expected to exist between innovation (and its enhancers) and youth employment among SSA countries. As shown in the next series of analysis, there are however extant conditions under which overall innovation can boost youth employment in SSA countries. The coefficient of productivity growth also fails the test in the result, indicating that productivity increases do not ensure more youth employment. On the other hand, educational quality and foreign ownership of resources both have significant positive impacts on youth employment rates.

Table 5: Results for innovation and youth employment rate

Variable	1	2
constant	4.279**	4.478**
	(0.144)	(0.180)
innovation	-0.327*	-0.104
	(0.164)	(0.132)
rdspend	-0.269**	-0.199**
	(0.093)	(0.070)
sciencersch_instq	0.100	0.095*
	(0.070)	(0.054)
uni_ind_colab	0.363**	0.127*

	(0.110)	(0.066)
govt_tech	0.098*	0.073*
	(0.051)	(0.035)
math_science	0.336**	0.220**
	(0.036)	(0.048)
mgt_schoolq	-0.023	-0.078*
	(0.039)	(0.040)
prg		0.003
		(0.003)
macroenvr		-0.036*
		(0.019)
eduq		0.141*
		(0.062)
foreign_own		0.032*
		(0.016)
infrq		-0.043*
		(0.025)
lurbr		-0.225**
		(0.042)
lmr		-0.054**
		(0.004)
adj. r-sq	0.483	0.670
f-stat.	15.74	35.05

Note: * and ** indicate significance at 5% and 1% respectively; standard errors in parentheses.
Source: Author's computation (2020)

Non-linear relationship between innovation and youth employment

Table 6: Non-linear Relationship Results

Variable	**1**	**2**	**3**
constant	-2.504**	-1.295	-0.670
	(0.891)	(1.139)	(1.097)
ptr	-0.074**	-0.056**	-0.039**
	(0.014)	(0.017)	90.014)
slxp	0.034	0.025	0.017
	(0.137)	(0.125)	(0.153)
ser	0.052**	0.031**	0.050**
	(0.008)	(0.007)	(0.008)
compedu	0.065*	0.119**	0.296**
	(0.031)	(0.044)	(0.059)
slxp×innov	-0.018	-0.020	-0.030
	(0.049)	(0.046)	(0.054)
ptr×innov	-0.019**	-0.011**	-0.017**
	(0.002)	(0.003)	(0.003)
compedu×innov	0.020**	0.014*	0.011*
	(0.005)	(0.006)	(0.005)
ser×innov	0.035**	0.053**	0.118**
	(0.011)	(0.016)	(0.021)

innovation	2.135** (0.298)	1.574** (0.396)	2.596** (0.418)
rdspend		-0.168** (0.065)	
sciencersch_instq		0.140* (0.060)	
uni_ind_colab		0.153 (0.098)	
higher_eduq		-0.286** (0.091)	
govt_tech		-0.034 (0.056)	
math_science		0.258** (0.049)	
mgt_schoolq		-0.007 (0.037)	
prg			0.006 (0.004)
macroenvr			-0.127** (0.036)
infrq			-0.048** (0.017)
foreign_own			-0.009 (0.016)
lurbr			-0.444** (0.044)
lmr			-0.034** (0.006)
adj. r-sq.	0.579	0.662	0.684
f-stat.	21.52	22.03	25.15

Note: * and ** indicate significance at 5% and 1% respectively; standard errors in parentheses. **Source:** Author's computation (2020)

In Table 6, we show the indirect effects of innovation on youth employment. In obtaining these effects, the innovation variable is interacted with the four education variables as shown in Table 6. In the results, the coefficients of all the education variables now possess the expected signs. Pupil-teacher ratio now has a significant negative impact on youth employment in each of the equations, while school enrolment and years of compulsory education now exert positive impacts on youth employment. This implies that when the interaction between education and innovation is taken into cognizance, education is expected to have significant improving effects on youth employment. The coefficient of innovation has similar outcomes. The coefficient is now positive in the results, suggesting that with education taken into cognizance, innovation has a significant positive impact on youth employment.

More importantly, the pattern of non-linear effects of innovation on youth employment is shown by the interactive terms. The interaction of *ptr* with innovation produces negative coefficients, indicating that innovation has a higher capacity for boosting youth employment in countries with better quality education (through lower pupil-teacher ratios). In the same vein, the result shows that innovation has better capacity for boosting youth employment in countries with higher secondary education enrolment and more years of compulsory education. These results suggest that innovation does not actually have a linear effect on youth employment. The benefits of innovation on employment of younger people is only obtained when the educational system is better quality and more widespread. Apparently, younger individuals can take the dividends of wider innovations when they are more educated in the system.

Conclusion and Recommendations

Conditions of demographic transition, labour market segmentations, and weak absorptive capacities of economic sectors in relation to employment have combined to influence policy directions among many SSA countries. The conditions have increased focus on providing more jobs for young people, reducing duality (and informality) in labour markets, and the need to stimulate job demand in all sectors of the economy. These dimensions have become more pronounced following the advent of the COVID-19 pandemic, which has generated social challenges in the economies. In this study, the effects of innovation on youth employment was examined for a group of SSA countries, with the role of education considered as intermediary. Given the deep segmentations in labour markets of SSA countries, post-Covid production patterns (that are being encouraged to adopt technology and other more innovative patterns) are expected to have significant implications for youth employment access and sustainability. This is given that the youths disproportionately suffer from shocks in macroeconomic activities. A sample of 27 SSA countries was used for the period 2007 and 2018, based on data from the Global Competitiveness Index and ILO. Results from the study suggest that innovation may hamper youth employment among SSA countries if educational characteristics are not well positioned for reaping the benefits of innovation. In particular, the study showed that education and innovation on their own limit youth employment. Innovation adopted by government was, however, shown to positively boost youth employment, emphasising the significant role of government in ensuring that the benefits of innovation are spread among all segments of the economy. There is also evidence that the relationship between innovation and youth employment is more non-linear, with countries that possess better educational quality and access having better influences of innovation on youth employment.

From the findings of the study, it is clear that innovation left solely in the hands of the private sector may actually harm youth employment, since most of the effects of such innovation may lead to job losses for the youth. There is therefore a need for the adequate preparation of youths in SSA countries to be able to adapt to the evolving production and services system through two channels. First, as shown in the result, education is a strong tool for helping the youth to appropriate employment benefits arising from technology and innovation adoption. Education does not have to be limited to formal academic work; rather, sound basic education along with vocational training (which is currently at appalling levels among SSA countries) may be sufficient in helping the youths adapt to modern systems. This will in turn promote youth employment. Second, government involvement in innovation activities is required for helping the youth in terms of employment. Governments are expected to ensure wide-spread training in innovative activities as well as to fund innovations in areas that are peculiar to youth employment capacities. For instance, training in innovative agricultural practices may not have great incentives for the private sector, but government involvement can increase adoption even in the rural areas. Also, boosting broadband connectivity by government has been shown to immediately boost youth work participation.

Moreover, the pattern of employment created in the region, especially for the youth, are in the informal sector with less capital and less productivity. There is therefore the need to refocus youth employment drives towards more labour intensive sectors that can easily absorb technology. This will, however, require adequate investment in human capital development and essential upgrading of infrastructure, especially in the rural sector. Building of post-school skills in agriculture, household enterprises, and information and communication technology is critical in this regard. Recently, there have been studies that emphasis that general innovative activities in the economy, such as more "ICT use and applications (as against firm-based innovation) can directly boost youth employment, especially for developing countries". Source?

Finally, although reforms have been prevalent in many sectors of many African economies, labour reforms are scarce and far between, focusing mainly on government determined wage fixing and employment protection for the formal sector. Reform policies in the labour markets among SSA

countries can play important roles in supporting intermediate transition of many SSA economies in the face of economic crises arising from the COVID-19 pandemic. This can aid in supporting entrepreneurship drives and enhancing investments in education and skills. Given the structure of production in SSA countries, programmes that support the development and survival of micro- and small enterprises should also be the focus of industrial policy in the region. Given that rapid technological advances are providing the templates for transforming work and employment systems, new policies by governments are therefore necessary to ensure a brighter future of work for young people in sub-Saharan African countries.

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EMPLOYABILITY MEASURES AND ENHANCING YOUNG ADULTS IN THE LABOUR MARKET: INSIGHTS FROM THE UNIVERSITY OF LAGOS, NIGERIA

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Abstract

Nigerian higher education has not been adequately producing graduates with the required knowledge, skills and attitude (KSA) necessary to function effectively in the labour market. This has further added pressure on higher institutions to focus more attention on the improvement in employability of young graduates. Hence, the paper seeks to examine employability measures at higher education that could enhance young adults for the 21st century world of work. Six research questions were raised and answered using focus group discussions and interviews with stakeholders in the higher education institution with reference to the University of Lagos, Nigeria. A desk review method was employed to gather secondary data for the discussion of the following concepts: employability; employability at higher education and labour market level; policies and strategies for employability in Nigeria; and practices and actions that support employability of students and graduates in higher education in Nigeria. Findings reveal that employability measures that influence policies in higher education are: 1) directives by the National Universities Commission (NUC) for the incorporation of entrepreneurship education in the university education curriculum; 2) the Nigerian Labour Act regulations on recruitment of young persons; 3) the National Policy on Education (NPE); and 4) the National Employment Policy of Nigeria (2002), outlined employability agenda in higher education. In the instance of the University of Lagos, Nigeria, employability measures put in place include: job placement programmes through the counselling units; entrepreneurial skills training for students through the entrepreneurship and skills development centre; resuscitation of graduate assistantship programmes; students' industrial work experience; teaching practice programmes; and the internship programme. However, in respect of curriculum delivery, it is revealed that it tends towards the theoretical rather than the practical approach to deliver a better programme implementation, which is not the best in terms of inclusivity and fair connection with the labour market. Nationally, there is a great challenge in the disparity between employers' and graduates' views on employability and incorrect implementation of policies and programmes. It is recommended, therefore, that there is a need for relevance in programme implementation, domestication of the CareerEdge Model, and the correct practical approaches to ensure that national policies and university learning experiences support graduates' transition towards the labour market.

Keywords: Employability, Transitions, CareerEdge Model, Competences, Labour market

Introduction

Education, and higher institutions of learning in particular, is an instrumental device par excellence towards national development. It is the key to unlocking potentials, capacities, skills and expertise of individuals to bring about cultural, socio-economic and political transformation for national development. Higher education is that aspect of education for developing high-level skilled manpower to meet the demands of the global market. The government of Nigeria at the federal level, through the

National Policy on Education (NPE, 2013) emphasized the purpose of higher education in preparing young adults for sustainable employment in the labour market, locally and globally. This is achievable by enhancing the competencies and lifelong learning skills required to fit into the world of work (Lees, 2002).

Globally, higher institutions of learning are supposed to be at the centre stage of human-capacity development. However, the university education system in Nigeria currently seems not to be producing graduates with employable and essential skills (Abiodun-Oyebanji & Omojola, 2018; Pitan, 2017). This is traceable to reasons such as the inability of university education to integrate curricula to the present skill demands of the knowledge-driven economy, and the theoretical approach to teaching and training which has made their graduates poorly-prepared and equipped for the world of work (Rufai, Bakar & Rashid, 2015).

Nigerian graduates need employability skills to aid their smooth transition from the academic environment to the labour market, especially with the increasing effects of globalization, demographic changes, and the rapid rate of technological development at the work place. According to Weligamage (2009) and Oliver (2015), employability skills are indispensable qualities for securing employment, sustenance and career progression. Also, employability skills are a set of personal attributes and competences required to enhance individual capacity towards gaining employment, and to be successful in a chosen field or occupation (Yorke & Knight, 2006). For this reason, a skilled individual delivers certain benefits to the workforce, the society and the nation at large. These skills include but are not limited to: leadership skills, adaptability skills, effective communication, problem solving, interpersonal relationships, creativity, innovative, information technology skills, team work, emotional intelligence, and presentation skills (Finch, Hamilton, Riley & Zehner, 2013).

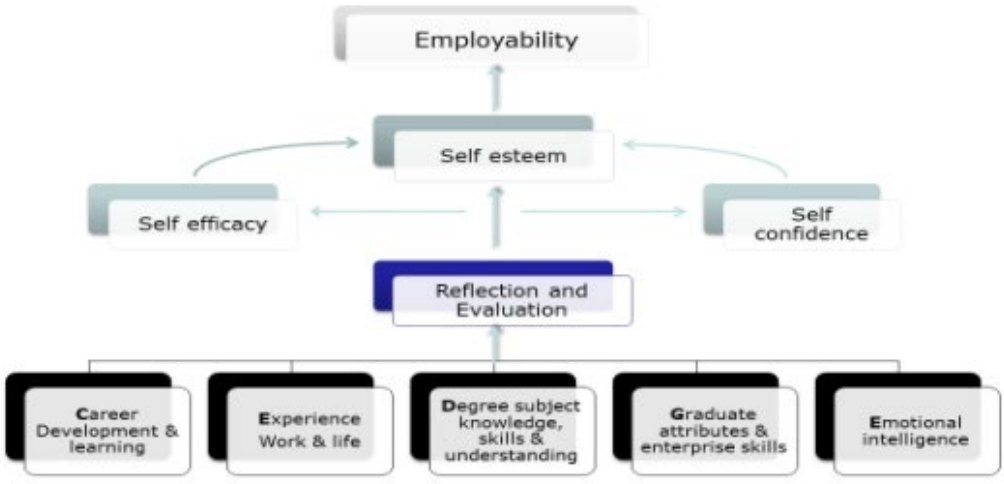
A dearth of employability skills could reduce Nigerian graduates' chances of securing and sustaining jobs. The inability to secure jobs by graduates of the Nigerian university is not limited to the inaccessibility or lack of jobs, but is also as a result of the inadequate employability skills of graduates as desired by employers (Emeh, Nwanguma & Abaroh, 2012; Pitan, 2015). In the opinion of Akanmu (2011), many graduates who are in search of jobs are not gainfully employed, and for those who are able to secure employment, their employers tend to have serious concerns about their competence and skills for the jobs.

Consequently, as argued in the literature, skills mismatch is one of the factors that has reduced employability of Nigerian graduates. Skills mismatch among employed young graduates is at 60.6% (Pitan & Adedeji, 2012). They stressed further that these young graduates are found deficient in critical thinking, effective communication, information technology-IT, effective decision-making, interpersonal networking and relationships, entrepreneurial mindset, technical and proficiency skills. To buttress this argument further, Dabalen, Oni and Adekola (2001) lamented the high level of skills disparity among employed graduates and the labour market that has rendered many Nigerian graduates unemployable.

Employability Model

The theoretical framework adopted goes a long way in enhancing employability of graduates. Theories on employability include: graduate employability development theory developed by Harvey (2003); theory on the relationship among job transitions, movement capital and perceived employability developed by Forrier, Verbruggen and De Cuyper (2015); USEM theory developed by Knight and Yorke (2003); and CareerEDGE theory of graduate employability propounded by Pool and Sewell (2007). However, the focus is on the CareerEDGE Model, because it has been adjudged as one of the best theories, contributing immensely to the development of employability studies, as demonstrated in Figure 1.

Figure 1: CareerEDGE model



Source: Pool and Sewell (2007)

CareerEDGE theory combines all the key features of USEM theory on employability skills. The model presents important variables or concepts in a lucid and simplified manner. Pool and Sewell (2007) aver that CareerEDGE model shows a practical summary of the underlying factors that are relevant for employability skills development. The theory identifies five critical stages that follow a bottom-up approach in building the employability process. At the first stage are: career development learning, work-life experience, degree subject, knowledge, skills and understanding, emotional intelligence, values and enterprise skills. Stage two exemplifies deep reflection and evaluation of the skills acquired in stage one. The third stage is the self-efficacy and self-confidence that will be developed through the reflection process, which will translate to enhancing individual self-esteem at the fourth stage. The final stage is the build-up of the employability skills through the experiences and skills acquired. CareerEDGE model discusses methods by which graduates' unemployment could be reduced if it is incorporated into the university curriculum and strategic plans.

Few researches have been done on policies and programmes and the institutional framework that enhances employability of graduates in Nigeria. This study, therefore, focuses on policies, laws, programmes and strategies that could help reduce graduate unemployability in the fast-changing knowledge and technology driven labour market.

Statement of Problem

Higher education institutions in Nigeria have been criticized over their inability to produce top graduates needed for the modern world of work. This is attributed to reasons such as inability to integrate employability related measures into the curriculum, dearth of effective implementation of education-specific programmes on employability, and a lack of institutional frameworks to influence employability of graduates, among others. This has resulted in persistent increases in the unemployment rate in the country, which has heightened issues of poverty, the youth dependency ratio, social menace, and delinquent behaviour in the country. In light of these challenges, this paper investigates policies and practices that can enhance employability of young graduates at higher education level in Nigeria.

Research Objective

The major objective of this research is to examine measures that enhance graduates' employability at the higher education level so as to ensure effective transition from the academic environment (higher education) to the labour market in Nigeria.

Research Questions

This study is guided by the following questions:

i. What are the policy initiatives that influence employability measures in institutions of higher learning in Nigeria?
ii. What relationship exists between the theories or models of employability and strategies at national level?
iii. In Nigeria, what are the policy documents that highlight the employability agenda in institution of higher learning?
iv. What are the educational activities and specific programmes that have been implemented at the University of Lagos, Nigeria, to enhance employability of students in the world of work?
v. How are the programmes carried out at the university boosting students' employability? Are the related measures in tandem with the curriculum or services offered by the university?
vi. What is the outcome of educational programmes on young adults' employability development?

Methodology

This paper adopts the case study approach of qualitative method by investigating the national policies, laws and institutional frameworks, and educational actions and programmes that support employability of young graduates. The focus group discussion and interview were conducted with stakeholders in the higher education institution (University of Lagos, Nigeria). The interview was carried out with the support of fellow researchers, majorly from the Adult Education Department and Business Administration Department, both in the University of Lagos. Their engagement allowed for contact and communication between the researchers and the stakeholders (staff of the Academic and Research Unit, staff of Students Affairs Division, staff of Counselling Unit; undergraduate and post-graduate students) in the University of Lagos, Nigeria. Two (2) staff members were interviewed per unit/division, and two (2) undergraduate and postgraduate students from each faculty (six faculties) were interviewed. In all, 18 participants were interviewed. The interview scheduled for students was based on those students that participated in some specific programmes at the university. A thorough review of available empirical and conceptual literature was done to ensure a robust discussion of the findings of the study.

Literature Review

Concept of Employability

The term employability has been subjected to numerous studies (Chandrasiri, 2008; De la Harpe, Radloff & Wyber, 2000; Finch, Hamilton, Riley & Zehner, 2013; Hillage & Pollard, 1998; Knight & Yorke, 2004; Pool & Sewell, 2007; Sumanasiri, Yajid & Khatibi, 2015; Wickramasighe & Perera, 2010). This shows that the concept and discussion of employability is not new. In this regard, employability is described as an array of related knowledge, such as skills, values and personal attributes, that increase graduates' chances of securing employment in a competitive labour market. It is worthy to note that the body of associated knowledge also supports the success of an individual's career progression in any field of endeavour, which ultimately benefits the labour force (employees), the society, and the entire economy of a nation (Yorke & Knight, 2006). Though, there seems to be the public opinion that employability is about being employed, for clarity, Harvey (2003) opined that there is more to employability than getting employed. Employability connotes developing critical and innovative abilities in order to empower learners for self-development. Employability, therefore, is expected to be competency based.

Studies on the employability of university graduates from higher education (academic environment) to the labour market revealed the varying perceptions of people about the concept, which has led to different understandings (Knight & Yorke, 2003; Pool & Sewell, 2007; Pitan, 2017). In view of this, employability is not an end in itself, and cannot be achieved just by the possession of employable attributes and skills by young graduates. Specific attention must be paid to the internal support systems of the institution, such as the faculty, curriculum, and initiatives, as well as employer-university relationships in meeting the demands and expectations of the labour market. Evidence suggests that higher education has failed drastically in the pursuit of enhancing graduates' employability through to the labour force, owing to the curriculum and educational activities not being tailored towards the present demands of the society (Sumanasiri et al., 2015). This has heightened youth unemployment in the global arena.

Employability Measures and Enhancing Young Adults in the Labour Market

The economic situation in Nigeria that leads to the unemployment of many university graduates became noticeable from the 1980s and continued into to the 21st century (Anayochukwu & Patrictia, 2014; Eneji, Mai-Lafia & Weiping, 2013). The problem of unemployable graduate emanates from the educational process which young adults underwent during their university education (Sodipo, 2014). There is no doubt that higher education institutions in Nigeria, and the National Universities Commission (NUC) as the regulating body, have fantastic educational programmes and curricula that actually support employability of young adults towards the labour market; however, the implementation process of these programmes and educational actions seems ineffective and unsustainable. The approach to teaching the curriculum appears theoretical in nature rather than being practical and learner centred. Lees (2002) argued that to make the teaching of the curriculum worthwhile and effective, it has to be learner centred and practically oriented. Similarly, Rufai et al. (2015) stressed that the mode of delivering the curriculum and training in higher education is no longer relevant to the current societal and economic realities, thereby leading to production of unemployable graduates in Nigeria.

If the implementation process in a system is wrong, the product of the system is equally believed to be half-baked. It is a law of garbage in, garbage out. This serves as a major cause of the inability of higher education institutions to produce employable graduates required for the dynamic knowledge economy. To corroborate this assertion, evidence suggests that there are over 40 million unemployed youths in the country, out of which 23 million are unemployable owing to inadequate skills required for gainful employment, which should have been acquired while in higher education institutions (Emeh et al., 2012; Pitan, 2017). Also, Mahmood (2014) argued that of over 300,000 graduates that are released to the labour market annually, about 70% to 80% of them are either unemployed or underemployed. The unemployment rate in Nigeria for 2017 is revealed in figure 2.

Figure 2: Unemployment rates in Nigeria as at 2017

Source: National Bureau of Statistics (2017)

Figure 2 reveals how the unemployment rate and labour force population increased at every quarter of the year 2017. In addition, the National Bureau of Statistics (NBS) (2018) revealed that the unemployment rate increased by 3.3 million in the third quarter of 2017 from 17.6 million to 20.9 million. The report claims that in the third quarter of 2017 there was an increase from 18.8% to 23.1%. The issue of unemployment among youths is enough to wreak havoc on the economic viability of the nation (Yinusa, Bakare, Adebisi & Jegede, 2020). This assertion clearly indicates that domestic labour is fragile and economic growth has not been strong enough to provide adequate employment in Nigeria's domestic labour market. Also, the statistics displayed here show that Nigeria has not done enough to salvage the issue of unemployment and employability of graduates, despite the laudable work and several supportive initiatives implemented in the past.

Many young Nigerian graduates are of the belief that university education is about acquiring a certificate (NUC, 2007). This contributes to the reasons why most young graduates do everything possible to get the certificate (i.e., via "read to know" or "sort to pass") while neglecting the prospect of acquiring the right competences, knowledge, attitudes, skills, and values needed to excel in the labour market. In essence, it may not be fair to shift the blame on the young graduates, since higher education institutions over the last two decades have wired them to believe this by shifting attention towards certificate oriented rather than competency and skill oriented education (Pitan, 2017). This contributes more woes to the rate of unemployable graduates in the economy. Phillips Consulting (2014) confirmed this claim by stressing that Nigerian graduates place more importance on certificates than employability skills, and this further worsens their employability in the labour market.

Other culpable factors of un-employability of Nigerian graduates with regard to higher education in Nigeria, as revealed by several empirical studies, are: poor synergy between Nigerian universities and the labour market (Pitan, 2017, Philips Consulting, 2014), mismatch in the employability skills instilled in young adults at the university education level, and the employability abilities required by employers of labour (Dabalen et al., 2001). A good and effective collaboration among these bodies could keep university systems abreast with trends of skills, information, practical experiences and competencies needed by the employers of labour to make Nigerian graduates attractive to potential employers.

National and Local Practices That Enhance Employability of Youths

There are several national and local programmes targeted towards enhancing the employability of young adults in Nigeria. Some of these initiatives are:

National Economic Empowerment and Development Strategy (NEEDS)

The National Economic Empowerment and Development Strategy (NEEDS), is a medium-term strategy (May, 2003-2007) that was introduced by the Nigerian government in response to the high unemployment rate, grinding debt burden and low industrial productivity in Nigeria (Marcellus, 2009). It is a strategy deployed by the country to reduce poverty towards wealth creation. NEEDS recognizes education as a dynamic transformational tool and a vibrant instrument for increasing young graduates' employability towards self-reliance. Adeyemo, Ogunleye, Oke and Adenle (2010) claimed that NEEDS goals of wealth creation, jobs creation, poverty reduction, and value re-orientation could only be effectively achieved and sustained via an education system that is efficient. As at March 1999, the unemployed in rural areas was 23.2%, while 12.4% of urban dwellers were without jobs (NBS, 2018). In March 2004, almost a year after NEEDS came on board, there was a decrease of about 12.3% in the rural unemployment rate, while the urban rate dropped to 7.4% from 10.8% (International Labour Organization [ILO], 2020; NBS, 2018). These statistics are terrifying, given the estimated 61 million youths in the Nigerian labour force.

Introduction of Entrepreneurship Education

Under the leadership of former President Olusegun Aremu Obasanjo with the support of International Labour Organization (ILO, 2001), the government understudied the Nigerian labour market and came up with a strategy to introducing a training module on entrepreneurship education in the curriculum of tertiary education. The rationale behind the introduction is to equip university students with the basic knowledge and skills required for setting up enterprises and to enhance their employability in the labour market. This development led to the creation of entrepreneurial study, skills acquisition, innovation, capacity building, and career advisory centres in the Nigerian higher education system (Adeyemo et al., 2010).

The Nigerian Youth Investment Fund (NYIF)

This initiative was established in 2020 by the Ministry of Youth and Sports Development, and is geared towards empowering 500,000 youths in Lagos state with the aim of enhancing innovative skills, employability and enterprise skills of Nigerian youths. The Nigerian Ministry of Youth and Sports Development in its 2020 report stated that the NYIF scheme is designed to enhance employability skills through training, as well as providing access to funds for enterprise among the Nigeria youth.

The N-POWER Programme

N-Power programme was established in 2016, and is a large-scale skills development initiative designed by the Federal Government of Nigeria to raise competent youths out of economic and employment struggles (Adi & Ngutor, 2019). N-Power is aimed at tackling youth unemployment by organizing a platform where qualified candidates are provided with opportunities to work in institutions, most especially public organisations. This initiative helps the government to fix the shortfalls in high-level manpower required in the public sector (Nwaobi, 2019). The programme's structure presents participants with the required competences to become employable in the labour market or, better yet, to create jobs. The programme is geared towards empowering young graduates with practical knowledge, skills, values and experience of the world of work, thereby transforming them into individuals who will be ready for the 21st century labour market (www.npower.gov.ng).

The National Youth Service Corps (NYSC) CV Portal

The Nigerian government instituted the NYSC on the 22nd May, 1973, with the principal aim of tackling the issue of inadequate workers in government parastatals and agencies across the nation. The launching of the Curriculum Vitae (CV) web repository and job portal in September 2017 was one of the numerous initiatives by the National Youth Service Corps to improve graduates' employability in the labour market. The initiative is geared towards creating a link between outgoing corps members (young graduates) looking for white collar jobs, and the employers of labour who are ready to employ and enjoy the services of competent graduates, based on their job specifications. The portal is designed to help graduates become well equipped for employability in the highly competitive labour market.

Graduate Employability Programme (GEP)

At the state and local government level, the GEP programme was organized with the support of corporate organizations to enhance undergraduates' and graduates' employability in the labour market. The conveners of these programmes, with the strong support of their corporate organizations, make provisions for 3-6 months' students exchange schemes. A good example is the Postgraduate School of Credit and Financial Management (PSCFM) in collaboration with the Lagos State Government, aimed at improving the employability skills of young undergraduate students and graduates in Nigeria.

Graduate Internship Programme

Lagos State Ministry of Wealth Creation and Employment launched the Graduate Internship Programme in a bid to tackle the unemployment crisis in the state. The programme is a six-month paid internship scheme for young graduates who have been unemployed for a minimum of one year after their National Youth Service Corps (NYSC) exercise. The programme is designed to offer an opportunity to candidates to develop employability skills which are often required and important in securing employment (http://mactayconsulting.com/lasg-graduate-program/).

These numerous programmes and practices have no doubt remarkably achieved their mandate of providing employability skills to young adults and graduates, enabling them to better see and identify opportunities and requirements of the labour market from an entrepreneurial point of view. The initiatives must, therefore, be sustained, and gains of the programmes enhanced through budgetary provisions.

Answers to the Research Questions

Policy initiatives that influence employability measures in higher institution of learning in Nigeria.

National Universities Commission (NUC) Directives for the Incorporation of Entrepreneurship Education in the University Education Curriculum

The National Universities Commission gave a directive in 2004 that entrepreneurship education should henceforth be integrated into the university education curriculum in a bid to tackle the scourge of unemployment and dearth of employability skills of young adult in Nigeria.

For example, at the University of Lagos, Nigeria, General Studies (GST) 307 (Entrepreneurship Education) is a university-wide course offered to all undergraduate students in higher education in Nigeria. It was part of the strategy to develop entrepreneurship and employability skills among university students before they graduate to the labour market (Department of Adult Education, University of Lagos, Students' Handbook 2012-2014).

However, the approach to the implementation of this course was wrong, the reason being that it was meant to be in alignment with the current issues and problems of industries in Nigeria. The survey

carried out by Phillips Consulting in 2014 corroborates the claim that there is lack of effective collaboration between higher education and industries as regards the design of a curriculum that will meet current needs in the world of work.

Secondly, results from the interviewees show that the teaching of the course was too theoretical, rather being practically oriented. The design of the training modules is abstract in nature and does not afford reflective and practically based learning by the students. In line with the findings, Rooijen (2011) asserts that concerted effort is required by the Nigerian universities to tailor the curriculum to meet market demands.

The Nigerian Labour Act Regulation on Recruitment of Young Persons

One of the policies that influences strategies in higher education is the regulation on the recruitment of young employees, as contained in the Nigerian Labour Act of 1990. It states:

"No recruiter shall recruit any young person: Provided that the Minister may in writing authorize the recruitment of young persons whose apparent age exceeds sixteen years with the consent of the parents or guardian for employment in an occupation appearing to the Minister not to be injurious to their moral or physical development, subject to such safeguards relating to their welfare as may be stated in the authorization" (Nigeria Labour Act, 1990). With the enactment of this regulation, Nigerian higher education institutions had to make it mandatory that any prospective candidate, to be eligible for admission, must be 16 years of age and above by the year of admission. This is to ensure that young persons who are being given admission for a four- or five-years course from age 16 would be fully mature and ready for the labour market from age 21 and above.

National Policy on Education (2014)

The National Policy on Education (NPE) is a policy guiding educational provision in Nigeria. NPE was promulgated in 1977, it was revised and reprinted in 1981, 1998, 2004, 2007 (Fifth Edition) and 2014 (Sixth Edition). The recent NPE review (2014, 6th edition) emphasized the goal of higher education in equipping young adults with the required skills in the labour market. Section 5 of the NPE policy states that university education shall:

a) Provide quality career counselling and lifelong learning programmes that prepare students with the required knowledge, soft skills, and competencies for self-reliance and employability in the world of business.

b) Make entrepreneurship skill acquisition a requirement for all universities in Nigeria, etc.

According to Evoh and Agu (2015), the employment mapping exercise revealed that the institutional framework of employability policy in Nigeria remains uncoordinated and underdeveloped.

Theoretical Dimension of Employability and National Policies

A cross-examination of theoretical model of employability and national policies as regards employability of young adults in Nigeria shows that employability in this sense must be employment centred. In the Nigerian context, employability is seen as possessing competences and characteristics which will transform individuals into potential employees for employers (Babalola, 2011).
CareerEDGE model emphasizes that employability must be in relation to achieving competencies that will make an individual employable in the world of work. This involves the gathering of learning experiences that will make an individual well qualified for jobs in the labour market.
For theoretical frameworks and national policies to work in tandem, the role of individual characteristics coupled with their responsibilities and labour market conditions must be considered.

The main documents outlining employability agenda in Higher Education

The National Employment Policy (NEP) of Nigeria (2002), outlined what higher education must do to enhance employability of university students. This is contained in the National Employment Policy Review (2016:28). Objective 2 states:

a) To provide education system and training institutes with the labour market demand in Nigeria.

b) The higher education institutions in Nigeria should bridge the gap between on-the-job experiential training and classroom education. This is to create opportunities for young people in Nigeria to acquire the necessary skills needed for the world of work. The NUC and Industrial Training Fund (ITF) could, with similar regulatory bodies, be given the opportunity and mandate to facilitate the strategy.

c) Charge the Nigerian Ministry of Education to determine workforce requirements of the labour market to enable higher education institutions to align their curricula and training with the labour force demand in order to produce skills and credentials needed by employers in Nigeria, etc.

The National Policy on Education, under Section 5, 6th Edition, also enumerates the employability agenda for higher education in Nigeria (NPE, 2014). In addition, the NEEDS stresses the need for higher education institutions to expand capacity to produce high quality manpower, among other strategies (NEEDS, 2007).

Educational Actions Implemented in the University of Lagos, Nigeria

a. The University of Lagos, Nigeria, established by Act of Parliament in 1962, has a counselling unit that provides counselling services, career services and job placement services to students. Annually, the counselling unit of the university organizes job placement in collaboration with private organizations and corporations for final year students. Examples of companies that have partnered with UNILAG for job placement are KPMG, PZ Cotton, Access Bank Plc, GTB Bank Plc, etc., in Nigeria. However, reports of the interview claimed that the counselling units of the University of Lagos were underutilized by the students, who don't visit the office when need be. More so, the guidance and counselling units' staff are not well qualified to handle the job adequately. This report corroborates the findings of Pitan (2017), who opined that where guidance and counselling units exist in the university system, there is underutilization of services by the students. He stressed further that the services rendered by the staff of this unit are substandard to what is expected because they are not being handled by professionals.

b. The resuscitation of the Graduate Assistantship Programme in 2015 is a laudable effort by the University of Lagos, Nigeria. This educational action was put on hold in 2007 before it was resuscitated in 2015 during the tenure of the former Vice Chancellor, Professor Rahman Bello.

c. The establishment of the Entrepreneurship and Skills Development Centre in 2013 was a giant step by the university management towards enhancing employability of students. Training programmes are organised for students to raise their employability and entrepreneurial competence.

d. University debate is an example of a specific programme instituted by the management to support the future career of students. University debate is organized annually to develop potentials in students towards building future careers.

e. Other educational actions implemented in UNILAG are the Student Industrial Work Experience Scheme (SIWES), Teaching Practice (TP) programme, and Internship Programme. The Student Industrial Work Experience Scheme and Internship Programme are handled by the Central Industrial Liaison and Placement Unit (CILPU), University of Lagos, while the Teaching Practice programme is handled by the Faculty of Education, University of Lagos (www.unilag.edu.ng). These programmes are instituted to enable undergraduate students to prepare for industrial work action so as to acquire practical skills, knowledge, understanding and values which will develop students' employability skills for the labour market. Unfortunately, these programmes are not yielding the result expected. The experience gained by students during the course of the programmes is insufficient, and sometimes students do not participate in these programmes. Major problems facing the SIWES, TP, and Internship programmes are: rejection of students by organizations for industrial practice, little or no vacancy in organizations, poor supervision of students, and paucity of funds for the programmes (Pitan, 2017; Okechukwu & Robinson, 2011).

Specific Programmes Carried out at the University to Boost Students' Employability

Work study programme:

The University of Lagos, Nigeria, implemented the 'Work Study Programme' for students who are of good academic standing (3.5-5.0 scale). The programme has been running since 2007 and it has helped students to acquire work experience, applied and practical skills, while serving at various units of the university. Qualified students are placed and work at different administrative units of the faculties for a period of two months in a semester.

Tutorial programme:

This programme was instituted at the university in 2014 and has really enhanced the communication and teaching skills of students. Mostly, students who are academically sound are given the opportunity to teach and tutor other students who need assistance and support to improve on their academic performance. According to the interviewees, it was from this programme that some students during the 2014/2015 session across the faculties acquired the competencies to run tutorial centres for self-reliance.

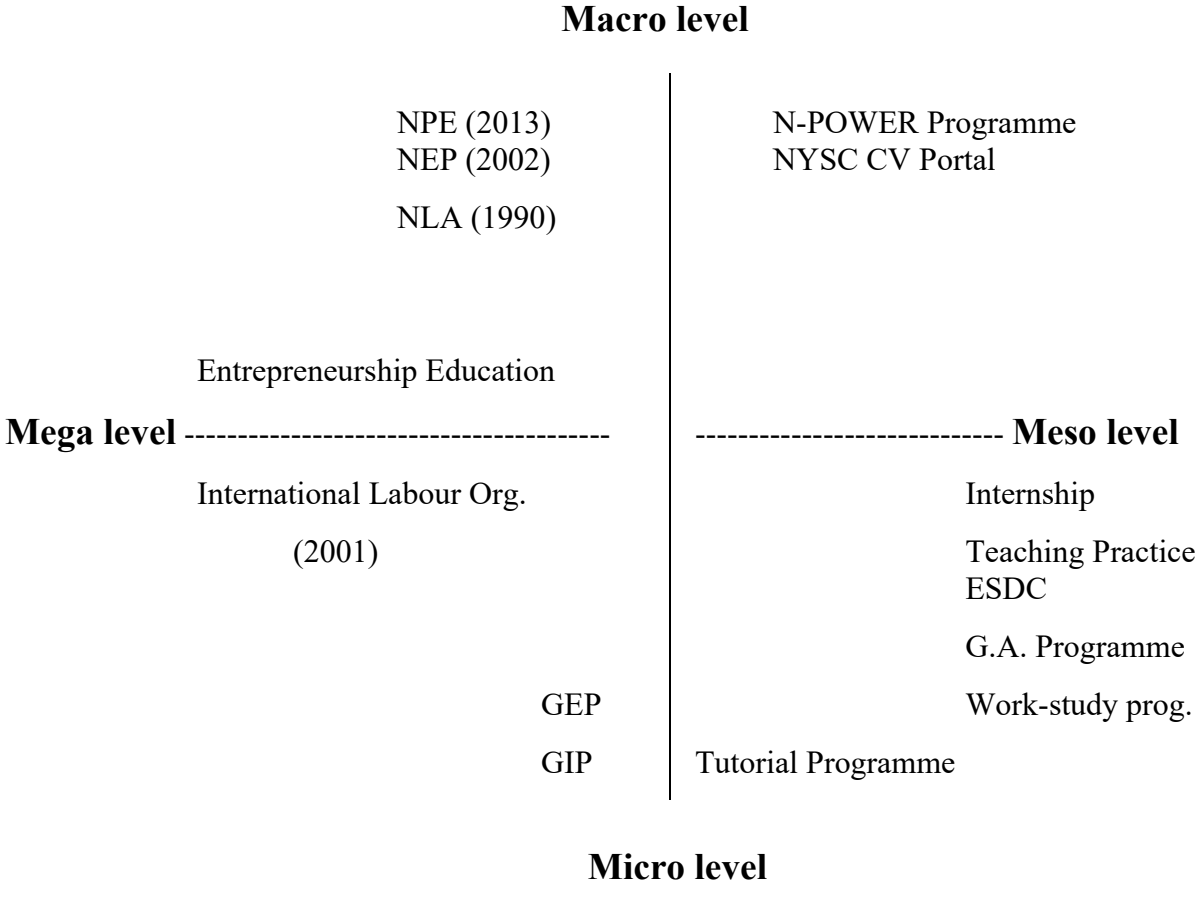
Employability Measures Relating to the Curriculum or Relating to Services Offered by the University:

To a large extent, the content of GST 307 (Entrepreneurship Education) offered to all students in the University of Lagos is targeted towards instilling employability and entrepreneurship skills in students. However, it has been gathered that the modus operandi of delivering the course content is sub-standard as it does not have direct applicability to the labour market. The modules were not designed to reflect experiential learning of students as they were too pedagogical in nature. In addition, lack of domestication of the course at the departmental level is jettisoning the value and educability of the course. This does not allow for a full grasp of the course content by the students. This report is in line with Stutern's Nigeria Graduate Report (2016) that stressed that most graduates believed that their academic experiences prepare them for further studies than than for employment.

To bridge this gap, the University of Lagos, Nigeria, established the Entrepreneurship and Skills Development centre in the 2013/2014 academic session in a bid to educate and train undergraduate students to acquire both employability and entrepreneurial skills and competences.

The summary of the policies and initiatives relating to employability measures of students and graduates are shown in figure 3.

Figure 3: Multilevel Analysis



Source: Lima & Guimarães (2011)

Outcome of Educational Programmes on Young Adults' Employability Development

According to the interviewees, these educational activities have improved them in the following ways: ability to think critically to handle technical work in and outside the office; ability to apply knowledge of job gained to work situation; working with team to achieve great result; ability to express oneself without fear of contradiction; ability to write report, minutes of meetings, etc.; ability to solve problem independently through creative thinking; and ability to teach professionally. Therefore, the educational activities implemented in the University of Lagos, Nigeria, have impacted positively on the development of young adults' employability.

Conclusion

This paper concluded that students and graduates must possess the employability skills that will aid their smooth transitions from higher education to the labour market, and this is possible when government and higher institutions ensure that those fantastic policies and programmes put in place at the national level, state level and in higher education institutions are effectively implemented and practically integrated into the curriculum. When this is done, students and graduates can be well qualified for work locally and globally, and also create work for themselves to enhance the economic growth of the country.

Recommendations

i. It is established in this study that Nigerian universities have been implementing some programmes, but there is a need for relevance in those programmes so that the skills of young graduates may be updated to the global standard.

ii. CareerEdge Model could be domesticated to accommodate and promote the professional and cultural values of the country to enhance employability skills of young graduates.

iii. There is a need for the right practical approaches to ensure that national policies and university learning experiences support graduates' transition towards the labour market.

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Student Engagement in Entrepreneurship Education Programs: Implication for Entrepreneurial Skills Development in Universities

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Abstract

As universities adopt entrepreneurship education as a path to graduating students that will be entrepreneurial, the extent to which students will choose to continue as entrepreneurs after graduation has become largely dependent on student engagement in entrepreneurship-related activities while in the university. This study examined the relationship between student engagement in entrepreneurship education programmes and entrepreneurship skills development of universities in Lagos and Ogun States. A descriptive survey research design was adopted with a population of 26,830 final year students as participants. The multi-stage sampling technique was used to select 2,394 final year university students as a sample. The study was guided by two objectives, from which one research question and one hypothesis was derived and tested using the Spearman's rho correlation analysis. The results showed a strong and significant positive relationship between student engagement in entrepreneurship education programmes and entrepreneurship skills development among the students. Based on the findings, the study concludes that student engagement in entrepreneurial content and practices reinforces the development of relevant entrepreneurship skills that might eventually promote value-laden university start-ups among students, even before graduation. Among others, it was recommended that collaborative administration of entrepreneurship programmes before and after graduation coupled with a sustained policy commitment on entrepreneurship programmes should be reinforced in universities.

Keywords: student engagement, entrepreneurship education, skills development, entrepreneurship skills development.

Introduction

Thirteen (13) years ago, the Federal Government of Nigeria (FGN) approved the National Universities Commission's (NUC) request to integrate Entrepreneurship Studies into the curriculum of all academic disciplines in Nigerian universities. This was based on the premise that entrepreneurship education constitutes an essential platform for the acquisition of globally competitive skills that are relevant for sustainable job creation and socio-economic development of the country. Even though the demand for knowledgeable, skilled, and competent graduates with entrepreneurial mindsets far outweighs the supply, several attempts to promote students' engagement in entrepreneurial activities across universities has failed to produce desirable optimal gains (Ibidunni, Mozie, & Ayeni, 2021). The deficit in the supply of aspiring student entrepreneurs has been associated with poor enabling environmental resources; poor understanding of entrepreneurship pedagogy; and poor university-industry collaborations (Peterman & Kennedy, 2003). Consequently, deepening entrepreneurship theory and practices among university undergraduates in Nigeria remains a challenge.

Within the context of developing countries, there are two existing views of entrepreneurship, namely: the narrow view and the broad view. The narrow view perceives entrepreneurship as the creation of new businesses and its followers nurture the belief that entrepreneurship education should be tailored towards encouraging university undergraduates to start-up their respective ventures (Katz, 2007). With

this in mind, the entrepreneurship curriculum focuses more on the teaching of the theories, principles, and basics of entrepreneurship for business creation. Notable topics covered include the concept of opportunity, forms of business, capital requirements, how to raise capital, financial planning and management, conducting feasibility studies, and writing a business plan. Unfortunately, increasing awareness has shown that the purpose of entrepreneurship transcends just the establishment of a new business. Thus, the relevance of the broad view of entrepreneurship cannot be over-emphasized.

The broad view of entrepreneurship stems from the postulations of classic scholars such as Joseph Schumpeter, IsrealKirzner, and Richard Cantillon. Schumpeter (1939) posited that entrepreneurship is laden with creative destructions borne out of individuals' ability to develop new combinations of commodity, technology, supply sources, and organizations. In short, Schumpeterian entrepreneurship seeks to be innovation-driven and it promotes radical and discontinuous shift, either in existing technology or markets. On the other hand, Kirzner (1992) posited that entrepreneurship is opportunity-driven, particularly in respect of profit-related opportunities. Kirznerian entrepreneurship seeks to discover discrepancies in prices within a given market. A typical Kirznerian entrepreneur is always alert and willing to discover new opportunities for value creation. Following these views, the purpose of entrepreneurship education includes building the capacity of university undergraduates to become either a Schumpeterian or Kirznerian entrepreneur. In order to achieve these objectives, student engagement in entrepreneurship activities take pre-eminence over traditional classroom teaching of entrepreneurship theories and content.

These views notwithstanding, the gains of promoting entrepreneurship education and training across all disciplines in our universities cannot be over-emphasized. First, entrepreneurship education equips students with requisite entrepreneurial knowledge, skills, and a sense of self-reliance. Second, students who undergo entrepreneurship education are better prepared for the post-university life, with instilled abilities to create new job opportunities. Third, entrepreneurship education empowers students to function entrepreneurially across a range of occupational choices. Finally, students are empowered with entrepreneurial vision and needs identification capabilities. While these are lofty promises, the reality is that the growing attempts to encourage university students' engagement in entrepreneurial activities across the country are yet to yield desirable and optimal social benefits (Ibidunni, Mozie, & Ayeni, 2021). Perhaps, the need for transformative entrepreneurship education in Nigeria's universities is long overdue.

Transformative entrepreneurship education seeks to arouse university students' interest in entrepreneurial skills acquisition and development for increased engagement in entrepreneurial activities. It comprises novel contents, methods, and series of activities that promote knowledge creation, competence building, and the accumulation of experiences needed by university students to initiate ideas, create entrepreneurial opportunities, and develop viable commercial ventures with potentials for progressive social impact (Moberg, 2014). Implicit in this description are transformative learning (Neergaard, Robinson, & Jones, 2020) and transformative social change (Kurczewska, Kyro, & Abbas, 2014; Welsh, Tuller, & Nemati, 2016). In either way, these scholars opine that entrepreneurial knowledge creation, competence building, and prior entrepreneurial experiences can only be achieved when University students are actively involved and connected to their peers, faculty members, and the institutions embedded within the university entrepreneurship ecosystem (Axelson & Flick, 2010).

The relevance of entrepreneurship skills development is widely appreciated among corporate citizens because of the increasing perception that entrepreneurial competence building is associated with graduate employability. The dynamics of the world of work arechanging very fast amidst the growing demand for new technology, changing competitive positioning within the market, changing institutional regulations, as well as global dynamisms. As such, supportive enterprising behaviour and having the capacity to "reshape" future outcomes and expectations of organisations are a few of the

entrepreneurial qualities which modern employers consider when defining an enhanced "fit" for intrapreneurial practices (Neergaard, et al., 2020; Moberg, 2014; Welsh, et al., 2016). Young workers who do not demonstrate appropriate competencies (i.e., problem-solving, negotiation, resilience, risk-taking and innovativeness) have very slim chances of securing desirable decent jobs. Thisfurther reaffirms the utility of transformative entrepreneurship education and the need to better understand how to promote active student engagement in entrepreneurial activities and, subsequently, entrepreneurial skills development among university undergraduate students in Nigeria.

Thus, the study is motivated to examine the relationship between students' engagement in entrepreneurship education classes and entrepreneurship skills development among university undergraduate students, particularly in selected universities across Lagos and Ogun states in Nigeria. Specifically, the study seeks to establish: (i) the level of students' engagement in entrepreneurship education classes, (ii) the level of entrepreneurship skills development among University undergraduate students in selected universities, and to ascertain the correlation between students' engagement and entrepreneurship skills development among university undergraduate students. The remaining part of the study is divided into four sections. The next section is the literature review. Section three and four considers the research methodology, data analysis, and the interpretation of results. The final section is the concluding part of the study.

Literature Review

Finn's Participation-Identification (FPI) Mode

Building on the classic studies of "poor academic performance," "aspiration-opportunity disjunction," and "dropout decision-making" among teenagers in high school and colleges, Finn (1989) argued that lack of productive engagement is inimical to students' learning experiences and academic excellence in their chosen career. In other words, Finn's (1989) participation-identification model postulates that students must be adequately engaged in-class and within the school environment in order to complete a given task successfully. Within the context of entrepreneurship development, the study adopts Finn's (1989) FPI model in order to ascertain the direction of relationship between students' engagement and entrepreneurial skills development.

At present, productive student engagement remains the nucleus of the FPI model but this wasn't the primary reason for its formulation. Instead, Finn (1989) was determined to demonstrate the need to better understand the causes of "dropout decision-making" among students and also to encourage school administrators and education policy-makers to pay less attention to the correlation between dropping out of school and academic performance. First, in order to achieve these, Finn (1989) opined that dropout decision-making is a developmental process, which flows directly or indirectly from frustration to low self-esteem, and the decision to dropout is at the extreme. He explained, further, that frustration sets in when a student wallows in the personal belief that his/her goals are unattainable given the prevailing circumstances in the classroom or within the school environment at large. This type of feeling often degenerates into frustration either in the form of persistentskipping of classes, truancy, or a complete withdrawal from peers, classes, and the school environment as a whole.

Second, Finn (1989) opined that consistent patterns of failure poseas threats to students' self-view. In other words, when a student is enmeshed consistently in poor performance in school programmes (i.e., regular unsuccessful outcomes), his/her self-esteem diminishes in the face of rising social sanctions, either from peers, teachers, or even parents. The consequences of low self-esteem due to regular unsuccessful outcomes are threefold, namely, reduced willingness to learn, gradual withdrawal from class/school activities, and finally the decision to drop out of school. In view of these two circumstances, Finn (1989) suggested that specific school practices are required to promote students'

involvement in effective learning processes, namely, "mild" disciplinary procedure, "adaptive" curricula designs, "positive" teachers' attitude towards the students, and "effective" teaching practices.

Third, Finn (1989) opined that how well a student is engaged in a given activity depends on: (a) how well he/she has been able to "bond" with his/her peers, teachers, and the school environment; (b) the level of commitment he/she has towards the school activities; and (c) the extent he/she is willing to reinforce his/her role as a student. Without disregarding the latter two, it is worthy of note that "bonding" symbolizes students' ties to the school's functions and activities. It also connotes attachment, commitment, involvement, as well as beliefs. It isinteresting to emphasize that students can also share bonding with their peers, teachers, and parents. When bonding is weak, students would rather take to absenteeism, truancy, and dropping out of school, or embark on socially destructive behaviour. Thus, Finn's (1989) participation-identification model posits that actively engaging students in productive in-class activities and providing them with an accommodative school environment enriches their self-esteem, increases their locus of self-control, strengthens their educational aspirations, and enables them to nurture and grow their respective academic abilities.

Fig. 2.1 is an illustrative diagram depicting the postulations of the FPI model, which shows that: (a) student engagement is a development process that comprises three important stages; namely, student participation, the performance outcome, and student identification with the school; and (b) student engagement as well as student identification with the school can be better described as multidimensional constructs. At the far right, students identify with the school either by showing a sense of belonging that is positively internalized (i.e., bonding) or/and valuing the experiences acquired through active participation in the school's programmes and events. These, in turn, metamorphose into strong commitment to excellence in learning and in participation. Conversely, a student who is unable to internalize his/her sense of belonging, and fails to value the experiences available for capture within the school environment, simply withdraws. Common strategies for enabling student commitment include voluntary participation, smart goals, small-to-moderate school size, students' participation inpolicy dialogue, and promoting cooperative student-teacher relationships.

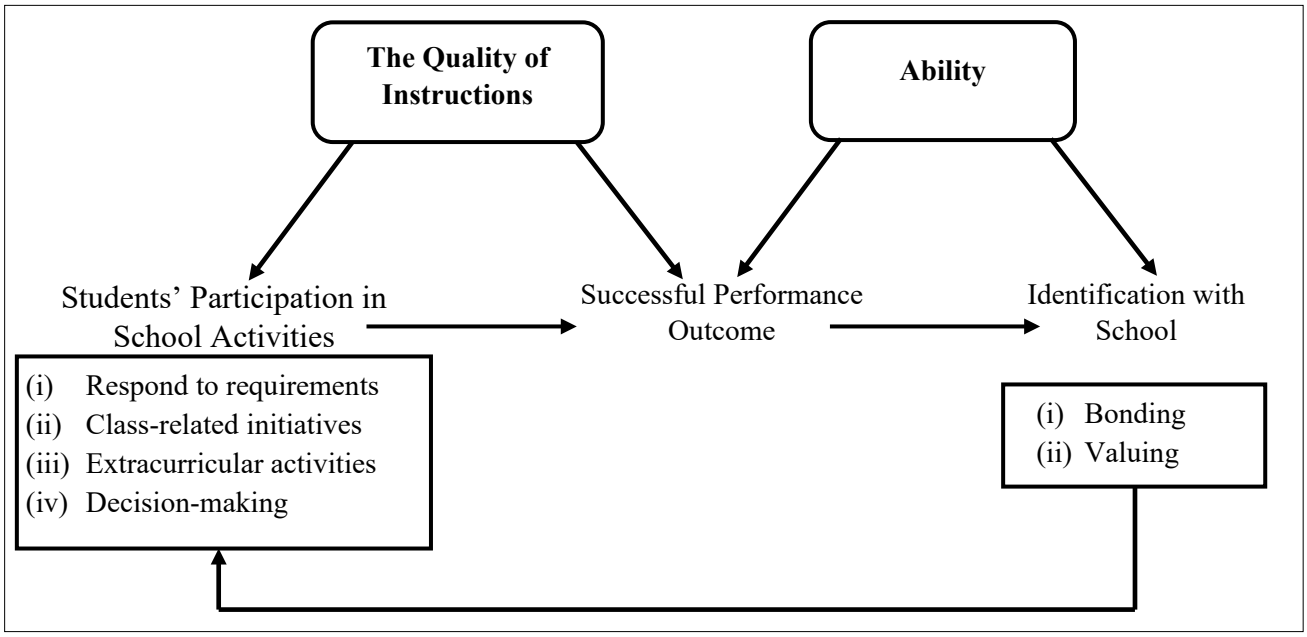

Figure 2.1: The Participation-identification model of student engagement
Source: Finn (1989)

On the far left of Fig.2.1, participation in school activities is considered to be a multi-dimensional construct. Students can participate in in-class activities, out-of-school activities, andin-school environment-related activities. The first ensures that a student effectively engages with both peers and teachers within the four walls of the classroom. This is traditionally known as formal learning activities, and it comprises attending to teachers' instructions, reading and studying effectively, learning how to memorize, responding to questions, etc. Other forms of participation include taking-up class-related initiatives, engaging in social and extracurricular activities, as well as cooperating with both peers and teachers for enhanced decision-making. These notwithstanding, Fig. 2.1 shows that the role of the quality of instructions on students' level of participation cannot be over-emphasized. In a similar vein, the extent to which students identify with the school depends on students' abilities and their perceived successful performance outcomes.

Conceptual Review

Student engagement

Following the discussion of the FPI model, there is evidence to show that student engagement is a multidimensional construct with diverse definitional focus (Fredrick, Blumenfeld, & Paris, 2004; Fredrick, Blumenfeld, Friedel & Paris, 2005). Prior to explaining the differences between student engagement and student involvement, Fredrick, et al. (2004) as well as Fredrick, et al. (2005) alluded to extant arguments that engagement is better studied as a multifaceted construct. They categorized engagement into three broad categories; namely, behavioural, emotional, and cognitive engagement. The behavioural engagement focuses more on students' involvement or participation in class-related activities and it is positively correlated with achievement outcomes. Achievement outcome can be described as successful outcomes in classroom activities, social activities, and other extracurricular activities within the school environment (Church, Elliot, & Gable, 2001; Wigfield& Cambria, 2010; Pekrun, 2017).

Emotional engagement connotes the appeal that a given task has for students. It emphasizes the significance of the identification construct espoused in the FPI model. More importantly, it relates tothe affection reactions which students show for a given activity. It also demonstrates the level of satisfaction they derive when carrying out given activities within the school's environment (Reina, Rogers, Peterson, Byron, &Hom, 2017; Rushton, Giallo, &Efron, 2020). Park, Holloway, Arendtsz, Bempechat, and Li (2012) demonstrated empirically that the utility of emotional engagement within the learning context is emphasised. Particular, their findings show that emotional engagement is positively correlated with needs for autonomy among students. Besides, variations in students' emotional engagement have effects on their decision-making abilities (Greene, Sommerville, Nystrom, Darley, & Cohen, 2012).

Cognitive engagement refers to students' investment or effort committed into memorization, comprehension, and mastery of a given skill sets so as to increase their chances of achievement outcome (Fredrick, et al., 2005). Students exhibit cognitive engagement when their skills are in alignment with the given activities (Kahu& Nelson, 2017). Building the constructionist view, scholars postulate that cognitive engagement is positively correlated with the school's learning environment (Rotgan& Schmidt, 2011). In other words, cognitive engagement comprises multiple strings of concepts that have both intent and action-driven perceptions. For instance, it consists of "perceived relevance" of an activity, "motivation" to learn, "willingness" to invest one's time and effort into a chosen or given task, as well as "striving" to attain a skill-mastery level. Given that there are diverse concepts that fit into the realm of this category of engagement, it can be better described as a meta-construct (Reschly& Christenson, 2012).

Implicit in these definitions of engagement is that students own their autonomy and are always willing to set their learning goals, pursue true understanding, and truly enjoy that sense of belongings as well as self-respect. In a university setting, these features of engagement can be achieved by appreciating the fact that student engagement is a "metaconstruct" and that it is often laden with interactive, participatory, and affective components (Fredrick, et al., 2004; Fredrick et al., 2005; Reschly& Christenson, 2012; Skinner & Pitzer, 2012). Thus, these scholars point out succinctly that student engagement isbetter enriched through participation, interpersonal relationships, intellectual endeavours, and teachers' involvement. Mahatmya, Lohman, Matjasko, and Fab (2012) are of the view that student engagements generally have a positive correlation with performance outcome. In the next sub-section, the study explores the concept of entrepreneurship skills development.

Entrepreneurship skills development

Earlier in the study, specific references were made to the descriptions of the Schumpeterian and the Kirznerian entrepreneurs. While the former type of entrepreneurs focus on maximizing profits by initiating new combinations of products, services, or even technology, the latter type of entrepreneurs impact their world by being alert to emerging opportunities and exploring same for social benefit of the entire market place. Implicit in this analogy is the fact that entrepreneurs acquire relevant skills in order to function effectively in the chosen market space. Entrepreneurship is, indeed, a journey, and it comprises diversity of actions, resilience amidst growing challenges, and the will-power to stand tall when crisis loom. Thus, in the remaining part of this section, the study examines the definitions and dimensions of entrepreneurship skills as well as the measures of entrepreneurship skills as it is discussed in extant literature.

Entrepreneurship skills can be described as the acquisition and the demonstration of knowledge through an action-driven activity within a given context and scenario (Oosterbeek, van Praag, &Ijsselstein, 2010). There is also a thin line between entrepreneurial skills and abilities. In Olson (1985), for instance, entrepreneurial skills and entrepreneurial abilities are synonymous and they both represent valuable tools to both extant and aspiring entrepreneurs. Olson (1985), further, explains that the major cause of business failure is lack of entrepreneurial skills. As such, in order to avert impending failures associated with new or existing business, entrepreneurship skills must be carefully acquired and assimilated (McMullan & Long, 1987). In "Who wants to be an entrepreneur?" Henderson and Robertson (1999) stressed that entrepreneurial skills can be innate and then acquired. Either way, entrepreneurial skills are essential for any aspiring entrepreneur for the ease of undertaking the entrepreneurial journey successfully.

Table 2.1: Human development perspective of entrepreneurial skills development

<table>
<tr><th colspan="2">Entrepreneurial Types by Crossing Education with Labour</th><th>Basic Innate & Learned Skills</th></tr>
<tr><td>Type A – Local Entrepreneurs

Short-term education;
Narrow labour experience;
Contextual knowledge;
Access to local support;
Generalized increment</td><td>Type B – Global Entrepreneurs

Long-term education;
Narrow labour experience;
Specific unique knowledge;
Impact society with global radical innovation;
Problem-solving skills</td><td rowspan="2">Common mind-set

Belief in oneself
Courage
Determination
Diligence
Explorative
Intelligence
Intuition
Self-confidence
Self-awareness</td></tr>
<tr><td>Type C – Incremental Entrepreneurs

Short-term education;
Broad labour experience;
General problem-solving skills;
Impact society with functional-incremental innovations</td><td>Type D – Radical Entrepreneurs

Long-term education;
Labour experience from abroad;
Specialist, with knowledge transfer capabilities;</td></tr>
</table>

	Impact society with affluent radical innovations; Products are knowledge-driven	

Source: Østergaard and Marinova (2018)

Following the thoughts of Olson (1985), McMullan and Long (1987), Henderson and Robertson (1999), and Oosterbeek, et al. (2010), two different perspectives about entrepreneurship skills are worth mentioning. The first is that entrepreneurship skills or abilities are innate talents. This perspective assumes that man is a natural entrepreneur to the extent of the abilities that he/she possess. Using the "Jack-of-All-Trade" analogy, Silva (2007) opined that individuals with "inborn" abilities can perform a variety of activities. On the right side of Table 2.1, which summarizes four entrepreneurial archetypes based on human development perspective, there are few of the specific skills that are commonly regarded as innate and which have significant influence on aspiring entrepreneurs' mind-sets, including courage, determination to succeed, diligence in actions, explorative and intelligent.

On the other hand, entrepreneurship skills can be acquired (Klein & Bullock, 2006) through conscious investments in education, training, experience accumulation, and health (Chatterjee & Datta, 2020; Schulz, 1982; Sousa, 2018). Building on the premise that the interaction between education and labour can produce entrepreneurial abilities of varying degree, four types of entrepreneurs are identified and these displayed in Table 2.1. These are local entrepreneurs, global entrepreneurs, incremental entrepreneurs, and radical entrepreneurs. Unlike both global and radical entrepreneurs, local and incremental entrepreneurs have short-term education. In terms of training, radical entrepreneurs prioritize investments in training above any of the other three (3) types of entrepreneurs. These also coincide with Long's (1983) perceived understanding that entrepreneurs are better described with specific references to their knowledge, skills, and competencies, which include creative opportunism, managerial competencies, and risk-taking amidst market uncertainty.

Table 2.2: Dimensions of entrepreneurial skills

Authors	No. of items	No. of dimensions	Sub-dimensions
Chen, Greene, and Crick (1998)	22 items	5 dimensions	"Marketing" skills "Innovation" skills "Management" skills "Risk-taking" skills "Financial control"
Jung, Ehrlich, De Noble and Baik (2001)	23 items	6 dimensions	"Developing new products & market opportunities" "Building innovative environment" Initiate investors' relationship Defining core purposes Coping with unexpected challenges Developing critical human resources
Zhao, Seibert, and Hills (2005)	4 items	1 dimension	Global scale
McGee, Peterson, Mueller, and Sequeira (2009)	19 items	5 dimensions	Searching Planning Marshalling Implement (People) Implement (Finance)

Source: Newman, Obschonka, Schwarz, et al. (2019)

Bandura's social cognitive theory (SCT) also lends support to the growing debates that entrepreneurship skills can be acquired through consciousinvestments of time, energy, and other resources into the mastery of related entrepreneurship tasks. Extant qualitative and quantitative

evidences affirm that a thin line exists between entrepreneurial self-efficacy and entrepreneurship skills. For example, Chen et al. (1998) stated that "*some individuals ignore entrepreneurial activities not because they lack necessary entrepreneurship skills but because they believe theydo*." Implicit in this quote is the fact that several scholars of entrepreneurship skills development suggest that entrepreneurial self-efficacy increases entrepreneurs' belief in their knowledge, skills, and competencies to successfully perform the given tasks of entrepreneurship. Building on Long's (1983) postulations, scholars such as Chen, et al. (1998), Jung, et al. (2001), Zhao, et al. (2005), and McGee, et al. (2009) identified necessary and concrete entrepreneurship skills required to accomplish given entrepreneurship tasks (see Table 2.2). Entrepreneurial self-efficacy also reinforces the importance of cognitive engagement in entrepreneurship programmes and training events.

Relevance of Review to the Present Study

The present study commenced with the broad objective of exploring students' engagement in academic entrepreneurship activities in universities and to ascertain the extent of correlation between students' engagement and entrepreneurial skills development among university undergraduates. Finn's (1989) participation-identification (FPI) model emphasizes that the purpose of students' engagement goes beyond overcoming the challenge of dropout among young adults. Its proposition that an effective engagement strategy can inspire students to embrace active learning and identify with their peers, teachers, school, and communities at large provided the needed theoretical direction for the study. In other words, the study combines the postulations of the FPI model with extant findings of the literature on entrepreneurship development to determine a priori the extent of correlation between student engagement in academic entrepreneurship activities and entrepreneurship skills development. Qualitative and quantitative evidences affirm that students' engagement have implications for their successful performance in school-related activities (e.g., Church, Elliot, & Gable, 2001; Fredricks & Blumenfeld, 2005).

Notable among the literatures explored are the studies of Chen, et al. (1998), Jung, et al. (2001), Zhao, et al. (2005), and McGee, et al. (2009). These scholars identify with the thought that entrepreneurship skills can be acquired and that they instil in entrepreneurs the confidence required to sail through the entrepreneurship journey successfully. For instance, using the Principal Component Factor Analysis (PCFA), Chen, et al. (1998) factorised 22 entrepreneurship tasks into five skill-sets, namely, marketing, innovation, management, risk-taking, and financial control. They affirm that students who have a stronger perception of their entrepreneurship skills expressed stronger willingness to embark on the entrepreneurship journey. In their comparative study of American and South Korean university students, Jung, et al. (2001) asserted that entrepreneurship skills are potent predictors of successful entrepreneurship journeys, especially at the start-up phase. Even though Zhao, et al. (2005) used a generalized entrepreneurial self-efficacy, they opined that skills acquired from previous experience have potent effects on entrepreneurial decision-making among aspiring entrepreneurs.

Building on the systematic studies of students' engagement (e.g., Kahu, et al., 2017; Pekrun, 2017; Rushton, et al., 2020; Wigfield & Cambrice, 2010), the available evidence shows that active participation of students in classes, effective interpersonal relationships with their peers, as well as willing teachers' involvement in their day-to-day learning processes have profound effects on students' willingness to commit their time, energy, and other resources to the achievement of identified tasks, including the acquisition of new skills. Within a formal learning setting, Park, et al. (2012) opined that students crave autonomy, internal locus of control, and participatory decision-making in classes. These notwithstanding, strategies that boost students' bonding with their school settings, foster their commitment to learning; and reinforces the identification of their roles within the learning environment increase students' engagement. Given Finn's (1989) postulation that when students identify with their learning environment such that their sense of belonging is internalized and they have a positive perception of their experiences, they commit willingly to skills acquisition and development.

Thus, the study hypothesises that there is a positive correlation between students' engagement in academic entrepreneurship activities and entrepreneurship skills development among university undergraduate students.

H_0: There is no positive correlation between student engagement and entrepreneurship skills development among university undergraduate students

H_1: There is a positive correlation between student engagement and entrepreneurship skills development among university undergraduate students.

Research Methodology

Data

The Students' Engagement and Entrepreneurial Skills Development Questionnaire (SEESDQ), which was administered for the purpose of this study, comprises subscales for the measurement of the two focal constructs of the study. These constructs are students' entrepreneurial engagement (SEE) and entrepreneurial skills development (ESD). All items in the subscales were measured on a four-point Likert scale (i.e., 1 = strongly disagree; 4 = strongly agree).

Students' entrepreneurial engagement was measured with 12items that assess students' perception of their engagement experiences as students while attending an entrepreneurship class in their respective universities. As an example, the selected undergraduate students of Management and Social Sciences were required to express their level of agreement/disagreement with statements such as "*I have the luxury of asking questions in class*," "*I am allowed to make contributions to class discussions*," "*I am allowed to make class presentations on a business idea*," etc. The internal consistency reliability of the 12 items was a Cronbach's alpha of .926, which reflects very strong reliability. The descriptive statistics for the 12items are summarized in Table 3.1 (see Appendix I).

Entrepreneurship skills development

Entrepreneurship skills development (ESD) measures relevant competencies acquired by university students for the purpose of recognizing opportunities, exploiting these opportunities, and breaking into new markets as well as creating values of social impact at large. In the study, ESD was assessed by a 17-item subscale relating to common entrepreneurial skills available at the disposal of entrepreneurship education students. Examples of entrepreneurial skills captured in the questionnaire include critical thinking, problem solving skills, team-based skills, leadership-related skills, etc. A sample item was "*attending entrepreneurship education class in this university has fostered my ability to think critically*." The Cronbach's alpha coefficient computed for the purpose of evaluating the internal consistency reliability of the seventeen items was .938. This also reflects a very strong internal consistency reliability. Table 3.2 is a summary of the descriptive statistics of the 17items measuring entrepreneurial skills development among university students (see Appendix II).

Results

Test of Pearson's Product Moment Assumptions

The study seeks to examine the relationship between entrepreneurial engagements and entrepreneurial skills development among university undergraduate students of Management and Social Sciences. In order to achieve the set objective, the study considered using the parametric test and specifically the Pearson Product Moment Correlation. However, there are a few assumptions that must be fulfilled. The remaining part of this sub-section presents the analysis of data guiding the determination of the violation/non-violation of the required assumptions.

Absence of outliers

In order to ascertain the presence/absence of outliers, the study used the boxplot. Fig.4.1 is an illustration of two boxplots, which visualize five summary statistics, namely, minimum, first quartile, median, third quartile, and maximum.

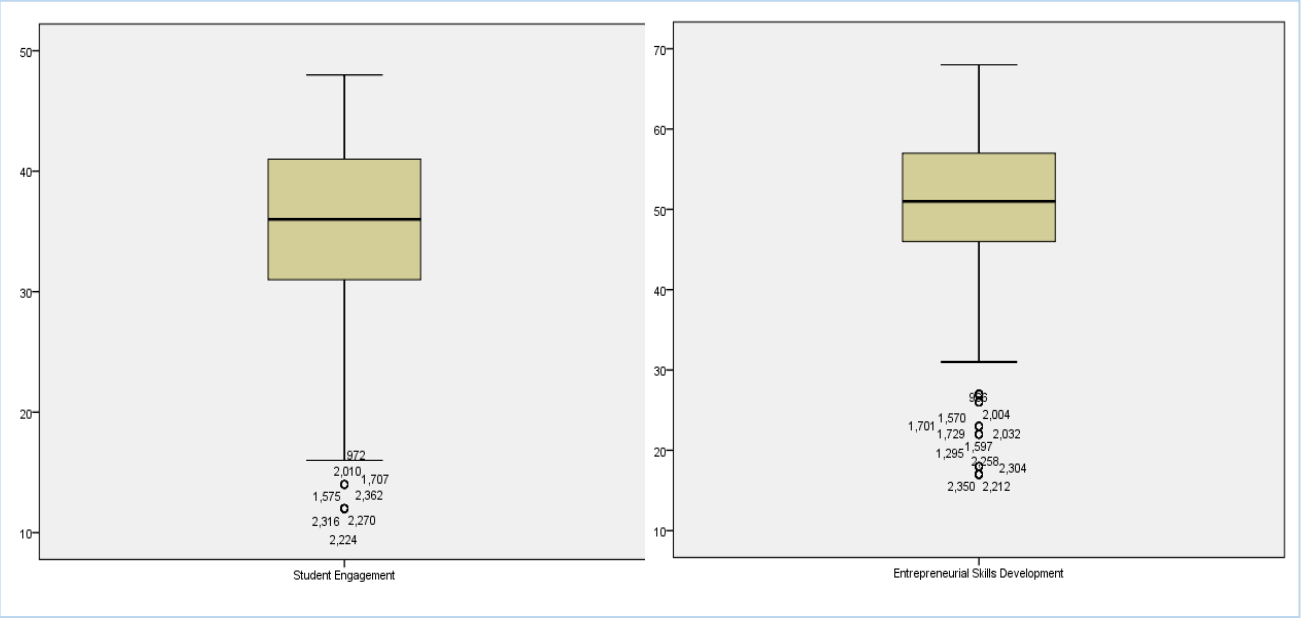

Figure 4.1: Boxplots of entrepreneurial engagement and skills development
Source: Authors' computation (2020)

The one on the right side is the boxplot for entrepreneurial skills development with an Inter-Quartile Range (IQR) of 29.5. A visual inspection of Figure 4.1 shows the presence of eleven (11) mild outliers inclusive of observations #910; #1,570; #1,597; #1,701; #1,729; etc., with scores lower than the IQR respectively. The boxplot on the left side is for entrepreneurial engagement with an Inter-Quartile Range (IQR) of 15. In Figure 4.1, a visual inspection shows the presence of eight mild outliers in the observation #972; #1575; #1707; #2010; etc., with scores less than 16 respectively.

Test of normality

The study uses Shapiro-Wilk statistics to test for the normality assumption. This assumption will be adjudged non-violated when *p*-value is greater than .05. In other words, a non-statistically significant result is an indication that the data is normally distributed. The *p*-values for both data in Table 4.1 show otherwise. Since the *p*-values of the Shapiro-Wilk statistics for both entrepreneurial engagement and entrepreneurial skills development are statistically significant, the study concludes that both data are not normally distributed.

Table 4.1: Test of normality for entrepreneurial engagement and skills development

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
Student Engagement	.054	2391	.000	.973	2391	.000
Entrepreneurial Skills Development	.108	2391	.000	.957	2391	.000
a. Lilliefors Significance Correction						

Source: Authors' computation (2020)

Test of homoscedasticity assumption

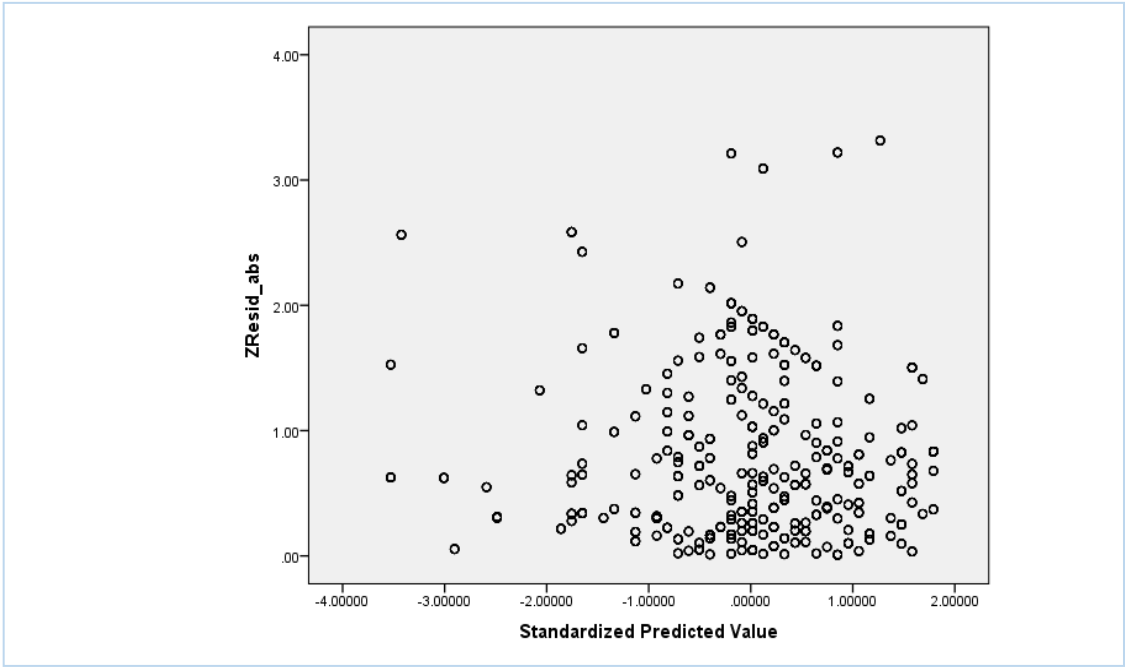

Figure 4.2: Scatter plot of standard predicted value and absolute value of standard residuals
Source: Authors' computation (2020)

The assumption of homoscedasticity implies that the variance of the residuals is the same across the entire spectrum of 2,394 observations. In other word, the predictive equation will be equally good for the entire spectrum of observations. There are several approaches to testing the homoscedasticity assumption. However, the study uses two comparable approaches, namely, visual representation (i.e., scatter plot diagram) and correlation analysis. A careful inspection of the scatter plot between standard predicted value and the absolute value of standard residuals (see Figure 4.2) suggests that there is no coherent pattern among the coordinates. The lack of a formidable pattern is an indication of the presence of heteroscedasticity.

In Table 4.2, the correlation between the standardized predicted value and the absolute value of standardized residual is -.058 and statistically significant (i.e., $p = .005$). Consequently, the assumption of homoscedasticity is rejected.

Table 4.2: Correlation between standard predicted value and absolute value of standard residuals

		Standardized Predicted Value	**Absolute Value of Standardized Residual**
Standardized Predicted Value	Pearson Correlation	1	**-.058****
	Sig. (2-tailed)		**.005**
	N	2391	2391
Absolute Value of Standardized Residuals	Pearson Correlation	**-.058****	1
	Sig. (2-tailed)	**.005**	
	N	2391	2391
**. Correlation is significant at the 0.01 level (2-tailed).			

Source: Authors' computation (2020)

In this section, the study tested three of the assumptions of Pearson's product moment correlation and the evidences demonstrate a violation of these assumptions. Specifically, the 2,391 observations comprise mild outliers and are not normally distributed. In addition, the assumption of homoscedasticity is violated. Rather than test the hypothesis of "no relationship between students' entrepreneurial engagement and entrepreneurial skills development among university undergraduates" using the Pearson's product moment correlation, the study uses the Spearman's rank correlation. The results are presented and discussed accordingly in the next session in an alternative approach.

Test of Hypothesis

Building on the preliminary analysis of the data collected, the study uses the Spearman's Rho to test the hypothesis of no association between student engagement in entrepreneurship academic activities and entrepreneurial skills development among university undergraduate students. The Spearman's Rho is also known as the Spearman's rank correlation. It is a preferred non-parametric alternative to the Pearson's product-moment correlation, especially when the data set of the two variables of interest are non-normally distributed and comprise some outliers (Puth, Neuhäuser, & Ruxton, 2015; Schober, Boer, &Schwarte, 2018).

Table 4.3: Spearman's rank correlation between student engagement and entrep. skills development

			Rank of SEE	Rank of ESD
Spearman's rho	Rank of SEE	Correlation Coefficient	1.000	.530**
		Sig. (2-tailed)	.	.000
		N	2391	2391
	Rank of ESD	Correlation Coefficient	.530**	1.000
		Sig. (2-tailed)	.000	.
		N	2391	2391
**. Correlation is significant at the 0.01 level (2-tailed).				

Source: Authors' computation (2020)

Specifically, the study tested the hypothesis of a no association between student engagement ranking and the ranking of entrepreneurship skills development. The results of the Spearman's rho test in Table 4.2 shows that there is a strong and significant positive linear relationship between student engagement ranking and the ranking of entrepreneurship skills development (r_s (2,389) = .530, p = .000). Since p< .05, there is enough evidence to reject the null hypothesis of no association between student engagement and entrepreneurship skills development among university undergraduate students. There is a strong and statistically significant positive relationship between student engagement in academic entrepreneurship activities and entrepreneurship skills development among University undergraduate students.

Discussion of Result

Results from Hypothesis One indicated positive and significant relationships between students' engagement and entrepreneurship skills development among university students in Lagos and Ogun states. The results showed that during the teaching of entrepreneurship, students were allowed to ask questions and contribute to class discussions. It was also established that lecturers worked with students to discuss business ideas long after the scheduled classroom activities. In addition to these, the study established that students were given opportunities to work on business ideas together with lecturers and mentors, with an opportunity to present the knowledge gained from such activities toother

members of the class. It was also reported that students were given the opportunity to discuss and share lessons from case-studies with other members of the classroom. Apparently, these facilitated cognitive, emotional and physical engagement with the course and its numerous offerings towards the development of entrepreneurship skills.

These forms of student engagement practices demonstrated in the study are likely to be a major contributor tothe high level of entrepreneurship skills development recorded among the students. In statistical terms, these practices account for at least 28.09 percent of the variations in entrepreneurship skills development among the university undergraduate students sampled by the study. The findings corroborated the work of Balan and Metcalfe (2012), which showed that the case study and team–based learning were the most engaging method for teaching entrepreneurship education. In another study by Exeter, Ameratunga, Ratima, Morton, Dickson, Hsu and Jackson (2010), it was highlighted that student engagement is directly relevant for positive learning outcomes and that teaching techniques commonly associated with small-class teaching can be used to engage students in very large classes. Apparently, despite the large classes, the students were engaged and this yielded positive learning outcomes that led to the development of entrepreneurship skills

Conclusion

The study seeks to establish the degree of relationship between student engagement and entrepreneurship development among university undergraduate students. The study builds on Finn's Participation-Identification (FPI) model, which stresses that when students are effectively engaged, they identify willingly with their peers, teachers, and institutions, and effectively commit to skills acquisition. In view of this proposition, the study developed and tested the null hypothesis that there is no association between student engagement and entrepreneurship skills development among university undergraduate students. Using the Spearman's rho correlation coefficient, the finding showed that there is a strong and statistically significant relationship between student engagement in entrepreneurship academic activities and entrepreneurship skills development among university undergraduate students. The study found that the students were engaged during the teaching of entrepreneurship education courses and were engaged in the utilization of the entrepreneurship support programmes and resources provided by the entrepreneurship and skills development centre.

These findings have both practical and policy implications. From the practical perspective, the study demonstrates that student engagement in academic entrepreneurship activities is neither a linear process nor is there a"fit-for-purpose" designed curriculum. Rather, there is a need for entrepreneurship educators at the universities and other institutions of higher learning to continuously engage in the study of student engagement in academic entrepreneurship activities. The aftermathof the COVID-19 pandemic and the EndSARS protests across the country point to one fact – the underutilization of the nation's leading resource base. Young people, no doubt, are the country's future, and the earlier Nigeria chooses to invest massively in nurturing the entrepreneurial talents of its young population, the better for the country and its desire for a sustainable and diversified economy.

In terms of policy, the findings signify a clarion call for the country to revisit the development of a National Graduate Entrepreneurship Policy (NGEP), which would lay a foundation for the cultivation of an innovative, supportive, and dynamic entrepreneurship ecosystem across all the universities and institutions of higher learning across the country. Notable is the need for each Enterprise Development Centre across all the universities in the country to embrace the principles and practices of transformative entrepreneurship. Transformative entrepreneurship emphasizes that entrepreneurship drives social changes for the good of the society at large. This implies that there is a strong need for a paradigm shift in the teaching of entrepreneurship solely for the creation of venture. Rather, entrepreneurship education in all universities across the country should be tailored towards teaching

students and producing graduates that are innovative, creative, resilient, and eager to be problem-solvers.

The study represents the first stage of a series of studies. There are still several areas which interested researchers can explore for future studies. First, the coefficient of determination showed that student engagement in entrepreneurship academic activities explains 28.09 percent of the variations in entrepreneurship skills development. Implicit in this is the possibility that student engagement is a determinant of entrepreneurship skills development. Future studies can use either the simple linear or multiple linear models to test this hypothesis. Another possible area of future research is the association between entrepreneurial self-efficacy and entrepreneurship skills development. Are these variables the same and predictors of one another? Attempts to explore the association between entrepreneurial self-efficacy and entrepreneurship skills development will help deepen our understanding of tasks of entrepreneurship among staff and students of entrepreneurship education.

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POLYGAMY AND FAMILY BUSINESSES IN NIGERIA

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Abstract

The impact of family structure, especially polygamy, on family business is an area that needs to be explored. Many studies have examined family business from various angles, but there is the dearth of studies on the effect of polygamy on family businesses, and specifically on succession issues. Polygamy, both as a cultural and global concept, is fast fading in many societies. Yet, there are a handful of entrepreneurs and highly educated family business owners who marry more than one wife, despite their levels of exposure, and run their family businesses for decades. This study, therefore, examines the effect of polygamy on family business succession, and provides insight on the organization, management and succession planning in polygamous family businesses in Southern Nigeria. Polygamous family business cases were observed and reviewed from Southern Nigeria and analysed using narratives, Atlas ti. and deductive inferences. Thematic issues that emerged were brought to the fore and inferences were drawn in order to accentuate the impact of polygamy on family business. The findings suggest that family businesses with polygamous family units have the advantage of a larger workforce than those established by monogamous families, but have greater chances of failing after the demise of the founder. The wives and children were involved in running polygamous family businesses, but had little input in the decision-making process. Succession is bleak and segregated among the wives and children; and in situations where the founders were insistent on handing over to only male children, who did not understand the vision and were not capable, the businesses declined. Some of the business founders, despite their extremely passionate and determined efforts towards continuity, refused to hand over their original family businesses to any of their offspring, but rather set up subsidiaries for each wife to take care of her children. Also, their offspring were only allowed to continue with the business name, but not the business line. The policy implication of this study for family business sustainability in Nigeria involves increasing awareness and encouraging business owners to have succession plans that are without prejudice in respect of the sex of their children; thereby enhancing their employability prospects.

Keywords: Family Business, Polygamy, Organization, Management, Succession,

Introduction

Family is the bedrock of any society, nation and ultimately the world. It is the first agent of socialization, it has the ability to instil good moral values in children, and to also prepare them for the future ahead (Israel, 2018; Arugu, 2014; Treuthart, 1990; Otto, 1962). The role the family plays in ensuring a balanced society cannot be overemphasized and one such is in the aspect of economic activities such as the setting up of family businesses. Tremendous benefits abound when family members work together to set up a family business. The tenets of family business are such that the benefits of working together in unity supersede the gains of sole proprietorship, since more resources are often pooled together, and more progress is assured (Nnabuife, Nwogwugwu & Okoli, 2019; De Alwis, 2010; Chami, 2001). Each member of the family contributes his or her own quota as they all

pull their resources together for a unified course, which is to sustain and grow the family business to become an empire.

The failure rates of family businesses have not only been of immense worry to the business and research world, but also to the popular press in many publications in Nigeria (Muo, & Ariyo, 2015; Arogundade, 2011; Eke, 2011; Nworah, 2011). Previous studies and anecdotal sources have shown that family businesses, where polygamy was practiced, hardly survive after the demise of their founders. Specifically, the International Finance Corporation (IFC) (2011) reports that 5%-15% of businesses that are owned by families pull through to the third generation, and some other studies have discussed the sad trends of failed family businesses in Nigeria, the reason for their failure, and the means by which such failures could be mitigated. Apart from factors such as high rate of attrition from the management, scarce resources to maintain cash-flows and other macroeconomic issues; one of the factors affecting family businesses in Nigeria is polygamy (Nnabuife, Nwogwugwu & Okoli, 2019; Ugoani, 2015; Musa & Semasinghe, 2014).

A closer look at some family businesses suggests that variations exist in terms of the family structure, management style, and succession plans. Most of the contemporary family businesses consist of monogamous family units with a father, mother, and children, whereas in some societies, the polygamous setting is more usual (Fenske, 2015; Duncan, 2008). There are also cases of single parents, where a man or woman decides to remain single and single-handedly raise children. Irrespective of these family structures, one major striking fact is that the advantages of monogamy outweigh polygamy (Witte, 2015; Witte Jr, 2014; Al-Krenawi, Graham, & Al Gharaibeh, 2011; Mendelsohn, 1948), and by extension, family businesses premised on monogamous settings have greater chances of continuity than polygamous settings, because of the lower occurrence or frequency of family conflict and rivalry (Adedayo & Ojo, 2016; Musa, & Semasinghe, 2014; Bewayo, 2009).

Given the desire for succession, and perceiving that family businesses with polygamous settings crash faster than those with monogamous setting, one of the concerns that arises is why some family business founders still practice polygamy. Historically, in Africa, polygamy was a way of life common amongst affluent men, who would marry many wives and have many children. In Zimbabwe, entrepreneurs become polygamist as their businesses grow; a typical instance is the Maravanyika's view of herdsmen that were historically adduced as polygamist given the need to grow and sustain their businesses (Nyamwanza, Mavhiki & Ganyani, 2018). Also, long before the advent of colonialism, polygamy was very common in many parts of Nigeria, especially because the major line of business was farming. People used to marry many wives and have many children in order to help with the farm work and grow their family businesses. However, the advent of Western civilization brought monogamy and has influenced many men to resolve to have only one wife (Fenske, 2015).

Numerous studies opine that despite the importance of family businesses in any economy, the rate of survival of these family businesses beyond their founders is minimal in Nigeria (Nnabuife, Nwogwugwu & Okoli, 2019; Ogundele, Idris, & Ahmed-Ogundipe, 2012; Arogundade, 2011), and even worse so in polygamous family businesses because of the many concerns arising and issues to be considered when planning for succession (Nnabuife, Nwogwugwu & Okoli, 2019). Yet there are still a handful of very conservative Nigerians, in Southern Nigeria, who run family businesses and marry more than one wife despite their educational status and levels of exposure. Therefore, the puzzle that comes to mind is how can polygamous family businesses thrive or remain resilient in the face of all existing and potential challenges that confront them?

In light of the foregoing, this study examines how polygamous business owners run their family businesses from which thematic issues emerged. Subsequent to this, the effect of polygamy on family

businesses was examined. Further, succinct distinctions were made between monogamous and polygamous family businesses. Finally, the study proposes a decoupling sustainability model that can enhance smooth succession in polygamous family businesses.

Literature Review

This section presents an overview of issues surrounding family structures and business modalities globally, and dovetails to issues confronting family businesses in Nigeria. Issues such as the definition and theoretical concept of polygamy, importance of family business, and historical reports of some prominent family businesses in Nigeria, are highlighted.

Polygamy and Family Business

The traditional family structure in Western economies comprises two married individuals (one man and one woman) providing care and stability for their biological offspring. This family structure, otherwise known as a nuclear family, is becoming less prevalent in advanced economies, and alternative family forms have emerged (Wackerfuss, 2015). In Africa, the traditional family structure was more of a polygamous and extended family setting, where a communal lifestyle was prevalent. However, this structure is fast eroding, largely due to colonialism, and the nuclear family has become more common as many people migrate to towns and cities (Fenske, 2015).

There are different forms of marriage, such as monogamy (one man, one wife), polygamy (one man, more than one wife), and polyandry (one woman, more than one husband). Polygamy, which is the focus of this study, is conceived as the conjugal union between a man and many women (Fenske, 2015; Uguani, 2015). Polygamy is a well-known phenomenon in African countries, and particularly in Nigeria. Long before the advent of colonialism, it was commonplace to find one man marrying more than one wife. Hence, it was very common for one man to have children from different mothers consecutively, and to have them all participate overtly in the family business. However, cultural laws do not take into account the objective selection of the best successor, which invariably has implications on the ease and timing of succession planning in family business (Machingambi, 2014; Adedayo & Ojo, 2016).

According to De Massis, Kotlar, Chua & Chrisman (2014), family businesses are conceived as
" a commercial set-up, where ownership, management and decision-making are influenced by two or more generations of a family that are related through blood, marriage or adoption. The decision-maker in a family business, which could comprise of the founder or the successor, possess the ability to carry the idea of the business through in order to actualize set objectives".

Succession Planning in Polygamous Family Business

The word succession was coined from the word succeed, and it means taking the place of another, or to follow or come after someone. In organizational theory and business practice, succession is seen as the process of transfer of ownership and management from one person or group of persons to the next generation. Succession planning can start anytime, but succession, in its entirety, involves the identification, selection, and training of the successor; and includes activities before and after the transfer (Nnabuife, Nwogwugwu & Okoli, 2019; Sharma, Chrisman, Pablo & Chua, 2001; Shepherd & Zacharakis, 2000). For this study, succession involves the transfer of ownership and management of commercial investment of any type from business owners to their offspring. This could be members of nuclear families in monogamous settings, or members of compound families in polygamous settings.

Existing literature has reported that many business founders develop cold feet whenever succession is mentioned. Most of these studies have attributed many founders' reluctance to plan for succession to

a number of factors, such as: founders' strong sense of attachment to their businesses, fear of death and retirement (Ogundele & Idris, 2008; Danny & Steier, 2004). However, for those who are courageous and eventually deicide to consider the issue of succession, studies have shown that it is much easier in monogamous than in polygamous settings (Lee, Lim & Lim, 2003; Musa & Semasinghe, 2014). In monogamous family business settings, the founders are usually free to choose either their wife or any of their children to continue the family business. Basically, as soon as they identify or register the interest of prospective successors, most business founders/owners who have a succession plan in perspective bring them on board and begin to train them while they are still running the businesses. This often leads to a smooth transition when the succession plan is finally implemented.

Polygamous family business settings, on the other hand, are usually fraught with many more challenges than are found in monogamous family business settings. Nnabuife, Nwogwugwu & Okoli (2019) identified seven factors affecting family business succession in polygamous settings, namely: cultural hindrances, fear of bias, sentiments and emotions, lack of succession planning knowledge, internal squabbles, not taking the business as a going concern, and not writing a will early. For instance, most business founders do not write their wills before their demise; and where some of them do, the traditional laws are rather subjective on the suitable successor in Nigeria. Moreover, even when the founder identifies and chooses the best individual as successor, in some instances the elders may take away the business as well as the family properties from him after the demise of the founder. In other regions in Nigeria where there are different cultural norms, the first son is usually the sole heir of the inheritance, and in some cases has the primary responsibility of sharing the inheritance among the male children. Female offspring were often not included in sharing their father's inheritances until recent times, when cultural norms began to change and people started advocating for gender equity as well as female involvement in economic activities and family businesses (Nnabuife, et al. 2019; Adedayo & Ojo, 2016; Ogundele, Idris & Ahmed-Ogundipe, 2012). This sometimes makes some competent Chief Executive Officers (CEOs) not put in their best to revive or manage some family businesses.

In polygamous set-ups, the founders are often accused of being biased, even when they are trying to be objective in choosing the right successors. There is usually rivalry among the offspring and their mothers on who the successors should be (Adedayo, Olanipekun & Ojo, 2014; Onuoha, 2013). Also, the founder may be in dilemma as to how to incorporate the children into the business without being seen to be biased in the eyes of the children and their mothers, or even in the society. This and many other reasons made Barclay, Foskey and Reeve (2007) suggest that some business owners, especially the polygamists, do not plan for succession because it brings them face to face with the realities of the problem of equality among their offspring; thus, making the polygamy-family business nexus a peculiar issue of research interest.

An Historical Overview of Family Businesses in Nigeria

Nigeria is a multi-cultural and multi-lingual country with three major tribes (Yoruba, Igbo, and Hausa). The Hausas are predominantly found in the northern part of Nigeria. The Igbos are in the eastern part while the Yorubas dominate the western part of Nigeria (Oderinde, 2011; Stroud, 2018; Eribake, 2015; Ewoigbokhan & Brieger, 1994)). Other minor tribes such as the Calabars, Ijaws, and Edos are majorly found in the southern part of Nigeria. Nigeria, though highly endowed with both human and natural resources, has been experiencing many economic and political challenges, primarily because of corruption, poor policy implementation processes, and bad leadership. Nevertheless, some of the citizens are making headways in the business world and globally, and some eventually grow their businesses and build empires before their demise, such as the Tribune newspaper founded by Chief Obafemi Awolowo, the conglomerate of Aliko Dangote, the Honeywell conglomerate of Chief Oba Otudeko, and the Globalcoms of Chief Michael Adenuga. Though the number of family businesses in

Nigeria cannot be easily determined due to the paucity of data (Esuh, Mohd & Adebayo, 2011), her history brims with many big and small family businesses, which went into decline after the death of their founders. In Nigeria's economic hub, in particular Lagos State, some famous family businesses thrived between the 1960s and the mid-1990s when their founders were alive, but declined a few years after their demise. According to Olubiyi, Egwakhe & Akinlabi (2019) and Adebayo et al. (2016), some such family businesses and their areas of specialties included:

- Odutola Brothers (Alhaji Jimoh Odutola & Timothy Adeola Odutola) – Rubber & Tyre
- Concord Group (Bashorun M.K.O. Abiola) – Media, Aviation, Banking & Shipping
- Sanusi Brothers Group of Companies (Late Ayodele Sanusi) – Building Materials
- Irawo Group of Companies (Late Chief Patrick Ayodele Irawo) – Consultant & Entrepreneur
- Balogun Group of Companies (Alhaji Lai Balogun) – Hardware & Software IT parts
- Ilodibe Group of Companies (Late Chief Augustine Ilodibe) – Transport
- Sijuwade Holdings Ltd (Immediate past Ooni of Ife, Oba Okunade Sijuade) – Real estate & Construction

For instance, Alhaji Jimoh Odutola was a leading entrepreneur and a forerunner in many regards in Nigeria. He started his business in 1932, after his mother advised him to go into partnership with his brother, Timothy Adeola Odutola. The partnership was delightful as the two brothers established the Odutola Brothers, which became one of the most renowned businesses for the production of rubber and tyre in Nigeria in the 20th century. However, the success with which this business operated during the existence of the founding brothers has eroded with time since his demise in the year 2010.

Again, Moshood Kashimawo Olawale Abiola established another well-known family business, known as Concord Group. Popularly known as MKO Abiola, Moshood Kashimawo Olawale (MKO) Abiola's story, being a polygamist, is more complex and tragic. MKO Abiola's image, together with his flourishing business empire, lingered for a while on the Nigeria's business panorama. But sadly, has now become a reference point of a tycoon whose family business gradually deteriorated after his demise. M.K.O. Abiola, who was once the president of the Nigeria Stock Exchange, had a chain of companies that spanned aviation, telecommunications, media, banking, shipping and farming. Most of these companies, once described as going concerns with the ability to exist in perpetuity, are now moribund (Arogundade, 2011).

Similarly, the immediate past Ooni of Ife, Oba Okunade Sijuade, was a successful international businessman, well-travelled and educated, and had a polygamous family (Osakede & Ijimakinwa, 2015). Kabiyesi Sijuwade has a business empire known as Sijuwade Holdings Ltd, and majors in Real Estate and Investment Services. He selected one child from each of his wives and made them members of the board of directors. However, his family business has been delisted from the United Nations Global Compact since 6th March 2012 due to failure to communicate progress of the business status (United Nations Global Compact, 2012).

In conclusion, the family members of these business moguls are always engulfed in one form of crisis after another, either concerning the management of the businesses or over the unlawful sale of properties and businesses after their demise. Similar family business outcomes exist in other sub-regions of Nigeria, where some enterprises have waned after their founders' demise (Adebayo et al., 2016; Arogundade, 2011)

Theoretical Review

Some common hypotheses and theories applicable to polygamous family business management and succession issues include the Kitchen Model, Game theory and Systems Theory.

Ugoani (2015) suggests that the polygamous business founders can use the "Kitchen Model" to arrive at acceptable conclusions when choosing their family business successor. The model is a fallout from some of the cultural practices as well as a product of research work and personal experiences. It is popular for contextualizing polygamous family business settings and it takes its roots from the scenario where each wife takes turns to cook for and sleep with their husband (Ugoani, 2015; Nnabuife, Nwogwugwu & Okoli, 2019). The Kitchen model describes a hypothetical polygamous family business setting where the originator (who is usually a polygamist) has three wives before his death. Just as the wives take turn to cook in the kitchen, the management of the family business after the demise of the founder is suggested to be rotational from the child of wife A to the child of wife B and the child of wife C, as the case ma ybe. The rotation continues in that order, or from whoever has the first male-child among the three wives to whoever has the second and third male-child. The model, however, is not free from rivalry and disputes because, apart from the interest of the children that will inherit the business, it often times breeds serious conflicts, blackmail, and even threats to life among the immediate or extended family members (Ugoani, 2015).

Game theory is often used for analysing interactions among two or more entities (Blumentritt, Mathews, & Marchisio, 2013; Osbourne, 2003). Its greatest power comes from the simultaneous consideration of actions by multiple actors, either as individuals, groups, or organization, and the interrelationships of the outcomes of those moves (Blumentritt, Mathews, & Marchisio, 2013). Although game theory stemmed from mathematics, one of its earliest applications was in analysing political situations among conflicting countries during the Cold War. Over time, its use has expanded to social and managerial settings (Bennett & Miles, 2011), and general business activities (Papayoanou, 2010; Lee, Lim, & Lim, 2003).

Game theory is another alternative for analysing family businesses, especially as it relates to the issues of succession. This is because it conveniently evaluates management outcomes and the inherent issues that influence the choices, as well as the fallouts from the process of making a decision which involves not just one person (Blumentritt, Mathews, & Marchisio, 2013). Therefore, game theory accounts for scenarios where a person's choice is influenced by the decisions and actions of others, or the preferences of various interconnected actors. Besides, the possibility of representing the activities regarding succession like games gives the opportunity to verify some of the modellings (Chakravarty et al., 2011). Thus, it is very relevant in the assessment of succession and management processes of family businesses for prospective successors even before the demise of the business founders. Furthermore, the analysis emanating via Game theory gives rise to rational, objective and informed decisions, especially as regards succession and family business sustainability (Blumentritt, Mathews, & Marchisio, 2013; Duh et al., 2009). However, the relevance of the theory with regard to polygamous family businesses is still in doubt, given the more complex set-ups and deep-seated self-interest that drives prospective successors; therefore, the systems theory is also examined.

Systems and contingency theories are contemporary approaches utilized for structural applications to different organizational set-ups. The systems theory has been widely applicable in different spheres to include the environment, biological and management sciences. The theory describes an organization as a system composed of interconnected parts or sections; such that these systems or set-ups have a minimum of two or more elements which are related (Johnson, Kast, & Rosenzweig, 1964; Checkland, 1994; Chrisman, Chua & Steier, 2003). As shown in figure 1, the systems theory captures the internal and external set-ups otherwise referred to as the open and closed components within a set-up.

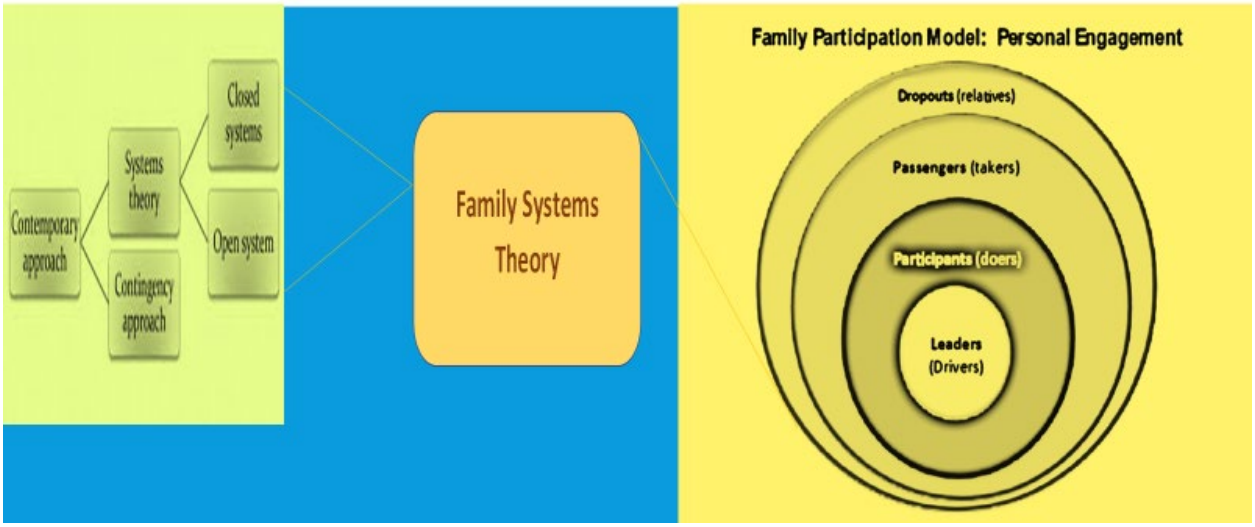

Figure 1: Systems Theory
Source: Adapted and Synthesised from Ludwig, 1940, Griffiths, 2015

Systems Theory is a way of thinking and analysing business management from its existence through to succession **(**Kast & Rosenzweig, 1972). Therefore, it is an alternative approach to planning, understanding, and managing family businesses (Chrisman, Chua & Steier, 2003; Dumas, 1992). It presents a model for the assessment of the core and peripheral aspects that shape the environment in which a business operates in a unified context (Johnson, Kast, & Rosenzweig, 1964; Checkland, 1994), thereby permitting the appreciation and function of subsystems (Chrisman, Chua & Steier, 2003; Dyer Jr & Dyer, 2009). The polygamous family business is viewed as a system which consists of the founder and the family members (usually the wives and children), and they are deemed as interconnected. The aim of the systems hypothesis for family businesses is to situate and evolve an advantageous setting for management. Thus, if the environment where decision-making is well understood and hierarchized, it is presumed that there will be less friction and collapse. According to Griffiths (2015), the application of the systems theory to family business distinguishes the main decision maker (whether the founder or principal successor) as the driver, the participants (which usually include the wives and children, some other family members or children other than the main successor), and dropouts (which largely include extended family members). Therefore, within the polygamous business system, the founder, if he understands this set-up, can appropriately work out a succession plan among his family members to ensure a smooth and sustainable succession.

Family businesses, just like any other normal organizations, are often hierarchical in nature and made up of departments, which are further divided into smaller units. Each of these departments and units needs to be properly managed in order to achieve the ultimate goal of profitability and continuity. The systems within which businesses operate are undoubtedly complex. However, managing businesses through systems concepts promotes a positive way of thinking, which assists in demystifying some of the complexities, and subsequently assists business owners and managers recognize the nature of the complex problems and thereby operate within the perceived environment. In essence, the family business is recognized as a part of a larger environmental system, and subject to external pressure from the cultural environment.

Methodology

This study utilizes the qualitative approach for data collection and analysis. The qualitative method allows collection of different available evidences using interviews, life history, interactions and personal experiences (Nyamwanza1, Mavhiki & Ganyani, 2018). The case-study approach is preferred, given that it relates to real life experiences with apriori expectations on polygamous family businesses (Olaore, Afolabi & Oyeleke, 2017); thereby, enabling valid deductions and conclusions on the subject matter.

In order to select cases that would make valuable contributions to the study of family businesses and succession in Nigeria, the issue of polygamy in family business emerged from the data (Akinbami et al., 2019). Hence, the polygamy cases were explored using purposive sampling techniques. From Akinbami et al. (2019), polygamous family business featured more in the South-West than South-East Nigeria. Thus, four cases were taken from the South-West and one case was taken from the South-East of Nigeria, giving a total of five cases that were utilized for this study. Information was gathered from the business owners, children and relatives. Table 1 summarizes the details of the cases examined.

Table 1: Descriptive Features of Selected Polygamous Family Businesses

Details/Issue	Case I	Case II	Case III	Case IV	Case V
Business Classification	Agro-Allied Products	Groceries and Provisions	Surveying	Construction and Real Estate	Construction & Building Materials
Category of Respondent	Daughter	Owner	Relative	Wife	Daughter
Sub-region of Business in focus	South-West Nigeria	South-West Nigeria	South-West Nigeria	South-West Nigeria	South-East Nigeria
Current Status of Business	Declining	Thriving	Declining	Thriving	Declining
Number of Wives and Children of the Founder	3	3	6	7	2

Source: Authors Fieldwork

In order to address the objectives of the study, some other evidence sought during data collection centred on the viability of the business as well as the means by which founders involved their family members, especially their wives and children. Other issues include the account of success or otherwise of the family business vis-à-vis the polygamous phenomenon; the current status of the family business following the polygamous context and the succession plan.

In order to analyse the responses, thematic issues on the approaches the polygamists adopted in their businesses were identified through narratives. The effects of polygamy on family business sustainability were analysed using Atlas ti. software; and the distinctions between monogamous and polygamous family businesses were generated through deductive inferences made from the case studies.

4. Research Findings & Discussion of Findings

Following the objectives of the study, the results are subsequently presented in four sub-sections. Each sub-section highlights the issues in each of the four identified objectives. Objective one addressed issues surrounding polygamous family business structure. Objective two addresses the effect of polygamy on family businesses. Distinctions between monogamous and polygamous family

businesses were made in objective three. Finally, this study proposed a decoupling sustainability model that could enhance smooth succession in polygamous family businesses

Thematic Issues on Polygamous Family Business Structure

Based on the interviews conducted, the thematic issues emanating from the responses are discussed in turns.

Family Structure

All the cases considered were confirmed polygamous families, as elicited through the interview. The polygamist was seen to adopt various family structures which were equally contingent for the manner in which their family businesses operated. For instance, following the classification of cases in Table I, Case I reported that until the demise of their father, they were unaware he had a third wife; only to discover that their father (who is the founder of the family business) had some other hidden chains of businesses and had willed them to the third wife and her children. Case III had his wives living with him under the same roof and he ran the family business together with his wives and some children until his demise. Meanwhile Case II further explained their living arrangement:

> *I have three wives and… but we are not living together in the same house. I built houses for each of them and set up businesses for them using the family business name……* ***Case II, Owner***

Organization

In terms of organization, most of the cases reveal that during the existence of the founder, the children are actively involved in assisting their Father with the running of the business to the extent to which he involved them, especially during their holidays. The incident reported from Case V explained that the children take orders from customers, join in the selling and distribution of goods, while their father collects the sales proceeds. Also, their father goes with their big truck all the way to Lagos to bring the goods. When asked why he refuses to delegate such duties, he said:

> *Trustworthy people are hard to find, even among the drivers. I've had terrible experiences of some of my employees carting away some of my goods and money so I don't allow any of them to go and bring the goods from Lagos……* ***Case V, Daughter***

The implication of this is that the polygamist, during his life time, has more influence on the loyalty of the wives and their children. This is opposed to the strained relationships and rivalry that threatens the sustainability of the family business after the demise of the polygamist.

Management

At management level, the business founder is seen to organize meetings with his family members on how the businesses should be run. He allocates/delegates specific duties to each family member, he sets the prices at which the goods are to be sold, and sees to the supply of goods to each outlet/branch. The fallouts from Case II explained that his business has five branches and deals in the wholesales and distribution of foodstuffs, provisions and toiletries. He further noted that:

> *I am a University graduate and all my children are educated but they assist me with my business whenever I need them"……. ……* ***Case II, Owner***

The respondents in Case IV added that the reason why he went into polygamy was for the management of his business. She said:

> *He married one of his wives because when she was just an employee, she assisted him to uncover a huge amount of money that would have been lost… she turned out to be trustworthy……* ***Case IV, Wife***

In other words, the extent to which the polygamist, who is also the founder, engages his family accounts for the extent of the involvement of the family members. This is not only contingent for the succession and stability of the business, but also determines the interest of the prospective successors in following through with the founder's vision of the business.

Succession

Polygamous family businesses are by set-up laden with rivalry and contentions after the demise of the founder. This explains why previous studies opt for the Kitchen model (of rotational management systems among children and wives of the polygamist) as a viable option to mitigate the challenges or likely problems that could prevail over the business (Ugoani, 2013; Nnabuife et al., 2019). Meanwhile, the experiences of the polygamist in Case II showed that the business successor (who succeeded his mother, but is now himself a polygamist) has resolved not to hand over the family business to any of his offspring but rather set up branches for each wife.

Like he said:

> *I cannot hand over this headquarter to any of my wives or children because it will cause a lot rancour. Instead, I will enlarge it, make it into a warehouse, I will stop selling wholesale and retail. I will become a wholesale distributor only and help my wives and children establish their own business outlets using the same business name. ……* ***Case II, Owner***

Gender Considerations

Women were involved in running the family business, but had little input in the decision-making process. Case I and II reported certain prejudices against the girl-child as successor compared with male children, who are preferred and even viewed as natural successors. Case II further stated that:

> *My daughters are bound to get married someday and will change their names to their husbands'; therefore, I prefer to establish my sons to manage my various outlets, after all, they will maintain my name……* ***Case II, Owner***

Case III reported that the founder was more than willing to allow his daughter to succeed him as a surveyor; moreover, among all his children, the identified prospective successor who happened to be a girl-child was trained in quantity surveying and estate management. However, the lady was struck with madness, which was believed to be spiritual attack orchestrated by one of the wives who was deemed jealous having recognized that the lady's prospects of succession were high.

The implication of the gender ideologies and outcomes prevalent in polygamous family businesses reinforces the patriarchal system operating in Nigeria's cultural systems. Also, it further exposes the obstacles and discrimination against the girl-child, thereby limiting the rights of the girl-child, reducing their employability prospects and natural opportunity for self-empowerment, as well as truncating their self-esteem, which results in subservience or dependence.

Effects of Polygamy on Family Businesses

Figure 2 contains the network of responses elicited via the interviews and also extends some of the factors identified by Nnabuife (2019) on the effects of polygamy on family businesses in Nigeria.

Children's Bias on Polygamy

Based on the children's disappointment in their polygamous family set-up, and the strained or odd scenarios that occurred within the family while growing up, this informed the opinion of the children as to not wanting to be involved with the family business. Rather, they preferred to disengage from the family business and evolve their own life's course.

Undue Favouritism

In polygamous settings, there is always the favourite spouse who has access to the core information and operations of the family business. As a result, the children of the other wives are often oblivious to the existence of most aspects of the family business. Therefore, after the demise of the founder, these children and their mothers are automatically left out of the succession process.

Interest of the Children

Some children grow up having different talents, inspirations and ideas from the family line of business. Such children are often not committed to the family business and end up pursuing their dreams at the expense of the family business.

Lingering Prejudices Leading to Manipulations

From the interviews, it was observed that prolonged prejudices and desperation for ownership and control of the family business led to spiritual attacks among family members. Some wives use voodoo and mystical powers to debar the children of other wives from gaining control or having access to the family business.

Following the points highlighted above, the findings corroborate the studies of Ugoani (2013) and Olaore et al., (2017) that examined the impacts of succession and negative influences obstructing the sustainability of polygamous family businesses.

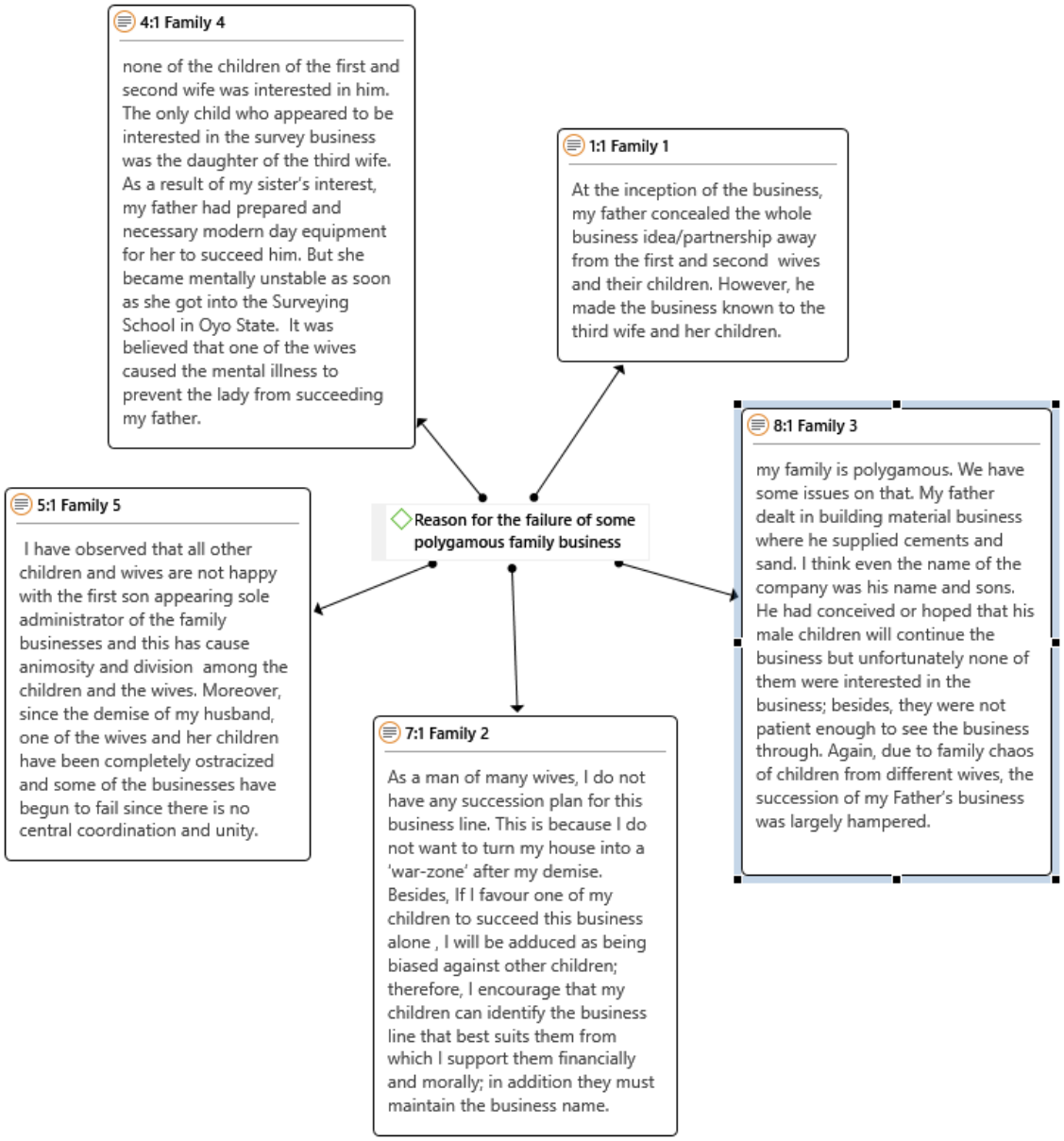

Figure 2: Effects of Polygamy on Family Business
***Source: Authors Fieldwork* (2020)**

4.3. Distinction Between Family Businesses and Polygamous Family Businesses

Some notable differences were observed between monogamous and polygamous family business structures.

Table 2: Distinction between

Issues	Monogamous Family Business	Polygamous Family Business
Management & Involvement	Ease of involvement of wife and children with manageable strife and rivalry	Complex and low level of involvement of wives and children with prolonged strife and rivalry sometimes leading to death of family members
Succession	It is usually smooth and well managed	It often involves cultural sentiments and owner's bias

Gender	There is less prejudice on the girl-child as successor	There are more prejudices on the girl-child as successor
Succession Plan	They do not often need to separate business name from the business line	In order to curb possible frictions and rivalries, decoupling business name from business line is often an option; thereby giving rise to subsidiaries
Longevity	They usually outlive their founders and have more prospects for sustainability	They hardly outlive their founders and have little prospects for sustainability
Workforce	Do not often have much workforce advantage like polygamous family businesses	Have more workforce advantage than monogamous family businesses

Source: Authors Fieldwork **(2020)**

Model for Polygamous Business Succession

The case of succession discussed in the thematic section evolves a plausible and viable model for family businesses where the founder, who has earned a household name and perhaps has businesses in different sectors, can disintegrate the centrality of his business while his business goodwill is sustained by prospective successors (his wives and their children). This study therefore proposes a ***Decoupling Model*** as presented in Figure 3.

To arrive at an alternative option to assuring sustainability in polygamous family businesses, we first recognize the existing model of successions. One strategy is where the founder selects his successor among his wife and children, while another is the Kitchen model proposed by Ugoani (2013) where succession involves the management of the main family business through rotation among the wives and the children of the founder.

The decoupling model argues that succession plans could involve separating the business name and the business line. Hypothetically, the polygamist is seen to own a thriving business name 'Alpha'; to avoid rivalry, the polygamist has two options, which could be in the form of Subsidiaries (distribution per wife) and Plant (distribution per child).

First, in the case of subsidiaries, the founder could set up independent branches for his wives and children (often known as *idi-igi* among the Yorubas in the South-West) using the family business name, which are denoted as Alpha-Sub A, Alpha-Sub B & Alpha-Sub C, as shown in Figure 3. Secondly, if using the Plants option, especially where the founder owns chains of businesses in different sectors of the economy, he could succeed each business sector per child (often known as *olori-jori* among the Yorubas in the South-West) as denoted by Alpha Plant A, Alpha Plant B, Alpha Plant C; and in this case, the children are expected to cater for their mothers. This case could be exemplified through the case of MKO mentioned earlier, who owned print media, real estates and airlines, where the polygamist could embrace the option of handing over one business per wife and her children while still maintaining the family business name. Also, there is the possibility of a hybrid of both options, depending on the reality facing the family.

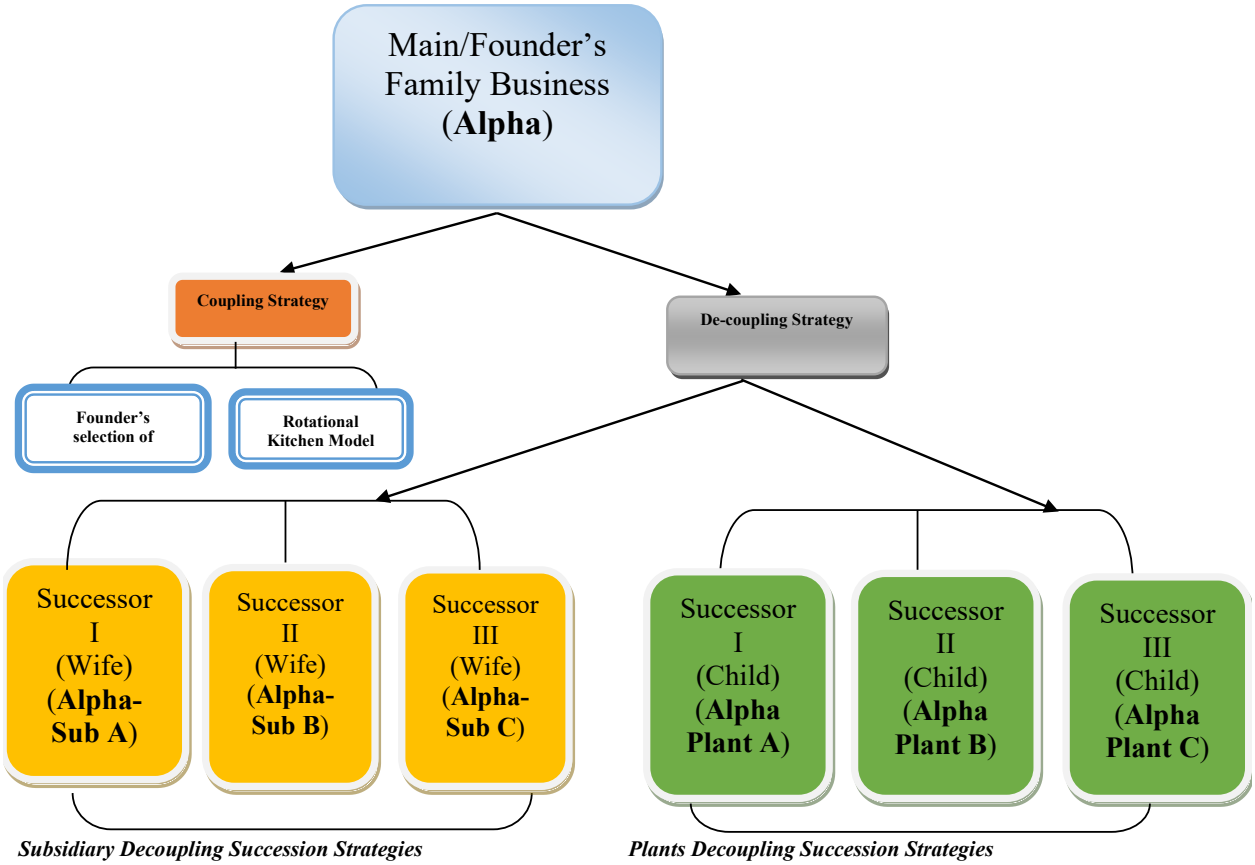

Figure 3: Decoupling Succession Strategies for Polygamous Family Businesses
Source: *Authors Fieldwork* (2020)

Conclusion

The study described the organization, management, and succession issues surrounding polygamous family businesses in Nigeria. The findings also highlighted the effects of polygamy on family businesses and noted the need for improved sustainability in approaches among family business owners. The study proposes a Decoupling Model of succession strategy, which could enhance the sustainability of polygamous family businesses in Nigeria. The study concludes that polygamous family businesses in Nigeria could enhance their sustainability prospects if the founders adopts effective succession strategies, thereby reducing and mitigating strains that could arise in the family business in the future. The policy implication of this study for family business sustainability in Nigeria involves increasing the awareness of business owners and encouraging them to have succession plans that are without prejudice in respect of the sex of their children; thereby enhancing their employability prospects.

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WHY WE DEFY THE LAW TO REMAIN IN URBAN SPACE: STREET TRADERS AND THE STRUGGLE FOR SURVIVAL IN LAGOS

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Abstract

Street trading is one of the cheapest businesses for millions of unemployed people in developing countries. Although street trading offers urban informal employment for millions of people in the global South, in the majority of African cities, most urban regulators still perceive vending on the streets as a symbol of poverty, underdevelopment and anti-modernization. They therefore evict, eject and arrest vendors indiscriminately in order to subdue their right to the urban space. This article examines the responses of street traders in Lagos State to the Lagos State Street Trading Prohibition Law. The study relies on a mixed-method of social research by adopting a cross sectional survey to sample 894 street traders across three senatorial districts in Lagos State, using multistage sampling technique. The survey is complemented by a total of 30 key informant interviews and focus group discussions of street vendors and government officials involved in the regulation of urban space in the state. Data generated is analysed using descriptive and inferential statistics. The results show that poverty, unemployment, family pressure and the need for street traders to cater for their dependents, are the critical incentives to defying Street Trading Law. This finding is complemented by evidence from the qualitative study which finds that people defy the law, not only because they are afraid of the law enforcement agents but because street trading serves their immediate economic needs in the face of harsh economic conditions.

Keywords: Street Trading, Urban Space, Law, Buyers, Lagos State

Introduction

Street trading is one of the major sources of employment for millions of people around the world, especially in Sub-Saharan Africa where the problem of poverty has continued to impose a heavy burden on individuals, thereby pushing them to the bottom of society. Whereas street trade is a supplementary income generating sector in most developed capitalist societies, in Africa, street work remains a major source of employment for millions of people (Adama, 2020; Brown & Mackie, 2018; Lindel, 2020; Linares, 2017; International Labour Organization, 2018). Skinner (2008) noted that street trade with the informal economy provides over 70% of employment in urban Africa. This is partly due to the deepening economic crisis in the continent and the inability of the formal sector to absorb millions of youths who are ready to work but are unable to secure formal employment (Skinner, 2008).

Although street trading promises competitive revenue generation and huge taxes for the declining state-controlled African economies, it is still the most abused, repressed and condemned economic activity by government officials, who want to create world class cities and preserve the formality of global capitalism and modernization. From West Africa, East Africa, and Southern Africa to North Africa, government officials and law enforcement agents have intensified efforts in creating urban

centres that align with the expectations of formal organizations: clean environments, aesthetic urban centres and globalization. Though the tolerance level varies across regions, there is a general consensus that modernization should come with a clean city that is devoid of traffic and an uncontrolled informal economy. This thinking is driven by the colonial ideologies with which the state in Africa and the cities were established (Lindel & Adama, 2020; Lindel, 2020).

The state in postcolonial Africa is a reflection of the defunct African colonial state, because both the creation of the state and the colonial cities were driven by capitalist exploitation of colonial economies. Colonial cities in Africa were therefore established as centres of excellence for the preservation of the capitalist interest of the colonial government. In order to achieve this, urban planning in most African cities was developed with the primary purpose of promoting formal trade, relegating the informal economy, and increasing the revenues from the colonial economies for the benefits of the imperial state. It was on the basis of this that colonial cities such as Lagos (Nigeria), Accra (Ghana), Harare (Zimbabwe), Kampala (Uganda) and Johannesburg (South Africa) were crafted and designed to reinforce these racial, class and capitalistic colonial segregations. The 1917 Town Colonial Ordinance in Nigeria is an example of urban town planning which structured cities to be created based on their importance to the colonial exploitation of the periphery (Aluko, 2010). The Lagos Town Council Ordinance of 1928 was also designed to create a Lagos city that was free from environmental decay and conducive for the development envisaged by the colonial masters. Street work was therefore treated in the colonial society as anti-colonialist.

Today, street work is also treated as anti-modernization and a symbol of poverty and underdevelopment which will drive away investment. This legacy of hostility to informality is a colonial legacy that has continued to dominate both the allocation and the use of the urban space in modern West African societies, including Lagos, where the government is vigorously pursuing different urban renewal programmes in order to position Lagos as an African mega city (Skinner, 2008; Lindel, 2020). Despite this hostility, millions of young people still defy the law to sell their wares, vehicular parts, food stuff and phone accessories in Lagos traffic. With the rapid growth of the population of Lagos at 3.4%, and the increasing rate of poverty in the other parts of Nigeria, street trading has become not only a means of livelihood for migrants, but a system to sustain the failure of the formal economy that is unable to provide jobs for millions of graduates that are shunted out every year.

This study was designed to establish the social and economic factors that are possibly responsible for the street traders' defiance of the Lagos Street Trading Law, 2003. The study became necessary in view of the fact that, despite the imposition of the ban by the Lagos State Government under Babajide Sanwanolu and his predecessor, former Governor Akinwunmi Ambode, the number of street workers has continued to increase in different parts of Lagos, such as Marina, Obalende, Oshodi and Yaba, exploiting the heavy traffic and chaotic situations created by Lagos' urban influx (Olatunji, Okechukwu, & Yetunde, 2020). The study was therefore set to achieve the following specific objectives: (a) assess the street trading and illegal market laws in Lagos State; (b) examine the influence of poverty, unemployment, family pressure, migration and location on street traders' compliance with the Lagos State Street Trading Law; (c) determine if bribing of task force officials and Lagos State Environment Corps enables street traders to evade arrest; and (d) proffer possible solutions to street traders' use of urban spaces in Lagos State.

Literature Review

The last three decades have seen an increasing amount of literature on the informal economy and the growth of cities of the global South (Aderinto, 2012; Brown & Mackie, 2018; Roever & Skinner, 2016; Skinner, 2008). The literature can be divided into three perspectives: 1. those who linked street work and informal trade to colonialism; 2. those who saw informality as a process of deregulation of the

African economy after independence; and 3. those who saw informality as a postmodernist struggle designed to give a voice to those whose voice has been silent in the global South (Skinner, 2008).

Because of limited space, the review of literature shall concentrate on two of these areas: colonial influence on the economy of Lagos; and the struggle for urban space caused by the deregulation of African economies, which resulted in decreasing employment capacity of the formal sector and increased participation of people of the global South in informal employment.

Colonial Economy, Urbanization and the Growth of Street Work in Nigeria

Colonial conquest of Nigeria has remained a major driving force in modern conceptions of street trade. This is because street trade has been part of Nigerian economic history for centuries. With the coming of colonialism to Africa, the traditional economic system was seriously altered, modernized and transformed to reflect colonial interests. First, it imported modern capitalism into Africa, injected new laws and modern infrastructure that were capable of improving the economy for the benefits of the metropolis. In British West Africa, the colonial government concentrated on agricultural produce that was favourable to the British colonial empire. Hence, it foisted laws and regulations on traditional markets, stifled cross-border trade and relegated the informal sector to the background. Second, it introduced a money market economy that made the informal economy depended on the formal sector for development. This strategy promoted the interests of the European bourgeois and their African collaborators to the detriment of the local economy (Olaoba & Ojo, 2014).

With time, urbanization and the population grew in response to the colonial economy. George (2012) noted that by 1943 the British had promulgated what looked like the first colonial law prohibiting trading on the streets. The regulation prohibited trading or hawking by children under 14 years and banned them from singing for commercial purpose. Notwithstanding the law and other colonial regulations, the population of Lagos continued to rise astronomically.

The coming of political independence in 1960 did not change the status quo; instead, it promoted urban modernism and made the informal sector secondary to the formal sector. During the first decades of Nigeria's independence, agriculture played a critical role in the transformation of Nigerian economy; however, by the early 1970s, it had lost its value in the national economy. This was a result of the oil boom, which left many Nigerians dependent on oil resources; and when the price of oil crashed in the 1980s, many Nigerians became jobless. The inability to get employment in the formal sector resulted in the re-emergence of the informal sector (Ezeala-Harrison, 1993).

At this time, many people began to migrate to Lagos in search of formal employment. Those who were unable to get formal employment resorted to street trade – *the sale of pure water in the Lagos traffic soared*. The deregulation of the Nigerian economy, courtesy of the Structural Adjustment Programme by the World Bank and the International Monetary Fund, further imposed a heavy burden on Nigerians (Ake, 2000).

Lagos reaped the consequences of this, both in terms of irregular development of urban centres and the emergence of trade corridors (Omoegun, 2015). Today, debates about street trading have changed from being a response to an economic crisis to the development of a critical sector that is germane to sustainable development in the 21st century (Skinner, 2008).

Roever & Skinner (2016) stated that new thinking about street vending in the global South is informed by postmodernism – an idea which holds that the global development agenda must be redesigned in a way that accommodates the interests of the urban poor. Since the formal economy has failed to provide jobs for many people in the developing world, the international community and governments of individual African nation must fight to protect the right of informal workers to the urban space.

The Size and Composition of Street Trading in Nigeria and Africa

The size and composition of the informal sector remains contentious worldwide, but recent statistics on informal employment by the International Labour Organization (ILO), the World Bank and non-governmental organizations, such as Women in Informal Employment: Globalizing and Organizing, have provided some consensus.

Worldwide, more men are generally believed to be in informal employment than women. A research by WIEGO and the ILO stated that the percentage of men to women in global informal employment is 63% to 58%. In the developed countries, men represent 19% and women 18%, while in emerging economies, the percentage of men in informal employment to women is 69% to 64%. However, in developing countries (low income countries), the percentage of women in informal employment is higher than that of men: 92% to 87%. In terms of global age composition and overall size, the ILO aptly stated that: "The majority of the world's global employment aged 15 and above – 61 per cent – are informally employed: a total of 2 billion workers. Informality is highest in countries with the lowest levels of income. Informality is 90 per cent in developing (low-income) countries" (Bonnet, Joann, & Chen, 2019: 4). Comparatively, the WIEGO & ILO reports stated that the percentage of wage workers globally is 56% to 44% self-employed workers, but in developing countries 72% of workers are self-employed.

Though it is difficult to get accurate data on the number of people in the informal sector in African countries, including Lagos, Nigeria, studies by Adama (2020), Lindel (2020), Lindel & Adama (2020) Mitullah (2003), Omoegun (2015), Skinner (2008), and Roever & Skinner (2016) have provided some insights into the size and composition of street trading business in Africa. Mitullah's study is particularly interesting because it covers six African countries: Kenya, Côte d'Ivoire , Ghana, Zimbabwe, Uganda, and South Africa. The study covers Nairobi, Kisumu, Migori and Machakos in Kenya; Kampala in Uganda; Kumasi in Ghana; Harare and Mutare in Zimbabwe; and Abidjan, the capital city of Côte d'Ivoire (Mitullah, 2003).

The various studies cited above, including Mitullah (2003), indicated that street trade is a major source of employment for millions of Africans, and most participants are women. Although men and young persons are involved, the proportion of women in street work is higher than that of men. Adama (2020) & Mitullah (2003) found that most of these traders are low income earners who use the trade to provide for themselves and their family members. These people, who are usually found in urban centres, rely on heavy urban traffic and the chaotic environment in urban centres to sell their goods. In terms of the type of goods that vend, Mitullah (2003) stated that while the choice of goods is often determined by location and access to customers, most vendors trade in wares, household items, soft drinks and prepared food (Lindel & Adama, 2020).

The factors responsible for people's involvement in street trading in most African cities ranged from poverty, unemployment, high cost of living, and high cost of renting a shop, to the pressure of urbanization (Roever & Skinner, 2016). Virtually all the traders face the challenge of having access to space in order to display their goods, and they are constantly exposed to harassment from government officials. Although there are regional variations in the level of tolerance of the activities of street traders, South Africa and Tanzania seem to have erected structures to allow for inclusive urban governance. The West African sub-region remains the epicentre of street trader harassment, despite the fact that their economies need the informal sector to rise above the declining income generation from the formal sector.

The works of Grossman (2020), Lawanson (2016) and Omoegun (2015) on street trading in Lagos are quite instructive in the modern understanding of the survival strategies of street traders in Lagos. While Grossman (2020) and Omoegun (2015) utilized the perspective of law, Lawanson examined it from the geographic perspective. Lawanson, like Adama (2020), found that most people in street trading are driven into the business by poverty and the quest for survival.

Omoegun (2015) examined the strategies that vendors often deployed in order to defend their rights to urban space. These include the payment of levies and bribes to task force officials and landlords who own the space where trading is taking place. He observed, however, that payment of levies to local government officials does not guarantee permanent access to the urban space. It also does not protect the traders from exclusionary policies and barbaric treatment by Area Boys and officials of Lagos State Task Force/ KAI and LAGESC, but bribes help to maintain order. Grossman's study of Ladipo Market and Oke Arin market in Lagos Island portrayed the ingenuity of using informal institutions to protect private property in a society where there is a weak criminal justice system.

Contributions of Street Trading to Lagos' economy

Street traders contribute significantly to the growing revenues of Lagos through the levies and taxes which they pay on their goods, yet they face exclusionary policies and abuse of their rights (Omoegun, 2015; Grossman, 2020). Besides contributing to the income of the state, vendors render a wide range of services to urban dwellers that keep the formal sector running; from the sale of wares at comparatively low prices to provision of food services to workers in the formal sector. They also sell at cheap prices to households who otherwise would not have had the purchasing power to compete favourably with the rich in a segregated urban society such as Nigeria.

Governing the Urban Space: The Lagos State Street Trading Law and the Vendors' Rights to the Urban Space

The governance of the urban space in Lagos and in most West African cities, such as Abidjan, Accra, Kumasi and Yaoundé, are still rooted in the colonial legacy of building world class cities that support capitalist investment. Two critical factors have reinforced this assertion in the governance of Lagos in recent times. The first is the Lagos Mega City Project, which is an urban renewal programme that is targeted at making Lagos' urban environment compatible with its global image as a mega city. This includes: the modernization of the transportation system, urban reclamation, intensive campaigns against environmental abuse, injecting funds into telecommunication systems, and building of support infrastructure for the productive sector to take off. Between year 2000 and 2020, Lagos' economy has witnessed the influx of Nigeria's telecommunication companies and the transport system has been transformed from the "chaotic Molue" of the 1980s to the Bus Rapid Transportation System supervised by the Lagos State Metropolitan Transport Authority (Adama, 2020b; Carmody & Owusu, 2016; Obono, 2007). Located in the coastal area, Lagos has been serving as a major export zone for a number of African countries. The rise of Lagos as the commercial capital of Nigeria and a significant economic player in the African continent has again reinforced the need to reposition the state in order to meet global standards.

The second factor is the fact that Lagos is said to be experiencing rapid population growth, with a growth rate of 3.5%. The increase in the population of Lagos from 1.4 million in 1970 to 12.6 million in 2014 is expected to have a significant impact on how the state responds to population and environmental issues. With reference to street trading, the Lagos State's Street Trading and Illegal Market Prohibition Law, 2003, has been the main legal instrument used in regulating the activities of street traders. Before 2017 when it was reviewed to accommodate punishments for buyers, the law exclusively targeted traders who violated the use of the urban space in Lagos and prescribed a punishment of ₦90,000 and six months' jail term for the trader. Today, both the buyer and the trader arrested for the offence are deemed to be culpable for criminal abuse of the urban space in Lagos (Ogunbiyi, 2016). Street traders do not only face arrest but also confiscation of their goods by officials of the state government.

Evictions, Confiscations and the use of Bribes and Extortion to Remain in Urban Space

Eviction from the urban space and confiscation of the goods of street vendors are some of the strategies that government officials in West African cities and cities of the global South often deploy to intimidate vendors and subdue them to the hostile environmental laws in most of the cities (Skinner, 2016). In Nigeria, such practices often involve the use of special law enforcement agents with the mandate to arrest and prosecute offenders using mobile courts (Adama, 2020c).

Because vendors want to survive in the urban space, they often succumb to the whims and caprices of extortion from multiple actors: task force officials, local government authorities, market leaders, and Area Boys. The payment of bribes to either the task force officials or market leaders is not usually a guarantee of access to an urban space or its permanent use. This uncertainty makes it imperative for traders to use their agency to determine their stay in the trade.

Lindel (2019) noted that in Africa, vendors often resort to three types of agency. The first is the individual agency which depends on his or her age, length of experience in the trade, and understanding of the dynamics of the markets. The second agency is the collective or social networks. Individual traders are expected to explore their social networks in order to remain in the urban space. This may include the use of social networks to connect with task force officials and negotiate how much bribe is due for payments. The third agency is the associational agency, which is the use of market associations to maintain one's participation in the business. In the case of Nigeria, trade vendors have not been able to effectively utilize this because of lack of collective organizing (Lindel, 2019).

Theoretical Framework

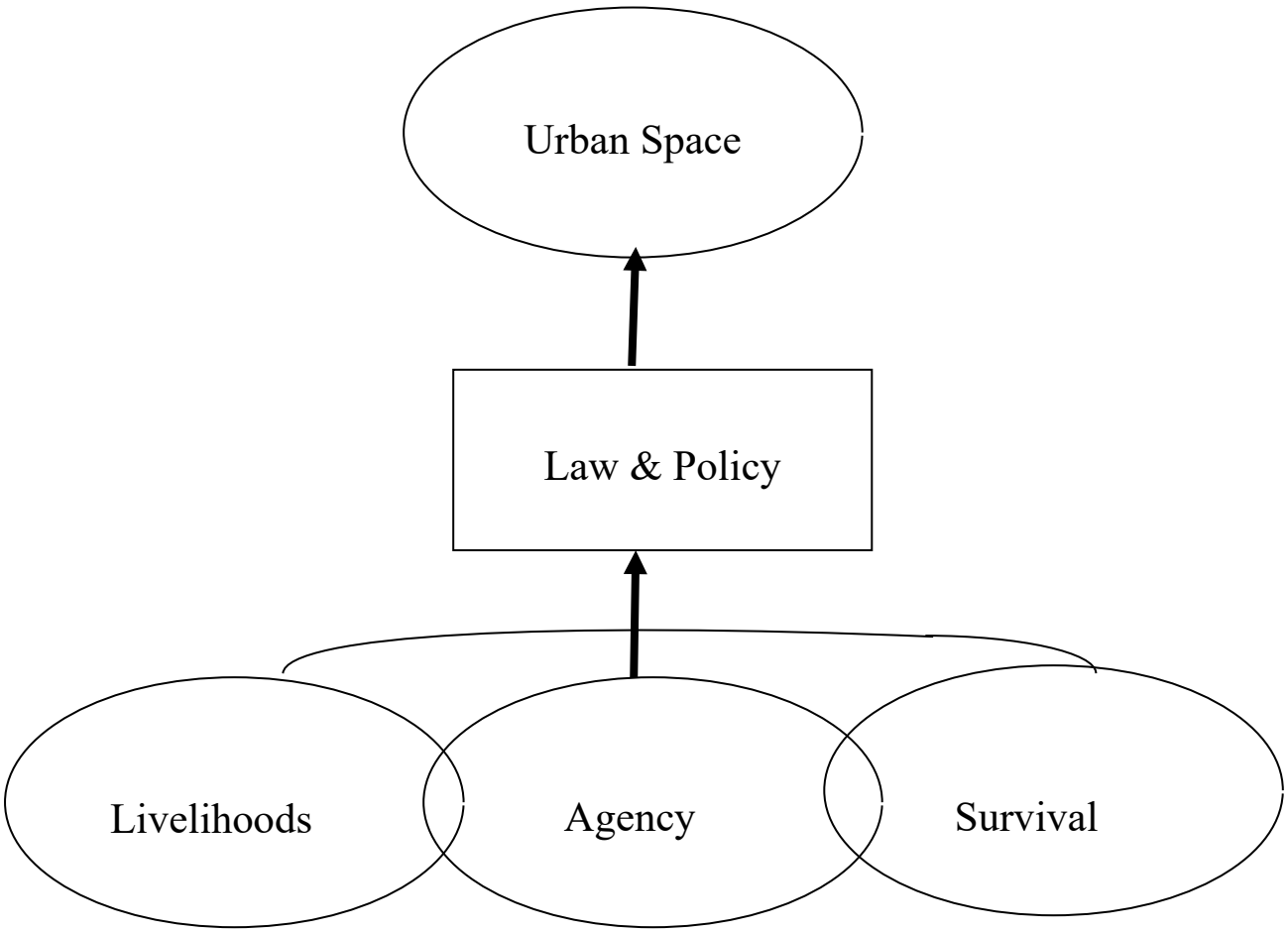
This work is rooted in the agency theory of street trading and the right to the city concept coined by the French philosopher, Henri Lefebvre. Incidentally, the two concepts are rooted in the Neo-Marxist tradition which gave birth to postmodernism (Lindel, 2019).

Before then, urban modernist and neoliberalist analyses have dominated the literature of urban street work. In Africa, and perhaps in the rest of the global South, the debate was sparked by the work of Keith Hart (1973) who developed the concept of the informal sector, which later drew the attention of the international community and the International Labour Organization to the importance of the informal economy to economic development (Skinner, 2008). In urban geography, the discourse is centred on whether street vendors have the rights to the urban space or not.

This work states that street workers have the right to the urban space by virtue of the fact that they are human beings and their rights to a livelihood are recognized by international laws and the UN Sustainable Development Goals. However, in the context of West African urban and regional planning, street traders do not have the right to urban space. Lindel (2019) noted that this thinking aligns with the assumptions of urban modernism, which sees street vending as anti-modernism and a symbol of underdevelopment.

While most African governments tend to maintain contradictory positions towards the informal sector, this work holds that the street vendors' ability to use their creative ingenuity consisting of bribes and social networks to navigate the urban space, is what is responsible for their survival in the street trading business. It is on the basis of this, that livelihoods and survival are central to how traders manipulate the urban space and utilize their individual, social networks and associational agencies to remain in the urban space (Adama, 2020a; Lindel, 2019). This is the thesis that this work maintains with its theory: Livelihoods, Agency and Survival Theory. The livelihoods, agency and survival theory asserts that survival in the street trading business in Lagos, Nigeria, will depend on how individual street traders are able to navigate the urban space, recognize those who matter in the allocation of space, and use their ingenuity to remain in the urban space. This strategy has the likelihood of guaranteeing livelihoods for those confronted by the problem of urban poverty.

Livelihoods, Agency and Survival Theory



Source: Ayobade & Adisa (2021)

METHODS

Study Setting

The study was carried out in Lagos State, Nigeria. The choice of Lagos State stems from the fact it is the nation's commercial capital, established in 1967 from the defunct Western region, and samples selected from the city can provide insights into modern urban planning and regulation of the informal economy. Lagos is also reputed to be the oldest capital in the country, dateing back to 1861 when the British recognized it as a colony of British West Africa. Consequently, it was through the colonization of Lagos that other cities in Nigeria emerged. Besides the historical and economic pre-eminence of Lagos, the city is Nigeria's hub of urbanization (Lindel, 2020; Mabogunje, 1968) driving internal and internalization migration as well as Nigeria's industrial economy.

Study Design

The study adopted a mixed method of social research. It combined cross sectional surveys of street traders with the qualitative assessment of the traders and the law enforcement agents. The study also

adopted observation method in order to get on the spot assessment of street traders and the management of the urban space. The advantage of mixed method is that it allows the voices and narratives of the respondents to complement the findings of the survey. The study was carried out in the three senatorial districts of Lagos State using six LGAs selected according to urban/rural criteria, in order to ensure that each geographical space of the state and the urban space is represented in the study. A total of 900 traders were sampled across the three senatorial districts (300 per senatorial district), but only 894 questionnaires were useable from the 900 sampled. The study adopted multi-stage sampling technique to select the traders. The first stage was the use stratified sampling technique in dividing Lagos State into senatorial districts, LGAs, and then representative urban space (urban and rural). Then, four markets each were selected from the LGA, making a total of 24 markets from the state. The markets selected include: Idumota, Idumagbo, Balogun, Marina Markets, Oshodi Market, Agric Market, Ikorodu Garage Markets, Obalende Market, Ojo Market, Iyanaba Markets, etc.

For the qualitative study, a total of 30 in-depth interviews were conducted, both for the traders and the enforcement officials across the three districts.

Data Analysis

Data generated from the survey was analysed using SPSS, while ethnographic content analysis was used in analysing data from the Key Informant Interviews and In-depth-Interviews. Descriptive statistics, such as frequency distribution, were used in presenting some of the findings while Chi Square test was used in presenting the test of hypotheses.

Results

\ **Table 1: Socio-demographic Profiles of Respondents**

Gender	Frequency (N=984)	
Male	329	36.8
Female	565	63.2
Age	Frequency (N=984)	
Below 18 years old	5	0.6
18-59 years old	845	94.5
60 years and above	34	3.8
No response	10	1.1
Marital Status	Frequency (N=984)	
Single	211	23.6
Married	607	67.9
Separated	21	2.3
Divorced	11	1.2
Widowed	36	4.0
Others	8	0.9
Ethnic Group	Frequency (N=984)	
Hausa	30	3.4
Igbo	307	34.3
Yoruba	480	53.7
Others	77	8.6
	Frequency	

Religion	(N=984)	
Christianity	534	59.7
Islam	340	38.0
Traditional religion	1	1.0
Others	19	2.1
Education	Frequency (N=984)	
No formal education	68	7.6
Primary education	249	27.9
Secondary education	481	53.8
Tertiary education	52	5.8
No response	44	4.9
Location of Study	Frequency (N=984)	
Urban	668	74.7
Rural	226	25.3
Senatorial Districts	Frequency (N=984)	
Lagos Central	295	33.0
Lagos East	299	33.4
Lagos West	300	33.6

Table 1 presents the socio-demographic characteristics of the respondents. The results show that the majority of the street traders (63.2%) sampled in Lagos in the course of the study were women, while men constituted 36.8%. This is understandable in view of the fact that trading is generally a woman's occupation in Nigeria and a part of their socialization process. With regards to the age of the respondents, the majority (94.5%) were between 18-59 years, while teenagers (those below 18 years) constituted 0.6% of the entire population. What this finding implies is that most of the people who engage in street vending are in their reproductive age.

Table 1 further presents the marital status, ethnic group, religion, education, location and senatorial district of the respondents. The table shows that the majority of the respondents (67.9%) were married, while less than one quarter of the population (23.6%) were still single as at the time of the study. The result shows that more than half (53.7%) of those surveyed were Yoruba traders, while Igbos and Hausa/Fulani constituted 34.3% and 3.4% respectively. The results further show that the majority of traders were Christians, while 38.0% of traders were Muslims. When the education of the respondents was probed, 53.8% of the traders were found to have completed secondary education, while a very small proportion (7.6%) never attended a formal school. The percentages of street traders with primary education and higher degrees constituted 27.9% and 5.8% respectively. The results in Table 1 also show that the majority of the street traders (74.79%) traded in the urban centres while 25.3% traded in rural and satellite areas. With regard to the senatorial districts, the results show a proportional representation of each senatorial district in the sample.

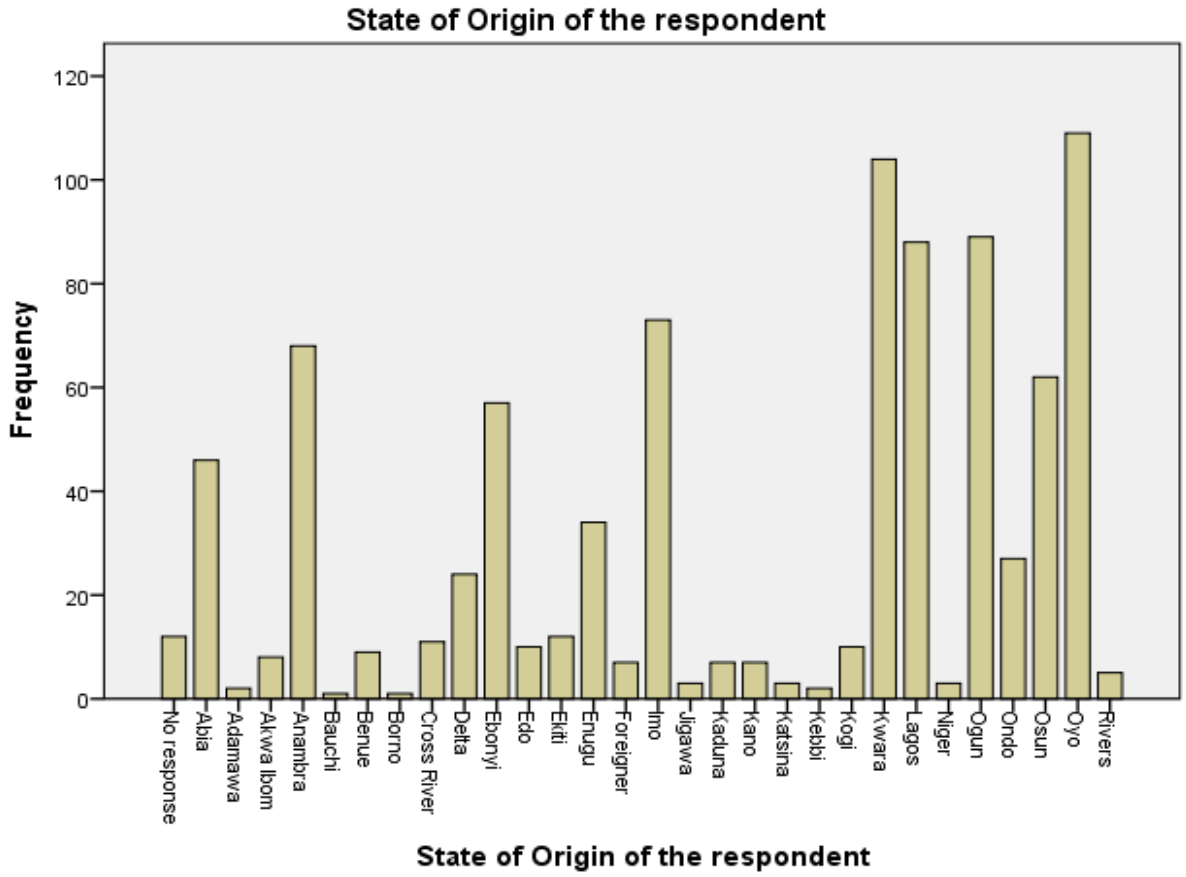
What can be inferred from the above results is that most of the street traders in Lagos are probably women, married and of Yoruba ethnicity. The results also show that more than half of the vendors have acquired secondary school education, implying that street trading is not just for those who did not go to school, but those who dropped out of school due to financial constraints, and are destined to use this education to navigate the urban space.

Table 2: State of Origin of Respondents

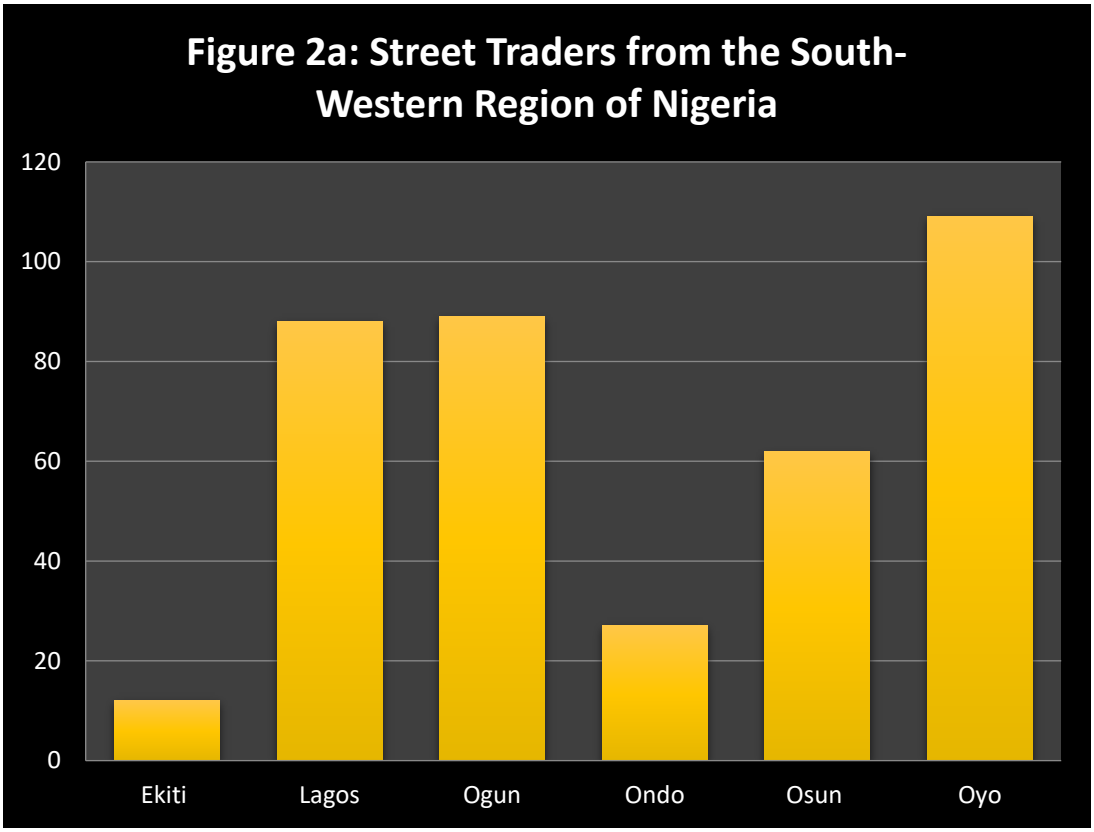
	Frequency (N=984)	
Abia	46	5.1
Adamawa	2	0.2
Akwa Ibom	8	0.9
Anambra	68	7.6
Bauchi	1	0.1
Benue	9	1.0
Borno	1	0.1
Cross River	11	1.2
Delta	24	2.7
Ebonyi	57	6.4
Edo	10	1.1
Ekiti	12	1.3
Enugu	34	3.8
Imo	73	8.2
Jigawa	3	0.3
Kaduna	7	0.8
Kano	7	0.8
Katsina	3	0.3
Kebbi	2	0.2
Kogi	10	1.1
Kwara	104	11.6
Lagos	88	9.8
Niger	3	0.3
Ogun	89	10.0
Ondo	27	3.0
Osun	62	6.9
Oyo	109	12.2
Rivers	5	0.6
Foreigners	7	0.8

No Response	12	1.3

The result in Table 2, which present the state of origin of the respondents, indicates that the majority of the traders are Yorubas. From the South-West, citizens of Oyo State constituted the greatest number, while those from Imo and Anambra ranked highest in the South-Eastern region, and Cross-River people were the most visible in Lagos trade, followed by the Edo people. In the North-Central, only the Kwara people seemed to be significant in the street trading business in Lagos. From the North-Eastern region, the indigenes of Adamawa and Bauchi formed a sizeable group trading in Lagos. Overall seven states can be said to be the major sources of informal workers in Lagos: Oyo, Kwara, Imo, Anambra, Osun, Ebonyi and Abia States.



The Figure 1, above, further shows the state of origin of the respondents. Although traders were also involved in the street vending going on in Lagos, the diagram shows that the overwhelming majority of the traders were Nigerians from outside Lagos.



This finding is further supported in Figure 2, which shows that Lagosians were just less than 50% of all traders sampled across the three senatorial districts. Of all the neighbouring regions of Lagos, the Oyo and Ogun people are the most widely represented in the street work going on in Lagos. This is understandable in view of the fact that they are closer to the state than any other South-Western states, and the boundaries have been overshadowed by the rapid urbanization in the country.

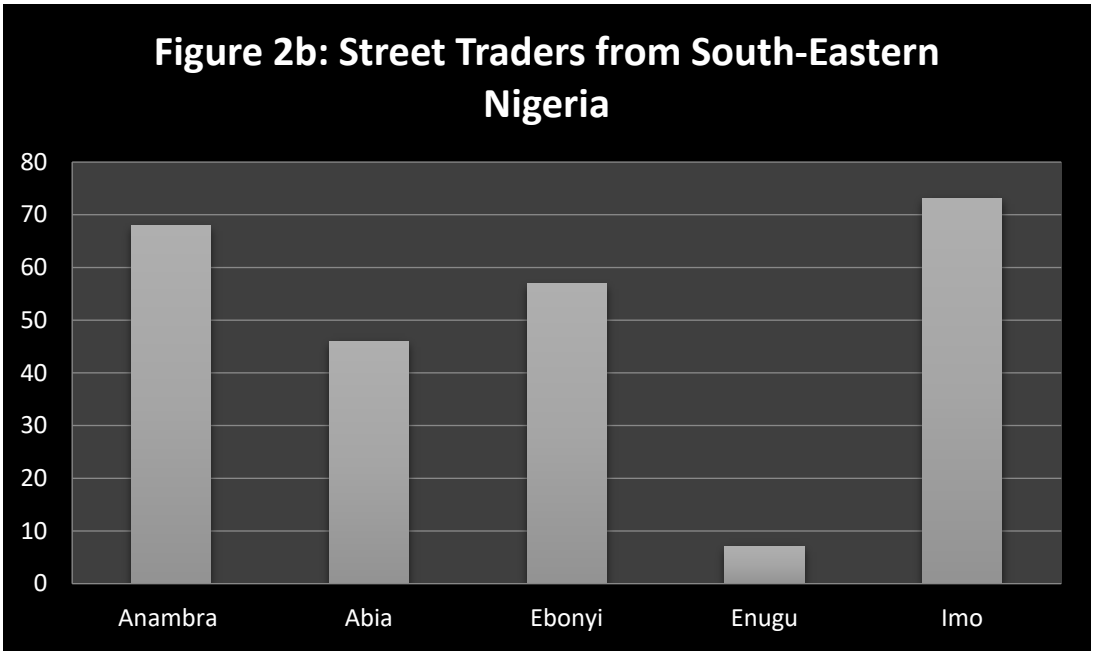
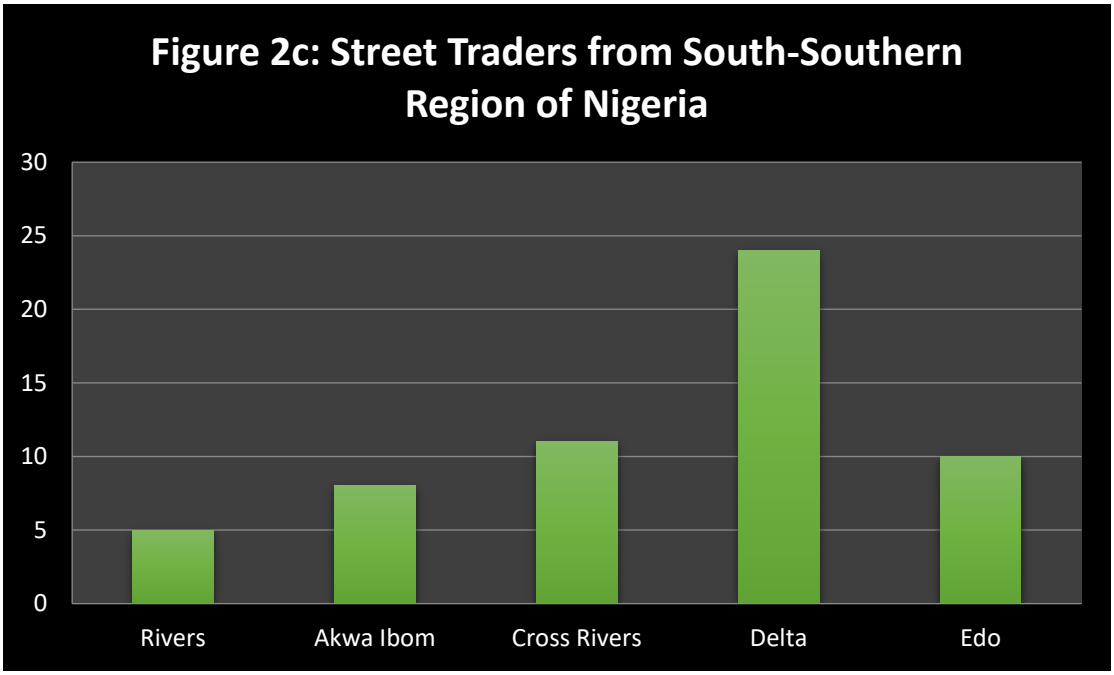
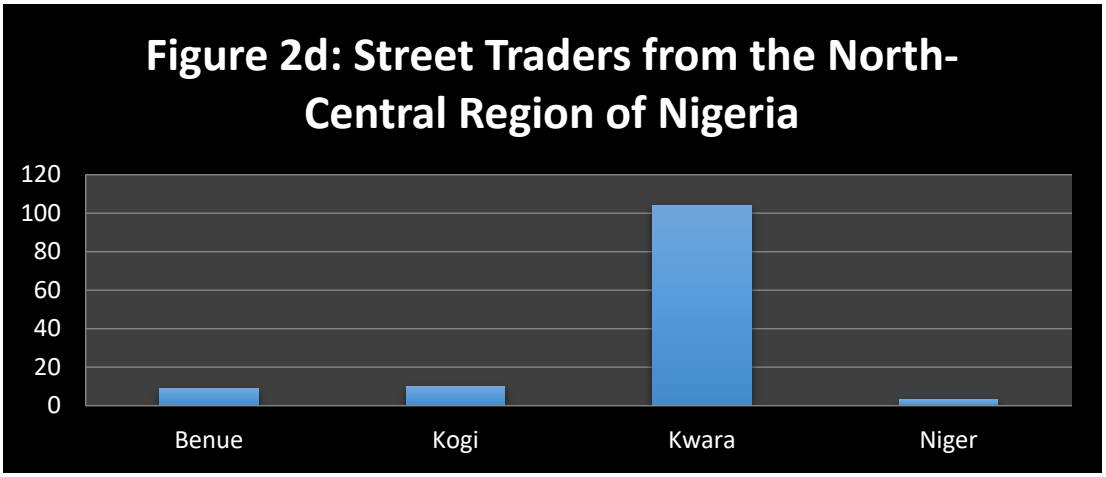


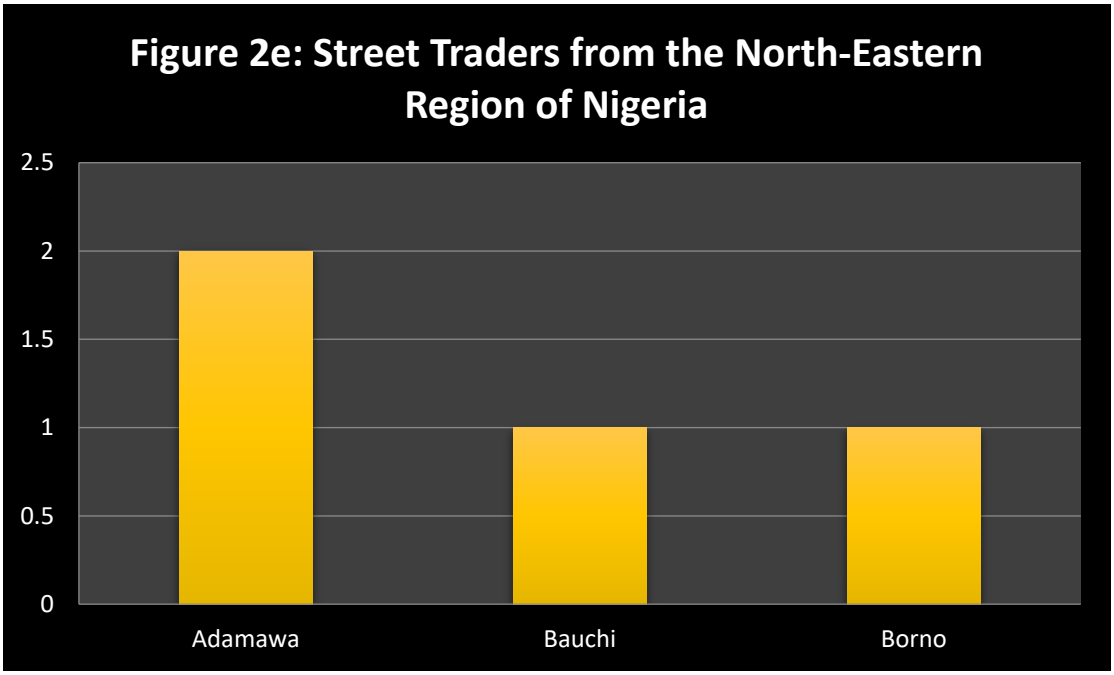
Figure 2b, above, further supports the data that most of the people from the South-Eastern region who are involved in street trading are from Anambra and Imo states.



The Deltas from this oil-rich region show are the most widely distributed in the street trading business in Lagos State, Nigeria, followed by the people of Cross-River and Edo states. Of these, the Edo and Delta people have the closest historical affinity with the people of Lagos, and it is not uncommon for them to migrate to Lagos for emplomentand business opportunties.



In respect of those from the North-Central Region, the Kwara people seem to be the most mobile and involved in the street trading business in Lagos. This is evidenced by their involvement in trade on Lagos Island, where specific occupation and trade is ascribed.



The diagram above shows that there are more indigenes of Adamawa State in the street trading business in Lagos than any other North-Eastern state. The low representation of the Northern Region in the commercial trade of Lagos may generally be attributed to the movement of the capital to Abuja, which has dramatically influenced the cross-border trade which Lagos and the North enjoyed during the colonial era.

Bivariate Test

The bivariate test is used to test the hypotheses of the study, which are stated, inter alia:

1. There is no significant relationship between poverty and evasion of arrest by task force officials.
2. There is no relationship between unemployment and evasion of arrestbytask force officials.
3. There is no relationship between migrant status and evasion of arrest.
4. There is no relationship between family pressure and evasion of arrest by task force officials.
5. There is no relationship between gender and evasion of arrest by task force officials.
6. There is no relationship between age and evasion of arrest by task force officials.
7. There is no relationship between ethnicity and evasion of arrest by task force officials.
8. There is no relationship between level of education and evasion of arrest by task force officials.

Table 3: Relationship Between Socio-Economic Factors and Evasion of Arrest by Task Force Officials

Variable	**Evasion of Arrest by Bribing Task force Officials**		%
Sex	Yes	No	Total
Male	194 (65.8%)	101 (34.2%)	295 (100.0%)

Female	261 (53.9%)	223 (46. 1%)	484 (100.0%)
$\chi 2$ =10.572	df=1	Sign=0.001	
Age			
Young People (16-24yrs)	24 (51.1%)	23 (48.9%)	47 (100.0%)
Older Persons (25 years and above	150 (55.4%)	145 (44.1)	325 (100.0%)
$\chi 2$ = 0.310	df=1	Sign=0.578	
Marital Status			
Never Married (Single)	107 (58.8%)	75 (41.2%)	182 (100.0%)
Ever Married	346 (58.2%)	248 (41.8%)	594 (100.0%)
$\chi 2$ = 0.017	df=1	Sign=0.897	
Educational Status			
No Formal education	28 (45.2%)	34 (54.8%)	62 (100.0%)
Primary	124 (54.1%)	105 (45.9%)	229 (100.0%
Secondary	257 (62.4%)	155 (37.6%)	412 (100.0%)
Tertiary	21 (50.0%)	21 (50.0%)	42 (100.0%)
$\chi 2$ = 9.892	df= 3	Sign=0.019	
Migrant Status			
Migrant	273 (58.3%)	195 (41.7%)	468 (100.0%)
Non-Migrant	109 (50.5%)	107 (49.5%)	216 (100.0%)
$\chi 2$ = 3.713	df= 1	Sign=0.054	
Ethnic Group			
Hausa	14 (50.0%)	14 (50.0%)	28 (100.0%)
Igbo	180 (66.9%)	89 (33.1%)	269 (100.0%)
Yoruba	236 (56.1%)	185 (43.9%)	421 (100.0%)
Others	18 (36.0%)	32 (64.0%)	50 (100.0%)
$\chi 2$ = 20.108	df=3	Sign=0.000	
Poverty			
Yes	338 (67.1%)	166 (32.9%)	504 (100.0%)
No	112 (41.9%)	155 (58.1%)	267 (100.0%)
$\chi 2$ = 45.308	df=1	Sign=0.000	
Unemployment			
Yes	208 (64.4%)	115 (35.6%)	323 (100.0%)
No	240 (53.8%)	206 (46.2%)	446 (100.0%)
$\chi 2$ = 8.630	df=1	Sign=0.003	

Result of Evasion of Arrest

The result shows that gender (0.019), level of education (0.054), migrant status (0.000), poverty (0.000) and unemployment (0.000) are significantly related to evasion of arrest by street traders in Lagos State. More specifically, the study shows that those who were motivated to enter into the street trading business by poverty and unemployment are more likely to evade arrest than their counterparts.

Table 4: Relationship Between Law Enforcement and Bribing of Task Force Officials

Variable	**Evasion of Arrest by Bribing Task Force Officials**		%
First Time Trading	Yes	No	Total
Yes	180 (81.4%)	41 (18.6%)	221 (100.0%)

No	527 (82.9%)	109 (17.1%)	636 (100.0%)
$\chi 2$ =0.227	df=1	Sign=0.634	
Have knowledge of the Law			
Yes	604 (82.6%)	127 (17.4%)	731 (100.0%)
No	107 (80.5%)	26 (19.5%)	133 (100.0%)
$\chi 2$ = 0.365	df=1	Sign=0.546	
Ever Been Arrested			
Yes	243 (94.2%)	15 (5.8%)	258 (100.0%)
No	446 (77.7%)	129 (22.3%)	574 (100.0%)
$\chi 2$ =33.987	df=1	Sign=0.000	
Nature of Official that Effected Arrest			
Police	1 (33.3%)	2 (66.7%)	3 (100.0%)
Task Force Officials	180 (92.8%)	14 (7.2%)	194 (100.0%)
Environmental Corps	47 (97.9%)	1 (2.1%)	48 (100.0%)
Others	20 (95.2%)	1 (4.8%)	21 (100.0%)
$\chi 2$ =18.926	df= 1	Sign=0.000	
Membership of Traders' Assoc.			
Yes	94 (80.3%)	23 (19.7%)	117 (100.0%)
No	619 (82.9%)	129 (17.2%)	748 (100.0%)
$\chi 2$ =0.406	df= 1	Sign=0.524	
Presence of the Law Enforcement Agents			
Yes	494 (90.8%)	50 (9.2%)	544 (100.0%)
No	208 (68.2%)	97 (31.8%)	305 (100.0%)
$\chi 2$ = 67.797	df= 1	Sign=0.000	
Prosecuted in a Court			
Yes	21 (87.5%)	3 (12.5%)	24 (100.0%)
No	209 (94.6%)	12 (5.4%)	221 (100.0%)
$\chi 2$ = 1.883	df= 1	Sign=0.170	
Nature of Court Where a Suspect was Prosecuted			
Mobile Court	9 (81.8%)	2 (18.2%)	11 (100.0%)
Regular Court	32 (94.1%)	2 (5.9%)	34 (100.0%)
$\chi 2$ = 1.552	df=1	Sign=0.213	

Enforcement of the Law and Bribing of Task Force Officials

The study shows that "ever been arrested" (0.00%) and "nature of official that arrested the trader" (0.00%) and presence are significantly related to bribing of task force officials. Specifically, the study shows that the people who have been arrested by a task force official will more willing to bribe than those who have never been arrested. Thus, this study attests to the fact that the presence of law enforcement officers and actual effect of arrest deter criminals from the road. It also shows that the arrest of street traders in the urban space imposes the heavy burden of paying bribes.

The result did not, however, support the fact that being a first trader, having some knowledge of the law, being a member of a traders' association and having gone through prosecution in the court influence the bribing of task force officials. The implication of these findings is that the presence of

law enforcement officials and the tendency to be arrested imposes a heavy burden of paying a bribe than being a member of a trader's union.

The statements made by some of the traders during the in-depth interviews significantly support the fact that bribery and extortion take place in the regulation of street trading in Lagos. One of the vendors had this to say when interviewed:

> "The penalty is that they will arrest us and put us inside their black maria and later collect all the money on us. They collect as much as Ten Thousand (10,000) and from some Eleven Thousand (11,000), when it is not that, they will seize your goods." (Female 33 years, IDI, Ojo, Lagos).

Table 5: Relationship Between Socio-Economic Factors and Hiding of Goods

Variable	**Hiding of Goods in a Distant Location**		%
Sex	Yes	No	Total
Male	225 (76.3%)	70 (23.7%)	295 (100.0%)
Female	358 (73.8%)	127 (26.2%)	485 (100.0%)
$\chi 2 = 0.586$	df=1	Sign=0.444	
Age			
Young People (16-24yrs)	32 (66.7%)	16 (33.3%)	48 (100.0%)
Older Persons (25 years and above	224 (68.9%)	101 (31.1%)	101 (100.0%)
$\chi 2 = 0.099$	df=1	Sign=0.753	
Marital Status			
Never Married (Single)	134 (73.2%)	49 (26.8%)	183 (100.0%)
Ever Married	447 (75.3%)	147 (24.7%)	594 (100.0%)
$\chi 2 = 0.305$	df=1	Sign=0.581	
Educational Status			
No Formal education	49 (79.0%)	13 (21.0%)	62 (100.0%)
Primary	175 (76.4%)	54 (23.6%)	229 (100.0%)
Secondary	308 (74.8%)	104(25.2%)	412 (100.0%)
Tertiary	29 (67.4%)	14 (32.6%)	43 (100.0%)
$\chi 2 = 2.102$	df= 3	Sign=0.552	
Migrant Status			
Migrant	369 (78.7%)	100 (21.3%)	469 (100.0%)
Non-Migrant	162 (75.0%)	54 (25.0%)	216 (100.0%)
$\chi 2 = 1.148$	df= 1	Sign=0.284	
Ethnic Group			
Hausa	23 (82.1%)	5 (17.9%)	28 (100.0%)
Igbo	202 (74.8%)	68 (25.2%)	68 (100.0%)
Yoruba	313 (74.3%)	108 (25.7%)	421 (100.0%)
Others	39 (78.0%)	11 (22.0%)	50 (100.0%)
$\chi 2 = 1.103$	df= 3	Sign=0.776	
Poverty			
Yes	388 (76.8%)	117 (23.2%)	505 (100.0%)
No	190 (71.2%)	77 (28.8%)	267 (100.0%)
$\chi 2 = 2.985$	df=1	Sign=0.084	
Location			
Urban	426 (77.2%)	126 (22.8%)	552 (100.0%)

Rural	157 (68.9%)	71 (31.1%)	228 (100.0%)
$\chi 2 = 5.909$	df=1	Sign=0.015	

Hiding of Goods in a Distant Location

The study shows that there is a significant relationship between location (0.015) and hiding of goods from law enforcement officials. Specifically, the study shows that those who trade or vend their goods in urban centres are more likely to hide their goods from officials than those selling in the rural areas or semi-urban areas. The study, however, shows age, sex, marital status, education, migrant status and ethnic nationality of the traders are not significant in relation to the hiding of goods from the officials of government; nor is poverty related to the hiding of goods. The visibility of the urban space, however, makes it a major avenue for hiding goods.

This is understandable in view of the fact that enforcement of the law is more stringent in urban centres than in the rural areas. All things being equal, the location where a street trader is trading will always come first in the decision to hide goods before any other factors, implying that if there is no disturbance from the state, there is no need for one to hide his/her goods.

A female trader had this to say about barriers to street trading often warrant hiding of goods:

> "The major challenge we face are the officials, our health is also at stake, assault from touts, sexual harassment, armed robbers and debtors, etc. I pay the task force officials and even those in the garage to enable me sell. No, I have never been arrested since I started selling; I have seen other traders being arrested by government agents." (Woman, 59 years, IDI, Eti-Osa Local Government Area).

The remark by a LAGESC official also supported the fact that the street trading prohibition law is being strictly enforced, resulting in the tendency for the street traders to hide their goods:

> "Yes I have arrested a lot of street traders. The law is prevailing in Obalende zone as some traders have relocated. I make arrest once or twice a week. Passers-by are usually not in support of the arrest made; they sometimes poke nose, form crowd and may free those that have been arrested. The government is in support of the law as they organize quarterly training for all officials (Male, LAGESC Official, 44 years, IDI, Obalende, Lagos).

Discussion of Findings

Debates about the right of street traders to the urban space and the role of the informal sector in Africa's economic recovery have dominated literature since the end of the cold war in 1989. Alongside these debates, which reignited global attention on the informalization of Africa's economy, is the challenge of building habitable cities and, at the same time, recognizing the right of street traders to the urban space. The first option for many African leaders is non-negotiable, because the thinking is that only habitable cities can attract investors and promote the rapid economic growth needed to cushion the effect of decades of economic crises (Adama, 2020; Lindel, 2020; Roever & Skinner, 2016; Skinner, 2008).

The coming of globalization to African society has therefore been perceived as an opportunity to rekindle the waning interest in the modernization of African cities constrained by rapid population growth that has accompanied urbanization Most African leaders are now more committed to urban modernism than ever before. While this debate is ongoing in Africa and in the majority of the global

South, there is increasing awareness that the survival of Africa's economy will depend on diversification, which recognizes other sectors as key players to economic development (Adama, 2020b; Lindel & Adama, 2020; Lindel, 2020; World Bank, 2016).

Previously, most African countries depended on oil and were unable to build a productive sector that could absorb its teeming population that were yearning for employment, Africa is today faced with a rising non-oil sector (the informal sector) (World Bank, 2016). This again raises a concern about satisfying the demands of global capitalism and at the same time protecting the right of street vendors in the urban space. In Lagos and in the majority of African countries, protecting global capitalism and creating habitable cities have remained an integral part of government's urban agenda. This is visible in government's urban master plan as well as series of legislations governing the use of the urban space. The Lagos State Street Trading and Illegal Market Law, 2003, is a potent tool with which the Lagos State Government ensures compliance of traders with its urban master plans. This study was designed to examine the influence of socio-economic factors on street traders' compliance and deviance from the law.

Profiles of Street Traders

The study revealed that street trading is a major source of employment for millions of Lagosians, particularly women, young people and migrants, who are determined to overcome the challenge of urban poverty and migration. The study revealed that street vending in Lagos is predominantly a woman's activity and that there is gender composition in the type of goods that are sold on the streets. While women are predominantly found in the sale of fruits, vegetables, tomatoes, food stuff and soft drinks. Men specialize in the sale of wears, household items and vehicular parts. There is also an ethnic dimension to the type of goods sold. The Ibos seem to be very predominant in the sale of second-hand clothes, while the Yorubas specialize in the sale of food stuff and soft drinks. This finding, therefore, aligns with Grossman's research on traders in Lagos markets (Grossman, 2020).

Observation in the field also indicated that young people tend to be more predominant in mobile street trading, while the older persons dominates sedentary street trading. With regard to factors influencing people's intention to partake in trading, the study confirmed previous studies (Adama, 2020; Brown, 2018; Lindel, 2020; Grossman, 2020; Omoegun, 2015; Roover & Skinner, 2016; Skinner, 2008) that found urban poverty, lack of employment in the rural sector and the pressure of urbanization to be responsible for the sudden rise in the number of street traders in West African cities. This study also confirms that the fact that most of the street traders have at least secondary school education (Omogun 2015), which implies that a certain level of education is required before an individual can function effectively in the street trade business (Lindel & Adama; 2020, Skinner, 2008).

Urban Space and Lagos State Law on the Regulation of Street Trading

The study found that Lagos' State Law on the regulation of street trading and the use of the urban space is still patterned along the colonial laws and military decrees which most Nigerian governments rely on to regulate and govern urban centres in the country. The study found that the major law which is guiding the operation and decisions of the Lagos State Government in the control of street vending in the city of Lagos is the Street Trading and Illegal Market Law, 2003 (Amended, 2017). The Law is not only derived from colonial and military laws, its enforcement resonates with the hatred and hostility for informality in urban modernism. Specifically, the study found that the imposition of six months' jail and a fine of ninety thousand naira (₦ 90, 000) criminalizes street trading in Lagos, thereby discouraging a sector that is contributing substantial revenues to the state's economy.

However, this practice which aligns with the state mega city programme, contradicts the global vision and the UN Sustainable Development Goals, which recognize the right of street traders to the urban

space (Lindel, 2020; Lindel and Adama, 2020). The study found that although government has stringent regulations on street traders, traders are still able to use their individual and collective agencies to navigate the urban space (Lindel & Adama, 2020). Individual agency includes the use of their age, length of experience and familiarity with the land tenure system to negotiate for availability of space and the retention of the space. The collective agency is the use of available social networks to get available space and seek for permanent use of the sites. This includes bribing of task force officials as well as the officials of Lagos State Environmental Sanitation Corps (LAGESC). The street traders are also paying taxes and levies to local government officials and street urchins popularly called 'Area Boys' through market associations, but these levies do not guarantee a permanent right of stay in the urban space. This finding also confirms Omoegun's (2015) research which found that, apart from suffering displacement, street traders in Lagos are confronted by multiple taxes and exploitations without a guarantee of a right to the urban space.

The Agency of Street Traders and the Bribing of Task Force Officials

The study found that bribery plays a critical role in the street traders' survival on the streets of Lagos. Though it usually comes in different forms, the agency of an individual street trader tends to determine the extent to which a vendor is able to utilize a bribe to remain in the urban space. This finding corresponds with Lindel (2020) and Lindel (2019) in the assertion that individual, collective and associational agencies play a critical role in determining how a street trader is able to access the urban space. This finding is also instructive to the Livelihood, Agency and Survival (LAS) Theory of street trading, which this study formulates and presents. The LAS theory holds that for a better empirical understanding of how street traders utilize bribery to grease-the-wheel of a rigid system, we must also study the factors that have pushed them into trading on the streets. People with high levels of poverty and the strain of lack of employment tend to be committed to the bribing of task force officials and other stakeholders in the informal sector.

Relying on the livelihood, Neo-Marxist and Post-Modernist approaches to street trading, the LAS[1] theory asserts that in communities where there are poor livelihoods and greater opportunities to trade in the streets, people are more likely to go into street trading. It also asserts that where a government insists on using the modernist vision of creating a clean city through closing the sources of income for the poor, the only way is to bribe the officials and defy the law. Defiance of the law is not only an opportunity to assert their right to the urban space, it is a creative ingenuity to be gainfully employed in a weak economy.

Tactics for Evading Arrest and Surviving Abuse in Lagos State

The study found that there are many tactics that the street traders often deploy in order to remain in the urban space and defy the law. These tactics, though, are often learned in the trade, and are related to age, education, length of stay in the business, and how a vendor is able to utilize his/her agency in manipulating the urban space (Adama, 2020; Omoegun 2015). The commonest among these tactics is the ready-to-run (RTR) tactic described by Adama (2020) as a major strategy for mobile urban street traders. Payment of bribe is another tactic that street vendors often adopt to defy the law. Payment of bribe to task force officials, however, cuts across the various segments of the street traders (whether mobile or sedentary). This is because bribe payment and its effective transfer to the appropriate quarter often guarantees the use of the urban space for a period until the expiration of the bribe. Task force bribes, however, are usually paid through a middle man, either among the traders or a nominee who comes around every week or middle of the week to aggregate how much is due to the officials. The

[1] LAS is a new theory which this study established. It holds that the causes of street trading in the global South and Lagos, Nigeria, are rooted in poor livelihoods that are evidenced in the urban space, and the only way through which urban subaltern overcome their continued relegation to the background is the use of their agency to navigate the urban space.

middle man or woman also helps to provide information about the operations of the task force officials of members of the LAGESC.

Relocation in the face of eviction is another tactic that is common among the traders. However, relocation to a new place is a function of the agency of the trader because the choice of the new place and availability of space for the trade, are a function of the vendors' individual and collective agencies. Relocation to a new place may also be a function of how a street trader is able to relate with Market Unions or Associations. However, street traders in Lagos State do not have a central association that protects their interests. Tose who sell their wares and goods in the corridors of markets are still forced to join Market Associations and, in the process, receive some protection (Omoegun, 2015).

Guaranteeing the Survival of Street Traders Through Inclusive Urban Governance

The study found that the Lagos State Street Trading and Illegal Market Law is still patterned after colonial laws and urban modernism in a society where the contributions of the informal economy are increasingly recognized. The Supreme Court of South Africa has since recognized the right of street traders to the urban space, and in Tanzania and Kenya, traders are allowed to form trader associations to protect their rights (Skinner, 2008). The reverse is the case in Lagos State, where street trading is not only criminalized, but is treated with disdain (Lindel & Adama; 2020, Skinner, 2018). The hostility towards street trading is not only demonstrated in the confiscation of their goods but also in the barbaric way in which law enforcement agents drag traders into "Black Maria" and transport them like common criminals. This study found that there is a dissonance in the provision of loans for the informal sector and the ability of government to recognize and provide a space for these small scale business owners, since this sector is a major source of employment for millions of Nigerians who are unable to secure employment in the formal sector.

Conclusion

The contest for urban space and the fight for the right of street traders to the urban space has dominated literature in the past decade. This study has added to this literature by establishing that poverty, unemployment, and the pressure of urbanization evidenced in migration contribute to the reason why traders defy the law to access the urban space. The study has equally shown that there is a dialectical relationship between livelihoods of street traders, their agency and the willingness to pay a bribe in order to enjoy their right to the urban space. It showed that, in communities where there is increasing poverty and unemployment, traders will be more willing to pay a bribe to task force officials and other stakeholders that can help them enjoy land tenure, even if it is for a more limited period than in those communities with improved standards of living. Consequently, the Lagos State Government and the Nigerian government must consider the social context of its urban renewal programme, as it affects the informal economy and global vision for sustainable urban development.

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INTELLECTUAL PROPERTY: PROTECTION, LEGAL FRAMEWORK, AND NATIONAL POLICIES FOR ENTERPRISE AND JOB CREATION FOR THE YOUTHS IN AFRICA

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Abstract

Global demand for youth focused policies and strategies are on the increase. In Africa, for example, youth unemployment soars unabated despite increasing acceptability of the 2030 Agenda for sustainable development. The study observes that the demographic trends, inconsistency in policy implementation and continuous dependence on external sources of raw materials are three of the numerous factors limiting job creation potential across Africa. Thus the study argues that there is a place for Intellectual Property (IP) systems and entrepreneurship in the job creation agenda for African youths. The study relies on mixed sources of information, primary, secondary as well as other international statutes and conventions. The study contends that today almost all dimensions of human life are touched by IP and proposes a legal framework of IP systems and job creation for the youth.

Keywords: Africa youths, unemployment, Entrepreneurship, Intellectual property, legal framework

1.0 Introduction

Two years ago, Sibanda (2019) cried out that "unemployment remains a big issue in Africa". Among the numerous factors accounting for the lingering unemployment challenge across Africa, three stand out. These include growth in the young population, lopsided policy implementation and heavy dependence on external sources of raw materials. While Africa remains the youngest continent globally, very little has been done to harness this innate asset. For more than thirty (30) years, policy summersault has become the norm across the continent, with noticeable negative influences on both industrialization and productivity. Little wonder that the continent is famous for declining business competitiveness. Several African countries still depend on importation of raw materials from the North, despite extant supply of both natural and human capital assets. Unguided tastes for foreign consumption underlie the consistent neglect of manufacturing and the associated value chains. Thus far, these account for exports of job creation opportunities and a sluggish economic diversification drive. Given these exigencies, Intellectual Property (IP) can be utilised as a means for job creation, especially in the interests of the African youth (Sibanda, 2019).

Historically, evidences abound that nations have created decent employment opportunities and also sustained their socio-economic development on the platforms of IP and IP systems (e.g., Korea, USA, Japan and lately China and Finland). Experiences from these nations show that effective IP systems are associated with the development of innovation ecosystems as well as the creation of knowledge-based commodities and services. This relationship further shows that IP systems provide a unique platform for breeding innovation-driven entrepreneurs, contrary to extant necessity-driven entrepreneurship that is prevalent across Africa. Hence, should the continent of Africa desire to reverse the lingering import trends, especially in consumables from the West, and become successful at exporting value-added commodities or services, then indigenous innovation and IP systems that are peculiar to Africa's needs must be revitalized (Sibanda, 2019).

The "World Intellectual Property Organization" (WIPO) describes IPs as "creations of the mind inclusive of inventions; literary and artistic works; designs; and symbols, names and images used in commerce". IPs are designed to protect the creativity and ingenuity of individuals or organizations (micro, small, medium or large) in the form of copyright, patents or trademarks. This enables individuals or organization to earn financial gains from their respective inventions or creations. Besides, the IP system brings together significant stakeholders that are associated with inventions and creations; promotes a balance between private and public interests; and also fosters an enabling environment for the cultivation of creativity and the supremacy of innovation (WIPO, 2020).

The ultimate goals of IP systems are lofty, but they are usually not easy to attain. Building on the experiences of innovation-driven economies (e.g., the USA, the Republic of Korea, Japan, and recently, the People's Republic of China), public and private commitment to research and development (R&D) cannot be over-emphasized (Racherla, 2016). When creating opportunities for business growth, public and private investment choices do matter. Although there are possibilities of crowding effects when the state invests in R&D, private investments in IP systems should be encouraged. Promoting innovation-laden IP systems is synonymous with creating fertile grounds for creativity, innovation, and decent work options for the future. First, the advent of the Fourth Industrial Revolution (4IR), and second, the COVID-19 pandemic has challenged Africans to appreciate the importance of digital know-how. In a similar manner, the need to develop information technology (IT)-driven IP systems has been emphasized. An IT-driven IP system promotes technology transfers, technopreneurship opportunities, as well as other numerous tech-related work opportunities. It will, further, encourage the development of foreign direct investment across Africa, and the stock of technology transfer agreements can be equally increased (Sibanda, 2019).

Locally, the task of promoting IP awareness and developing IP systems that matches Nigeria's peculiar business environment has remained daunting (Ejere & Tendi, 2012). First, Nigeria's educational system is built around theories with very little problem-based teaching approaches. Over the years, experiences show that a greater percentage of Nigeria's young graduates are best qualified for "white collar jobs" because they are not trained for other skills-based occupations and vocations. Given the continuous increase in the stock of higher institutions of learning across the country and continuous decline in the establishment of labour-intensive industries, the supply of labour far outweighs the demand across Nigeria's labour market. Unfortunately, due to the dearth of creativity or lack of understanding of the operations of an IP system, several unemployed graduates or under-employed graduates have challenges utilizing their embedded creativity for commercial gain.

Second, it is common knowledge that the institutions of higher learning across Nigeria offer entrepreneurship education with a view to developing graduates that are self-reliant, resilient, and capable of driving initiatives (Olorundare & Kayode, 2014). Unfortunately, in more than a decade, the Federal Government of Nigeria (FGN) is yet to deem it fit for higher institutions to develop their respective Intellectual Property Rights (IPR) policies. A functional IPR policy fosters the development of graduate entrepreneurial skills, attitudes and competencies that are considered as requisite needs for job creation (Aliu, 2008; Kuratko & Hodgetts, 2004). Besides, a functional IPR can complement university entrepreneurship ecosystems, stimulate the development of university start-ups, promote job creation among university undergraduates, and drive technology and industrial development, as well as job-ready graduates (Kuratko, 2005).

Racherla (2016) opined that "an effective IP system provides incentives to invest in R&D and other innovation which is an integral part of a successful innovation ecosystem. This will enable firms to commercialize and monetize their innovations to justify and sustain R&D investments."

The study is structured into five subdivisions. Section one is the introduction. Section two is on intellectual property rights and how it can help strike a balance between the interests of innovators and

the public interest, providing an environment in which creativity and invention can flourish for the benefit of all. Section three is about entrepreneurship education for national transformation. Section four is on building bridges between academia and business. This touches on the benefits of effective IP systems. Section five is the conclusion and recommendation.

2.0 Intellectual Property

"Intellectual property (IP) is a broad term, which comprise various legal entitlements that are attached to the creations of the mind and expressions (WIPO, 2020). These include inventions, symbols, literary and artistic works, names and creative images designed for use in commerce." Given these attributes, Sodipo (2015) described IP as human intellect-driven creations.

Beyond its definition, IP protects the outputs of creative minds. One of the gains of 21st century economic activities is the appreciation of the values of innovation and inventions. It is true that entrepreneurs innovate, but not all entrepreneurs are inventors. As such, IP is a globally acknowledged incentive for the ingenuity of individuals or organizations. There are three common dimensions of protection offered by IP; namely, copyrights, patents and trademarks. Depending on the nature of the creation or invention, these enable entrepreneurs to commercialize their creations and inventions accordingly.

Beyond the IP, the IP system is broader and serves as a platform connecting all the relevant stakeholders that are associated with activities leading to inventions and creations of original products and services. An IP system, generally, seeks to promote balanced and shared interests among all the stakeholders by fostering an enabling environment for the cultivation of creativity and the supremacy of innovation (WIPO Treaties).

2.1 Intellectual Property Rights

IPRs are "the rights awarded by society to individuals or organizations principally over creative works that are used in commerce". In the view of Oyewunmi (2015), "IPRs gives the creator the right to prevent others from making unauthorized use of their property for a limited period". "IPRs are classified as industrial property (functional commercial innovations) and artistic and literary property (cultural creations)." (Integrating Intellectual Property Rights and Developing Policy, 2003). Therefore, IPRs are special rights granted to individuals or an organization by laws in relation to the creation of his or her intelligence, this potentially guarantees the exclusive regulation and enjoyment of work for a period (Owoseni, 2001).

2.2 Nature of Intellectual Property Rights (IPRs)

Building on previous evidences that IPRs are a multi-dimensional construct, the study principally examines two dimensions of IPRs; namely, copyright and industrial property. Copyright, on the one hand, regulates "literary, musical and artistic creations such as books, music, arts, films and broadcasts, as well as live performances and expressions of folklore". In recent times, the scope of copyright has been expanded to include multimedia productions, which are available by means of computer programme. Industrial property, on the other hand, includes "patents, trademarks, industrial designs, geographical indications, appellations of origin utility model, etc.".

2.2.1 *Copyright*

The Nigeria Copyright Act, LFN (2004) provided that "copyright refers to protection for works of authorship, including computer programmes". Copyright seeks to protect original works of authorship against copying. Within the context of the law, copying includes duplicating copies, making derivative works, distributing or marketing copies without authors' consents, as well as public display or

performance of works without authors' consent. The related area of neighbouring rights protects performers, producers of phonograms (sound recordings), and broadcasting organizations.

Specifically, Section 1(1a-f) of the Nigeria Copyright Act grants exclusive rights to the creators of original literary, scientific and artistic works. Copyright only prevents copying, not independent derivation. In the First Schedule, the Copyright Act provides that "copyright protection begins, without formalities, with the creation of the work, and lasts (as a general rule) for the life of the creator plus 50 years (70 years in Nigeria, US and UK)". Section 6 of the Act also "prevents unauthorized reproduction, public performance, recording, broadcasting, translation, or adaptation of a creative work". In Section 11, the Act "allows for the collection of royalties for authorized use of a work". In addition, Section 51 of the Act provides that "computer programmes are protected by copyrights, as software source and code have been defined as a literary expression".

2.2.2 *Patents*

The Patent and Designs Act (PDA), Cap P2, Laws of Federation of Nigeria (2004), defines a patent as "a government grant of exclusive rights in the invention for a limited period of time, in exchange for which the inventor must disclose the invention to the public". To be patentable, an invention must be new, useful (or industrially applicable), and not any obvious improvement over a previously known invention. An invention is a new development in any field of technology. Patenting is peculiar particularly in respect of a new device, process, composition of matter, or an improvement on any of the aforementioned.

A patent is an exclusive and monopoly right designed for protection. It is awarded to an inventor to prevent others from producing, selling, distributing, importing or using his or her invention, without licence or authorization, for a fixed period of time. The Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement) lays down at least a possible 20 years from the date of application (see TRIPS Agreement, Article 33). In return, a grant of patent to a statutory inventor requires that the patent applicant disclose the invention in a manner that enables others to put it into practice (TRIPS Agreement, Article 29 (1); Section 6 of the PDA). "This increases the body of knowledge available for further research." In other words, "a patent is an exclusive right granted for an invention, a product or process that provides a new way of doing something, or that offers a new technical solution to a problem". In Nigeria, a patent is protected for 20 years with the payment of the prescribed fee (Section 7, PDA).

2.2.3 *Industrial designs*

"An industrial design is any composition of lines or colours, or any three-dimensional form, that gives a special appearance to and can serve as a pattern for a product of industry or handicraft. An industrial design is generally protected if it is new or original and not dictated solely by technical or functional features" (Patent and Designs Act, Cap P2, Laws of Federation of Nigeria).

"Industrial designs protect the aesthetic aspects (shape, texture, pattern, colour) of an object, rather than the technical features." "TRIPS Agreement requires that an original design be eligible for protection from unauthorized use by others for a minimum of 15 years" (TRIPS Agreement. Article 26 (3) states that "duration of protection shall amount to 10 years" See Section 20 of the Patent and Designs Act). "An industrial design refers to the ornamental or aesthetic aspects of an article." "In Ajibowo & Co. Ltd. v Western Textiles Mills Ltd (1976) 7. S.C. 97, the Court held that, a design may consist of three-dimensional features, such as the shape or surface of an article, or two-dimensional features, such as patterns, lines or colour".

"Industrial designs are attached and applied to a wide variety of industrial products and handicrafts: from technical and medical instruments to watches, jewellery and other luxury items; from house-wares and electrical appliances to vehicles and architectural structures; from textile designs to leisure goods."

Section 13 of the PDA provides that, "to be protected under most national laws, an industrial design must be new or original and non-functional". This means that an industrial design is primarily of an aesthetic nature, and any technical features of the article to which it is applied are not protected by the design registration. "In Best v Woolworth, Reports of Patents, Design and Trade Mark Cases, the Court held that a patent could protect those features which are of technical value" (Reports of Patents, Design and Trade Mark Cases).

2.2.4 *Trademarks*

"A mark is any sign or combination of signs capable of distinguishing the goods or services of one undertaking (i.e., person or business) from those of another." The terms "mark" and "trademark" include service marks. "A related area is the geographical indication (also called an appellation of origin), which identifies a good as originating in the territory of a particular country, or a region or locality in that territory, where a given quality, reputation, or other characteristic of the good is essentially attributable to its geographical origin" (Trademarks Act, Cap T13, Laws of Federation of Nigeria, 2004).

"Trademarks provide monopoly rights to use distinctive signs, such as symbols, colours, letters, shapes or names to identify the producer of a product, and protect its associated reputation. In order to be eligible for protection, a mark must be distinctive of the proprietor so as to identify the proprietor's goods or services." (TRIPS Agreement, Article 15(1), provides for and outlines what can be protected under trademark. See also Section 67 of the Trade Marks Act, Cap T13, LFN, 2004). "The objective of a trademark is to prevent customers from being misled or deceived. The period of protection varies, but a trademark can be renewed indefinitely. In addition, many countries provide protection against unfair competition, sometimes by way of preventing misrepresentations as to trade origin regardless of registration of the trademark." "Indication prevents unauthorized parties from using a protected Geographical Indication (GI) for products not from that region or from misleading the public as to the true origin of the product." (TRIPS Agreement Article 22 [2] [a]).

2.2.5 *Trade secrets*

"The law in this area protects information of a confidential character which is not in the public domain from misappropriation by a person on whom the information has been confided, (see "Roxburgh J. in Terrapin v Builders' Supply Co (Hayes) Ltd, Taylor Woodrow Ltd & Swiftplan Ltd [1967] RPC 375 at 391). The court held that a person who has obtained information in confidence is not allowed to use it as a springboard for activities detrimental to the person who made the communication…" "Intangible property such as business goodwill, trade secrets, and know-how are protected under the laws prohibiting unfair competition." ([1967] RPC 375 at 391).

"Unfair competition includes any act contrary to honest commercial practices. Acts of unfair competition include, but are not limited to, breach of contract, misappropriation of trade secrets, and false or misleading representations as to the origin or quality of goods or services." "The laws against unfair competition are sometimes included in commercial (companies) law and are sometimes included in consumer protection law. Restrictive business practices (monopolies) related to licensing may also be acts of unfair competition." Safeguard of trade secrets and other forms of unfair competition does not fall within intellectual property statutory protection in Nigeria; it does, however, subsist under the common law, which is part of the body of laws in Nigeria.

2.3 Justification of Intellectual Property

Several reasons have been given for the benefit of IP; they include: "First, the development and well-being of humanity rest on its capacity to create and invent new works in the areas of technology and culture. Second, the legal protection of new creations encourages the commitment of additional resources for further innovation. Third, the promotion and protection of intellectual property spurs economic growth, creates new jobs and industries, and enhances the quality and enjoyment of life."

"An efficient and equitable intellectual property system can help all countries to realize intellectual property's potential as a catalyst for economic development, social and cultural well-being. The intellectual property system helps strike a balance between the interests of innovators and the public interest, providing an environment in which creativity and invention can flourish for the benefit of all" (Newman, Rothschild [eds], 2002).

IPRs can be accessed like any property right. An intellectual property right can be allocated, pledged, owned, or authorized. Most forms of intellectual property are 'choses in action' rights that can be enforced only by legal action as opposed to possessory rights" "In Torkington v. Magge, (1902)2 KB 427. Channell J. described a 'chose in action' as a legal expression used to describe all personal rights, which can only be enforced by action and not by taking physical possession." Similarly, in "Plateau Publishing Co. Ltd. v. Adolphy, (1986) 4 NWLR (Pt.34) at p.205. Karibi-Whyte, JSC, held that this legal right, though abstract in nature, vests the holder with the sole and exclusive privilege of multiplying copies of his creative work by publishing, selling or disposing of the same as it pleases him for a stated period." "Intellectual property rights play an important role in the economic life of any nation, especially in this age of technological development. It is indeed meant to protect the right of inventors, writers, artists and the public generally."

3.0 Entrepreneurship Education for National Transformation

Aliu (2008) notes that "several nations in the world are currently experiencing economic meltdown, hiccups, or crisis. Africa has not been spared of this global malaise; there is an increasing rate of unemployment and poverty". Consequent upon this, entrepreneurship as a Course was included in the curriculum of Higher Education Institutions (HEIs) to diversify the interest and training in universities. This is in response to the Federal Government instruction to make Entrepreneurship Education (EEd) a requirement from the 2007/2008 academic year. It is worthy of note that a good number of the higher education institutions in Nigeria now have a centre for entrepreneurship education. University of Lagos (UNILAG) has taken up the challenge and established the 'Entrepreneurship and Skills Development Centre'. UNILAG, in the last three years, has paid more attention to unlocking the entrepreneurial potentials of the students through innovation and entrepreneurship to create jobs. According to Forbes, UNILAG has been adjudged the third best University in Africa in respect of educating entrepreneurship. The revision of curricula of universities in Nigeria by the NUC is highly commendable, because incorporation of entrepreneurship study will drive technology and industrial development, as well as job-ready graduates. "In view of the positive social and economic effects of entrepreneurship, many Nigerian universities are now advancing entrepreneurial thinking and behaviour to develop students' awareness of the relevance of entrepreneurship training."

According to Oviawe (2010), unemployment of Nigerian graduates is premised on the disparity in relation to industry requirements and absence of expertise and talents. "If advancing entrepreneurship in universities is successfully achieved, the graduates would not need to queue up in the labour market for paid employment, but rather create jobs for themselves and others. This will go a long way to reduce poverty in the society and unemployment in the labour market" (Amoor, 2008).

One of the most unique and greatest rules in science is Avogadro's Law, which projected that "under controlled conditions of temperature and pressure, equal volumes of gases contain an equal number of

molecules". Amedeo Avogadro worked in the disciplines of Mathematics, Chemistry and Physics, and in addition popularized the city of Turin in Italy to be recognised throughout the world as a result of his renowned and mythological innovations. Extraordinarily, Avogadro in fact studied Law and graduated in Jurisprudence in 1792, and afterwards became a senator in the Piedmont Region of northern Italy. In addition, he took a doctorate in Ecclesiastical Law and qualified for his advanced degree in 1796. He actually trained as a lawyer at the wish of his father, who wished for him to become heir to his Law firm and kingdom. However, his core ambition was in fact in the sciences. In private, without his father's leave, Amedeo went ahead to follow his heart's yearning in mathematics and physics, and ultimately developed a theory of law that made new discoveries and forever altered the field of science. The consequence of this resolve was that a Doctor of Philosophy in law proposed a theory and foundational law to direct scientists (Coley, 2001).

According to Jim Rohn (Feyoh 2020), "Formal education will make you a living; self-education will make you a fortune". Records show the statistics that a good number of the world's richest personalities once had to make a decision between formal education in school and self-education outside a structured school when they realized that their schooling was meddling with their education. "Formal education makes you a living; self-education makes you a legend. Formal education would teach you how to conform to society, while self-education would teach you how to get out of conformity so that you can fill your life with adventure and beauty."

Entrepreneurship is difficult because it involves taking on monetary challenge and risk in the hope of profit. Statistics have shown that the first thing to learn is determination to succeed and secondly to manage inadequate funds for the trade to yield profit effectively.

"Entrepreneurship is a service rendered by anyone who starts a new business. Entrepreneurship involves creating and bringing something new to a market that does not exist. Even if the market exists, there is no certainty that the new product will go beyond the introduction stage of the product life cycle, taking into consideration the teething competition." (Ogundele, Sofoluwe & Kayode, 2012).

Akanwa and Agu (2005), opine that "anyone who creates a business, establishes it and nurses it towards growth and profitability, or takes over an existing business because the founder is dead or has sold it, or who inherited it and continues to build and innovate it, or who runs a franchise, qualifies as an entrepreneur". In other words, "an individual can become an entrepreneur through: self-establishment; taking over already existing business; inherited business venture and franchisement. Furthermore, any person who has the zeal and ability to discover and evaluate opportunities, generate resources and takes steps towards taking advantage of such opportunities can become an entrepreneur."

Several scholars recognized the importance of entrepreneurship to the economic and social development of a state to include: "identification of business opportunities; selection of opportunities; decision on form of enterprise; allocation and distribution of resources; coordination of other factors of production such as land, labour, and capital; planning and controlling organizational programmes and activities; mobilization and utilization of locally produced raw materials; risk bearing; creating of employment opportunities; marketing activities for customer satisfaction; Promoting balanced regional development, reducing concentration on economic power; and innovation to meet with needs of local market" (Danko, 2005; Kumar, 2011; Ogundele, Kayode, Oduleke, & Alade, 2013).

To Enu (2012), "entrepreneurship education is made up of all kinds of experiences that give students the ability and vision of how to access and transform opportunities of different kinds. As such, it goes beyond business creation. It is about increasing student's ability to participate and respond to societal changes."

Open enterprise creates a dynamic training for commercial, hands-on and real growth of a state. This has been given local and international recognition as an instrument for a viable ecosystem. This

position has led the Nigerian governments to establish and support appropriate organizations to attain this goal. The determination of government can be appreciated in the launch of the following skills initiatives: (Federal Republic of Nigeria, 2011). .

i. National Directorate of Employment (NDE);
ii. Industrial Attachment or Student Industrial Working Experience Scheme (SIWES);
iii. Vocational and technical training;
iv. Agricultural training; and
v. Information and Communication Technology (ICT) Training.

Similarly, to Emeraton (2008), "entrepreneurship education deals with those attitudes and skills that are necessary for the individual to respond to its environment in the process of conserving, starting and managing a business enterprise."

Oduwaiye (2009), perceived some tactics and talents which are necessary for a person to act in response to a situation and distinguish its capabilities and potentials. In other words, entrepreneurship training prepares the individual to be equipped and obtain marketable talents which may well be used to improve and accomplish their own industry or that of others.

Entrepreneurship education or enterprise education is that "educational training which assists students to develop positive attitudes, innovation and skills for self- reliance rather than depending on the government for employment. Such an experience will in return produce graduates with self-confidence and capacities for independent thought to discover new information leading to economic development. Besides, it is the type of education that seeks to provide students with the knowledge, skills and motivation to encourage entrepreneurial success in a variety of settings. It thus empowers students to develop and use their innate creative skills to take on initiatives, responsibility and risks."

Guerrero and Urbano (2012), note that "an environment where knowledge-based entrepreneurship transpires as a driving force towards job creation, economic growth as well as competitiveness is referred to as an entrepreneurial society." Hence, an innovative university is as necessary and important as disseminating society and information creators. The ensuing are the anticipated goals to be achieved through entrepreneurship training, which will lead to a national revolution if they are well and aggressively executed:

a. Teaching and scholarship: Entrepreneurship will flourish through knowledge and preparation centres for the interpretation of ideas and concepts into fruitful projects. It will aid the apprentices to learn and reason innovatively. It will also assist them to ascertain their abilities and help them in achieving their potential, which will ease the endless search for jobs.

b. Enables Management Potential: The exercise will expose the students to how to recognize, generate and exploit opportunities. The curriculum will further expose them to how to compose a feasibility study which will bring in the funding to establish an industry or trade. In the view of Erwart (2012), "entrepreneurship education builds skills such as managerial, human, technical, conceptual skills in the individuals by teaching and allowing them to start businesses with little or no money for themselves".

c. Self-Fulfilment for the Entrepreneur: Entrepreneurship education brings contentment to the receiver when he has learnt how to navigate and identify the assets, flaws, prospects and dangers inherent in starting and succeeding in a trade.

d. Build Balance in Rural-Urban Migration: If and when entrepreneurship education is achieved and implemented in the university curriculum system in Nigeria, the number of students who migrate to urban centres in search of white collar jobs will reduce, while the rural area will grow and additional

careers will be generated. In essence, this will get rid of and eliminate poverty and, more importantly, increase the overall security of the nation (Danko, 2005).

e. Creates Employment: Studies reveal that the total labour force is enabled via entrepreneurial schemes, which leads to a large reduction in the level of joblessness (United Nations [UN], 2010).

f. Entrepreneurship activates capital that would have remained underutilized in the hands of society and employs the use effectively through investment and resources creation.

g. Furthermore, it brings together the different segments of the economy and establishes the marketplace, which provides agrarian and manufacturing production. This will make available a veritable source of employment for big businesses and industries.

The benefits of the entrepreneurship movement is first the creation of prosperity, rise in the marketplace and a positive collective ecosystem, because of a conducive environment in the state. Secondly, there is specialization through invention and skill. Thirdly, entrepreneurship will generate trade and start-ups for commercial growth in areas such as communication, roads and health services.

To Brown (2012), there are nine basic factors that hinder entrepreneurship education in Nigerian universities. "These are poor knowledge based economy and low spirit of competition; poor enterprising culture; lack of entrepreneurship teachers, materials and equipment; unavailability of relevant funds; non-inclusion of entrepreneurship programme in the general school curricula; poor societal attitude to technical and vocational education development; inadequate facilities and equipment for teaching and learning in practical-related courses; insensitivity of government to enterprise creation and expansion strategy; and poor planning and execution of processes of action."

The Government of Nigeria has engaged the appropriate agencies to undertake and fulfil these issues. There is evidence in the University of Lagos, (UNILAG), where lecturers in every faculty and department were trained as 'Facultpreneurs'. UNILAG wishes to become the university where students can engage in entrepreneurship education and demonstrate entrepreneurship capabilities towards economic development. This led to the approval of the Entrepreneurship, Innovation and Business Incubation Programme (EIBIP) across the university's numerous disciplines to enable all course specializations in the university to be entrepreneurially focused. This delivered the new challenge of creating faculty members that will fill and be fit for this purpose. It led to the creation of the Train-The-Trainer Programme in Entrepreneurship and Innovation Mentorship Education Certification (EIMAC) for the various faculty members that will be involved in assisting the university achieve its objective of creating a sustainable and impactful entrepreneurship-oriented university in Nigeria and Africa.

Effective training and application of entrepreneurship in universities in Nigeria will produce sought after graduates, which will in turn add to the country's socio-economic expansion. In the views of Albert Einstein, "Education is what remains after one has forgotten everything he learned in school. It is a miracle that curiosity survives formal education" (Kleckner 2018).

"The proof of going to school is the certificate, but the proof of education is in the ability to solve problems through innovation and creativity. Graduates who cannot solve problems are liabilities. Education is not just about going to school and getting a degree; it is about widening knowledge, thinking creatively and absorbing the truth about life. We must see education beyond certificates."

Beyond rhetoric, study has shown that societies devote valuable time and energy in school, merely to obtain official document and credentials, not education or training. To Einstein: "Education is not the learning of facts, but the training of the mind to think" (Albert Einstein Quotes). Given these attributes, it is important to take along the creative mantra, "think outside the box" .

According to Amoor (2009), "entrepreneurship education will help to discover talented, competitive, creative and very skilful individuals that will be the nation's innovative assets; prepare individual students to be responsible and entrepreneurially conscious to contribute significantly to economic growth and development; and build a connecting link that creates productive and very thoughtful citizens that can contribute to local, regional and national competitiveness. It will also encourage the university graduates to establish small scale businesses and sustain them. Such small businesses form the cornerstone of future economic growth, job-creation and wealth-generation."

4.0 Linking Ivory Tower and Industry

"Universities and research institutions, as well as knowledge … industry, are the backbone of economic activity in most countries" (Adebiyi & Onakoya, 2013). The participation and collaboration of African knowledge based industry will transform the economy and make them competitive internationally. The capability to revolutionize and grow cutting edge tools will dominate and increase African needs and give them visibility to be amongst countries that trade great value produce and service and join the world's economic participants (The Innovation Policy Platform, 2013).

African representatives have identified the important role of universities, research groups and Small and Medium Size Enterprises (SMEs) as initiators of novel facts to take care of local needs (Pecas & Henriques, 2006). They also recognize the necessity to reinforce relations between ivory tower and industry. This is to ensure that study programmers yield productivities germane and beneficial to the world. "Policies that encourage active use of IP rights to protect and leverage the economic value of the new technologies, products and processes that these important actors generate, for instance, through licensing and start-up schemes, will enable them to secure sustained research-funding and promote business growth" (Sibanda, 2019).

Increasing numbers of policymakers are identifying the urgent role of academia, study institutions and small businesses as creators of new knowledge to take immediate care of local needs and wants to grow the economy. This can be achieved by connecting IP and invention. The practices of certain nations offer exciting perceptive happenings to accomplish continued socio-economic growth by boosting and encouraging the use of IP. For example, some decades back, the economy of Korea was very poor. However, its pledge to revolution and entrepreneurship, in addition to strict application of IP, empowered it to develop as a leading global economy. This development is not an exception. What can be achieved when representatives of government embrace lasting and measured attention on invention and intentional use of IP cannot be overemphasized, as it brings development and strengthens the country's economy (Sibanda, 2019).

4.1 Benefits of Intellectual Property

According to Adebiyi & Onakoya (2013), "industries use IP rights strategically to develop, trade in, and secure income from their innovative products and services. These rights help companies gain and maintain a competitive advantage in markets at home and beyond." Multinationals with a calculated and effective IP program gain more robust and better negotiating points, they accomplish better and superior achievement besides a developed and thriving market. Essentially, this is a highly viable marketplace where authorization and assignment is progressively more predominant, particularly within the medicinal, automotive, and knowledge areas (Saha & Bhattacharya, 2011).

"Amid low levels of industrialization and associated high unemployment, African policymakers are grappling with ways to promote innovation and greater use of the IP system to foster business growth, jobs and economic sustainability" (Osunde, 2016). IP awareness is important and should be brought to the attention of upcoming and growing businesses, equally these dealings promote financial

development. It is observed that businesses that engage in IP privileges trend to grow and develop in revenue and service, better than those that are unconscious and ignorant of exactly how IP can maintain trade investment (Evenson, 1990).

According to Rivette & Kline (2000a), "consumers and society as a whole also stand to gain because IP rights support the process of bringing a product to market, thereby providing consumers with access to an expanding range of innovative products and services." Effective and operative IP usually guards users against fake, adulterated and pirated goods and chattels. The result of such illegal action fails genuine crafts and the skill to capitalize in innovation and inventiveness. It also places purchaser wellbeing and safety in danger (Rivette & Kline, 2000b).

Expansive acceptance that can come from the discovery, in addition to a strategic active IP rights, will guarantee that Africa's initiators as well as businesspersons successfully safeguard and delight in the worth of their IP resources. This will build prospects for service, wealth-creation, financial and commercial advancement.

4.2 Collaboration with Downstream Commercialization and Innovation Ecosystems

As customary originators and information disseminators, study undertakings of academia and investigation bodies remain focused upstream on advance significance actions. On the other hand, SMEs are inclining to downstream by adjusting to fresh and novel understanding to help produce merchandises in addition to facilities that the marketplace can use. Collaboration is central to developing thriving, innovation ecosystems (Sundbo, 1998).

"To create optimal conditions for knowledge generation and subsequent commercialization, consideration needs to be given to ways to encourage academia, industry and governments to work together to improve awareness of the economic benefits that can flow from strategic use of IP" (The Innovation Policy Platform, 2013). Effective cooperation is vital to obtaining research backing. This is imperative in ensuring that study programmes remain significant in respect of indigenous requirements. It is noted that teamwork deepens acceptance and understanding of the effects of advance innovation and effective IP on digital transformation. (The Innovation Policy Platform, 2013).

Adams (2000) advises African countries to work together and take advantage of IP to improve commercial growth as this will ease the tasks that will arise from the fast engagement and acceptance of a more advanced digital knowledge.

The aim remains to guarantee that African establishments of education and study come to be part of total and integrated nationwide inventions, where all players and industries stand to accept technological invention which will provide for and take care of social necessities. "The creation of opportunities for decent employment and heightened global competitiveness are critically important by-products of this process" (World Bank, 2006). The success of achieving this end will define exactly the future of Africa growth towards overall IP creation against a fast-moving scientific and financial backdrop.

According to Sibanda (2019), "there is a pressing need for dialogue to support the development of an African roadmap for IP and innovation. Such a roadmap will give added impetus to efforts across the continent to improve employment prospects and living standards by leveraging Africa's wealth of talent in an era of rapid technological transformation" (Sibanda, 2019).

Apparently, there is need for Nigeria to emulate other nations of the world to grow a local IP policy. This is important, and should be treated as urgent. Borrowing from the practices of nations like India, the Republic of China and other developed countries such as the US, no country can have an effective IP system without first developing a National Policy Agenda and Law which will provide the overall IP aim and objectives and give timelines to assist in the plan and goal

The anticipated Nigerian National IP Policy (NIPP), when successfully achieved, will outline and propose the goals to be achieved with the combined contributions, values and expertise. The drive will showcase and be a reflection of the direction in which Nigeria's creative industry will advance, and then determine the international treaties or conventions that will be ratified in line with laid down rules.

5.0 Concluding Remarks

The paper concludes that the present clamour for an industrialized, independent economy supported by broadening expertise is significant; particularly when oil, which is Nigeria's primary source of foreign exchange earnings, is failing as a result of crumbling infrastructure, competing international prices and alternative energy sources relied on by some nations which were formerly dependent on Nigeria's oil. The paper recommends a total transformation for the country from a customary import orientated economy to a skills and knowledge driven economy, transferring know-how, innovation and technological developments.

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