



Volume 1 / Issue 3, 2021

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

JOURNAL

of
African Employment
Entrepreneurship and
Skills Development
(JAEESD)



ISSN: 2805-3524

"Youth Employment Matters for Sustainable Africa of Now and the Future"

**Copyright © 2021 by ARUA Centre of Excellence for Unemployment and Skills Development,
University of Lagos, Nigeria**

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photo-typing, or otherwise without the permission of the Editor.

Published By

ARUA Centre of Excellence for Unemployment and Skills Development

Right-Hand Side, First Floor,

Entrepreneurship and Skills Development Centre (ESDC) Building

Behind Creative Arts Building, Faculty of Social Sciences Premises,

University of Lagos, Akoka-Yaba, Lagos State, Nigeria

Website: <https://arua-coe-usd.com/>

Email-1: arua_usd-coe@unilag.edu.ng | info@arua-coe-usd.com

Sponsored By

UKRI/GCRF

**Partnership, Research, and Capacity-Building for Youth Unemployment Solutions in Africa
(PRAC-4-YUSA) Grant ES/T003790/1 (2019-2022)**

**JOURNAL OF AFRICAN EMPLOYMENT, ENTREPRENEURSHIP AND
SKILLS DEVELOPMENT (JAEESD)**

ISSN: 2805-3524 (PRINT)

ISSN: 2814-3698 (ONLINE)

Publication of the ARUA, Centre of Excellence for Unemployment and Skills Development (ARUA, CoE-USD), University of Lagos, Nigeria

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 collaborations 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 output 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 quantitative or qualitative 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 6th or 7th edition APA referencing style

EDITOR-IN-CHIEF

- Sunday Adebisi
University of Lagos, Nigeria

CO-EDITOR

- Kesh Govinder
University of KwaZulu-natal, South Africa

MANAGING EDITOR

- Professor Jackson Maalu
University of Nairobi, Kenya

EDITORIAL ADVISORY BOARD

- Abimbola Windapo
University of Cape Town, South Africa
- Priscilia Baffour
University of Ghana, Ghana
- Jackson Olajide
University of Ilorin, Ilorin, Nigeria
- Joy Kirru
University of Nairobi, Kenya
- Tony Bailetti
Carleton University, Ottawa, Canada

- Jackson Maalu
University of Nairobi, Kenya
- Taiwo Asaolu
Obafemi Awolowo University, Ile-Ife, Nigeria
- Dimy Doresca
John Papajohn Entrepreneurship Centre, University of Iowa, USA
- David Maas
Conventry University, UK
- Patrick Oladele
Federal University, Oye-Ekiti, Nigeria
- Kirk Semple
Lancaster University, UK
- Olufemi Obembe
Obafemi Awolowo University Ile-Ife, Nigeria
- Earnest Aryeetey
African Research University Alliance, Ghana
- Patrick Okonji
Research and Innovation, University of Lagos, Nigeria
- Joan Lockyer
Conventry University, UK
- Isaac Abereiyo
Obafemi Awolowo University, Ile-Ife, Nigeria
- Oyedunni Arulogun
University of Ibadan, Nigeria
- Ayodele Atsenuwa
University of Lagos, Nigeria
- Akanimo Udoh
Lancaster University, UK
- Hakeem Ajombadi
Birmingham University, UK
- Toyin Ogundipe
University of Lagos, Nigeria
- Olufemi Saibu
University of Lagos, Nigeria
- Chuks Daniel
University of Sussex, UK
- Folashade Ogunsola
University of Lagos, Nigeria
- Bitange Ndemo
University of Nairobi, Kenya
- Muindi Florence

- University of Nairobi, Kenya*
- Chika Yinka-Banjo
University of Lagos, Nigeria
- Mary Kinoti
University of Nairobi, Kenya
- Olujide Jackson
University of Ilorin, Nigeria

From the Table of Editor-in-Chief

It is very delightful to present to the academia community and the public, our fourth publication which will be rounding up the first Volume of the JAEESD 2021 editions that has produced one Special Issue, and three regular issues for year 2021. The ARUA, Centre of Excellence for Unemployment and Skills Development (ARUA, CoE-USD), through its grant from United Kingdom Research and Innovation (UKRI) in Partnership with the African Research Universities Alliance (ARUA), titled; Partnership, Research and Capacity-Building for Youth Unemployment Solutions in Africa (PRAC-4-YUSA) has continued to pursue activities that support Africa to leverage research and innovative activities to overcome the menace of Youth Unemployment.

The JAEESD 2021 Volume has drawn its theme and focus from the ARUA,CoE-USD's 1st International Conference in December 2020, titled: *The Deepening Youth Unemployment Crisis Occasioned by COVID-19 Pandemic: What Options Available for the Rescue?* The present Volume 1, Issue 3 has a total of eleven (11) brilliant articles from scholars across Africa

The first International Conference led to the birth of the maiden edition of "*The Journal of African Employment, Entrepreneurship, and Skills Development (JAEESD)*", with focus on employment, entrepreneurship, innovation and skills development across the continent of Africa. JAEESD also has the objective and purpose of engendering quality research knowledge that will focus on resolving the menace of unemployment, through; leveraging entrepreneurship, and skills development research outputs for galvanizing opportunities for decent jobs in Africa. There is no doubt that entrepreneurship is an emerging area of discourse in the world over, and JAEESD is the best journal to acquaint researchers, youths and all stakeholders interested in economic growth with the best practices in entrepreneurship development for sustainable Africa.

The JAEESD Volume 1 Issue 3 with eleven (11) Articles, had twenty three (23) contributors who have also participated in our international conference and successfully presented their developmental papers. The authors have brilliantly focused further discussion of understanding the menace of youth unemployment, especially as exacerbated by COVID-19 pandemic on issues like the roles of SDGs in creating pathway to solutions to youth unemployment, funding challenges, Green entrepreneurship, sustainable entrepreneurship as well as the challenges faced by people living with disabilities and what needs to be done to support their entrepreneurship intention in the African society. This Issue-3 is very rich, and contains articles that further help the ARUA,CoE-USD to achieve a better understanding of the enormity of the youth unemployment in Africa, and the need to commence discussion about what needs to be done by all stakeholders.

I acknowledge the hard work of each of the authors of the 11 articles that made it into the Volume 1, Issue 3 edition of this journal. Thanks for engaging a very quality research to make scholarly contributions to our journal and the body of knowledge in the efforts of Africa to find understanding and home-grown solutions to the menace of youth unemployment, especially in the most difficult era of COVID-19 pandemic. It is my hope that every stakeholder in the African economy such as professionals, entrepreneurs, government and the academia will find new and disruptive ideas that can make Africa economy great and sustainable for global competitiveness.

We thank the United Kingdom Research and Innovation (UKRI) Global Challenges Research Funds (GCRF) as well as the African Research Universities Alliance (ARUA) for providing the grant for PRAC-4-YUSA which is the foundation for having fund to publish JAEESD regularly. For this, we are sincerely grateful. ARUA, CoE-USD also appreciates the research friendly ecosystem created by the Management of the University of Lagos to host this International Centre. It is our hope to continue to use JAEESD as a medium to reach the larger society of Africa and the global communities on the various issues associating with the crisis of youth unemployment in Africa. It is our hope that in no time, we would have galvanized activities that bring scholars and African stakeholders together, towards co-creating sustainable solutions to overcome this monster, and pave way for economic development of Africa region.

Professor Sunday Abayomi, Adebisi
Director, ARUA CoE USD
Editor-in-Chief
September, 2021

Table of Contents

The Role of Sustainable Development Goals (SDG)'s 2030 to Create Innovative Opportunities for Youth Employment in South Africa <i>Haseena, Majid and Ganzamungu, Zihindula.</i>	1-15
Funding Youth-Entrepreneurship through the Venture Capital Model in Nigeria: Current Realities <i>Oluwadamilare Odu-Onikosi</i>	16-29
COVID-19 pandemic, Future of Work Unemployment, and Social-economic Crisis in Africa <i>Rahim, A.G., Adebisi, S.O., and Amole, B.B.</i>	30-44
Green Entrepreneurship Practices as Opportunities for Internationalisation of Nigeria Small and Medium Sized Enterprises. <i>Gabriel Nedomien, Osayende and Sunday Abayomi, Adebisi</i>	45-72
Rescuing African Youth Future from Unemployment through Early Strategic Training of Adolescents in Coding, AI and Robotic for Technopreneurship Opportunities <i>Chika Yinka-Banjo, Sunday Adebisi, and Joel Adebayo</i>	73-85
Sustainable Entrepreneurship: A Panacea for Youth Unemployment in Nigeria <i>Oluwadamilare Odu-Onikosi</i>	86-94
Entrepreneurship and People with Disabilities (PWDs) in Nigeria: Analysis of Challenges and Prospects <i>Gunu, U. Omolekan, Olota, O.O., and Ashiru, A.</i>	95-108
The Impact of Lagos Innovation Hubs and Covid-19 Realities on Wealth Creation. <i>Adegbiji, Adebayo Peter and Adebisi, Sunday Abayomi</i>	109-125
Youth Entrepreneurship Training, Employment and National Development In the Post-Pandemic Period: Evidence from Ekiti State <i>Janet Monisola Oluwaleye</i>	126-139
Assessing the Relationship between Emotional Intelligence, Organisational Commitment and Entrepreneurship during the COVID-19 pandemic in Nigeria Perspective <i>Moruf Akanni Adebakin, Risikat F. Adeoye, and K.O.Ganiyu</i>	140-153

That we may not be left behind: Analysis of Entrepreneurship Education
Policies and Curricula for Teacher Education in Nigeria

Oyetero, Oyebode Stephen

154-176

The Role of Sustainable Development Goals (SDG)'S 2030 to Create Innovative Opportunities for Youth Employment in South Africa

Haseena Majid¹ & Ganzamungu Zihindula²

^{1,2}Tekano for Health Equity and Social Justice, South Africa

²College of Health Sciences, School of Public Health Medicine, University of KwaZulu-Natal, South Africa; ²Healthy Rural Society Africa, ¹School of Management, IT and Governance, University of Kwazulu-Natal, Durban SA

Email: g.zihindula@atlanticfellows.org

Abstract

South Africa is one of the countries where youth unemployment rate stands at 46.3% to date, yet in the absence of youth employment strategies most of the SDG's will not be achieved by 2030. Despite an alignment between the SDGs and the South African National Development Plan (NDP), there has been no remarkable progress toward job creation for youth. This research is being conducted to highlight the incongruence between achieving the SDGs for youth employment and the programmes culminating from the NDP. A desktop review was conducted and relevant documents considered for inclusion as sources of data were the national labour reports, country strategic plans, and published papers on youth (un)employment in South Africa. A narrative approach was adopted and content analysis was carried out. The results show that South Africa is lagging behind in implementing innovative approaches for job creation. One of the challenges threatening South Africa's efforts to address youth unemployment and achieve pertinent SDGs by 2030 is corruption, lack of adequate monitoring and evaluation for the implementation of programmes, as well as racial and gender inequity inherited from the apartheid regime. We call upon government to establish a team led by youth to be central to the planning and implementation process for programmes aligned with the NDP. We conclude that the current policies in place are ineffective and recommend a refreshed approach for addressing youth unemployment through social compact where the state partners with the private and civil society. Findings have however highlighted the role played by SDGs in creating innovative opportunities or youth employment and through existing literature, we have identified where these opportunities have been or not been implemented.

Key words: Innovative Opportunities, SDGs2030, South Africa, Unemployment, Youth Employment.

Introduction

The historic global agreement to eradicate poverty and improve the living conditions of all people through the Sustainable Development Goals 2030 (SDGs) has been well received at regional and national levels (United Nations, 2020). The 17 goals, which seek to leave no one behind, are progressive and show an advancement from the Millennium Development Goals (MDGs) which preceded it. The universal nature of these goals and particularly its coverage of areas which were lacking in the MDGs has created a futuristic model to address critical areas such as employment, inclusive and peaceful societies and the growing income disparities in countries (Kumar, Saxena, 2016). The shift to focus on human rights and equity, with an extension to include people with disability and vulnerable populations has expanded the scope of the SDGs allowing it to be more

comprehensive and inclusive as compared to the MDGs. The MDG in comparison was far narrower in its approach in that it focused on developing countries, with the support of funding from developed countries and it had fewer goals, targets and indicators (Kumar, Saxena, 2016).

While it is true that innovative approaches are needed to navigate a fast-changing world, the reality of inequity as a persistent obstacle cannot be ignored (Plagerson and Mthembu, 2019). Global agreements aligned with national policy and programmes are useful to achieve desired goals. It is important however to ensure that an enabling environment exists to translate theoretical aspirations into practice. Well intended policies can sometimes be limited in their success due to institutional hindrances which are in place (Haywood et al., 2018; Khan, 2016). Lack of accountability and poor monitoring and evaluation of programmes, coupled with the neglect of youth employment as a core component for development of communities and the national economy remains an area of contention and will likely impact negatively on the envisaged outcomes of the SDG 2030 (United Nations, 2020).

As of 2019, the total global youth population stood at 1.2 billion, representing 16% of the world's population (DESA, 2019). Of these, the developing countries are home to the highest number of youth populations with 361 million in Central and Southern Asia, 307 million in Eastern and South-Eastern Asia and 211 million in Sub-Saharan Africa (SSA). These figures are projected to increase by at least 62% in the next 30 years with the greatest increases anticipated in the least developed countries. These large numbers translate into a greater working class and could yield productive results globally if there are well structured resources in place to enable their capacitation through skills development, training and education (DESA, 2019). The link between empowerment, healthy life outcomes and economic success is undeniably attached to education. Education however, need not be limited to formal learning systems to achieve gross success for youth, given the disparate economic structures which exist within and between countries (Feinstein et al., 2006).

Where health is normally described as the absence of disease, health equity in its link to the social determinants of health speaks to the presence of the key social and economic structures, equitably distributed so that people in the greatest need have sufficient resources to enable fair opportunities to participate in the economy and to achieve good health and well-being (Braveman, Arkin, Orleans, Proctor, Plough, 2017; WHO, 2008). Thus, there is a clear need for governments to align their national plans to address challenges affecting the social determinants of health as a parallel, intersectional process to creating solutions for increased youth employment. Addressing the macro and micro-level challenges simultaneously to meet the SDGs as set out by the United Nations (UN) should extend to include education, infrastructure, safety, water and sanitation (Givens et al, 2020).

South Africa remains one of the most inequitable countries in the world, Despite the Government's efforts since 1994 to re-write national policies to enable transformation, social cohesion and equity, it has not been without challenge (World Bank, 2021). While monitoring and evaluation of projects to meet national directives requires more attention, the policies which underpin reformative programmes are well structured with equity and social justice at the core (DPME, 2007; UNDP/SA, 2020).

De Lannoy et al (2020) frames the complexities of the youth unemployment crisis in South Africa as problems arising within multiple sectors. These include the influence of the economic state on the absorption of young people within the labour market and low job opportunities, the participation of young people, and the influence of the education sector and its policies in the labour market.

They argue that the persistence of unemployment despite investments in active labour market programs (ALMP) which seek to address the multi-sectoral challenges affecting youth reflects the need for better understanding of this crisis. While the barriers to the uptake of employment in relation to the labour market are well documented, there is a scarcity of literature to report on the personal and socio-economic barriers to the uptake of employment opportunities. The broader cyclic events of poverty and its related consequences need to be emphasized alongside statistical reports if policies and programmes are to adequately address youth unemployment.

The successful enablement of youth to achieve capable economies is strongly attached to SDG 3, 4 and 8 which require focused efforts across all government sectors to create conducive environments in which healthy, educated people can find employment to harness their skills and talents for greater benefit (DESA, 2019). The United Nations Youth Stats for hunger and poverty found, in its report that some global challenges facing youth include:

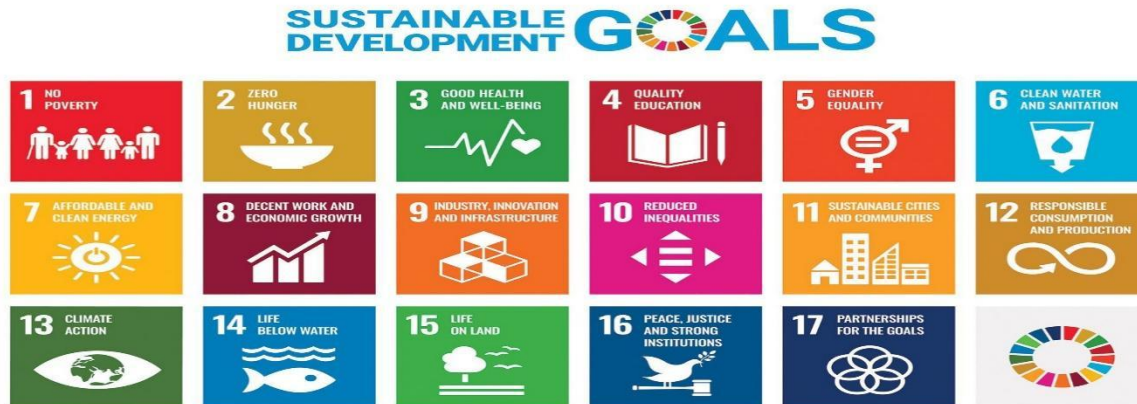
- More than 500 million youth live on less than \$2 per day
- Youth are 3x more likely to be unemployed
- Young people are underrepresented in the decision-making process – less than 12% of parliamentarians are in their 30's
- Gender based limitations on the advancement and empowerment of girls through cultural barriers and gender-based violence continue to limit the progress and health outcomes for women and girls.

Against these backdrops, this research was conducted to highlight the incongruence between achieving the SDG's for youth employment and the programmes culminating from the NDP. For the purpose of this study, employment is defined as people aged 15 – 64 years old who do not have employment at a specific time but continues to look for work. In its expanded form, unemployment may also refer to people who no longer pursue job searches. Youth, as defined by the United Nations is anyone between 15 and 24 years old, however, in South Africa, anyone between 15 and 34 years old are considered to be within the category of youth (StatsSA, 2021).

Methodology

This paper was compiled using a desktop search engine including Research Gate, Google Scholar, government and NGOs websites, to access policy documents which include the National Development Plan (NDPs), National Strategic Plans (NSPs) and the South African revised labour policies. We searched from other international organizations for United Nations reports and official statistical data for the Republic of South Africa. The key word searched are: *innovative opportunities for job creation, youth (un)employment in South Africa, implementation of SDGs related to job creation for youth, and youth unemployment rate in South Africa*. Information gathered was analysed qualitatively using content analysis. The main themes generated were *the provision for youth in the SDGs* identified after conducting an *overview of the SDGs with provision for the youth in particular*. The *causes of youth unemployment in South Africa* were also explored as second theme; and the third theme was *implementation of SDGs as strategy for job creation in South Africa*, then fourthly, the *consequences for youth unemployment in the country*. These themes were followed by a section of *policy implications* for the unemployment challenges.

An overview of the sustainable development goals



So

urce: (New Zealand Red Cross, 2021)

Whereas the plans to achieve, the SDGs are reflected in the NDP, there is a paucity of information about how the programmes to achieve these goals would reflect the disparities amongst the population, demographically, socio-economically and otherwise at local levels. Stakeholders identified to propel plans for the implementation of the SDGs within provincial plans include civil society, the private and public sector (SAG, 2020). While each of the goals are likely to be separated into independent sectors for implementation at a national level, there needs to be a consciousness about the interdependence of goals on each other. Further, the socio-economic disparities between and within communities need to be factored into the structure of plans and programs to achieve the desired goals as the sustainability of these goals are underpinned by the principles of economic viability, environmental protection and social equity (Mensa and Casadavell, 2019). Social equity is needed to sustain these goals, and the implementation of programmes toward the goals in a South African context specifically, are needed to achieve social equity for the advancement of the country (Leibbrandt and Shipp, 2019). An integrated approach through the reduction of limitations caused by silo practices and strengthened coordination across entities would facilitate an easier means to implement plans at varying levels. We thus concur with previous research that, for low-to-middle-income-countries (LMIC's) to meet the 169 SDGs targets, there should be a conscious effort to deconstruct each of the 17 goals into sub-components of race, age, gender, geographic location and income, to adequately formulate interventions in fulfillment of the overarching goals (Marmot and Bell, 2018).

Provision for Youth in the SDGs

Targets within the United Nation's 2030 Agenda for Sustainable development specifically focused on youth employment include, targets 4.4, 8.5, 8.6, 8.b, and 10 (ILO,2021). The broader goals for the youth is highlighted through its prescription of achievements necessary for their development. These include amongst others, the number of youth with information and communication skills, a reduction in the number of youth who are not in education, employment and training, fiscal

allocations from national and global levels toward employment, and capacitation in specific sectors such as climate change, planning and management for women, youth and marginalized communities. The increasing of skills development, vocational training, improved literacy and numeracy is central to the progress of youth to fulfill the goals of all other SDGs. In the absence of a reliable and valid approach to achieve this, there exists the risk of poor fulfillment of the United Nations' objectives to have a world which is more equal to all people (Republic of South Africa, 2019).

While the SDGs speak about youth with specific reference to age, Millennial are those who best fit the description as beneficiaries of the outcomes the SDG's seek to achieve. Key characteristics of this generation have been identified in the Youth-Speak survey which sought to identify the priorities of 170 000 youths across 100 countries (AIESEC, 2015). Key findings of the surveys include:

Their top motivators were family, purpose in life and friends as compared to financial success and recognition. There was a great willingness to volunteer time to purposeful projects in other countries (82%), but resources remain a challenge (52%). Over 55% of Millennials indicated a lack of knowledge about SDGs, and finally, most of the 55% showed interest in SDG 4, 1 and 3 in order as central to their accomplishment.

Similarly, My World Survey conducted in 2015 (UN, 2015) had 2,1 million respondents highlighting key thematic areas which they believed needed to be prioritised. These included: Education, employment and entrepreneurship, health, governance participation, peace and personal security. This formed the foundation of the UN's Post 2015 Development Agenda to prioritize youth. The Development Agenda identified the causes of youth unemployment to be linked to the state of the economy, the manner in which labour markets were structured, lack of experience and challenges linked to health, geographical location, stigma and discrimination in respect of age and gender. The commitment made to address these challenges and for the prioritisation of youth employment have since been echoed in the SDGs, specifically those attached to quality education (SDG4), decent work (SDG 8) and Climate Action (SDG 13). The interconnectedness of the goals is dependent on the quality and strength of the partnerships formed to achieve them (Haywood et al., 2018).

The collaborative nature of the SDGs from its conception to its policy is reflected in the vast working groups and the broad consultative processes which was undertaken. It is also reflected by way of its recognition of key sectors, like Civil Society Organisations (CSO's) which are capable to strengthen calls for accountability from government. While this has enhanced inclusivity, it has also created a wide and diverse spectrum of work to be achieved. Haywood et al, (2018) highlight the importance of the relationships between stakeholders to be clear, with common goals and mutual benefit to all stakeholders. They also emphasise the need for interdependence and a conscious effort to avoid working in silos.

With particular focus on employment, the International Labour Organisation (ILO) identifies key areas within each SDG relevant to youth. The thematic areas give consideration to the future of work, youth specific policies, skills and employability (ILO,2021). The focus on decent employment amidst the reality of employment poverty, through the payment of unsustainable wages and exploitation of young people is also an area within innovative youth employment strategies

which requires attention. Simply creating jobs is an insufficient intervention. The jobs created for youth should speak to the greater global goals to achieve economic growth, social cohesion and environmental stability (UN, 2015). Furthermore, the age interval of youth between 15-34 years old for the reporting of economic contribution requires sub classifications within this cohort due to the age and skills differentials. As per the schooling system, there is an expectation on schools, society and individuals to retain as many children within schools until grade 12. This limits the number of young people largely between 15 to 17 years of age to avail themselves to economic participation. The government's goal to reduce youth unemployment to 14% by 2020 has failed. Instead, the unemployment rate among youth in the country is the highest in its history (StatsSA, 2021). Achieving the 6% unemployment goal by 2030 is growing seemingly less achievable in the absence of a review and reconstruction of existing interventions to be more practical and inclusive.

Causes of Youth Unemployment in South Africa

While the various explanations offered about the causes of unemployment in South Africa could be influenced by contextual bias, social and political positions and economic argument, there are commonalities in the explanations which are deeply rooted in the historical structure of the country's economy and its link to the social determinants of health (Republic of South Africa, 2020; Roy, 2020).

South Africa has become infamous for its apartheid years, which imposed gross human rights violations on people of color. While this period served to extend unfair privilege to a minority group, the unemployment rate at the transition to democracy was 20.5% in 1994, for people who were unable to find employment but continued to look. This increased to 25.2% in 2014 and 32.6% in 2021 (StatsSA, 2020).

The inequity around education, access to education, skills training and quality of education remains crucial in the understanding of South Africa youth employment and their contribution to the country's economic development (Sayed and Ahmed, 2015). The cycles of inequity perpetuated through the different political dispensations has contributed to the increased disparity between communities, and population groups both in rural and urban areas (UNDP, 2014; Plagerson and Mthembu, 2019). Moreover, youth are seemingly the most impacted by unemployment, with decreasing chances based on their education level, work experience and skills (Carpenter, 2018). Graduate employment as an example, despite being high (33,1%) was still lower than unemployment rates for youth with other education qualifications in 2020. The stability of employment in the formal sector, which is heavily reliant on education and skills as compared to the informal sector, transport and agriculture, is another example of the centrality of education as key requirement for employment. The sector reported an increase of 79000 jobs in the first quarter of 2020 whilst all other sectors reported a decline (StatsSA,2020).

During this quarter 1,9 million youth reported having been discouraged from seeking employment and have disengaged with the labour market. Of importance, is that in the face of high unemployment and its visible impact on the health outcomes of people and their communities, those who disengage the labour market do not seek to capacitate themselves further through improved skills, education and training (StatsSA, 2021). This could well be the cycle of inequity which starts and ends with education. Poorly educated communities have low job security. Low job security

translates into low household income and lower opportunities for education of dependents. Being unable to secure better jobs means no more money to develop skills through training and education and the cycle continues for generations (Amnesty International, 2020).

Other researchers in South Africa including but not limited to (Carpenter, 2018; Reddy et al., 2016; Mahadea and Simson 2010) have associated youth unemployment in South Africa to the supply-demand mismatch in the labour sector, the role of trade unions in government, slow economic growth and a low uptake of entrepreneurship opportunities.

The low accessibility to knowledge, resources for skills development and training which give rise to unemployment cannot be isolated as challenges of education only. The cyclic effects resultant from low education communities as acknowledged in the Draft National Youth Policy 2020-2030 extends to include poverty, poor nutrition, poor health outcomes, gender inequity, crime and substance abuse. It also feeds into challenges at a community level which include unhygienic living conditions, establishment of informal housing infrastructure, poor sanitation and environmental harm (RSA, 2020). It is for these reasons that authors wish to emphasise the necessity of education leading to employment as a fundamental component for the successful implementation of the SDGs. Where education is understood to be diverse to include formal education as well as communication, training and development independent of academic qualifications.

The 2020 review of the NDP has echoed the importance of the development of young people's capabilities to be central to the realization of its plan. A fundamental manner to achieve this is to adopt inclusive approaches in the planning and execution programmes to include youth. The current challenges with such programmes is that the nature of engagements from conception to delivery are variable and dependent on the willingness of stakeholders, resources available and political will. The determination of these programmes is seemingly subjective and reactive instead of being premised on core concepts to advance education and training, entrepreneurship and economic opportunity as envisaged by the SDGs.

Implementation of SDGs for Job Creation in South Africa

In 2019, South Africa participated in the Voluntary National Review (VNR) of the high-level political forum on sustainable development. Whereas the review highlighted areas of progress to include the provision of clean water, electricity, sanitation, education and health; one of the main identified barriers to sustainable development was youth unemployment. In seeking to make recommendations for the way forward, employment opportunities for vulnerable groups was identified as one amongst a list of potential interventions (Presidency, 2019). Right now, South Africa is a country heavily burdened by quadruple burden of disease, a working sector challenged by (HIV/TB, Maternal and child health, NCDs as well as injuries and violence) skills shortages, and a disproportionate allocation of resources (Altbeker and Bernstein, 2017). However, the recognition of vulnerable groups within the SDGs is a significant step to building more inclusive societies and to create platforms which improve dignity for all. Vulnerable populations in the SDGs are referred to in Paragraph 23 of the Agenda as *“all children, youth, persons with disabilities, people living with HIV/AIDS, older person, indigenous peoples, refugees and internally displaced persons and migrants as well as people affected by complex humanitarian emergencies and in areas affected by terrorism”*. Stats SA (2020) identified marginalized groups to be people within *“sectors which*

require special efforts at levels of policy planning and implementation to inform amongst others resource allocation". These groups include Children (less than 17 years old), Youth (15-34 years old), Women, Elderly persons (older than 60 years), people with disabilities. While there is an alignment between the SDGs and the country that youth be perceived as vulnerable in theory, there appears to be conflict in how their needs are catered for and how they are reported on within the implementation of programs

South Africa's agenda for the implementation of the SDG 2030 is underpinned by its motto "solving complex challenges together" (Presidency, 2019). The VNR 2019 depicts the 74% alignment that the NDP has with the SDGs. It also highlights the long-term interest the country has, to materializing its commitments to delivering a better quality of life to its people through its collaboration and agreements with the United Nations, the African Union (SDG, 2030, AU 2063) and the SADC Regional Indicative Strategy Plan. While job creation, gender equity and a more inclusive economy are part of the government's plans to deliver on these commitments, there appears to be a gap in the policy and how it is to be implemented at a local level. Further, the government recognises that this is a huge task which requires multisectoral collaboration, public-private-partnerships (PPPs) and social compacts (RSA, 2020).

Youth employment programmes introduced by government in 2020 include the Youth Environmental Services (YES) programme aimed to empower 2700 youth whom upon completion were to be placed in permanent employment or in other training institutions. In previous years' programmes such as Growth, Employment and Redistribution (GEAR), Accelerated and Shared Growth Initiative for South Africa (ASGISA) and the New Growth Path (NGP) were implemented to accelerate the economy, where increased employment was a common objective. These programmes culminated into the NDP: Vision 2030 (RSA, 2019). A recent NDP vision-2030 analysed in this report cuts across provisions in the strategic plan 2017-2022, the country's strategy paper 2018-2022, the national development strategy (NDS) 2022 and the annual performance plan 2021-2022. Most of these policies are relevant and have provision for the youth but just like GEAR, ASGISA, YES and NGP, clarification on key aspects such as reach, impact and uptake of programmes is required.

The convergence between the NDP vision 2030 and the SDGs aligns itself closely in respect of key areas which include amongst others increased employment through an accelerated economy and education, skills development and training. The objective to build a capable state by leaving no one behind is premised on principles of equity and transformation which seek to reverse the damaging effects of Apartheid. While much of the challenges have been apportioned to apartheid, there is little to be said about the failures under the new democratic dispensation to implement innovative and competitive strategies to advance the agenda for sustainable communities and a strengthened economy. Further, in areas of SDG 4.4, 8.5, 8.6 and 8.b there is little to be said about prioritisation of youth employment goals in proportion to the distribution of youth across rural and urban areas and in alignment with the current academic climate which prevails. South Africa is a country with a high school dropout rate from primary to secondary level, for reasons intimately connected to the social determinants of health and a limitation in the number of academic institutions and training facilities inequitably positioned within the country as well as mismatch between skills and the demands of the labour sector (Weybright et al., 2017). There is much work to be done to develop innovative, reliable and sustainable solutions which empower youth reasonably across all sectors. This empowerment should ideally be designed to achieve multiple objectives which aside from

creating employment, creates opportunities for such employment to address specific challenges within localized contexts. In the implementation of the SDGs through the NDP, the South African Government sought to remedy challenges in education through well-meaning policies which sought to achieve a 90% retention rate of learners at schools. More FET and TVET colleges have been opened in closer proximity to its intended beneficiaries and there has been a marked increase in the graduation rate.

The provision of tax incentives to employers and increased learnership and placement programs, like the “YES” program, have shown promise. However, there remains a capacitation challenge to create proportional opportunities for the number of youth unemployed. Moreover, the plans for the development of young people to thrive within the entrepreneurial space is poorly detailed. The impact of unemployment on the GDP and its focus on the formal employment sector is poorly reflective of the potential of the informal sector to improve its outcomes. The ILO (2020), in its commentary of the informal sector identify several elements including economic context, regulatory and policy framework, low education, poverty, and lack of access to resources such as property, finance and business services as barriers for the progress of the sector. It also identifies barriers to decent working conditions to include the rights of workers. We have found in our research that the use of the words employment, unemployment and decent work within a South African context requires more research to develop a better representation of the policy, regulatory and programmatic grey area between the three components which can serve to impact on how resources and interventions are allocated to people to improve their economic outcomes. This in turn will influence the socio-economic strategy within communities to create strengthened opportunities to access education, better health outcomes and ultimately better life outcomes for communities. We contextualise this premised on the contributions of Valodia (2007), where he presents the argument of the interconnectedness of the formal and informal economies as opposed to two distinct and unconnected aspects of the economy. In the absence of a better understanding of the relationship between the formal and informal economies (both positive and negative) and without a more inclusive definition for unemployment to include unsustainable entrepreneurship, low wage employment in the informal sector, there will continue to be mismatch between the supply and demand for jobs and its connection to decent employment. Overall, this is likely to influence policy planning and fiscal support in respect of vulnerable youth within already constrained environments.

Consequences of Youth Unemployment in South Africa

The failure of the economy to create sustainable jobs aligned with population demands has created persistent unemployment which is alarmingly high. While this is a direct danger to economic growth, there is a risk of overshadowing other serious consequences for youth. Chronic unemployment is a contributor to cyclic poverty and a repetition of negative social outcomes (Fourie, 2011). The impact on education and health is a primary consequence which contributes directly to both the cycles of poverty and unemployment. The resultant outcomes are burdens on the individual, physically and mentally (Graham, De Lannoy, Patel, Leibbrandt, 2018; Leibbrandt, and Shipp, 2018).

The perpetuation of inequity, in the absence of well targeted programmes which identify the importance of recognizing all aspects of a young person’s life and position fundamentally increases

their risks of exploitation and abuse. The marginalisation of people based on race and gender advances the exclusion of women and vulnerable groups from participation in the mainstream economy (Mlatsheni and Rospabe, 2002). Gender – based violence, the spread of diseases like HIV/AIDS, high mortality rates for women and infants and challenges with nutrition and safety are subsequent consequences to unemployment (Mlatsheni, Rospabe, 2002). Teenage pregnancies, drug abuse and an increase in criminality alongside aforementioned challenges at societal and individual levels pose risks to the fiscus. The growing dependence of people on social grants due to their circumstantial barriers to look for and/or take up employment opportunities places the fiscus at risk.

The dependence on state grants for a high number of unemployed people, who are sexually active, places a 2-fold strain, one on state finances for monthly financial support and the other on government systems including health, education, water and sanitation; which would need to provide essential services to a higher number of people with lower numbers of tax contributing citizens to make such funding and services available. The pressure on an already strained national infrastructure is dangerous and unsustainable. A further resultant consequence is social instability, unrest within communities, and undue strain on the environment. The greatest consequence of youth unemployment is the compromise of human dignity (Cloete, 2015), coupled with the looting and burning of valuable property as a way for unemployed youth to avenge their anger. These consequences need to be addressed by responding to the causes of unemployment for the youth and beyond. The need to engage policy makers and other relevant government departments is one of the best solutions to the chronic problem.

Policy Implication

The SDGs presents an opportunity to address issues of concern to young people in the context of a fast-paced world with huge demands on skills and capacitation. Understanding the world from a youth perspective is becoming necessary in the formulation of policies, programmes and plans which seek to leverage their energy and skills for a more productive future. To achieve this, it would be well placed to develop strategies for youth based on deeper knowledge about how much they identify with and understand the SDGs' its objectives and their implementation.

Millennials have the energy and futuristic approach to be able to contribute meaningfully to a world with reduced poverty, a healthy planet and new and diverse ways to solve old problems in a new era. The concept of selling lucrative employment opportunities to young people without involving them meaningfully in the processes to construct such opportunities could result in avoidable barriers to the co-creation process (Cheng, 2019). To achieve a world which is more equitable, fairer and more reflective of the diverse skills and talents young people embody is linked to their opportunities to access education, training and skills development opportunities. While a formal education is ultimate aim for majority of people, it should not become exclusionary on the path to youth empowerment through employment.

Developing young people to be more confident and skilled in accountability, principles of monitoring and evaluation and awareness of their own potential and the potential of those around them requires enhanced communication and education strategies which are forward thinking. It also requires that the current demand on work experience and skills as criteria be relaxed through

strategic interventions which enable the capacitation of young people through supported training and creating new platforms of trust which dispel the notion that experience comes with age.

While these ambitions cannot be materialized by governments alone, the private sector and civil society sector need to be rallied to create such developmental opportunities for the education of youth through a collaborative approach. Such collaboration should create key spaces for the voices of youth to be reflected in governance structures, through designated youth representation on boards and committees at management and senior levels. Within the political sphere, there should be more asserted pressure for cabinets to improve the representation of youth in key committees and within parliamentary structures where their representation enforces the call for innovative solutions for young people consistently. It will also create much needed spaces for policy and program to be reflective of the needs of young people by themselves and as such could carve the pathway for more self-driven solutions to become the culture of the future. The existence of cross cutting policies in South Africa recognises the urgency to address youth unemployment. Whereas these policies reflect the greater outcomes expected, it fails to spell out implementation plans. The policies are often also silent on multi-stakeholder collaboration, the risk sharing and power- dynamics attached thereto. This could fuel mistrust between stakeholders such as the private, labour and government sectors. Innovative solutions require regular review for alignment with technological, social and economic shifts within the country.

Policies should include indications for the direct employment of youth for government programmes which include maintenance and development of infrastructure and how these programmes can be replicated for implementation across sectors. Lastly policies are not prescriptive on capacity building and the transfer of technology. These should be available across rural and urban populations and stakeholders to ensure that capacitation in human resources, skills and training contributes to a resource intensive economy. The arrangement for the transfer of technology is made possible through the implementation of parallel service delivery programmes for infrastructure and support, making room for PPPs.

Conclusion

South Africa is lagging behind in implementing innovative approaches for job creation. Consequently, achieving the SDGs for South Africa by 2030 is threatened by corruption, lack of adequate monitoring and evaluation for the implementation of programs as well as racial and gender inequity inherited from the apartheid regime. While achieving programmatic goals aligned with the SDGs are reflected across all sectors (technology, agriculture, health, small business), these goals are seemingly detached from the cyclic nature of poverty. There is a further detachment in programmes from the equitable access to the social determinants of health which are fundamental to sustainable good health and well-being outcomes for all communities. Where the eradication of poverty remains a priority goal for the country and the SDGs and where the NDPs align closely with the SDGs, it becomes necessary to prioritise the urgent fast tracking of basic essential service delivery as the cornerstone to successful outcomes. This will likely create more fertile and sustainable environments within and between communities for employment opportunities both in the formal and informal sectors. Approaching solutions to youth unemployment and the essential service delivery crises in the country using intersectional methods could offer an opportunity to address both challenges simultaneously. This mirrors the interconnectedness between the individual

barriers to uptake employment opportunities and the macro-challenges faced by the labour market to meet the supply-demand requirements of a fast-growing population. This study also highlights the needs to be a more enabling environment for youth within leadership and decision making spaces, particularly in areas related to youth challenges. Therefore, the successful achievement of goals is a shared responsibility, and thus, PPPs should be strengthened to sustain credible partnerships for maximum benefit.

References

AIIESEC., (2015). Youth Speak 2.0: Preliminary Report. https://issuu.com/aiesecinternational/docs/youthspeak_2.0_preliminary_report

Altbeker, A, Bernstein, A., (2017). No Country for Young People: The crisis of unemployment and what to do about it. Africa Portal <https://www.africaportal.org/publications/no-country-young-people-crisis-youth-unemployment-and-what-do-about-it/>

Amnesty International (2020). Broken and Unequal. The state of Education in South Africa. Amnesty International Publications.

Braveman P, Arkin E, Orleans T, Proctor D, and Plough A. (2017). *What Is Health Equity? And What Difference Does a Definition Make?* Princeton, NJ: Robert Wood Johnson Foundation. Retrieved from <https://www.rwjf.org/en/library/research/2017/05/what-is-health-equity.html>

Carpenter, J., (2018). Enabling a generation of social entrepreneurs: A study to establish if the practice of social entrepreneurship offers inclusive self-employment opportunities for disenfranchised South African Youth.

Cerf, Marlon E., (2019). Sustainable Development Goal Integration, Interdependence, and Implementation: The Environment–Economic–Health Nexus and Universal Health Coverage. *Journal of Global Challenges* 3(9).

Cheng, M. (2019). The 8 Characteristics of Millennials that support Sustainable Development Goals (SDGs). Forbes

Chilenga-Butao, T., (2020). Decentralisation and Recentralisation in South Africa’s local government: case studies of two local municipalities in Limpopo. Public Affairs Research Institute. <https://pari.org.za/decentralisation-local-govt-limpopo/>

De Lannoy, A., Graham, L., Patel, L., (2020). Why Is Youth Unemployment So Intractable in South Africa? A Synthesis of Evidence at the Micro-Level. *JAYS*, 3, 115–131. <https://doi.org/10.1007/s43151-020-00012-6>

Department of Monitoring and Evaluation, (2007). Policy Framework for Government-wide Monitoring and Evaluation. South Africa: Department of M&E

- Feinstein, L., Sabates, R., Anderson, T.M., Sorhaindo, A., Hammond, C., (2006). What are the effects of education on health? Measuring the effects of education on health and civic engagement: Proceedings of the Copenhagen symposium.
- Fourie, F.C.V.N., (2011). The South African unemployment debate: three worlds, three discourses. Working Paper Series, No 63- 84.
- Haywood, LK., Funke N., Audoin, M., Musvoto, C., Nahmamn, A., (2018). The Sustainable Development Goals in South Africa: investigating the need for multi-stakeholder partnerships. Research Space.
- HELP? A Systematic Overview of the Evidence and a Theory of Change High-level Overview <https://www.wider.unu.edu/publication/reducing-inequalities-south-africa>.
- Khan, Anisur, (2016). policy implementation: Some aspects and issues.
- Kumar, S., Kumar, N., Saxena, V., (2016). Millennium Development Goals (MDGs) to Sustainable Development Goals (SDGs): Addressing Unfinished Agenda and Strengthening Sustainable Development and Partnership. *Indian Journal of Community Medicine*, 41(1), 1-4.
- Graham, L., De Lannoy A., Patel, L., Leibbrandt, M., (2018).What drives youth unemployment and what interventions help? A systematic Overview of the evidence. Executive Summary. REDI 3X3: <http://www.redi3x3.org/>
- Leibbrandt, M. & Shipp, T., (2019). Reducing inequalities in South Africa: Progress on equality thwarted by slow growth and success of top earners. WIDER Policy Brief 2019/2. Helsinki: UNU-WIDER.
- Leibbrandt, M. & Shipp, T., (2018). Reducing inequalities in South Africa – progress on equality
- Mahadea, D., Simson, R., (2010). The challenge of low employment economic growth in South Africa:1994-2008. *South African Journal of Economic and Management Sciences*.
- Marjory, L., Bridget, G.B., Sheri, P., Elizabeth, J.A., Pollock, V.N.....Kandia, D.A., (2020). What do we know about drivers of health and equity? A narrative review of graphic representations. *Health Equity*, 4(1), 446-462.
- Marmot, M. & Bell, R., (2018). The Sustainable Development Goals and Health Equity. *Journal of Epidemiology*, 29(1), 5-7 <https://www.sdgsinhighered.se/wp-content/uploads/sites/55/2019/03/Health-equity-SDG.pdf>
- Mensa, J., Casadavell, S.R. (2019). Sustainable Development: Meaning, history, principles, pillars and implications for human action: Literature Review. *Cogent Social Sciences*, 5:1, DOI:10.1080/23311886.2019.1653531

- Mlatsheni, C, Rospabé, S., (2002). Why Youth Unemployment is high and unequally spread in South Africa? Working Papers: University of Cape Town, No 02, 65.
- New Zealand Red Cross, (2021). Red Cross welcomes UN global goals for sustainable development. <https://www.redcross.org.nz/stories/new-zealand/red-cross-welcomes-un-global-goals-sustainable-development/>
- Plagerson, S. & Mthembu, S., (2019). Poverty, inequality and social exclusion in South Africa: a systematic assessment of key policies, strategies and flagship programmes. CSDA, Johannesburg
- Reddy, V., Bhorat, H., Powell, M., Visser, M.M. & Arends, F., (2016). Skills supply and demand in South Africa. Commissioned by the Department of Higher Education and Training (DHET), Labour Market Intelligence Partnership (LMIP). Retrieved from: <https://www.uj.ac.za/faculties/humanities/csda/Documents/Youth>
- Republic of South Africa, (2010). National Service Delivery Agreement. South Africa: The Presidency.
- Republic of South Africa, (2019). South Africa's Implementation of the 2030 Agenda for Sustainable Development- Voluntary National Review Report. South Africa: The Presidency.
- Republic of South Africa, (2020). A review of the NDP 2030, National Planning commission. South Africa: The Presidency.
- Republic of South Africa, (2020). National Youth Policy 2020-2030 draft. Department of Women, Youth and Persons with disabilities. South Africa
- Republic of South Africa, (2020). National Development Plan 2030. The Presidency, National Planning Commission, South Africa
- Sayed, Y., Ahmed, R., (2015). Education quality, and teaching and learning in the post-2015 education agenda. *International Journal of Educational Development*, 40, 330-338.
- South Africa Government, (2020). Review of the National Development plan 2030 national planning commission. The Presidency
- StatsSA., (2019). Population data. Republic of South Africa
- StatsSA., (2020). Vulnerability of Youth in the South African labour market. Republic of South Africa: StatsSA
- StatsSA., (2021). Quarterly labour force survey. Republic of South Africa

- StatsSA., (2021). Youth still find it difficult to secure jobs in South Africa. Republic of South Africa <http://www.statssa.gov.za/?p=14415> thwarted by slow growth and success of top earners, Unu-Wider. 184. Pretoria. Available at: Unemployment report FINAL interactive.pdf.
- United Nations, (2015). My World Survey – We the Peoples. The United Nations Global Survey for a better world. United Nations.
- United Nations, (2015). We the Peoples. Retrieved from: https://www.ilo.org/global/topics/dw4sd/themes/working-conditions/WCMS_558587/lang-en/index.htm
- United Nations, (2019). World Population Prospects 2019: Highlights. Department of Economic and Social Affairs. United Nations: Population Division.
- United Nations, (2020). The Sustainable Development Goals Report. United Nations Department of Economic and Social Affairs. <https://unstats.un.org/sdgs/report/2020/The-Sustainable-Development-Goals-Report-2020.pdf>
- United Nations, (2020). World Social Report 2020. Inequality in a rapidly changing world. Department of Economic and Social Affairs. <https://www.un.org/development/desa/dspd/wp-content/uploads/sites/22/2020/02/World-Social-Report2020-FullReport.pdf>
- United Nations, (2021). Transforming Our World: 2030 Agenda for Sustainable Development. A/RES/70/1. USA: United Nations
- Weybright, Elizabeth H., Caldwell, Linda L., Xie, Hui Jimmy., Wegner, Lisa., Smith, Edward A., (2017). Predicting secondary school dropout among South African adolescents: A survival analysis approach. *Journal of education*
- World Bank, (2021). The World Bank in South Africa. Pretoria <https://www.worldbank.org/en/country/southafrica/overview>
- World Health Organisation, (2008). Closing the gap in a generation Health equity through action on the social determinants of health Commission on Social Determinants of Health. Geneva: WHO.
- Worldometer, (2021). Live population of South Africa – 29 June 2021. <https://www.worldometers.info/world-population/south-africa-population/>

Funding Youth-Entrepreneurship through the Venture Capital Model in Nigeria: Current Realities

Oluwadamilare Odu-Onikosi

Department of Management Technology, Lagos State University, Ojo, Lagos

Email: dare.onikosi@gmail.com

Abstract

*Nigeria's unemployment rate reached an all-time high of 33.3% in 2021. Worst hit are the Nigerian youths with over **42.5percent** currently unemployed. The only choice is to gravitate towards entrepreneurship which requires regular and adequate funding. The global best practice is to employ variety sources of funding. The study made use of primary data sources. Sample was drawn from Youth-Led enterprises and Venture Capital firms. For this purpose, a set of structured questionnaires was designed and administered. This was supported by Key In-depth Interview (KII) for the Venture Capital firms. A total of Eighty-Five (85) respondents were sampled. Descriptive statistics was used for data analysis. The study investigated three objectives namely awareness; use and factors influencing use of Venture Capital in funding Youth-Led enterprises in Nigeria. The findings indicated low level of awareness; majority have no knowledge of Venture Capital. Social Media, workshops and seminars served as important source of awareness. The study also revealed a low level of use. The willingness of future re-use among those who have used it shows more of hesitancy. Decision to use Venture Capital in funding Youth-Led enterprises is predicated on several factors. The greatest obstacle to the utilisation of VCs a veritable means of financing Youth-Led enterprise was insufficient information on availability and activities of Venture Capitalist firms. This was followed closely by unwillingness of entrepreneurs to let go a substantial chunk of their enterprise. Funding plays a critical role in all types of entrepreneurial journey. The successful creation and management of any entrepreneurial activity is predicated on regular availability and access to necessary funding. The study thus recommends that government should regulate the Venture Capital space to encourage youth-led entrepreneurs to explore and make use of variety sources of funding needed for entrepreneurial development, regular training and capacity building programmes for entrepreneurs in the understanding and practical utilisation of Venture Capital should be organized for awareness creation and to remove all bottle-necks, and strengthening the existing interactions and collaborations among actors in entrepreneurial development will increase awareness and utilization of Venture Capital.*

Keywords: Funding, Entrepreneurship, Venture Capital, Youth, Economic Development.

Introduction

Nigeria's unemployment rate reached an all-time high of 33.3% in 2021(NBS, 2021). Worst hit are the Nigerian youths with over **42.5percent** currently unemployed. Without jobs, the only choice is to gravitate towards entrepreneurship which requires regular and adequate funding. Funding plays a critical role in all types of entrepreneurial journey. The successful creation and management of any entrepreneurial activity is predicated on regular availability and unhindered access to necessary funding. The Venture Capital Space in Nigeria is emerging with the success stories recorded from the likes of Iroko TV, Jobberman, Supermart, Andela and Hotels.ng amongst others. Recent studies revealed a general decline in recent times in entrepreneurial activity in advanced market economies

in the last decade (Porter, 2018). Surprisingly, there appears to be a clearly sharp contrast in the experiences of many developing economies like Nigeria where there is a growing appreciation for entrepreneurial activity. This is an important time for entrepreneurs to create new jobs and economic growth. This position resonates with that of OECD (2003) that entrepreneurship is essential to job creation and economic growth. Research has shown that growth-oriented start-ups has the potential to contribute massively to total growth in employment generation and enhances the ability to compete and increase productivity through the introduction of new products, services, organization, idea, business models and new markets.

Statement of the Problem

There is a convergence of opinion among researchers that funding is pivotal to entrepreneurial success. The place of funding as a springboard for entrepreneurship development has been globally acknowledged and documented. (Ahlstrom & Bruton, 2006; Weiss, n.d.; Aizenman & Kendall, 2012; FGN 2012). In fact, Khadijat (2020) posited that securing financing for a new and even an existent venture is one of the most critical problems that can confront an entrepreneur in his or her entrepreneurial sojourn. The global best practice is to employ variety sources of funding such as Venture Capital (VC). VC are funds provided by non-bank financial institution, wealthy investors or corporation in form of providing equity and quasi-equity to very risky ventures at the start-up and early-stage, supplementing or taking the place of traditional credit facilities that conventional banks are not willing and too skeptical to provide. Several Venture Capital firms have and continues to spring up in Nigeria. However, despite its attractiveness and robustness, the absence of knowledge of its workings and how to utilize them in financing youth entrepreneurship which is in dire need of innovative financing options in Nigeria is quite worrisome. Without a clear understanding, acceptance and judicious utilization of the model will be almost impossible. How then could sustainable youth entrepreneurship be spurred in the face of Nigeria's rising unemployment, with the worst hit being the Nigerian youths with almost half currently unemployed? What role could VC play in reversing these ugly trends? It is these questions and more that informed this study.

Objectives of the Study

The specific objectives of the study are to:

1. Assess the awareness level of youth-led enterprises on VC model;
2. Examine the use of Venture Capital in funding youth entrepreneurship; and
3. Assess the factors influencing use of Venture Capital in funding entrepreneurship.

Significance of the Study

This study will break new grounds in addressing the issues surrounding the adoption of Venture Capital regarding accessing funds for entrepreneurial activity in Nigeria.

Literature Review

Entrepreneurship

The term can be traced back to Schumpeter (1939; 1997), Kirzner (1973; 1999), Schultz (1975), Granovetter (1983) and Loasby (1999). Stevensen et al (1994) avers that entrepreneurship is akin to the ‘*quest or search for opportunity without regard to resources currently controlled*’. Schumpeter was interested in investigating on how the entrepreneur’s drive for innovation and modifications creates change and upheaval. He views it as the force driving “creative destruction”. The entrepreneur comes up with “*new combinations.*” *Ultimately phasing out old industries and rendering them obsolete.* He contends that entrepreneurship helps in the destruction of established means and patterns of doing business by the creation of new and efficient means of doing them. Drucker took this idea forward by construing the entrepreneur as someone who goes in search of change, responds to the identified change, and seeks to exploit it as an opportunity. Here exploiting opportunity for value addition is key. Weiss (2015) and Schumpeter (1934) argued that entrepreneurship is deeply rooted in innovation and stemmed, originally from the idea that entrepreneurs combine resources in a very unprecedented manner which in turn helps in the generation of value which acts a generative source for the emergence of new industry, national growth and development, and comparative advantage.

Venture Capital

The important logic behind venture capital model was in shifting part of the savings that have accrued from investment trusts and insurance companies over time into innovative new ventures. Weiss (2015). Today, VC have developed into highly sophisticated actors in the financial space and with diverse foci and business models. According to Ernest & Young (2014), VC’s are now an integral and very important part of the international financial space in vibrant and developed markets such as the United States, Europe, Israel, Canada, China, and India, with investments totaling up to about USD 49 billion in 2013. Researchers have tried to account for the reasons why VC thrived in place of other forms of funding options. Some of the reasons alluded to the robustness of the VC option which includes:

- Risk Taking
- Attractive to companies with limited operating history
- Co-ownership
- Formidable partnership in terms of financial, technical knowledge, mentoring, talent acquisition, collaboration, marketing expertise and business model.
- Rapid and aggressive scalability
- Detailed Due Diligence
-

How Venture Capital Works

In determining the future value of a new ventures, a VC determines: a company’s exit value; the requested fraction of the VC at exit stage, the required slots of shares to be bought in the current

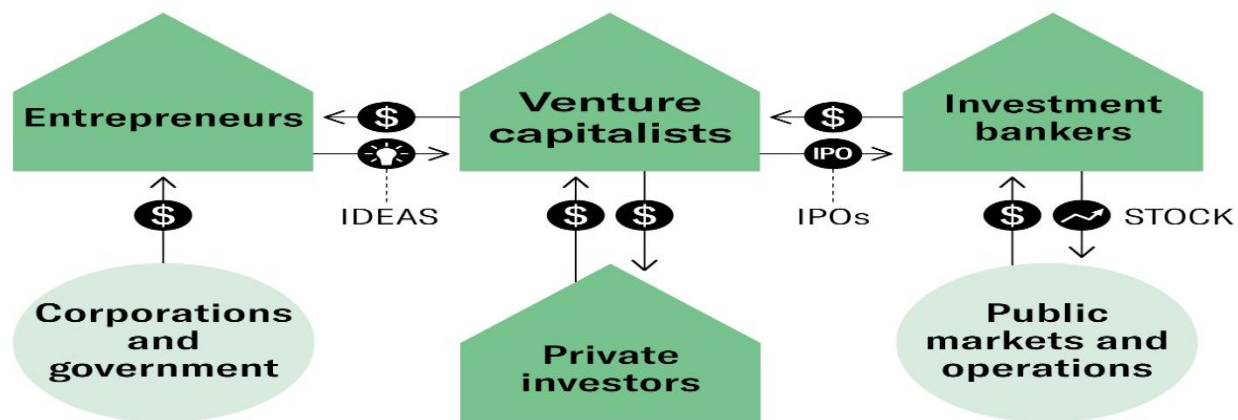
financing round to get the desired percentage and estimation of the highest price per share that the VC is willing to invest in the current financing round.

According to Zider (1998), venture capital plays a significant role in the period in a ventures life when it begins commercializing its offerings. He argued that, more than 80% of venture capitalist investments goes into building the required infrastructure to grow and thrive. He avers that the idea of a venture capitalist is not a long-term investment, rather the idea is to invest in a new ventures balance sheet and its infrastructure till it reaches a sufficient size and credibility.

Figure 2: Institutional Theory

How the Venture Capital Industry Works

The venture capital industry has four main players: entrepreneurs who need funding; investors who want high returns; investment bankers who need companies to sell; and the venture capitalists who make money for themselves by making a market for the other three.



HBR

Source: Zider (2015).

Funding

Entrepreneurial finance is concerned with how to value and allocate resource appropriately, in matters relating to new ventures addressing the key questions challenging all entrepreneurs: how much money would be needed and how much of it should be raised; when should this funds be raised and from what source or combination of sources; what is a reasonable valuation for the ventures; and how should funding contracts and exit decisions be made and structured. Some sources of entrepreneurial financing include:

- Internal Sources (Owner financing, delays-in payment, subsidy finance, personal borrowings etc).
- External Sources (Angel Investors, Venture Capital, Crowdfunding, Hedge Funds, Alternative Asset Management, Buy outs etc).

Youth

People between ages 15-35, (National Youth Policy, 2009 in Wikipedia) often associated with the time between childhood and adulthood. The youth constitute the core of the productive workforce in Nigeria. It is said that 62% of Nigerian population are 24 years or below. NBS. (2021).

Economic Development

Jhingan (1997) stated that the term economic development is used to mean growth accompanied by change. Economic development can also be used to mean qualitative and subjective changes in economic needs, products, motivations, organizations, outputs and knowledge or a positive and inclusive change of the entire social system. The term economic development can be referred to the development of capacities to expand the capacities of economic actors. These actors include individuals, firms, public agencies, professional bodies, research institutions and non-governmental organizations. Rather than focusing on counts of jobs or rate of growth, the focus of economic development is quality of any such growth (Sen, 1990; Feldman et al, 2014).

Theoretical Review

Silicon Valley Model

Silicon Valley has metamorphosed into the nerve-center for disruptions and is home now to many multinational corporations with global operations, Weiss (2015). These organizations are catered to by a group of interrelated and dependent network, including but not limited to financiers, law firms, consultancy firms, the media and universities and research institutes. Annalee Saxenian in Weiss (2015) paints a picture of the uniqueness at the Valley as “*Silicon Valley continues to reinvent itself as its specialized producers learn collectively and adjust to one another’s needs through shifting patterns of competition and collaboration*”. The Valley is a start-up assembly line of some sort, an attraction of talent and capital churning out unprecedented innovative products with a ritual of pitching events, competitions, and investment bargaining’s. There is significant awareness of its products and services and a legion of publications and academic research is what makes the Silicon Valley Model thick, (Engel, 2015; Saxenian, 1994).

Institutional Theory

Institutional theory brings a novel perspective to the study of dynamics and inter-connectedness that existed between social, economic, and political factors. (DiMaggio & Powell, 2000). Institutions are now regarded as the rules of the game in society (North, 1991). Institutional Structure, Legal Structure, Informal Relationships can all or individually make or mar the entrepreneurial journey. (Engel, 2015; Khanna, Laeven, & Rajan, 2000). Institutional theory does not merely explain why organization structures or practices become institutionalized, but why and how change occurs. Individual, social, organizational, and institutional factors are all formed by, and help to form each other. The strength of institutional theory is its ability to recognize the inter-dependencies between

insights from different and differing perspectives into the problem at hand. This framework is illustrated in Fig.1 below:

Figure 2: Institutional Theory



Source: Adopted from Alice de Junge (2015)

Empirical Review

Weis, (2015). In his study titled “Combining the Best of the Valley and the Savannah” examined the social dynamics playing out in Kenyans ICT Sector. The study investigated dynamics the success stories of technology entrepreneurship in Kenya, adopting the Silicon Valley framework as a yardstick. The findings of the study established some set of very robust recommendations to improve and adapt alien entrepreneurship strategy to local environment.

In a study conducted by Akanbi, Ogunleye, and Arogundade, (2016). The study assessed the different financing options available to SMEs and their contribution to economic growth. The paper basing its conclusion on secondary data generated from the Central Bank of Nigeria Statistical Bulletin and the World Development Indicators concluded that due to policy inconsistencies in SME Financing there is an insignificant relationship between financing and economic growth.

In another study conducted by Nguyen, Alam and Prajogo (2014) on “Developing Small and Medium Enterprises (SMEs) in a Transitional Economy – From Theory to Practice: An Operational Model for Vietnamese SMEs”. The study examined the factors contributing to the survival and growth of SMEs using a conceptual framework on the concept of resource, cluster, networking and institutional theories. The findings of the study showed that institutional weakness and lack of coordination in policymaking, implementation and market conditions are factors militating against entrepreneurial development.

Zider (1998) in his seminal paper titled “How Venture Capital Works” sees venture capitalist filling the funding void in the entrepreneurial space. Samila and Sorenson (2011) in their study titled

“Venture capital, Entrepreneurship, and Economic Growth” affirms that increase in the supply of venture capital has a positive effect on start-ups, aggregate income and employment generation.

Enoch & Okpala (2012). Carried out a study on Venture Capital and the Emergence and Development of Entrepreneurship: A Focus on Employment Generation and Poverty Alleviation in Lagos State. The findings from the study shows that venture capital firms do exists in Lagos State but not effective. Which has in turn affected entrepreneurship development, encourages high level of unemployment and underdevelopment.

Kato and Chiloane (2022) carried out a study titled “Venture capital Financing as a Driver for Entrepreneurship Development in Africa. A Literature Review and Future research Agenda. The study delivers a thematic analysis for further empirical studies on the role of venture capitals investment in entrepreneurial development in Africa.

Methodology

The study adopted a mixed-method research design combining qualitative study of Venture Capitalist firms with Questionnaire Survey of Youth-Led Enterprises. The study adopted purposive and convenience sampling techniques. The study was conducted in Lagos State, Nigeria’s commercial nerve center. The choice of Lagos was predicated on its strategic location as the entrepreneurial heartbeat of Nigeria with an estimated population of over 200 million with a good number of Venture Capital firms springing up in Lagos. Convenience and purposive sampling were adopted for this study. A set of structured questionnaires was designed and administered. This was supported by Key In-depth Interview (KII) for the Venture Capital firms. A total of Eighty-Five (85) respondents were sampled.

Data Collection, Analysis and Presentation

This section presents the key findings from the study. The information reported include the socio-demographic characteristics of youth-led entrepreneurs, awareness of VC among Youth Entrepreneurs, its utilization of as a veritable source of funding and factors influencing use of VC.

Table 1: Socio-demographic Information

<i>Characteristics</i>	<i>Categories</i>	<i>Frequency</i>	<i>Percentage (%)</i>
<i>Industry</i>	Agriculture	29	36.25
	Health	26	32.5
	Logistic & Supply Chain	25	31.25
	Sub Total	80	100.0
	<i>Years of Entrepreneurial Experience</i>	0-5 years	46
	6-10 years	21	26.25
	11-20 years	8	10
	21 years and above	5	6.25
	Sub Total	80	100

Source: Researcher’s Compilation (2021)

A total of 90 questionnaire were administered, only 80 were filled and returned. This represents 88% response rate. Table 1 below shows the distribution of respondents based on their industry; 32.5% operates in the Agricultural Industry, 31.25% in the Health Industry and 18.75% operating in Logistics and Supply Chain Industry. With respect to years of entrepreneurial experience, 57.5% have less than 5 years entrepreneurial experience, while 26.25% had between 6-10 years of experience, another 10% had between 11 to 20 years and 6.25% had more than 20 years of experience.

Table 2 Awareness of VC by Youth Entrepreneurs

Industry of Respondents	Not at all	Low	Medium	High
Agriculture	05 (17.2)	17 (58.6)	5 (17.2)	2 (6.90)
Health	03 (11.5)	16 (61.5)	4 (15.4)	3 (11.5)
Logistic and Supply Chain	04 (16.0)	13 (52.0)	3 (12.0)	5 (20.0)
Legend: No Awareness = 1, Low = 2, Medium = 3, High = 4				

Source: Researcher’s Computation (2021)

There seems to be a strong relationship between awareness of VC and its utilization. It is only natural that more awareness will likely lead to a proportionate increase in utilization. Table 2 above depicts respondents’ level of awareness. Of the total respondents who participated in the study 72.5% claimed to have no little to no awareness of the existence of Venture Capital option while only 12.5% and 15% claimed to high and medium awareness respectively. The more the level of awareness among the large population of entrepreneurs who have little to no knowledge, the more the use would be.

Table 3 Level of Interest on Venture Capital

Industry	Interested	Indifferent
Agriculture	26 (89.7)	03 (10.3)
Health	25 (96.15)	01 (3.85)
Logistics and Supply Chain	22 (88.0)	03 (12.0)
Total	73 (91.25)	07 (8.75)
Legend: Interested = 1, Indifferent = 2		

Source: Researcher’s Computation (2021)

Asked to estimate their level of interest in knowing more about how Venture Capital works. The findings presented in Table 3 above indicated that majority with 91.25% are very interested in knowing how it works, while only a fraction 8.75% are indifferent to the workings of Venture

Capital. This shows that most of the respondents are interested in knowing more about how VC (Venture Capital) works. This is a good thing. What is left is to get the message out to the appropriate quarters. This, findings when put to the participants in the KII, majority of the respondent’s expressed optimism and contends that the future holds a better promise for the VC model as the preferred financing option in the country as more and more entrepreneurs are showing an appreciable interest in the option.

Table 4 Source of Information for Entrepreneurs

	Sources of Information (N= 80)	Percentage (%)
A	Internet & social media	30 (37.5)
B	Peers	8 (10.0)
C	Workshop/Seminar and Conferences	12 (15.0)
D	Newspaper	05 (6.25)
E	Radio	04 (5.0)
F	Television	08 (10.0)
G	Expert Opinion	09 (11.25)
H	Public Opinion/Polls	04 (5.0)

Source: Researcher’s Computation (2021)

Table 4 depicts the different sources of information available for decision making among youth-led entrepreneurs in Lagos State. The analysis indicated that the commonest sources of information are the internet and social media, workshops, seminar, and conferences and expert opinion accounting for 37.5%, 15% and 11.25% respectively. Other sources include peers and television with 10% each. These analyses are important in policy formulation and to help direct the medium and channels of communication. This may construe that online and social media platforms and workshops/seminars and conferences are critical tools VC firms can use in getting their messages and communications out to the desired audiences.

Table 5. Level of Utilization of Venture Capital by Youth Entrepreneurs

Industry	Yes	No
Agriculture	02 (6.90)	27 (93.1)
Health	01 (3.85)	25 (96.15)
Logistics and Supply Chain	05 (20.0)	20 (80.0)
Total	08 (10.0)	72 (90.0)
Legend: Yes = 1, No = 2		

Source: Researcher’s Computation (2021)

Table 5 shows the analysis on the utilization of VC Model among youth-led entrepreneurs in Lagos. 90% of the respondents affirms that there are not making use of the VC model in financing their business. From this analysis, it could be inferred that majority of youth-led entrepreneurs did not understand the importance of the Venture Capital Model in financing entrepreneurship. It is apt to say that youth-led entrepreneurs are missing out on the potentials of Venture Capital. To further corroborate the results of the findings of the study, the question on utilization was posed to the venture capital managers during the key in-depth interview and the key response was that VC have inherent opportunities but not yet fully understood.

Table 6. Willingness to Re-Use of VC for Financing Youth Entrepreneurship

Industry	Yes	Maybe	No
Agriculture	0 (00.0)	02 (100)	0 (00.0)
Health	0 (00.0)	01 (100)	0 (00.0)
Logistics and Supply Chain	01 (20.0)	03 (60.0)	01 (20.0)
	1 (12.5)	06 (75.0)	01 (12.5)
Legend: Yes = 1, Maybe = 2, No = 3			

Source: Researcher’s Computation (2021)

The willingness of re-use was also investigated as shown in table 6 above. The analysis indicated that three out of every four (75%) of the respondents showed hesitancy to re-using VC Model again. Going by the touted potential benefits of the venture capital model it would be expected that Nigerian Entrepreneurs would embrace the idea with both hands. Unfortunately, this is not the situation.

Table 7. Factors Influencing utilization of Venture Capital

	IMPEDIMENTS TO USING VC	A Not an Obstacle	B Sometimes an Obstacle	C Usually an Obstacle
A	Trust Issues	20	23	37
B	Unavailability of information	02	28	50
C	Lack of clarity	10	12	58
D	Unwillingness to let go a chunk of the Company	03	05	72

E	Lack of Interest from Entrepreneurs	23	34	23
F	Technicality of the workings of Venture Capital	45	25	10

Source: Researcher’s Computation (2021)

Several issues come to play in financing decision-making process. All parties in the game are expectedly concerned about getting the best out of the deal. Without doubt, the sources and the terms of finance matter a lot. To this end, this study examined the factors influencing the use of venture capital as a source of funding. Table 7 analysis shows that unavailability of information and unwillingness to let go are the greatest impediments to the use of venture capital model in Nigeria. It is therefore not surprising that the expectations regarding the potential contributions of the venture capital model to the development and creation of entrepreneurship have not been realized. The greatest impediments to the use of venture capital model were unavailability of information (54.2%) lack of interest from entrepreneurs (48.9%) was not considered an impediment. This indicated that youth-led entrepreneurs have the capability to process and understand the robustness of the venture capital model if they are provided with sufficient information. Other impediments are unwillingness to let some stakes in their enterprise (43.6%), trust issues (34.2%) and emotional attachment to their enterprise (32.4%). One of the interviewees had this to say when asked why youth-led enterprises are not using VC (Venture Capital) as a veritable source of funding:

“I think it’s a thing of the mindset. They (Nigerian Entrepreneurs) have this emotional thing for their enterprise. They are afraid to let go. Most would rather let the idea stunt than approach VC for funding. This perhaps stems from a lack of understanding of how VC works” – Venture Capital Manager

Summary

Funding plays a critical role in all types of entrepreneurial journey. The successful creation and management of any entrepreneurial activity is predicated on regular availability and access to necessary funding. The findings of the study build on the institutional theory because the venture capital model has different players with different interests. This study evaluated the current realities surrounding the awareness and use of venture capital model among youth-led entrepreneurs in Lagos. this was achieved through structured questionnaire and supported by oral interviews for selected VC firms.

Conclusions

The study concludes that while venture capital model showed a lot of promise, its utilization is at best, out of a blue moon and un-institutionalized into the entrepreneurial space in Lagos, Nigeria unlike what obtains in developed and matured economies. This low level of awareness and subsequently, use is attributed to unavailability of adequate information. Internet and social media platforms are the most veritable means of acquisition of information for young entrepreneurs and need to be explored in getting the right message out.

Recommendations

In the light of the insights above, the study thus recommends that government should regulate the Venture Capital space to encourage youth-led entrepreneurs to explore and make use of variety sources of funding needed for entrepreneurial development, regular training and capacity building programmes for entrepreneurs in the understanding and practical utilisation of Venture Capital should be organized for awareness creation and to remove all bottle-necks, and strengthening the existing interactions and collaborations among actors in entrepreneurial development will increase awareness and utilization of Venture Capital.

Further Studies

Some issues have arisen from this study that needs further investigation. They include:

- i. Understanding the interactions between the venture capital firms and entrepreneurs.
- ii. Impact of venture capital Funds on entrepreneurship development in Lagos, Nigeria.
- iii. Further exploration of trust issues in utilizing the venture capital model in Nigeria.

References

- Ahlstrom, D. and Bruton, G. D. (2006). Venture Capital in Emerging Economies: Networks and Institutional Change. *Entrepreneurship Theory and Practice*, 30, pp. 299-320.
- Alice de Junge (2015) in The Glass Ceiling in Chinese and Indian Boardroom.
- Amaoko, I.O. & Matlay, H. (2015). Norms and trust – shaping relationships among food exporting SME in Ghana. *Entrepreneurship and Innovation Journal*. 16(2), 123-134.
- Aizenman, J. and Kendall, J. (2012). The Internationalization of Venture Capital. *Journal of Economic Studies* 39(5), 488-511.
- Akanbi, B., Ogunleye, A., and Arogundade, S. (2016) Analysis of Small and Medium Scale Enterprises (SMEs) Financing and Economic Growth: Which Way for Nigeria. *European Journal of Business and Management*. Vol. 8, No. 16.
- Du Preez, N. D., and Louw. L. (2008). *A framework for managing the innovation process*. Department of Industrial Engineering, South Africa: Stellenbosch University Press. Retrieved August 22, 2017, from <http://induvations.co.za/attachments>
- Engel, J. (2015). Global Clusters of Innovation: Lessons from Silicon Valley. *California Management Review* 57(2), 36-66.
- Ernest & Young. (2014). *Venture Capital Insights 2013 Year-End: Global VC Landscape, Angel and Incubator Participation Trends and Exit Landscape*.

- Federal Government of Nigeria (2012). *National Policy on Small and Medium Scale Enterprises*. SMEDAN.
- Ferrary, M. and Granovetter, M. (2009). The Role of Venture Capital Firms in Silicon Valley's Complex Innovation Network. *Economy and Society*, 38(2), 326-59. Accessed August 12, 2020.
- Galindo-Martin, M. A., Mendez-Picazo, M. T. & Castano-Martinez, M. S. (2020). The role of innovation and institutions in entrepreneurship and economic growth in two groups of countries. *International Journal of Entrepreneurial Behavior & Research*, 26(3), pp. 485-505.
- Khadijat (2020). Lecture Notes on Project Finance, Lagos State University, Ojo.
- National Bureau of Statistics, (2021). *Labour Force Statistics: Unemployment and Underemployment Report Q1 2021*.
- Nguyen, T. H., Alam, Q., and Prajogo, D. (2009). Developing Small and Medium Enterprises (SMEs) in a Transitional Economy- from Theory to Practice: An Operational Model for Vietnamese SMEs. *Journal of Sustainable Development*.
- Samila, S. and Sorenson, O. (2011). *Venture Capital, Entrepreneurship and Economic Development*. MIT Press.
- Saxenian, A. (1994). *Regional Advantage: Culture and Competition in Silicon Valley and Route 128*. Cambridge, Massachusetts, and London, England: Harvard University Press.
- Schumpeter, J. (1934). *The theory of Economic Development*, Cambridge, MA: Harvard University Press.
- OECD (1997). *The Oslo Manual: Proposed Guidelines for Collecting and Interpreting Technological Innovation Data*. Paris: Organization for Economic Cooperation and Development.
- OECD (2005). *The Oslo Manual, The Measurement of Scientific and Technological Activities*, 3rd Edition
- OECD (2012). Glossary of Statistical Terms. Incremental Products Innovation. Available at: <https://stats.oecd.org/glossary/detail.asp?ID=1322>. Accessed 06-06-2021.
- Porter, E. (2008). Where are the start-ups? Loss of Dynamism is impeding growth. New York Times.
- Weiss, T. (2015). *Combining the Best of the Valley and the Savannah* in Hanley, L. M, Jansen, S.

A., & Grotehans, B, Entrepreneurial Solutions for Social Challenges in Colombia, Ethiopia, Kenya, Mexico, and South Africa.

Wikipedia (2021). Youth. Accessed on 13 September, 2021 at en.m.wikipedia.org/wiki/Youth.

Wikipedia (2020). Entrepreneurial Finance. en.m.wikipedia.org/wiki/Entrepreneurial_finance. Accessed on August 17, 2020.

Zaheer, S. and Zaheer, A. (2006). Internationalization of Small and medium-sized enterprises (SMES) and international entrepreneurship: a critique and policy implications. *Regional Studies*. 41(7), 1013-1029.

Zider, B. (1980). How Venture Capital Works. *Harvard Business Review*.

COVID-19 pandemic, Future of Work, Unemployment, and Socio-economic Crisis in Africa

Rahim, A.G.,¹, Adebisi, S.O.², & Amole, B.B.³

^{1&2}Department of Business Administration, University of Lagos, Lagos, Nigeria.

³Department of Business Administration, Distance Learning Institute, University of Lagos, Lagos, Nigeria

E-mail: arahim@unilag.edu.ng

Abstract

The COVID-19 pandemic is a severe health disaster and its impacts are second to any known maladies in the history of mankind. The objective of this paper is to review COVID-19 pandemic, future of work, unemployment and socio-economic crisis in Africa. The COVID-19 pandemic has created a disturbing influence on global economies, with Africa mostly tough hit due to its restricted financial and healthcare facilities, as well as the huge interruption of global supply chains. In addition, COVID-19 foster transformation towards remote works in the workplace which generates workforce vulnerabilities. Coupled with the previously high intensities of youth unemployment in numerous African nations, COVID-19 poses a severe threat to the prosperity and future of the continent's socio-economic development. This paper concludes that COVID-19 pandemic is a huge health tragedy that impacted individual, society, and businesses. In particular, it further worsened an already youth unemployment crisis in Africa. The study recommends urgent need for Africa government to initiate policy framework to carry out a careful, sector-by-sector and demographic-based analysis of types of jobs that at risk of health pandemic so as to encourage integration of people and businesses to the "New Normal." More important, the evaluation should deliberate on the traditional dynamics and take into consideration post-pandemic complications faced by workforces/businesses and unintended influences of crisis-reaction policies.

Key words: Africa, COVID-19, Developing countries, Entrepreneurship, Future of work and Unemployment.

Introduction

COVID-19 pandemic was reported in China in December 2019 and consequently spread to other countries, Africa inclusive. In Africa, Egypt is the first country to report cases of COVID -19 pandemic on 14 February 2020. Despite late influx, the pandemic spread quickly across Sub-Saharan Africa countries. Overwhelmed by the huge social and economic consequences of the COVID-19 virus, the deadline proposed by the United Nations for all countries to attain full and productive employment and decent work for all have passed, and there is a dwindling hope of meeting the target by most Africa countries (United Nations, 2021). In the year 2015 when the target for NEET (not in employment, education or training) was advocated, the worldwide NEET level was projected to be 21.7 per cent; but by 2020, the global NEET rate is projected to have enlarged to 22.4 per cent (International Labor Organization, 2019). A glance of the NEET conundrum reveals that young people not in employment, education or training constitute extremely diverse cluster and the explanations for being classified as NEET differ generally across nations and

regions. According to Dickens and Marx (2020), being categorized as NEET is perceived to have a tough undesirable influence not only on physical, but emotional, psychological, and psychosocial wellbeing of young people.

The declaration of COVID-19 by the world health organization as a global health pandemic, has change the future of work in a very remarkable ways. In particular, working remotely during the COVID-19 has become a new normal. Due to the health emergency occasioned by the spread of coronavirus, businesses and workforces quickly adopt remote working arrangements which are more flexible to curtail the diffusion of the virus. Such pattern of work has been describe in literature with diverse narrative such as teleworking, remote work, nomadic working, agile working, and homeworking (Karia & Asaari, 2016; Groen, van Triest, Coers, & Wtenweerde, 2018). Notwithstanding dissimilarities in lexicon, these terms highlight the nonexistence of a stable workplace and the adoption of Information and Communication Technologies (ICT s) to carry out tasks.

Arising from declining economic growth occasioned by COVID-19, the employment situations in Africa has become critically worsen and the level of labor absorption more challenging, generating huge employment deficit for the youth. Youth are the Africa's greatest asset and her youth population is speedily growing and predicted to upsurge to over 830 million by 2050 (African Development Bank Group, 2016a). Despite the demographic opportunity, roughly 10 to 12 million youth enter the labor market each year, while about 3.1 million jobs are generated, leaving huge numbers of youth unemployed (African Development Bank Group, 2016b). Further compounding the problem of unemployment is that many young women are deterred from seeking employment as a result of societal customs and beliefs, where male-controlled civilizations are deeply entrenched.

An unemployed person is one who is available for work but does not have work and so does not contribute meaningfully to economic growth and development. In simple words, unemployment denotes circumstances of people who are without jobs. Unemployment arises when people who are enthusiastic to work, find it difficult to get jobs (Adebayo, 1999). Unemployment is linked with chains of undesirable socio-economic impacts such as loss income, stress, poor state of health, physical and psychological wellbeing, growing deviance behaviors, and host of other criminality tendencies. In other words, the prevalent of the aforementioned complications, prompted crisis of legitimation, a notion that succinctly demonstrates how citizen agitate for their right and privileges by taking law and order into their hands. This scenario plays out in the just concluded EndSARs protest in Nigeria where some miscreants mostly youth used the umbrella of protest to engage in illicit acts such stealing, arson and unwarranted killing of innocent citizens. The consequences of youth unemployment in Africa are widespread and stark, resulting to poor living circumstances, huge migration and avoidable conflict. COVID-19 epidemic conveys not only human health related challenges, but it also occasioned huge socio-economic disorder across the world, but more pervasive in Africa. According to Lee and Stephen (2020), COVID-19 has confirmed that international collaboration is fragile and without little difficulty collapses during crisis. As a result, there is urgent need for an improved system of global cohesion to empower Africa to overcome

crisis of huge magnitude like COVID-19 (Organization for Economic Co-operation and Development-OECD, 2020).

COVID-19 pandemic has propelled severe public health concern, economic complications, and political predicaments across the world (Scott, Elizabeth, Elize, & Andre, 2020). The complications created by COVID-19 transcends from an unparalleled health disaster to a severe socio-economic crisis, putting at risk the health status, opportunity to secure jobs and earn incomes by millions of people across the world. In particular, the stringent suppression procedures adopted by numerous nations during the early phase of the pandemic expose huge contractions on economic and social activities. According to World Bank (2020a), the COVID-19 pandemic threatens health and economic prospects across the world and the outlook is mostly sobering for the most vulnerable populations in developing nations (World Bank, 2020a). The pandemic exert stark health impacts and serious constraints on socio-economic growth and development. For instance, quarantine and physical distancing procedures, which are required to lessen the rapid transmission of the coronavirus, resulted to tremendous job losses with more people unemployed in 2020, compared to 2019 (World Bank, 2020a). Statistics released by International Labor Organization-ILO reported that there are roughly 17.3% or 495 million full time equivalent working hours' losses, with lower-middle-income nations recording the toughest projected decline of 23% (International Labor Organization, 2020).

Policy design and implementation on youth unemployment in Africa prior to and after the COVID-19 pandemic are insufficient and African developmental policies and poverty reduction tactics are often inaudible with respect to employment concern; undermining the capability to develop a coherent policy initiative on employment generation in Africa (African Economic Outlook, 2012). As a result, there is urgent need for comprehensive analysis of employment complications to propel poverty reduction strategies and developmental progression in African. Against the aforementioned research background, the overarching objective of this paper is to review COVID-19 pandemic, future of work, unemployment and socio-economic crisis in Africa.

Literature Review

COVID- 19 and Future of Work

Work performs a major role in our lives, not only as a means of livelihood but people social identity. Individual employee and businesses are becoming much concerned with the structural changes occasioned by the COVID-19 pandemic propelling severe alterations the world of work- Future of Work (FoW), specifically how and where people will work in the future (Asiya, 2021). The FoW is a fascinating topic, but equally disquieting (World Employment Confederation, 2016). The COVID-19 crises have impacted the FoW by fast-tracking remote work and remarkably change working structure. As a result, a number of writers and news headlines have advocated that offices are gradually becoming redundant (Wells, 2020, Segal, 2021). Working remotely signifies a major social change regarding where, sometimes when and how work is accomplished. According to

Capgemini Research Institute (2020), remote work has come to stay with roughly three in ten businesses expecting well over 70% of their staffs working remotely in the next two to three years, growing from one in ten prior to COVID-19 pandemic. COVID-19 has emphasized the prominence of physical closeness as one of the major issue influencing the future of work. In particular, forces of change are remarkably impacting three important elements of work: the work itself, who does the work, and where is the work done (International Labor Organization, 2006). Therefore, to generate value from these changes, business organisations should adopt a comprehensive viewpoint regarding work flow and opportunity for workers to collaborate, because the new realisms generated by these forces of change present a number of fascinating and complicating questions about the future of work.

The swing to remote work did not support business-as-usual in all forms of business settings, for obvious reasons such as workforce competence, costs, and proficiency to use computer applications among others. In particular, remote work procedures are also likely to have severe heterogeneous influence among numerous clusters (Longgi, David, Sonia, Siddarth, Shilpi, Jeffrey et al., 2022). For instance, the rich and very educated may become more dynamic, because they have the means to acquire the equipment required, have access to functional space to work remotely, and likely experience some degree of comfort negotiating for improve compensation scheme that account for the additional cost of working remotely (Luca, Giovanni, & Sergio, 2021). On the contrary, disadvantaged clusters of the population will likely be hit harder as a result of the additional cost of doing work from home, experience difficulty gaining access to comfortable spaces to work, and not be in a suitable position to agitate for additional compensation.

COVID-19 has raised the significance of diverse feature of work, particularly its physical nature (hybrid remote work). COVID-19 has also brought huge interruption to the workers, emphasizing the prominence of physical proximity in work and stimulating remarkable changes in business models and consumer behavior, countless of which are likely to endure. Remote work appeals to numerous workforces due to its simplicity, absence of rigidity, and the costs savings opportunity (Society for Human Resource Management, 2021). From the perspective of the company's, reducing costs related with hiring and sustaining a physical space can lead to major savings (Meister, 2013). At the same time, less rigid work patterns open firms to a broader talent pool, enabling them to recruit the best workforce, irrespective of physical location (Kurtzberg, 2005, Morrison-Smith, & Ruiz, 2020). Nevertheless, this transition is creating imbalance of firm-employee relations by altering the cost of workplace from companies to workers (Roger, 2020). Similarly, adoption of remote work pattern will make employees to be static, silo and prompt fewer tendencies to interact and collaborate effectively.

COVID -19 and Unemployment

Unemployment is one of the major developmental problems confronting most countries across the globe, but more prevalent and devastating in Africa. When the youths that represent the active population in most countries are made redundant, consciously or inadvertently, that nation tends to linger in stagnation in her developmental progression. Joblessness illustrates misfortune and

difficulty to tap into economic activities so as to earn decent living. Beggs (2012) defined unemployment as a situation in which an individual in a society is looking for a job and find it difficult to secure one. Currently, there are roughly 1.3 billion young people worldwide, out of which 267 million are categorized as NEET (Katarzyna, Anna, & Bhaskar, 2022). While developed nations have lessened their NEET levels, the reverse is the case in developing countries (where both rates and frequencies) are progressively growing.

The young people in Africa are severely challenged with numerous complications oscillating from economy that is relatively blessed in term of human and material resources, but finding it difficult to create jobs, a situation that worsen with the declaration of COVID-19 pandemic. The most fundamental challenges for growing poverty occasioned by unemployment in Africa are documented in two countries: Nigeria and Democratic Republic of Congo, taken together, roughly 150 million people in the two countries account for more than one-quarter of aggregate poverty in Africa and are projected to constitute almost half of Africa's poor by 2030 (Kristofer, Baldwin, & Martin, 2019). The implication of youth unemployment outspreads beyond national labor policies. For instance, absence of productive employment opportunities for young people is alleged to have weighty influences on vital global issues like poverty, growing violence and rising migration; more important, it is alluded to upsurge the risk of social dissatisfaction.

The COVID-19 pandemic interrupted labor markets worldwide with sudden and severe consequences. Not only that millions of people lost their jobs, so many lost the requisite skills to fit into contemporary workplace arrangement- 'remote work'. Notably, a year following the COVID-19 crisis, hours worked are still far from pre-crisis eras. For instance in March 2021, hours worked was roughly 7% which is relatively lower than the level recorded in December 2019 (International Labor Organization, 2022). According to Ebrahim and Andualem (2022), the COVID-19 crisis harshly influences young people in three major areas: (i) interruptions to education and learning; (ii) bloated concerns on the part of job seekers; and (ii) loss of job and income, resulting to worsening quality of employment.

In literature, numerous factors have been documented as the major influences contributing to youth unemployment comprising aggregate demand, demographic shift, level of education, wage and salary structure, labor market rules and individualities (Rahim, Wale-Oshinowo, & Agbi, 2020). From an individual's perspective, period of unemployment can impact economic and social circumstances in diverse ways and in unpredictable degrees. Sociologists and psychologists noted that the redundancy emanating from loss of job could result into stigmatization, state of insecurity and shame. Loss of job also signifies a potential source of tension, and can trigger emotional and physical anguish, segregation and disaffection. More important, the economic and social concerns of unemployment are anticipated to contribute to, or be complemented by the subjective sense of social exclusion.

Research also suggests that the toughest detrimental impacts of unemployment are on the people quality of work life and satisfaction, because when people are out of work, their skills/competence may erode due to lack of utilization. Likewise, being out of work may lessen employee's "social capital"—the network of business connections that make finding new potential jobs stress-free. In addition, the pressure of being out of work can impact an individual's physical and psychological/mental health, family dynamics, and the well-being of his or her immediate family. While a person is unemployed, the person's family income decreases due to lack of earning, and the loss of income (which becomes greater as unemployment duration is extended).

Literature shows a strong connection between youth unemployment and predisposition to violence— both criminality and youth involvement in political hooliganism and armed bandits (Collier, 2000). Also, there is a rise in delinquency tendency, drug addiction and prostitution among young unemployed youth. Unemployment is a major source of grievance – coercing a drive alongside self-indulgence – while the tendency for unemployed youth to participate in violence and mingle with bad people is generally high (Collier, 2000). Youth unemployment is also a primary cause of insurgency or civil war, because it fosters engagement in rebellions, inspires people to join violent gangs, motivates people to become radical, and it is one of the main causes behind growing domestic violence (Ali, 2014; Cramer, 2015). Unemployment is a huge setback to socio-economic development in Africa. For example, in Nigeria, the teeming unemployed youths are the foremost risks to peace and security in the country as manifested in growing kidnapping, armed robbery, violence, oil theft, internet fiddle, car snatching, homicide, cultism, kidnapping, rape, food and drug counterfeiting, child trafficking and exploitation, prostitution, Boko haram insurgent, and political hooligans to mention a few.

Socio-economic Impact of COVID-19 pandemic

Economy of any nation be it developed or developing, at one time or the other has always been vulnerable to shocks of numerous forms and enormities. The literature is beleaguered with accounts of economic shocks such as the Great Depression, the Organization of Petroleum Exporting Countries-OPEC oil price shock, and global financial crisis to mention a few. According to Ireteyao (2021), ever since declaration of the influenza epidemic of 1918 and the Second World War (1939-1945), the world has not been confronted with a common difficulty in recent time like the COVID-19 virus. Since the formal declaration of the Corona virus in December, 2020, it was subsequently discovered in over 190 nations across the globe (World Bank, 2020a). Consequently, countries across the globe have closed their borders to arrivals from nations with infections, pronounced that businesses should close, ordered their citizens to self-quarantine, and closed schools at all levels. As at August, 2020, roughly one third (about 32%) of the global workforces are living in countries with lockdowns order (International labor Organization, 2020).

Previous Poverty and Shared Prosperity Reports remarked that the difficulty experience by most nations is unfortunate, pointing to the direction that the world is not on the right track to meet the Sustainable Development Goal Number 3- “reducing extreme poverty to 3% by 2030 (World Bank, 2020b). Globally, 700 million people are living in extreme poverty, i.e. people living on less than \$1.9 per day with roughly additional 49 million people added to extreme poverty in 2020 as a result of COVID-19 (The Sustainable Banking Network, 2020). Growing youth unemployment was before now a serious challenge in Africa before the COVID-19. However, the socio-economic impact of COVID-19 is exceptional in size and scope and has speedily changed from a health crisis into socio-economic predicament, which has far-reaching consequences for businesses, workforces and countries across the globe. The collapse of socio-economic activities experienced during the COVID-19 pandemic has not been witnessed since the Great Depression of 1929. In simple words, no forms of health or economic disaster in history have ever created such huge disruption of socio-economic activities, resulting to border closures and restrictions of human movement. In the opinion of Jones and Jones (2020), the COVID-19, evasively tagged the “great equalizer” suggests that all nations and everyone are susceptible to the virus, and that the economic activities across the world are similarly obstructed irrespective of economic or social status.

The COVID-19 pandemic fuelled a worldwide health pandemic with no parallel in human history. The consequential impact on the economy and societies at large has been both severe and extensive. The pandemic affected Africa’s growth forecasts, with huge impact on socio-economic activities and the well-being of people. The COVID-19 pandemics generate huge disorders to economic and societal functioning. The waves of the pandemic and restraint measures resulted to a huge shrinkage in economic activities as numerous people were unable to work and businesses experience difficulty to operate, resulting to poor capacity utilization and decline of industrial activities. Capability to sustain business activities also experience difficulty, particularly for small and medium scale businesses, which considerably deteriorate informal engaged employees’ income, because the closure policy harshly disturbed work and economic activities (Ebrahim & Andualem, 2022).

The consequences of this on the government, businesses and employees are huge and very devastating. The combined decrease in volume of goods and services with no prescribed social or employment protection simply lessens the worker count necessary for production and puts additional burden on the already restricted resources. According to Wright, Labell, and Carleton (2016), unemployment and job insecurity prompt financial trouble and economic doubt and, consequently, exert serious impacts on individuals’ state of mental health. The COVID-19 caused a more persistent mobility crisis for Africa than any other economic or health pandemic-induced catastrophe and on a degree unparalleled since World War II (Iretiayo, 2021). The pandemic triggered enormous collapse in human capital, and disrupted ample opportunity for millions of citizen’s particularly young people.

The socio-economic concerns of the COVID-19, particularly, on youth unemployment predicament are far-reaching. For example, in 2019, the International Labor Organization projected that Africa

had an unemployment rate of 18.1%, or 73 million, young people (ILO, 2019). The absence of job prospects has triggered an exodus of African youth looking for job opportunities to migrate to developed countries. This exerts severe consequences on African nations, particularly youth. Liu, Zhang, Wei, Jia, Shang, Sun et al., (2020) stated that COVID-19 pandemic created negative emotions, like fear and anxiety. Besides, the social distancing policy and isolation of confirmed cases constitute additional risk influence which advanced anxiety, addictive, and mood disarrays (Sani, Janiri, Nicola, Janiri, Ferretti, & Chieffo, 2020). In addition, the scenario of misinformation amplified confusion and uncertainty, fueling severe negative influence on people's livelihoods, with numerous families struggling hard to meet basic needs like food, clothing and shelter.

The loss of income arising from COVID-19 pandemic has largely upset the diverse strata of the population, particularly, those living below poverty line and people working in establishments that are more vulnerable to layoffs, pay cuts and, in general, those in precarious employment labor markets such as aviation, hospitality, tourism and recreational businesses to mention a few. The diverse socio-economic influences also echo the social dissimilarity matrix in the Africa region, which is founded around social class, gender, life-cycle stage, level of civilization or race and region, including other influences such as infirmity, and migratory tendency among others (World Bank, 2020a). These inequalities exacerbate, and caused numerous forms of complications that resulted to growing citizen deviance behavior, loss of productivity and legitimation crisis in most Africa countries.

Discussion

Momentous issues or activities are those happenings that are considered to change history in a very remarkable way. The COVID-19 pandemic qualifies as one of those health disasters that is second to none, in term of magnitude and impacts. The pandemic has been categorized a trans-boundary catastrophe that remarkably influences all components of a social system: individual, family setting, society, businesses, government and countries across the globe (Ansell, Boin, & Keller, 2010). With its foremost influences on human being, work, businesses and society at large, COVID-19 has been labelled as the most extensive and deep health crisis in contemporary era (Shoss, 2021). It is an undeniable statement that COVID-19 has altered so many facets of our society. In particular, it has had a substantial impact on labor market metrics in almost all countries and demographic cluster across the world. The COVID-19 crisis with its deep and demoralizing influences related to human travail, economic damages and social commotions revealed the interconnectedness of our societies and the degree of inequalities within and among nations.

COVID-19 pandemic fueled a number of transformations in the workplace, one of which is remarkable shift towards remote work aimed to accommodate a fast changing world of work. The COVID-19 pandemic has exposed to businesses and workforces an innovative opportunity to reshape how and where work is done, it has also triggered harsh/ unforeseen changes to almost all

industries and sectors, underlining precise workforce susceptibilities. The waves of COVID-19 concerning how people work indisputably characterizes the most radical and speedy shift to the global workforce and have change work patterns in space and time. The induced lockdown alongside other precautionary approaches to help lessen the spread of the COVID-19 virus aided the need to rethink the physical space of work, because, it has become apparent that what the world contemplate as work is going to change remarkably. COVID-19 pandemic complicated worldwide economic prospects and the consequences have been very devastating in Africa, not only to individual but to businesses.

The nature and form of the influence of the pandemic on the labor market was influenced by policy measures developed to curtail COVID-19 crisis. According to Carlo and Ippei (2023), the nature and rapidity of the labor market recovery is likely to be impacted in three critical ways: (i) the degree to which the critical period of the health crisis and economic crunch upsets jobs opportunity window, causing a new heave in job losses among those presently on temporary redundancy or compact working hours, (ii) the relative ease with which those who have progressed into inactivity can rapidly be re-absorbed, and (iii) the degree to which new job opportunities open up. Thus, how different nations' experienced the pandemic will differ depending on the precise restrictions imposed, their structural configuration features and economic/employment arrangement. All the aforementioned influences propelled uneven impacts in terms of aggregate employment, the forms of jobs and employees affected (International Labor Organization, 2022). In particular, employee displacement occasioned by COVID-19 has far-reaching repercussions not only on individual, and businesses but government as an institution.

Notwithstanding the potential opportunities connected to having huge youth population in Africa, unemployment is rising and becoming overwhelming. The youth are for the most part vital to the prosperity of Africa countries. Therefore, effort to transform the “youth bulge” into a “demographic gain” critically depends on the capability to generate productive jobs, which is becoming complicated due to COVID-19 pandemic. The unemployment situation in Africa depicts crowding of unemployment rates within region which necessitate why youth extremely occupy low-skill jobs that are highly informal and more vulnerable to market fluctuations (Brixiova & Kangoye, 2014). According to Rahim, Afolabi, and Odunayo (2018), Africa’s youth unemployment rate is disturbing and it echoes a deteriorating labor market situation characterized by growing informality and poor financial inclusion that compel people to resort to petty jobs and trading for survival. While concentrating on NEETs is vital for advocating policies to improve employment situation of the teeming youth, it is imperative to know that the complication of youth unemployment and engagement extend beyond job creation to crafting decent jobs, because a large percentage of those in employment are in poor quality, relatively low paid and apprehensive employment condition. The COVID-19 pandemic has generated severe complications in both developed and developing countries, but more severe in Africa; and if left unresolved, will create an imminent constriction on Africa economic growth and development. The above inference is based on a simple analogy that

resonates the fact that an idle mind is not only a devil workshop but tools through which numerous other detrimental evils expressed.

According to Beegle and Christiaensen (2019), effort and strategies to improve employment prospects is particularly vital in sub-Saharan Africa for several reasons- (i) the large chunk of the population in the region are mostly youth who lack access to quality education and other prospects to build human capital, (ii) the past high fertility rate in Africa has increase the labor force, (iii) continuous economic progress, required the need to fund investments needed to build more robust economies and societies, and necessitates stable growths in labor productivity. One likely justification why employment has not fully recovered in Africa is the uncommon co-occurrence of slow employment and close-fitting labor markets. Two years after the occurrence of COVID-19 might not be adequate to have a complete and appreciative knowledge of all that occurred during the crisis. Nevertheless, it is vital to remember both good in term of lessons learnt and bad, because the health, and socio-economic maladies occasioned by COVID-19 crisis is a huge crisis– highly systemic, very disruptive, exceedingly transformational – and only by developing a thorough understanding of its magnitude and complexity that we can contemplate how best to respond to such health calamities in the future. Besides, it is imperative that countries such as Africa use misfortunes induced by the COVID-19 pandemic to deeply reflect on all that transpired to derive valuable lessons for the future.

Conclusion and Policy Recommendations

This conceptual paper is a review of COVID-19 pandemic, future of work, unemployment and socio-economic crisis in Africa. COVID-19 has taken a huge toll on human life and brought remarkable interruption to socio-economic activities across the world, particularly, massive loss of jobs. Of all the concerns of COVID-19 pandemic, youth unemployment is projected to exert the most demoralizing impacts. The COVID-19 health crisis has had severe depressing impacts on global economies and Africa has been particularly hit very hard due to a number of factors such as poor healthcare facilities, poorly diversified economy, and inadequate financial and healthcare resources. While the degree of socio-economic impact of COVID-19 is difficult to predict with accuracy, Africa countries need to evolve tactical planning that create sufficient jobs for the teeming youth through financial inclusion, information and communication technology literacy and entrepreneurship development to serve as a safety net and mitigate the impacts of the pandemic. As a result, social protection and well-being of youth must be contemplated from a viewpoint of universalism that is sensitive to dissimilarities, i.e. taking into consideration the needs/expectations of youth and peculiar discrimination they face. To sustainably address unemployment complications facing Africa youth, rigorous action plan are required with a strong emphasis on the demand side to foster structural transformation of employment opportunities in Africa countries.

COVID-19 pandemic complicated worldwide economic prospects and fueled a number of transformations in the workplace, one of which is the shift towards remote work aimed to accommodate a fast changing world of work. In other words, COVID-19 fast-tracked the shift from conventional office work to the extent that companies that do not institute full-time remote work rules are unlikely to completely return to their pre-COVID-19 work structure. As an alternative, they are likely to adjust to some form of hybrid work pattern, in which workforces divided their time between working remotely and office work, or a mixed-model, comprising a combination of full-time remote workers and full-time office workforces.

COVID-19 crisis aggravated an already worsened youth unemployment crisis in African nations. With the growing prevalence of poverty across the globe, Africa countries needs to create more employment to address the menace of hunger, malnutrition and poor living standards of her citizenry. Given Africa's diversity, considerable differences exist regarding unemployment trend across numerous sub-regions and clusters. Therefore, the multiplicity of country-specific contexts in Africa reflected the wide array of policy measures being adopted to curb unemployment. The socio-economic costs of the pandemic and youth unemployment crisis are particularly far-reaching, with roughly 50 million people pressed into severe poverty across Sub-Saharan Africa. This paper propose the under listed policy recommendations to lessen the menace of unemployment, changing work patterns, and socio-economic crisis occasioned by COVID-19 pandemic in Africa.

- i. To develop and empower youths to actively engage in productive activities in Africa, government and other stakeholders such as international agencies and world developed nations must foster developmental programme that are peculiar to Africa circumstances/needs aimed at integrating them (the youths) into the crucial task of nation building and socio-economic development.
- ii. With the growing complications of unemployment in Africa, it is important to develop proactive policies so as to lessen its impacts through the creation of more employment opportunities and improve infrastructural facilities to encourage entrepreneurial development.
- iii. Government should make concerted effort to diversify the economy, because one of the foremost causes of unemployment is the excessive reliance on one major source of economic wealth, mostly oil and gas. Therefore, all facets of productive base of the economy must be revitalized and reconfigured to meet the contemporary realities of the Africa socio-economic circumstances.
- iv. To effectively come to terms with the complications of dipping NEET status in Africa, there is an urgent need to institute comprehensive parameters for youth employment policy beyond the conventional criteria so as to prioritize and identify which forms of NEET status are mostly connected with vulnerability and the differing support required lessening NEET rates in each national context.
- v. Policy measures should be developed as a matter of urgency to promote continental free trade and regional alliances so as to encourage vibrant economic diversification and lessen Africa dependence on external aid to foster economic recovery.

References

- African Development Bank Group (2016a). *Bank Group Strategy for jobs for Youth in Africa, 2016-2025*. Retrieved from <https://www.afdb.org/en/documents/document/bank-group-strategy-for-jobs-for-youth-in-africa-2016-2025-89238>
- African Development Bank Group (2016b). *Job for Youth in Africa: Catalyzing youth opportunity across Africa*. Retrieved from https://www.afdb.org/fileadmin/uploads/afdb/Images/high_5s/Job_youth_Africa_Job_youth_Africa.pdf
- African Economic Outlook (2012). *Government action to promote youth employment: A poor track record*. Retrieved from <http://www.cpahq.org/cpahq/cpadocs/Government%20Action%20to%20Promote%20Youth%20Employment.pdf>
- Adebayo, A. (1999). Youth unemployment and national directorate of employment self-employment programmes. *Nigerian Journal of Economic and Social Studies*, 41(1), 81-102.
- Ali, M. (2014). Youth unemployment: A global security challenge. *Harvard International Review*, 36(1). 6.
- Asiya, I. (2021). Work-from/at/for-home: CoVID- 19 and the future of work - A critical review. *Geoforum*, 2021
- Ansell, C., Boin, A., & Keller, A. (2010). Managing trans-boundary crises: Identifying the building blocks of an effective response system. *Journal of Contingencies Crisis Management*, 18, 195–207.
- Beegle, K., & Christiaensen, L. (2019). *Accelerating poverty reduction in Africa*. World Bank Publications
- Beggs J. (2012). *Types of unemployment*. Retrieved from <http://www.economics.about.com>
- Brixiova, Z., & Kangoye, T. (2014). Youth employment in Africa: New evidence and policies from Swaziland, in Ángel Malo, M. and Sciulli, D. (Eds.) (2014). *Disadvantaged workers: Empirical evidence and labor policies*. AIEL Series in Labor Economics, Springer International Publishing: 181-202.
- Collier, P. (2000). Doing well out of war and economic perspective." In M. Berdal and D. Malone, eds. *Greed and grievance: Economic agendas in Civil Wars*. London and Boulder, Colorado: Lynne Rienner
- Cramer, C. (2015). *Jobs, unemployment and violence*. Retrieved from <https://gsdrc.org/wp-content/uploads/2015/07/JobsUnemploymentViolenceRP.pdf>
- Capgemini Research Institute (2020). *The future of work-from remote to hybrid*. Retrieved from <https://www.capgemini.com/capgemini-research-institute-subscription/>
- Carlo, P., & Ippei, S. (2023). Has COVID-19 induced labor market mismatch? Evidence from the US and the UK. *Labour Economics*, 2023

- Dickens, L., & Marx, P. (2020). NEET as an outcome for care leavers in South Africa: The case of Girls and Boys town. *Emerging Adulthood*, 8(1), 64–72.
- Ebrahim E.M., & Andualem K.A. (2022). Food insecurity and unemployment crisis under COVID-19: Evidence from sub-Saharan Africa. *Cogent Social Sciences*, 2022
- Groen, B.A., van Triest, S.P., Coers, M., & Wtenweerde, N. (2018). Managing flexible work arrangements: Teleworking and output controls. *European Management Journal*, 36(6), 727–735.
- Karia, N., & Asaari, M.H.A.H. (2016). Innovation capability: the impact of teleworking on sustainable competitive advantage. *International Journal of Technology, Policy and Management*, 16(2), 181–194.
- International Labor Organization (2019). *Young people not in employment, education or training*. Retrieved from https://www.ilo.org/emppolicy/projects/sida/18-19/WCMS_735164/lang-en/index.htm
- International Labor Organization (2020). *ILO Monitor: COVID-19 and the world of work*. Sixth edition Updated estimates and analysis. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/briefingnote/wcms_755910.pdf
- International Labor Organization (2006). *Patterns in the world of work*. International Labor Conference 95th Session 2006. Retrieved from <https://www.ilo.org/public/english/standards/relm/ilc/ilc95/pdf/rep-i-c.pdf>
- International Labor Organization (2022). *ILO monitor on the world of work*. Ninth edition. May. Available at https://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_845642.pdf. Articles/2020/03/27/sp032720-opening-remarks-at-press-briefing-following-imfc-conference-call
- Iretiayo, A. (2021). *The economic impact of Covid-19 pandemic in Lagos, Nigeria: The case of female alcohol sellers*. Research Report, IFRA-Nigeria Working Papers Series 79, IFRA-Nigeria. 2021.
- Jones, B.L., & Jones, J.S. (2020). *Gov. Cuomo is wrong, covid-19 is anything but an equalizer*. Washington Post. Retrieved from <https://www.washingtonpost.com/outlook/2020/04/05/gov-cuomo-is-wrong-covid-19-is-anything-an-equalizer/>.
- Katarzyna, C., Anna, B., & Bhaskar, V. (2022). Young people not in Employment, Education or Training (NEET) in Sub-Saharan Africa: Sustainable Development Target 8.6 missed and reset. *Journal of Youth Studies*, 25(8), 1126-1147
- Kristofer, H., Baldwin, T., & Martin, H. (2019). *Poverty in Africa is now falling-but not fast enough*. Retrieved from <https://www.brookings.edu/blog/future-development/2019/03/28/poverty-in-africa-is-now-falling-but-not-fast-enough/>
- Kurtzberg, T.R. (2005). Feeling creative, being creative: An empirical study of diversity and creativity in teams. *Creativity Research Journal*, 17, 51–65.

- Lee, E.M., & Stephen, M. (2020). *Covid-19 and social mobility CEP COVID-19 Analysis*. Retrieved from https://eprints.lse.ac.uk/104673/1/Machin_covid_19_and_social_mobility_published.pdf
- Longgi, Y., David, H., Sonia, J., Siddarth, S., Shilpi, S., Jeffrey, W., Connor, J., Neha, S., Kevin, S., Brent, H.S., Jaime, T. (2022). The effects of remote work on collaboration among information workers. *Nature Human Behavior*, 6, 43-54.
- Luca, B., Giovanni, G., & Sergio, S. (2021). Working from home and income inequality: Risks of a 'New Normal' with COVID-19. *Journal of Population Economics*, 34(15), 303-314.
- Liu, N., Zhang, F., Wei, C., Jia, Y., Shang, Z., Sun, L., Wu, L., Sun, Z., Zhou, Y., Wand, Y., & Liu, W. (2020). Prevalence and predictors of PTSS during Covid-19 outbreak in China hardest-hit-areas: Gender differences matter. *Psychiatric Research*, 287, 6.
- Meister, J. (2013). *Flexible workspaces: Employee perk or business tool to recruit top talent?* Forbes. Retrieved from <https://www.forbes.com/sites/jeannemeister/2013/04/01/flexible-workspaces-another-workplace-perk-or-a-must-have-to-attract-top-talent/?sh=531a99132ce7>.
- Morrison-Smith, S., & Ruiz, J. (2020). Challenges and barriers in virtual teams: A literature review. *Apply Sciences*, 2, 1–33.
- Organization for Economic Co-operation and Development-OECD (2020). *OECD updates G20*. Retrieved from summit on outlook for global economy. Retrieved from <http://www.oecd.org/newsroom/oecd-updates-g20-summit-on-outlook-for-globaleconomy.htm>
- Rahim, A.G., Wale-Oshinowo, B.A., & Agbi, B.D. (2020). Struggling with economic recession: Youth unemployment and crisis of legitimation in Africa. *Ilorin Journal of Administration and Development (IJAD)*, 6(1), 44-56
- Rahim A.G., Afolabi, A.A., Odunayo, B.A. (2018). Epistemic reflections on the traditional perspective of the informal sector in developing countries: Evidence of the failure of its transient predictions in Africa. *Scientific Papers of Silesian University of Technology, Organisation, and Management Series, Silesian University of Technology, Poland*, 1, 67-83.
- Roger, T. (2020). *Remote working has its problems, but it points to the future*. Retrieved from <http://www.forbes.com/sites/rogertrapp/2020/07/21/remote-working-has-its-problems-but-it-points-to-the-future/#4bca16ab793a>
- Shoss, M. (2021). Occupational health psychology research and the COVID-19 pandemic. *Journal of Occupational Health Psychology*, 26, 259–260.
- Segal, E. (2021). *The great disconnect: Many more employers than workers want to return to offices*. Retrieved from <https://www.forbes.com/sites/edwardsegal/2021/10/05/the-great-disconnect-many-more-employers-than-workers-want-to-return-to-offices/>
- Society for Human Resource Management (2021). *Full poll results: Telework in the time of Covid-19*. Retrieved from <https://www.shrm.org/hr-today/news/hr-news/pages/poll-telework-coronavirus-full-results.aspx>.
- Scott, L.G., Elizabeth, J.K., Elize, M.F., Andre, P. (2020). The comparative politics of COVID-19: The need to understand government responses. *Global Public Health*, 15(9), 1413-1416

- Sani, G., Janiri, D., Nicola, M., Janiri, L., Ferretti, S., & Chieffo, D. (2020). Mental health during and after the Covid-19 emergency in Italy. *Psychiatric Clinical Neuroscience*, 74, 372.
- The Sustainable Banking Network (2020). *Report factsheet*. Retrieved from [https://www.ifc.org/wps/wcm/connect/43502347-ce65-4466-9d10-faedbd4160cc/SBN+Necessary+Ambition+Report+2020_Factsheet_final.pdf?MOD](https://www.ifc.org/wps/wcm/connect/43502347-ce65-4466-9d10-faedbd4160cc/SBN+Necessary+Ambition+Report+2020_Factsheet_final.pdf?MOD=ajpg&_afPQ=1)
- United Nations (2021). *Policy brief: The impact of Covid 19 on food security and nutrition*. Retrieved from <https://unsdg.un.org/resources/policy-brief-impact-covid-19-food-security-and-nutrition>
- World Bank (2020a). *How the World Bank Group is helping countries with COVID-19*. Retrieved from <http://www.worldbank.org/en/news/factsheet/2020/02/11/how-the-world-bank-group-is-helping-countries-with-covid-19-coronavirus>
- World Bank (2020b) Poverty and share prosperity (2020). *Reversals of fortune*. Retrieved from <https://openknowledge.worldbank.org/bitstream/handle/10986/34496/9781464816024.pdf>
- Wright, K.D., Lebell, M.A.N.A., & Carleton, R.N. (2016). Intolerance of uncertainty, anxiety sensitivity, health anxiety, and anxiety disorder symptoms in youth. *Journal of Anxiety Disorders*, 41, 35–42.
- Wells, J. (2020). *After Coronavirus: The office of the future is the office of the past*. Retrieved from <https://www.cnn.com/2020/04/27/after-coronavirus-the-office-of-the-future-is-the-office-of-the-past.html> (accessed 22 October 2021).
- World Employment Confederation-WEC (2016). *The future of work issues at stake and policy recommendations from the employment industry*. Retrieved from https://www.weceurope.org/uploads/2019/07/2016_WEC_Future-of-Work.pdf

Green Entrepreneurship Practices as Opportunity for Internationalisation of Nigerian Small and Medium-Sized Enterprises.

Gabriel Nedomien, Osayande & Sunday Abayomi, Adebisi

University of Lagos

Abstract

The recognition that global warming arising from human activities is leading to draughts, population displacements, farmer-herder clashes and thus increasing poverty, has led to the need to conduct human economic affairs with due consideration to the welfare of future generations. These considerations are also amply advocated in the United Nations 17 Sustainable Development Goals (SDGs). A significant aspect of the pursuit of the SDGs is global poverty reduction, which in turn can be helped by tackling widespread unemployment. The consequent pressing need for job creation induces an intense demand for entrepreneurship, given that an increase in entrepreneurship endeavours results in lower unemployment. Even though entrepreneurship may create poverty-alleviating jobs, this may not always be guaranteed, as many jobs and associated human activities result in an intensification of activity-types that ultimately lead to global warming. This presents an economy-ecology tension which requires ongoing attention. The resulting nexus between the global concern for environmental sustainability and poverty-alleviating entrepreneurial job creation should call for certain preferred Green Entrepreneurial Practices (GEPs). These involve products, services or processes which help in reducing, re-using, and recycling resources towards environmental preservation, green product design, energy efficiency, circular economy, social contribution, ethical acceptability, organizational openness to internal innovation, economic profitability, enterprise sustainability and risk management. Recognising that SME internationalisation offers growth and the associated ability to create poverty-alleviating jobs, this study addressed the possibility of the presence of a relationship between these GEPs, Nigerian SMEs and internationalisation. In the context of Nigeria, this study evaluated whether GEPs offer beneficial opportunities for sustainable business expansion and importantly, whether they help the internationalisation of SMEs.

This research concluded that Nigerian SME internationalization can be promoted by giving attention to environmental preservation, is positively affected by green product design and is supported by the adoption of energy efficiency measures. Furthermore, the adoption of circular economy models and social contribution significantly supports Nigerian SME internationalization. And that Nigerian SME internationalization benefits from their being in good ethical standing.

Introduction

The recognition that global warming arising from human activities is leading to draughts, population displacements, increasing poverty, farmer-herder clashes (in West Africa) etc., has led to the widely recognised need to conduct human economic affairs with due consideration to the welfare of future generations. These considerations are also amply described and advocated in the United Nations 17 Sustainable Development Goals (SDGs). A significant aspect of the pursuit of the SDGs is global poverty reduction, which in turn can be helped by tackling widespread unemployment via job creation. The consequent pressing need for job creation also induces an intense demand for entrepreneurship, given that an increase in entrepreneurship endeavours results in lower unemployment (Kritikos, 2014).

Even though entrepreneurship may create poverty-alleviating jobs, this may not always be guaranteed, as many jobs and associated human activities result in an intensification of activities, which if indiscriminate, may be of the human activity-types that ultimately lead to global warming (Olsen, 2009). Industrialisation focused on profit making in developing economies results in the degradation of nature in its being used as a major factor of production leading the global warming (Uslu, Hancioglu & Demir, 2015). This presents an economy-ecology tension which requires ongoing attention (Higgins, 2013). Therefore, it is not enough that economic development is superior to economic growth in addressing poverty. Economic development still needs to be improved to cater for environmental concerns. Businesses need to be green and preferably started via green entrepreneurship. The vicious cycle of non-green job creation in itself leading to global warming-induced poverty, requires solution via entrepreneurial job creation of the sustainable type, especially if such jobs result in overall environmental footprint reduction (Mathaisel, 2015).

A possible route to business scalability may be expansion internationally (Ali & Ahamat, 2018). Therefore, practices that may support business expansion internationally – be it from push or pull factors – should be of interest. The resulting nexus between the global concern for environmental sustainability and poverty-alleviating entrepreneurial job creation should call for certain preferred practices. The set of Green Entrepreneurial Practices (GEP) involve products, service or process which help in reducing, re-using, and recycling resources towards environmental or ecological preservation, green product design, energy efficiency, circular economy, positive social contribution, ethical acceptability, organizational openness to internal innovation, economic profitability, enterprise sustainability and risk management (Fulvia, Marino, Sule, & Philipp, 2011; Ataman et al., 2018).

This study addressed the possibility of the presence of a relationship between GEPs, Nigerian SMEs and internationalisation. SMEs are important because they provide much larger employment opportunities than non-SME organisations (Katila, Chen & Piezunka, 2012). Entrepreneurship is the process of designing, launching and running a new business, which is often initially a small business. (Katila, Chen, & Piezunka, 2012). While some businesses evolve, others are consciously designed (Yetisen, Volpatti, Coskun, Cho, Kamrani, Butt, Khademhos, Sein, & Yun, 2015). This provides opportunities to identify green practices that can *ab-initio* be designed into entrepreneurial start-ups with a view to achieving rapid growth through internationalisation. Such business growth through internationalisation will help accelerate job creation and decrease poverty.

Small and Medium-Sized Enterprises (SMEs) in Nigeria, according to PriceWaterhouse Coopers' February 2018 survey, contribute 48% of national GDP, account for 96% of businesses and 84% of employment (Venture Investment, 2016). The huge contribution of SMEs to employment points to the need for job creation efforts to be focused here especially as according to the 2018 National Bureau of Statistics publication, Nigeria unemployment rate as at the third quarter of 2018 was a worrying 23.1%. According to the Internal Finance Corporation (IFC), SMEs constitute about 96% of Nigerian businesses compared to 53% and 65% in the US and Europe respectively. The IFC also estimates that SMEs contribute some 1% of Nigerian GDP compared to 40% in Asian countries and 50% in the US or Europe. These comparative numbers are indicative of the huge potential SMEs can offer the Nigerian economy if properly developed. The growth of SMEs will further increase their employment generation capabilities (Ali & Ahamat, 2018). An important SME growth path and performance enhancing trajectory is business expansion internationally. The process of increasing involvement of

enterprises, including SMEs, in international markets – referred to as internationalisation – is likely to be more favoured by certain practices than others. In the context of contemporary Nigeria, the importance of SMEs to job-creation and hence poverty alleviation, and its potential for accelerating growth via internationalisation makes it particularly important for study. A juxtaposition of GEPs that have a likelihood to increase the opportunities for SME internationalisation are worthy of study given the potential for poverty alleviation and economic development. The areas most in need of solutions to unemployment are in poor economies like Nigeria, with poor governance systems and weak ecosystem support for creating businesses. It is of interest that amidst this presence of high risk in Nigeria lies a huge entrepreneurial potential in line with the “high risk, high reward” maxim. This potential needs to be developed really fast as the world would not wait for Nigeria in the relentless global march towards progress and economic development. The combination of factors covering employment generation, poverty reduction, environmental sustainability and the significant and growing risk in an increasingly poor Nigeria compels a speedy search for solutions. In the context of Nigeria, this study will, in the first instance, evaluate whether green entrepreneurship practices offer beneficial opportunities for sustainable business expansion and importantly, whether they help SMEs undergo internationalisation.

Statement of the Problem

Nigeria risks being left behind in the comity of nations as the world – especially the developed economies – march relentlessly towards greening their economies. Nigeria’s natural resources like crude oil, forestry, and solid minerals (like bitumen, gold, uranium, etc.) may lose value if green exploitation practices are not speedily taken on board, or not at all. The extent to which GEPs are expected to aid the internationalisation of Nigerian SMEs were explored alongside whether or not business and organisations from advanced economies would be attracted, and encouraged to support or preferentially do business with Nigerian SMEs that adopt green practices.

As a developing economy, the argument exist that Nigeria’s natural non-renewable resource endowments like coal and crude oil, rather than being abandoned in pursuit of greenness, would need to be exploited and deployed to leverage the pursuit of an emergent green economy. The concurrent pursuit of the exploitation of natural non-renewable endowment and the greening of the economy, even though creating a priority conflict, could potentially help prevent a situation where Nigeria is perpetually playing catch-up with the developed economies. In any case, in the global scheme of pollution, where industrialised countries like the USA and China are currently the chief culprits, as-yet non-industrialised Nigeria’s best contribution to the slowing down of global warming would be in the conversion of diesel and petrol driven engines to utilise gas, and the arrest of deforestation by the conversion of cooking stoves to use of natural gas. Fortunately, with reserves of 160 trillion cubic feet according to the US Geological Surveys, Nigeria has an abundance of untapped natural gas.

Significance of Study

Nigeria is in trouble! With population growth rate out-stripping GDP growth rate by ratio 3:2, poverty is increasing (Abdullahi, 2019). The need for the speedy exploitation or deepening of sustainable job creation opportunities is particularly needed now to arrest the imminent economic and social catastrophe Nigeria’s current developmental trajectory seems to portend.

The world is going green. Reuters News agency reported on July 1 2019 that nearly 50% of all new cars sold from January to June in Norway were electric, surpassing the 31.2% seen for the full year 2018. India and many European Union countries have ambitious electric car plans. Economically rising China has set ambitious goals for greening their massive economy. Nigeria needs to prepare for a greener world and avoid going from oil mono-economy to a zero-economy! Given Nigeria’s influence and economic size relative to other Sub-Saharan African countries, this study is important in the creation of a pathway to utilising green entrepreneurship to guide policy aimed at getting Africa out of the woodworks.

The study enriches the academic knowledge in green entrepreneurship in Nigeria – a discipline area that is not yet sufficiently explored compared to other parts of Africa. The study should be of benefit to policy makers and investors on policies and practices that can ignite or catalyse green entrepreneurship.

Research Objectives

This study critically examined whether GEPs present opportunities for the internationalization of Nigerian SMEs and specifically, whether

- i. giving attention to environmental or ecological preservation, promotes Nigerian SME internationalization.
- ii. green product design affects Nigerian SME internationalization.
- iii. energy efficiency measures supports Nigeria SME internationalization.
- iv. the adoption of circular economy models supports Nigerian SME internationalization.
- v. the extent to which positive social contribution support Nigerian SME internationalization.
- vi. ethical acceptability standing supports Nigerian SME internationalization.

Scope of the Study

The study targeted owner-CEOs of 250 Nigerian SME in Lagos, 199 of which returned properly filled-out questionnaires representing 79.6%. Lagos was chosen as the context because, of the about 38,000 SMEs in Nigeria, about 24,000 are in Lagos representing about 60%. That Lagos is arguably the commercial nerve centre of Nigeria is corroborated by the 60.3% application from Lagos alone in the 2019 Carbon SME funding offer, with Rivers a distant 2nd at 6%. The remaining 34 states of the Federation and the FCT shared the remaining 33.7% (Carbon, 2019). Lagos is the most populous, most ethnically diverse, and headquarters of most Nigerian companies that have internationalised (Nwangwu & Oni, 2015).

Summary of Applicable Models/Approaches to Internationalisation.

Table 1 list the internationalisation models/approaches as well as some opportunities relevant to Nigerian SMEs that were considered in this study.

Table 1: Internationalisation Theories and SME Opportunities.

Theory/Approach	Opportunities Open to Nigerian SMEs
Heckscher-Ohlin (or factors proportions).	Export products that utilize Nigeria’s Oil & gas, arable land, cheap labour, clement weather, solid minerals.
The Linder hypothesis	Nigeria can trade with (West African and other common wealth)

(demand-structure hypothesis).	countries with similar demand structures like Ghana, Kenya, Liberia, and South Africa.
Foreign direct investment (FDI).	Opportunities in fast growing market and a resource-rich Nigeria.
Monopolistic advantage theory.	Foreign companies compete easier due to (1) Junior employee respect for foreigners, (2) Asymmetric information, (3) Conflict removal entry approach, and (4) Diversification risk reduction.
Non-availability approach.	International trade from imports that are absolutely or relatively unavailable at home, e.g. cloud computing infrastructure.
Technology gap theory.	Technological diffusion into Nigeria is enabled by IT, large local market, and geographical connectivity in areas like 5G telecoms.
Uppsala model.	Companies gain experience from the domestic market before internationalising. Nigeria’s huge domestic market arising from its about 200 million population can be put to great advantage.
Diffusion of innovations.	Nigerian-grown technologies and practices to address oil pollution, water hyacinth invasion, could diffuse to other markets with lag times presenting internationalisation possibilities.

Conceptual Framework.

Figure 1 represents the conceptual framework between GEPs and SME Internationalisation of this study. The entrepreneurial activities of SMEs interact with their unique characteristics such that SMEs can imbibe GEPs to achieve business expansion through internationalisation. The research paradigm of the possible relationship of GEPs and internationalisation was explored.

Fig. 1: Conceptual Model of Relationship between Green Entrepreneurship Practices (GEPs) and SME Internationalisation.



SMEs’ Characteristics and Practices.

SMEs are typically small in terms of resources relating to staff size, financial resources, and market serviced. They are often owner-managed, or at least have very short command structure with many run by owner-managers, allowing for response agility to issues within their resource capability. The frequent occurrence of CEO owner-managers is such that the temperament, interests, objectives of the CEO significantly influences the SME. Many SMEs are the technology innovation centres generating innovations for the big companies. As the number and variability of SMEs is huge, they often have niche offerings or service niche markets.

Dependent and Independent Variables

Organizational openness to internal innovation, economic profitability, enterprise sustainability and risk management, would be applicable to all entrepreneurial SMEs. SMEs with a green leaning would additionally include concern for environmental or ecological preservation, green product design, energy efficiency, circular economy, positive social contribution, ethical acceptability. These specific set of green concerns particularly relate to GEPs and form the independent variables of this study. Nigerian SME **internationalisation** as a business expansion route is the dependent variable.

Outline of Input, Process and Output of Investigation.

A 5-point Likert scale questionnaire was developed to test the GEPs in language that would be intelligible to the owners and key managers of SMEs. The collection and subsequent usage of the data was done in an ethical manner, respecting the privacy and confidentiality of respondents. The received filled-out questionnaire was subjected to SPSS statistical analysis. The exercise and the entire research in general is self-funded, and has no biased influences.

The study also attempted to figure out whether such internationalisation can accelerate the growth of Nigerian SMEs and so contribute to addressing Nigeria’s dire need for economic development. The metrics received in the returned questionnaire are summarised in Table 3, which by so doing provides what the questionnaire was like.

Innovation, Entrepreneurship, Green Entrepreneurship Clarification.

Table 2: Conceptual clarification: Innovation, Entrepreneurship, Green innovation and Green Entrepreneurship.

	General	Green
Innovation	An application of technical or organizational novelty which is neither an invention nor a development. It is the realization of new or highly improved product or process, a new marketing or organizational method. (Gault, 2016). The first successful generation, development and adaptation of a new idea, behaviour, application of product or process (Damanpour, 1996).	Innovation which decreases negative effects on the environment. (Küçükoğlu & Pinar, 2015). Aims to decrease pollution, improve energy efficiency, reduce waste, use resources sustainably, and encourage recycling and geared towards environmental care and protection. The development of environmental quality or optimum usage of natural resources (Ziegler, 2013).

Entrepreneurship	The process of designing, launching and running a new business, which is often initially a small business (Yetisen et. al. 2015). The capacity and willingness to develop, organize and manage a business venture along with its risks in order to make a profit. (Law, J. (Ed.) 2016).	The activity of consciously addressing an environmental/social problem/need through the realization of entrepreneurial ideas with a high level of risk, which has a net positive effect on the natural environment and at the same time is financially sustainable. (Greent Project, 2018).
-------------------------	---	---

a) Environmental or Ecological Preservation.

The Black Law Dictionary defines Environmental Protection as the practice of protecting the natural environment by individuals, organisations and governments, with the objectives of conserving natural resources, the existing natural environment and, where possible, to repair damage and reverse adverse trends. Environmental protection is closely aligned with environmental preservation which seeks the prevention of undesired changes to ecosystems and their constituent parts, especially those brought about by human activities (Kimikrishna & Manickam, 2017). Environmental waste is a huge, mainly urban, problem in Nigeria, resulting in unsightly surroundings, air and water pollution and disease spread. At the most basic level – environmental segregation of waste and incineration of plastics etc. can be used to generate electricity in a clean manner as has been achieved by Singapore. (Kim & Yan, 2018). With the right policies, the waste generated in the Lagos area and the hunger for electrical power can stimulate SME internationalization from Singapore, say.

b) Green Design:

Green product development, design for environment, design for eco-efficiency or sustainable product design, addresses environmental issues holistically as opposed to the traditional end-of-pipe-control approach with possibly conflicting traditional and environmental attributes. Lemke & Luzio, (2014) posit that important gaps remain between what green consumers demand and what businesses are currently able, or willing, to supply, and that businesses interested in sustainability and internationalisation need to pay particular attention to green product design, as well as ensuring that the production process itself is green. Green product design thinking includes improvement in product, input materials or components, to achieve better environmental performance. Green product and process design activities may include decrease of component toxicity, emissions reduction and increased energy consumption efficiency during product usage, increase in durability, and product recycling schemes (Dangelico & Devashish, 2010), as well as reducing negative environmental effects with the production processes (Cheng, Yang & Sheu, 2014). It also covers the development of products with positive or less negative environmental effects during their lifecycle (Durif, Bolvin & Julien, 2010).

The manufacturing’s of plastics in Nigeria are not executed with enough environmental considerations, and are not designed with consequential environmental fall-out after their use. The potentially beautiful and tourism-attracting Lagos Lagoon is increasingly becoming an unsightly refuse dump for all manner of non-biodegradable rubbish, especially plastics, and marine life is threatened by unregulated chemical dumping. This is inhibitive of business internationalisation by SMEs in the tourism space.

c) Energy Efficiency

Energy efficiency is the use of less energy or eliminating energy waste in performing tasks. This results in the optimisation of energy costs and reduction in greenhouse gas emissions, thus leading to economic and environmental advantages. [Muthulingam, Corbett, Benartzi & Oppenheim](#) (2013) found that profitable energy efficiency opportunities remain under-exploited especially arising from the sub-optimal sequencing of energy efficiency options in a portfolio of opportunities. Optimisation comes from sequencing adoptions from best to worst payback. Oyedepo (2012) broadened the energy efficiency discuss to include the optimised utilisation of resources and networks and regarded a sustainable energy system as one that is cost efficient, reliable and environmentally friendly. He posited that energy efficiency and conservation measures can promote economic development, ensure access to energy, job creation, and climate change mitigation.

Thus, energy efficiency is at the heart of greenness. The crucial difficulty with reaching energy efficiency in Nigeria is that the nation's energy policy is not energy-efficiency-friendly resulting in the undermining of economic growth and environmental conservation. For example, the nationalised archaic central power transmission system and inadequate electrical power generation and distribution has led to the installation of tens of thousands of small individualised petrol and diesel powered generators, with each largely operating sub-optimally having no scope for aggregating the unused power productively. According to Dalberg (2019), the collective capacity of the Nigeria's 22 million small gasoline generators (of 0–4 KVA) is eight times more than Nigeria's national grid, and besides the associated under-supply of power, results in wide-ranging negative impacts on the environment, public health and government budgets (by way of debilitating government petroleum subsidy of \$1.6–2.2 billion yearly). This is clearly unsustainable and unsupportive of the attainment of poverty reduction in particular and the United Nations' Sustainable Development Goals in general.

Nigeria's poor public power supply is a major source of energy inefficiency and contributor to greenhouse gas emission. Unused capacities from household and industry-sized petrol and diesel generators are wasteful and air and noise polluting. Central/public power generation enjoys much better utilization. The wasteful flaring of the gas associated with crude oil production – one of the worst on the world – is also a major contributor to Nigeria's energy inefficiency. Artisanal refining of typically stolen crude oil is not only terribly wasteful but also extremely polluting of the environment. Other aspects of the energy utilisation inefficiency in Nigeria stem from a tradition of “old energy” practices like use of firewood and charcoal for cooking, use of legacy/obsolete equipment, underdeveloped recycling and cyclic processes economy (e.g. electronic, solid, scrap metal, paper, etc.), and lack of capital/financing. Finding a suitable solution to this pervasive problem may have the potential to contribute to improved competitive position, and very likely SME internationalisation via business growth.

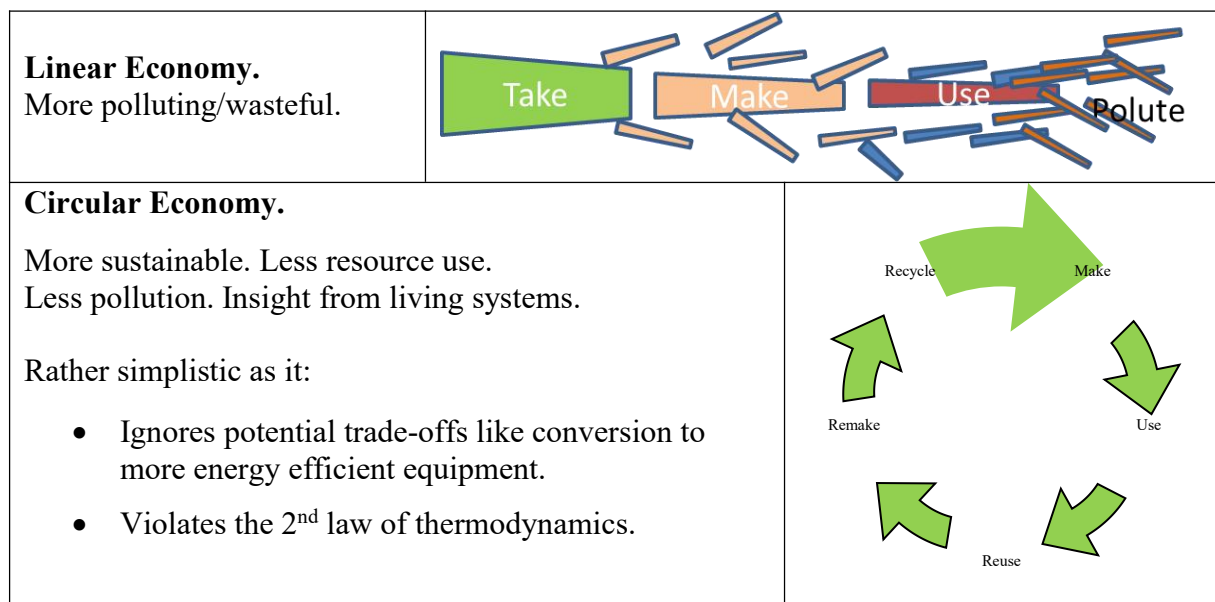
The resolution of the current paradox of Nigeria's low industrialization in the midst of abundant oil, gas and coal supply and a huge domestic market via the creation of an ecosystem of clustered industrial parks presents a huge opportunity for SME business internationalisation. Driven by a global decarbonisation agenda, Ethiopia's economic growth example is worth emulating (Okereke, Coke, Gebreyesus, Wakeford, & Mulugetta, 2018). According to Odutola (2019), Nigeria's Renewable Startup, Rensource announced on 18/12/2019 that it had raised \$20 million in Series A equity round – the largest to date for a Nigerian renewable energy start-up. This is important because the firm is bridging Nigeria's power deficit through the delivery of renewable-based decentralized energy, focusing primarily on SMEs.

d) Circular Economy

A Circular Economy (CE) is an economic system aimed at minimising resource inputs by continual use, re-use, sharing, repair, refurbishment, or recycling of resources (Geissdoerfer, Savaget, Bocken & Hultink, 2017). CE supports sustainability by minimising or eliminating waste, pollution and carbon emissions. Unlike the traditional or linear economy that follows the take-make-use-dispose paradigm, CE extracts the most value from a resource followed by recovering and regenerating products or other inputs at the end of the service life. CE covers industrial, practice and policies scopes (Ranta, Aarikka-Stenroos, Ritala & Mäkinen, 2018). CE examples that minimises resource use applicable to Nigerian SMEs include the selling of services rather than products and multi-client rental rather than ownership models in traditional ownership areas like wedding gowns, electronics, furniture, and transportation. These can increase revenues per unit, thus decreasing the need to produce more to increase revenues. Other CE examples are scrap metal, plastic, paper, computer/electronic waste, saw-dust, tires and shipping containers recycling.

Figure 2 schematically compares Linear Economy with Circular Economy. The linear economy takes the earth’s green resources to make usable products, but in the process, creates and discards waste during the making process, and pollutes the earth during and after the use of the products. On the other hand, Circular Economy is the near-evergreen make-use-reuse-remake-recycle-make circularity as illustrated. It is described as “near-evergreen” because perfect circular conservation is physically unattainable, in line with the second law of thermodynamics.

Figure 2: Linear versus Circular Economy



SME internationalisation opportunities are potentially plentiful as several multilateral agencies (like the World Economic Forum, United Nations Environmental Programme, World resources Institute, Ellen MacArthur Foundation), their over 40 partner-multinational corporations (like IKEA, Alphabet Inc, and Coca-Cola) and their government partners/institutions (from The Netherlands, Finland, China, Rwanda, etc.) declared their intention in 2018 to develop models of blended finance for circular projects for

developing economies under the Platform for Accelerating the Circular Economy (PACE) project (WEF, 2019). This is a veritable opportunity for Nigerian SMEs in electronics waste management, scrap metal recycling, disused plastics recycling, used tires recycling, etc.

e) Social Contribution

Beyond delivering on financial performance and meeting tax obligations, society increasingly demands, and organisations have also realised, that companies, serve a *social* purpose (i.e. make *positive contribution* to society), to prosper over time (Khojastehpour & Johns, 2014). Examples of social contributions include local volunteer work, cooperating in the national effort to find solutions to the social challenges (health, economic empowerment, support of the socially vulnerable, assistance to charitable organizations), infrastructure and human capacity development, etc. Corporate giving by way of positive social contribution in Nigeria is not without its own problems. In the Niger Delta region, for example, where local communities from whose land the Nigerian state has derived billions of dollars in petro-dollars in the midst of a near-absence of government presence, oil multinationals face problems of delivering social contributions. Instances abound where communities have demanded to be paid sums of money before they would allow the construction of roads by oil multinationals in their communities. Even when some social contributions are made, an entitlement mind-set prevents the full realisation of the harmonious relationship that such positive social contribution should ordinarily result in. In other instances, intended social contributions are captured by a few community elites with vested interests as have happened in Ogoni and Kula communities of Rivers state, amongst others. In spite of these occasional delivery bottlenecks, opportunities abound for positive social contribution as an enabler for business expansion through internationalisation.

According to a PriceWaterHouseCoopers 2019 report, Nigeria migrant remittance inflows amounted to \$23.63 billion in 2018, representing 6.1% of Nigeria's GDP, 83% of the Federal Government 2018 budget, and 11 times the FDI flows in the same period. Some 30% of this sum is investment-related presenting a veritable funding source for entrepreneurial SME creation. The investment proportion and size of this positive social contribution can be significantly increased with the right government policies to contribute more to entrepreneurial endeavours. Moreover, it is much easier encouraging other nationals to invest in Nigeria via FDI, when Nigerians themselves are sending money home.

f) Ethical Acceptability

In this study, ethical acceptability refers to a broader conceptual reflection on the enterprise practise which considers moral and social acceptance issues that emerge as a consequence, especially those with international ramifications. These moral and social acceptance issues go beyond the tendency by industries to primarily focus on clients and end-users, to wider societal inclusion. (Martinuzzi, [Blok](#), [Brem](#), [Stahl](#) & [Schönherr](#), 2018). Some problems that can impede these from the perspective of Nigerian SMEs include cross-cultural ethical issues vis-à-vis Nigeria versus other countries targeted for internationalisation, and the pervasive corruption and weak application of the rule of law in Nigeria. International companies would either by the force of legal compliance or out of enlightened self-interest seek out ethically-compliant SMEs to do business with. Opportunities with SME internationalisation are however present given the “hunger-inspired” compliance with sound ethical principles if SMEs must grow via internationalisation. International food standards must be met if Nigerian SMEs are to be allowed to export agricultural products like yams and meat products to international markets.

Example vehicles through which GEPs are deployable

Table 3 below lists some routes which we have referred to as example vehicles through which the various green practices are deployed or deployable and some associated issues and challenges pertinent to Nigeria.

Table 3: Green entrepreneurial practices.

Green practices.	Example vehicles.	Issues.
Environmental/ Ecological preservation.	Waste recycling. Ecotourism.	Different growth stage of rich vs. poor countries. Green usage of returns from hydrocarbon investment.
Green product design.	Cultivation of innovative intermediaries. IT support for agriculture. Plant based meat.	Technological affinity versus business stability.
Energy efficiency.	Partnerships to facilitate access to affordable, reliable, renewable and sustainable energy.	Global peer pressure with international awakening to global warming and need for joint action. What do poor countries do with abundant coal and oil resources in the face of global peer pressure?
Circular economy	Waste recycling, resource re-use. Organic farming.	Logistical issues with waste collection. Technical impossibility of 100% circularity.
Positive social contribution.	Solve social problems around education, health and economy. Greenness index generation.	Poverty alleviation. Social safety net. Elite capture. Concurrent concern for profitability.
Ethical acceptability.	Adherence to corporate governance stipulations. Ethics and compliance. Transparency	Sell pollution control concerns, risk management, cost reduction. Cultural variability. Lobby by non-green industry e.g. logging (in Nigeria).

The Role of Government

Finally, although governance was not listed amongst the green entrepreneurship practices being discussed, it has an overarching role in SME internationalisation, especially given its powerful role over whether or not ethical considerations can thrive. Without the right enactment and adherence to laws, rules and regulations, policies, SME internationalisation will not happen. A simple legislation mandating the inclusion of 5% high quality Cassava flour in baking bread would transform the cassava industry and provide a positive socio-economic impact to millions of farmers and spur internationalization. A delegation of solid minerals control from the Federal Government of Nigeria to the States or Local Governments would ignite massive uptake in regulated solid mineral mining (for bitumen, gold, columbite, etc.) by SMEs, and be on their way to internationalisation. Success in

government efforts to provide adequate public electrical power in Nigeria would vastly transform the SME and general business landscape.

Small and Medium Scale Enterprises (SMEs)

Small and medium-sized enterprises (SMEs) are businesses whose personnel numbers and financial strength fall below certain limits which vary around the world. In the European Union, SME are enterprises which employ fewer than 250 persons and have an annual turnover not exceeding 50 million Euros, and/or an annual balance sheet total not exceeding 43 million Euros (EU, 2016). As defined by the Central Bank of Nigeria, SMEs are businesses with turnover of less than one hundred million Naira (N100m) per annum and/or less than 300 employees.

Generally, SMEs outnumber large companies by a wide margin and also cumulatively employ a lot more people. For example, Australian SMEs make up 98% of all Australian businesses, produce one-third of the total GDP and employ 4.7 million people.

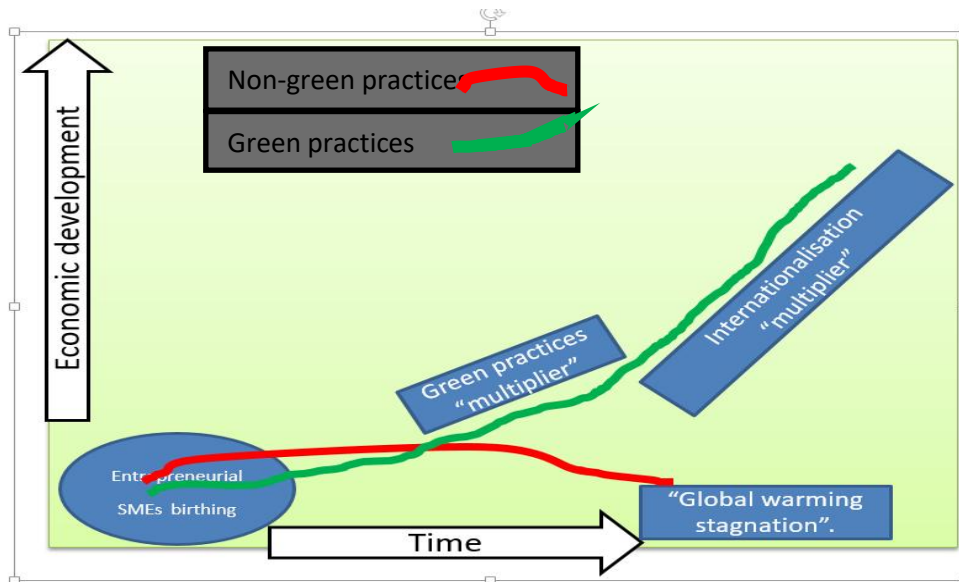
In developing countries, generally, SMEs have a larger share than in developed countries and drive innovation and competition in many economic sectors. SMEs are important for economic and social reasons, given the sectors role in employment. As elsewhere, SMEs with entrepreneurial orientation in a transition country like Nigeria potentially represent the most dynamic actors of the economies (Emoke - Szidónia, 2015). It is worth investigating therefore what roles such SMEs can play in the economy against the backdrop of business internationalisation, especially when imbued with green practices. Studies on green entrepreneurship orientation in developing economies are scanty, with the predominant literature concentrating on the wider entrepreneurship orientation for developed economies, even if mainly covering decisions, processes and practices that help with new entry (Covin & Miller, 2014).

SMEs are important for technological innovation, can generate huge employment opportunities, stimulate competition, enhance quality of human resources, nurture a culture of entrepreneurship, support large scale industries and open new business opportunities (Weerakkody, (2013) in Rahman & Ramli (2014). A 2010 Survey on SMEs in Nigeria by the National Bureau of Statistics in collaboration with SMEDAN, revealed that the SME sector in Nigeria can provide up to 80% of jobs, increase value addition to raw materials supply, improve export earnings and unlock economic expansion and GDP growth.

Research Conceptual Model

The research conceptual framework first posits as follows: Entrepreneurial ventures often create SMEs. Non-green entrepreneurial ventures may have a head start via focussing mainly on short term financial gains. In time, such growth spurts when they occur, level out, followed by stagnation or decline in the long term. Such non-green ventures are likely to in the long run lead to a non-sustainable future and thus ultimately, poverty. On the other hand, GEPs present opportunities for business growth and internationalisation. That GEP-enabled SMEs even if they have a slower start, would provide a boost to SMEs' longer-term growth as the global concern for sustainability intensifies. The green practices of such firms grow the enterprises in what can be termed a "green-multiplier" which in turn subsequently enables an "internationalisation multiplier" via cross-border business expansion. The schematic below illustrates this postulation, namely that whilst traditional entrepreneurship approaches may lead to early growth, followed by a peaking and ultimate stagnation and demise of a business, the adoption of GEPs presents a business "GEP growth multiplier" which in turn enables and "internationalisation multiplier".

Figure 3: Multiplier concept: Green Practices and Internationalisation.



Gap in Literature.

Although the family of practices that can be associated with green entrepreneurship are fairly well known, what opportunities for SME internationalisation they may offer has not been previously adequately studied. If GEPs support SME internalisation, their relative or interactive contribution to the process is not known. It is yet unknown if “born-green” SMEs have any advantage over traditional SMEs that later take on green practices. It is also not established whether or not GEPs have any “multiplier effect” on business growth or on business internationalisation.

It can be argued that switching to green practices now, especially as it relates to the exploitation of natural resources like crude oil, coal, forestry, etc. is ill affordable to developing economies like Nigeria. The developed economies exploited their natural resources like crude oil, timber and coal in the past to achieve the economic positions that have enabled their switching to their relatively higher green ways today. Egging on developing economies to leapfrog to greenness without providing for the “bridging” financial and other enablement would be a hard-sell, especially when the benefits of greenness is not geographically limited. Discouraging the developing economies from exploiting their (limited) natural resources amounts to having them disproportionately pay the price for global environmental health with their paltry financial resources.

In some cases, some of what is considered preferred green practice today may yet turn out to be more harmful to the environment than practices that prevailed before them. Some examples of this, highlighting the desirability or otherwise of aspects of the current green pursuit are presented below:

- ◆ Wood harvesting from renewable forestry in the US and exported to fire turbines in the UK was until recently considered to be a green practice. Recent calculations have however shown that this is not so given the 30 to 40 years required to replace the trees, during which time unrecoverable environmental damage would have been done (Styles, 2016).

- ◆ There is increasing evidence that methane leakages from interconnecting piping in the use of natural gas – currently considered green – may be contributing more to global warming than hitherto thought.
- ◆ The rapidly expanding coverage of solar panels may have undesirable consequence of limiting sunshine from reaching oxygen-producing plants depending on sunlight for photosynthesis. Solar cell insolation requires that plant life underneath the solar panel areas would be denied sunlight. This in itself constitutes a non-green practice, resulting in diminished oxygen production from photosynthesis.

The negative side or cost of pursuing SME green entrepreneurship in Nigeria, re-tooling away from the traditional practice of slash and burn rural subsistence farming, unemployment associated with mechanisation-induced rural farmer depopulation, etc. have not been estimated. The existence or otherwise of a GEP multiplier or its quantification and slope behaviour of possible green practices multiplier and internationalisation multiplier are also unknown.

Quantitative Survey Instrument

Summarised Results

The received summarisation of the responses are embedded in the questionnaire as shown below. The responses to group 1 through 5 in section A, indicates that under Gender, the 199 respondents were comprised of 113 males representing 56.8% and 86 females representing 43.2%. The numbers in the 5-point Likert scale are described as follows for the statement “It does not matter if people around me suffer, so long as my business is profitable” under Environmental preservation: 36 respondents representing 18.1% of the 199 respondents Strongly Disagreed. A summation of the Disagree and Strongly Disagree group represents a general polarisation of respondents who disagree with the assertion as represented in the last column. Thus, in this case, 49.3% generally disagree. The aggregate disagreement with all the assertions under Environmental Preservation is represented by 66.45% in the top line. Other Green Entrepreneurship segments entries should be similarly interpreted.

SECTION A: Groupings

1. **Gender:**
Male (113 / 56.8%), Female (86 / 43.2%). Total 199
2. **Age range:**
18-27 (56/28.1%), 28-37 (97/48.7%), 38-47 (29/14.6%), 48 & above (12/6%).
3. **Highest Educational Attainment:**
WASC/Equivalent (35/17.6%), HND/BA/BSc/Professional Qualification (121/60.8%), MSc/MA/MBA (39/19.6%). Ph.D. (2/1%). Others (2/1%)
4. **Marital status:**
Married (57/28.6%), Widowed (65/32.7%), Single (61/30.7%). Divorced/Separated (15/7.5%)
5. **Occupation:**

Farming (16/8%), Trading (36/18.1%), Manufacturing (86/43.2%), Services (42/21.1%), IT (18/9.5%), Others (0/0%).

Table 4: Summary of collated data from questionnaire returns.

On a 5-point scale: 1. "Strongly agree (SA)", 2. "Agree (A)", 3. "Neither agree nor disagree (N)", 4. "Disagree (D)", or 5. "Strongly disagree (SD)" with the following statements.						
	SA	A	N	D	SD	D+SD %
Environmental preservation.	Number out of 199/Percentage (%)					66.45
It does not matter if people around me suffer, so long as my business is profitable.	12/6.0	21/10.6	68/34.2	62/31.2	36/18.1	49.3
Global warming is not important to me and my business.	3/1.5	16/8.0	51/25.6	84/42.2	45/22.6	64.6
Government would clean the environment, mine is just to do my business.	4/2.0	5/2.5	39/19.6	95/47.7	56/28.1	75.8
It does NOT matter if my grand-children cannot inherit my business.	3/1.5	3/1.5	40/20.1	95/47.7	58/29.1	76.1
Green product design.						79.03
It is NOT important to consider the environment in designing products.	6/3.0	4/2.0	35/17.6	90/45.2	64/32.2	77.4
Once the product is used, I just throw it away.	7/3.5	6/3.0	30/15.1	103/51.8	53//26.6	78.4
Disposable plastic bottles are better than repeat-use bottles.	5/2.5	9/4.5	25/12.6	95/47.7	65/32.7	80.4
I do not need to find other ways of using an old product.	5/2.5	9/4.5	26/13.1	96/48.2	93/31.7	79.9
Energy efficiency.						82.05
Energy efficient bulbs are not worth using.	7/3.5	5/2.5	25/12.6	87/43.7	75/37.7	81.4
Lower fuel consumption machines do not matter much.	5/2.5	8/4.0	19/9.5	96/48.2	70/35.2	83.4
Using energy efficiently would not help my business grow internationally.	3/1.5	7/3.5	24/12.1	100/50.3	65/32.7	83.0
If electricity is cheap, I do not bother economizing.	6/3.0	8/4.0	25/12.6	103/51.8	57/28.6	80.4
Circular economy.						83.58
If raw materials are free, there is no need to reduce wastage.	5/2.5	5/2.5	33/16.6	99/49.7	57/28.6	78.3
The waste product from my business cannot be useful to others.	1/0.5	7/3.5	21/10.6	104/52.3	66/33.2	85.5
Re-cycling waste is a waste of time.	0/0	8/4.0	20/10.1	104/52.3	67/33.7	86.0
The adoption of circular economy model is not useful.	2/1.0	4/2.0	25/12.6	107/53.8	61/30.7	84.5

Social contribution.						82.58
My business does not benefit from my CSR activities.	3/1.5	3/1.5	27/13.6	104/52.3	62/31.2	83.5
CSR activities are a waste of resources.	6/3.0	5/2.5	24/12.1	106/53.3	58/29.1	82.4
Since I pay taxes, I do not need to do CSR.	4/2.5	4/2.0	26/13.1	107/53.8	57/28.6	82.4
My business does not benefit from people around me.	4/2.0	5/2.5	27/13.6	101/50.8	62/31.2	82.0
Ethical acceptability.						81.33
Being smart is important in business. If the customer does not inspect the product well before buying, it is his/her fault.	10/5.0	5/2.5	22/11.1	112/56.3	50/25.1	81.4
My business can still grow without customer trust. Ethical behaviour is not important to my business.	6/3.0	9/4.5	25/12.6	104/52.3	55/27.6	79.9
Sound ethical behaviour cannot help my business attract overseas partners or investors.	4/2.0	7/3.5	24/12.1	104/52.5	60/30.2	82.7

Continuation: On a 5-point scale	SA	A	N	D	SD	D+SD %
Internationalisation.						81.24
Protecting the environment cannot help my business go international.	5/2.5	11/5.5	17/8.5	107/53.8	59/29.6	83.4
International companies would NOT like to do business with me if my business is environment conscious.	2/1.0	11/5.5	24/12.1	102/51.3	60/30.2	81.5
“Greenness” cannot help SMEs internationalise.	7/3.3	10/5.0	27/13.6	94/47.2	61/30.7	77.9
My business is “green” if it protects the environment but being “green” cannot help my business expand internationally.	6/3.0	9/4.5	25/12.6	98/49.2	61/30.7	79.9
Environmental preservation does not promote SME internationalization.	2/1.0	8/4.0	23/11.6	106/53.3	60/30.2	83.5
Link between “greenness” and business growth.						84.08
It is bad practice to design products to be used again and again.	4/2.0	9/4.5	13/6.5	111/55.8	62/31.2	87.0
Inconveniencing others whilst making our products is not important.	3/1.5	8/4.0	21/10.6	109/54.8	58/29.1	83.9
The way we make our products cannot help us grow.	4/2.0	5/2.5	23/11.6	107/53.8	60/30.	83.8
“Greenness” cannot help SMEs accelerate their growth.	4/2.0	6/3.0	22/11.1	112/56.3	55/27.6	83.9
Green companies in Nigeria cannot be sought after by international companies.	3/1.5	8/4.0	26/13.1	108/54.3	54/27.1	81.4

Green practices in my business is irrelevant in securing international support/patronage.	2/1.0	7/3.5	22/11.1	107/53.8	61/30.7	84.5
Resistance to adopting green practices.						78.25
Adopting green practices now is NOT in Nigeria's best interests.	4/2.0	9/4.5	24/12.1	101/50.8	51/30.7	81.5
Pursuing greenness now will slow Nigerian SMEs down.	7/3.5	11/5.5	25/12.6	101/50.8	55/27.6	78.4
Europe and America previously exploited their non-green resources like coal and nuclear energy to develop. Nigeria should embrace greenness now and abandon her coal and crude oil.	8/4.0	10/5.0	25/12.6	97/48.7	59/29.6	78.3
Nigeria should exploit her natural non-renewable resources like coal, crude oil, etc. and the greening of the economy concurrently.	4//2.0	18/9.0	28/14.1	97/48.7	52/26.1	74.8
SME desirability or otherwise for growth.						73.7
I like the freedom running my own business gives me.	6/3.0	15/7.5	27/13.6	97/48.7	54/27.1	75.8
I prefer to work when I like.	3/1.5	15/7.5	29/14.6	102/51.3	50/25.1	76.4
Being my own boss is more important to me than growing the business.	5/2.5	16/8.0	29/14.6	97/48.7	52/26.1	74.8
I prefer to enjoy the current level of the business rather than stress myself.	10/5.0	19/9.5	35/17.6	83/41.7	52/26.1	67.8

Data Presentation, Analysis and Interpretation

Analysis of Major Research Questions

Research Question 1: To what extent would giving attention to environmental or ecological preservation, promote Nigerian SME internationalization?

The findings showed that 49% representing majority of the respondents disagreed with the assertion that it does not matter if people around them suffer, so long as their businesses were profitable, 34% were indifferent while 17% agreed. Sixty-four (64%) disagreed with the assertion that global warming is not important to their business. A total of 75.8% disagreed that government alone should be responsible with cleaning the environment, leaving them to only worry about their businesses. Finally, 76.8% did not agree that it does NOT matter if their grand-children could not inherit their businesses. The result of the descriptive statistics confirmed the positive significance of the relevance of environmental or ecological preservation in the promotion of Nigerian SME internationalisation. (Mean=3.8003 and SD=0.76664).

The above implies that it matters to business profitability that people around the business do not suffer especially as a consequence of the business' operations. Business' influence on global warming and the effects of global warming are important to business. Business should not be deleterious to environment. Finally, the interest in having the grand-children of a business owner or promoter inherit the business is an indication of a desire for business sustainability and longevity. Overall, these responses cumulate to

suggesting that giving attention to environmental or ecological preservation promotes Nigerian SME internationalization.

Research Question 2: How does green product design positively affect Nigerian SME internationalization?

The finding here shows that 77.4% of the respondents believe that it is important to consider the environment in designing products. Also, a majority of the respondents at 78.4% disagreed that once products are used, they should thereafter be discarded. In other words, finding avenues for product reuse is considered a good thing. They rejected the assertion that disposable plastic bottles are better than repeat-use bottles (80.4%) possibly due to the recognition of the higher propensity of plastics to lead to environmental pollution. Finally, a total of 79.9% representing majority of the respondents disagreed that they do not need to find other ways of using an old product. The descriptive statistics (Mean=4.0050, SD=0.76746) shows positive results in favour of green product design being considered beneficial to SME internationalisation.

Research Question 3: Does Energy Efficiency support Nigeria SME internationalization?

The data shows that 81.1% of the respondents disagreed that energy efficient bulbs are not worth using. In other words, they agree that the use of energy efficiency bulbs is beneficial. The assertion that lower fuel consumption machines do not matter much was also rejected (83.4%). Majority of the respondent agreed that energy efficiently measures would help businesses grow internationally (83%). Similarly, respondents disagreed with the assertion that if electricity is cheap, they would not bother economizing. Descriptive statistics presents a good results here too (Mean=4.0716, SD=.71657). The result implies that energy efficiency measures support Nigeria SME internationalization. The finding additionally shows also that using energy efficiently would help businesses grow internationally and if electricity were cheap, and could still be economically consumed.

Research Question 4: How does the adoption of circular economy support Nigerian SME internationalization?

The data shows that the adoption of circular economy practices support Nigerian SME internationalization. Majority of the respondents (78.3%) were not in agreement with the assertion that “If raw materials are free, there is no need to reduce wastage”. 85.5% of the respondent disagreed that the waste product from their business could not be useful to others. More so, 86% disagreed that recycling waste is a waste of time. 84.5% representing majority of the respondents disagreed that the adoption of circular economy model is not useful. The descriptive statistics shows (mean =4.1005 and SD =0.71657) positive result with regard to the research question. The data indicates that even if raw materials were free, there would still be a preference for minimising wastage and that the waste products from one business activity could still be useful to another. Waste re-cycling is therefore not considered a waste of time. Therefore, the adoption of circular economy practices support Nigerian SME internationalization.

Research Question 5: To what extent would social contribution support Nigerian SME internationalization?

First, 83.5% of the respondents disagreed that their businesses do not benefit from their CSR activities. Also, 82.4% disagreed that CSR activities were a waste of resources. In the same way, a total of 86.4% were in disagreement with the assertion that “Since I pay taxes, I do not need to do CSR”. This implies that they undertake CSR activities in addition to paying taxes and do not see the payment of taxes as

obviating of the need to conduct CSR activities. They also disagreed with another assertion that their business do not benefit from people around them. Mean score is 4.0590 and standard deviation is 0.63013. The finding therefore reveals that the clear inclination is that social contribution supports Nigerian SME internationalization.

Research Question 6: How does ethical acceptability support Nigerian SME internationalization?

To this question, majority of the respondents (81.4%) disagreed with the assertion that “being smart is important in business” and that “If the customer does not inspect the product well before buying, it is his/her fault”. The respondents therefore accept the responsibility to provide quality products or services that meet the requirements of his customers.

The majority of the respondents (79.9%) also disagreed with the statement that “business can still grow without customer trust” and that “Ethical behaviour is not important to my business”. Finally, a total of 82.7% disagreed that sound ethical behaviour cannot help business attract overseas partners or investors. The result shows (Mean=3.9866, SD=.63013) positive implication of ethical responsibility in business.

The responses here therefore shows the importance accorded ethical acceptability as an enabler for business internationalisation. Business growth, in the view of the respondents, would be stunted without customer trust and ethically acceptable behaviour. Finally, sound ethical behaviour helps business attract overseas partners or investors.

Internationalization

Majority of the respondents (83.4%) disagreed that protecting the environment cannot help their businesses to go international. They (81.5%) also disagreed that international companies would NOT like to do business with them if their businesses were environment conscious. Majority of the respondents (77.9%) disagreed that “greenness” cannot help SMEs internationalize while (79.9%) disagreed that with the assertion that “my business is “green” if it protects the environment but being “green” cannot help business expand internationally”. They therefore affirm that “greenness” relate to concern for the environment and does help SME business expand internationally. As 83.5% of respondents, representing the majority, disagreed with the assertion that environmental preservation does not promote SME inter-nationalization, this suggests environmental preservation does promote SME internationalization. The descriptive statistics shows high mean score and standard deviation in support of internationalization as follows: Mean = 4.0211, SD = 0.66739.

Summary of questionnaire responses outcome:

The combined responses for “Disagree” and “Strongly Disagree” represents the GEP desirability responses ranging from 66.6% to 83% and averaging 79.2%. The favourability that the GEPs would positively contribute to SME internationalization averages at 81.2%. And the belief that greenness would lead to business growth averaged 84.1%. The non-resistance to the adoption of green practices was at 78.3%.

SMEs aspects	Percentage (%)
Environmental preservation.	66.5
Green product design.	79.0
Energy efficiency.	82.1
Circular economy	83.6
Social contribution.	82.6
Ethical acceptability	81.3
Average for GEPs desirability	79.2
GEPs potential to help Internationalisation	81.2
Link between “greenness” and business growth.	84.1
(Non-)Resistance to adopting green practices.	78.3

Fig 4. SME internationalization as a function of GEPs.

$$\text{SME Internationalisation} = \sum_{i=1}^n F_{n_i}(\text{GEP}_i)$$

Discussion of Findings

The analysis on “giving attention to environmental or ecological preservation” shows that it matters a lot if people around businesses suffer as a consequence of the business activities of the enterprise, and that this can be deleterious to businesses profitability. With a probability value or p-value less than 0.05, it follows from the hypothesis testing that giving attention to environmental or ecological preservation promotes Nigerian SME internationalization.

The result from analysing green product design shows that it is important to consider the environment in designing products and services and that prior consideration for environmental conservation aspects be given attention in the design of products and services. Hence, there is need to find other ways of using an old product or used product. One can safely conclude that green product design has positive effect on Nigerian SME internationalization. This is in line with Lemke & Luzio, (2014) who posited that important gaps remain between what green consumers demand and what businesses are currently able (or willing) to supply, and that businesses interested in sustainability and internationalization need to pay particular attention to green product design, as well as ensuring that the production process itself is green. Green product and process design activities may include decrease of component toxicity, emissions reduction and increased energy consumption efficiency during product usage, increase in durability, and product recycling schemes.

The result implies that energy efficiency measure support Nigeria SME internationalization following the respondents' view that energy efficient bulbs are worth using and that using lower fuel consumption machines matter. The finding shows also that using energy efficiently would help businesses grow internationally. [Muthulingam, Corbett, Benartzi & Oppenheim](#) (2013) corroborates this finding in their statement that profitable energy efficiency opportunities remain under-exploited especially arising from the sub-optimal sequencing of energy efficiency options in a portfolio of opportunities. Optimization comes from sequencing adoptions from best to worst payback.

Result on adoption of circular economy shows that if raw materials were free, there is still need to reduce wastage and the waste product from business activities is useful. Re-cycling waste is not a waste of time and the adoption of circular economy model is beneficial. Therefore, the adoption of circular economy model has significant positive influence on Nigerian SME internationalization ($p < 0.05$). Corroboration is found for this from Ranta, Aarikka-Stenroos, Ritala & Mäkinen, (2018) in their view that Circular Economy (CE) - which covers industrial, practice and policies scopes - extracts the most value from a resource followed by recovering and regenerating products or other inputs at the end of the service life.

The findings reveal that positive social contribution supports Nigerian SME internationalization since businesses benefit from their CSR activities. Executing CSR activities are not a waste of time. The payment of taxes does not obviate the need for businesses to undertake CSR activities. In being involved in CSR undertakings, businesses in turn benefit from the people in their neighbourhood. With a p-value less than 0.05, positive social contribution has significant positive influence on Nigerian SME internationalization.

Summary of Findings, Conclusions, and Recommendations

Summary of Findings and Conclusions

SMEs' huge contribution to economic development in most economies derive from the promotion of indigenous entrepreneurship, employment generation, income redistribution, output expansion, and production of input goods to strengthen industrial linkages (Hussain, 2017). From the research conducted, we reach the following conclusions:

- i. Nigerian SME internationalization can be promoted by giving attention to environmental or ecological preservation.
- ii. Nigerian SME internationalization is significantly positively affected by green product design.
- iii. Nigerian SME internationalization is supported by the adoption of energy efficiency measures.
- iv. The adoption of circular economy models significantly supports Nigerian SME internationalization.
- v. The adoption of positive social contribution significantly supports Nigerian SME internationalization.
- vi. Nigerian SME internationalization benefits from their being viewed as being of good ethical standing.

The data analyses show that the greenness of a business is indicative of its concern for and ability to contribute to environmental protection. These attributes contribute to energizing it to compete favourably and so gain recognition and expansion internationally.

Human economic activities which lead to global warming, at best produce economic growth (rather than development), and at worst, lead to global warming, which ultimately lead to poverty via unsustainable resource utilisation, environmental degradation, draughts, population displacements, farmer-herder clashes (in West Africa), et cetera. It is desirable to tackle widespread and worsening unemployment via job creation in a manner that does not create future (and more severe) problems. Efforts at job creation require to be done with due regard to the Green Entrepreneurship Practices (GEPs) of environmental or ecological preservation, green product design, energy efficiency, circular economy, positive social contribution and ethical acceptability. As these GEPs help SMEs grow and internationalize, it is recommended that Nigerian SMEs deploy them.

Recommendations

As the future of the human race is tied to the entire earthly eco-system, the considerations for conducting human economic activities should go beyond sustainability to the need to additionally satisfy the United Nations 17 Sustainable Development Goals (SDGs). All practices that can contribute to making SME optimize their economic development, rather than just economic growth boosting role, should be given prominence. In this connection, beyond the traditional practices like organizational openness to internal innovation, economic profitability, enterprise sustainability and risk management to help boost the effectiveness of SMEs, GEPs. The effectiveness of these GEPs in enhancing SME growth is further magnified by their enabling ability to internationalization. This is particularly important to avoid the possible pitfall of today's economic growth leading to accelerating global warming and long-term economic doom for mankind.

These GEPs which involve products, services or processes support the recommendations that

1. There should be increased awareness for SMEs to develop their environmental or ecological preservation consciousness and practice and deploy same to boost business growth through internationalisation.
2. Nigerian SMEs take cognizance of green product design as it is a veritable business internationalisation enabler.
3. SMEs deployment of energy efficiency measures beyond supporting costs optimisation, is a business internationalisation enabler.
4. SMEs that practice the reducing-re-use-recycle dictum of circular economy improve their potential for business internationalisation.
5. Social contribution is beneficial to SMEs business internationalisation agenda.
6. SMEs with sound ethical acceptability standing would benefit more in interactions of the business internationalisation kind.
7. The pursuit of greenness rather than impede growth, is conceptually easily comprehensible and with its promise of long-term benefits, should be embraced by all Nigeria SMEs.
8. This study has demonstrated that in the context of Nigeria, green entrepreneurship practices offer beneficial opportunities for sustainable business expansion and that they help Small and Medium Enterprises' (SME) internationalisation.
9. Nigerian SMEs should adopt GEPs on a broad scale to attract support from foreign advanced economies. For example, on June 4, 2019, the German Federal Ministry for Economic Cooperation and Development (BMZ) launched the Development Investment Fund to attract investments in SMEs in African markets for ecologically and socially sustainable projects, to the tune of US\$4.5 million (Donortracker, 2019).

10. Organizations that mentor budding entrepreneurs e.g. educational institutions like the University of Lagos entrepreneurship curriculum, should advocate the importance of GEPs.
11. Sustainable competitive advantage is being maintained by the West with Africa continuing to play catch-up. Africa must leap-frog to catch-up via green entrepreneurship, especially with the birth of “born-green” SMEs. The combined efforts of government bureaucracy policy entrepreneurs and private sector green champions would be required to achieve this.

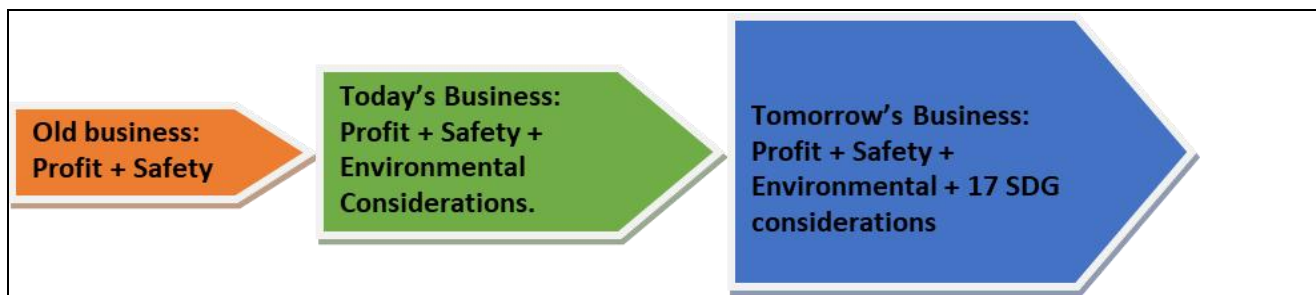
Contribution to Knowledge

This study contributes to a deepening of the green discussion in Nigerian businesses as well as the scanty body of research on the relationship between GEPs and SME internationalization. It presents reference material to the outside world about the green entrepreneurial bent of Nigerian SMEs and the abundance of profitable green opportunities in Nigeria. In the same vein, Nigerian SMEs are helped by this study to become more aware of the beneficial internationalization opportunities GEPs offer.

Switching to green practices now, especially as it relates to the exploitation of natural resources like crude oil, coal, forestry, can be made affordable even in developing economies like Nigeria through ethical acceptability and energy efficiency considerations. All peoples of the world need to work in concert to arrest the current trend of global warming for the joint benefit of all. This is achievable if the policy or decision makers can effectively balance the different needs of the developed and developing economies.

This study also attempts to look beyond the horizon of the discussion on greenness. Beyond the hitherto limited focus on business profitability and focus on safety, today’s businesses are increasingly extending to green thinking, i.e. including focus on environmental considerations. Green as an appellation is often linked with human endeavours aimed at reducing the negative consequences of economic endeavours, a critical part of which is the production of food and oxygen by (green) plants photosynthesising sunlight. In the near future, the focus should go beyond ecological considerations to also satisfying the SDGs. SDGs is more emphasizing of the need for global poverty reduction than only environmental awareness. As SDG considerations is more encompassing, and given the presence of water as a better indicator of the presence of life (as we know it), the appellative colour should be blue. Thus we should be talking about Blue Entrepreneurship Practices. Akin to the Blue Ocean Strategy in Management Studies, Blue Entrepreneurship also evokes thoughts on exploring uncontested grounds in green entrepreneurial endeavour.

Figure 4 The journey towards Blue Entrepreneurship.



Suggestion for Further Studies.

1. A study of companies abroad who wish to invest in Nigeria is required to improve the understanding of what attributes of Nigerian companies they may be looking out for and to what extent greenness features in their consideration.
2. From this study, it can be deduced that GEPs have positive “multiplier effect” on business growth and on business internationalization. However, the need remains to study the actual multiplier of various GEPs to ascertain desired effort ranking and the optimised coupling of GEP combinations.
3. The risks inherent in the selection of green efforts require study as some current supposed green actions may be erroneous. E.g. the US has now realised that replacing coal with natural gas from fracking did not sufficiently address carbon emissions with leaking methane – a worse climate crisis.
4. It remains to be seen how SMEs that adopt greenness at a later stage would compare with SMEs that are “born green”.

Limitations

This study had a number of limitations, including:

- a. Scepticism and suspicion of what the instrument is about. Some SME promoters proved difficult to get to carefully complete the questionnaire as expected. They felt that filling questionnaire was time consuming and unlikely to better their lot.
- b. The sample SMEs were taken from Lagos only. Although Lagos has over 60% of Nigeria’s SMEs, it would have been more nationally representative to include SMEs from other parts of Nigeria.
- c. The preference by some SMEs for the pursuit of independence rather than growth may obfuscate the assessment of the benefits of GEPs in the consideration of some SME promoters.

References

- Abdullahi, M.S. (2019). Three things Nigeria must do to end extreme poverty. World Economic Forum. Downloaded 25//10/2019. <https://www.weforum.org/agenda/2019/03/90-million-nigerians-live-in-extreme-poverty-here-are-3-ways-to-bring-them-out/>
- Ali, M.S.S., Ahamat, A., (2018). Internationalization process of firms from developing country: An empirical evidence of UAE family business firms. *IJASOS International E-Journal of Advances in Social Sciences, Vol. IV*, (Issue 10, April 2018). DOI: 10.18769/ijasos.417700
- Ataman, K., Mayowa, J., Senkan, E., Olusola, A.M., (2018). Green Entrepreneurship: An Opportunity for Entrepreneurial Development in Nigeria. *Covenant Journal of Entrepreneurship (CJoE) Vol. 1 No. 1*.
- Carr, D., (2019). FACT SHEET New Report Shows Wood Pellets from Drax’s U.S. Mills Increase Carbon Emissions During the Timeframe Necessary to Address Climate Change”. https://www.southernenvironment.org/uploads/publications/2019-08-08_FINAL_Biomass_Factsheet_Drax_SIG_Report_Updated1.PDF

- Covin, J., Miller, D., (2014). International Entrepreneurial Orientation: Conceptual Considerations, Research Themes, Measurement Issues, and Future Research Directions. *Entrepreneurship Theory and Practice*, p. 11-44.
- Dalberg, (2019). Access to Energy Institute report titled “Putting an End to Nigeria’s Generator Crisis: The Path Forward”.
https://a2ei.org/resources/uploads/2019/06/A2EI_Dalberg_Putting_an_End_to_Nigeria's_Generator-Crisis_The_Path_Forward.pdf accessed 2/1/2020.
- Damanpour, F. (1996). Organizational Complexity and Innovation: Developing and Testing Multiple Contingency Models. *Management Science*, *42*,(5). <https://doi.org/10.1287/mnsc.42.5.693>.
- Donotracker, (2019). German Federal Ministry for Economic Cooperation and Development (BMZ) launches Development Investment Fund to attract investments in African markets. donotracker@seekdevelopment.org. Downloaded on 5/5/20 from <https://donotracker.org/German-BMZ-development-investment-fund-Africa>.
- European Commission, (2016). User guide to the SME Definition. Downloaded from https://ec.europa.eu/regional_policy/sources/conferences/state-aid/sme/smedefinitionguide_en.pdf on 2/5/20. Ref. Ares (2016)956541 - 24/02/2016
- Fulvia F., Marino B., Sule A., & Philipp A. (2011). Green entrepreneurship: the missing link towards a greener economy.
- Gault, F. (2016). Defining and Measuring Innovation in all Sectors of the Economy: Policy Relevance. OECD Blue Sky Forum III, Ghent, Belgium, 19-21 September 2016
- Geissdoerfer, M., Savaget, P., Bocken, N., & Hultink, E.J., (2017). The Circular Economy – A new sustainability paradigm? *Journal of Cleaner Production*. 143, 757–768. Doi: 10.1016/j.jclepro.2016.12.048. “Greent Project” downloaded from <http://greentproject.eu/wp-content/uploads/2016/01/Definition-green-entrepreneurship.pdf> on 20/8/2019
- Higgins, K.L. (2013). Economic growth and sustainability – are they mutually exclusive? Striking a balance between unbounded economic growth and sustainability requires a new mind-set. *Elsevier*. <https://www.elsevier.com/connect/economic-growth-and-sustainability-are-they-mutually-exclusive?>
- Hussain, M.N., (2017). Linkages between SMEs and Large Industries for Increased Markets and Trade: An African Perspective. African Development Bank, Economic Research Papers No. 53. Downloaded on 18/5/20 from <https://www.afdb.org/fileadmin/uploads/afdb/Documents/Publications/00157640-FR-ERP-53.PDF>
- Katila, R., Chen, E. L., Piezunka, H. (2012). All the right moves: How entrepreneurial firms compete effectively. *Strategic Entrepreneurship Journal*, 6(2), 116–132. Doi: [10.1002/sej.1130](https://doi.org/10.1002/sej.1130).

- Khojastehpour, M. & Johns, R. (2014). The effect of environmental CSR issues on corporate/brand reputation and corporate profitability, *European Business Review*, 26(4), 330-339. <https://doi.org/10.1108/EBR-03-2014-0029>
- Kim, J. & Yan, M. (2018). How Singapore solved garbage disposal. (Video and text). <https://www.businessinsider.com/singapore-waste-energy-garbage-landfill-space-2018>
- Küçüköğlü, M.T. & Pinar, R.I. (2015). Positive Influences of Green Innovation on Company Performance. *Procedia - Social and Behavioral Sciences* 195, 1232-1237. World Conference on Technology, Innovation and Entrepreneurship. Doi: 10.1016/j.sbspro. 2015.06.261. DOI: 10.1016/j.sbspro.2015.06.261.
- Kriticos, A.S. (2014). *Entrepreneurs and their impact on jobs and economic growth*. IZA World of Labor 2014: 8 doi: 10.15185/izawol.8 | wol.iza.org
- Law, J. (Ed.) (2016). *A Dictionary of Business and Management* (6 ed.). Oxford University Press. ISBN-13: 9780199684984. eISBN: 9780191765278. DOI: 10.1093/acref/9780199684984.001.0001.
- [Martinuzzi](https://doi.org/10.3390/su10030702), A., [Blok](#), V., [Brem](#), A., Stahl, B., & [Schönherr](#), N. (2018) Responsible Research and Innovation in Industry - Challenges, Insights and Perspectives. *Sustainability* 2018, 10(3), 702; <https://doi.org/10.3390/su10030702>. Editorial.
- Mathaisel, D.F.X. (2015). Is Scalability Necessary for Economic Sustainability? *European Journal of Sustainable Development*, 4(2), 275-282. ISSN: 2239-5938. Doi: 10.14207/ejsd.2015.v4n2p275.
- Moke-Szidónia, F. (2015). Emerging Markets Queries in Finance and Business International entrepreneurial orientation and performance of Romanian small and medium-sized firms: Empirical assessment of direct and environment moderated relations. *Procedia Economics and Finance*, 32, 186 – 193. Doi: 10.1016/S2212-5671(15)01381-7.
- Muralikrishna, I.V. & Manickam, V., (2017). *Environmental Management: Science and Engineering for Industry*. Chapter Two - Sustainable Development. Pages 5-21. Butterworth-Heinemann. ISBN 978-0-12-811989-1. <https://doi.org/10.1016/B978-0-12-811989-1.00002-6>.
- [Muthulingam](#), S., [Corbett](#), C. J., [Benartzi](#), S., & Oppenheim, B. (2013). Energy Efficiency in Small and Medium-Sized Manufacturing Firms: Order Effects and the Adoption of Process Improvement Recommendations. *Manufacturing & Service Operations Management*. [15\(4\)](#). <https://doi.org/10.1287/msom.2013.0439>.
- Nwangwu, I. & Oni, T. (2015). Lagos and Its Potentials for Economic Growth. Downloaded 25/10/2019. <https://ng.boell.org/2015/07/02/lagos-and-its-potentials-economic-growth>.
- Odutola, A. (2019). Deal: Nigeria's Renewable Startup, Rensource raises \$20 million. Nairametrics. <https://nairametrics.com/2019/12/18/deal-nigerias-renewable-startup-rensorce-raises-20-million/> accesses 2/12020.

- Okereke, C., Coke, A., Geebreyesus, M., Wakeford, J.J., Mulugetta, Y., (2019). Governing green industrialisation in Africa: Assessing key parameters for a sustainable socio-technical transition in the context of Ethiopia. *World Development*, 115, 279-290. <https://doi.org/10.1016/j.worlddev.2018.11.019>.
- Olsen, L. (2009). The employment effects of climate change and climate change responses: A role for International Labour Standards. ILO, Geneva: 2009 32 p. (GURN discussion paper; no. 12). ISBN: 9789221228073 ISBN: 9789221228080. https://www.unclearn.org/sites/default/files/inventory/wcms_122181.pdf.
- Oyedepo, S.O. (2012). Energy Efficiency and Conservation Measures: Tools for Sustainable Energy Development in Nigeria. *International Journal of Energy Engineering IJEE*, 2(3), 86-98. ISSN 2225-6563(print) ISSN 2225-6571(online).
- PCW (2019). Strength from Abroad: The Economic Power of Nigeria's Diaspora. Downloaded from <https://www.pwc.com/ng/en/pdf/the-economic-power-of-nigerias-diaspora.pdf> on 4/1/2020.
- PCW Nigeria, (2019). Nigeria SME Survey: Assessing current market conditions and business growth prospects. Source: <https://www.pwc.com/ng/en/events/nigeria-sme-survey.html>. Assessed 31/12/2019.
- Premium Times, (2020). Small, medium enterprises account for 84 per cent of jobs in Nigeria. Publication dated Apr 7, 2020. Downloaded from <https://www.premiumtimesng.com/business/business-news/215707-small-medium-enterprises-account-84-per-cent-jobs-nigeria.html>.
- Rahman, N.A.A., Ramli A., (2014). Entrepreneurship management, competitive advantage and firm performances in the craft industry: concepts and framework. *Procedia - Social and Behavioral Sciences* 145 (2014) 129–137. <http://creativecommons.org/licenses/by-nc-nd/3.0/>. Doi: 10.1016/j.sbspro.2014.06.019.
- Ranta, V., Aarikka-Stenroos, L., Ritala, P., & Mäkinen, S. (2018). Exploring institutional drivers and barriers of the circular economy: A cross-regional comparison of China, the US, and Europe. *Resources, Conservation and Recycling*. 135, 70–82. [doi:10.1016/j.resconrec.2017.08.017](https://doi.org/10.1016/j.resconrec.2017.08.017).
- Styles, D. (2016). British power stations are burning wood from US forests – to meet renewables targets. *The Conversation Newsletter*. Downloaded on 7/5/2020 on <https://theconversation.com/british-power-stations-are-burning-wood-from-us-forests-to-meet-renewables-targets-54969>.
- Uslu, Y.D., Hancioglu, Y., & Demir, E. (2015). Applicability to Green Entrepreneurship in Turkey: A Situation Analysis. *Procedia-Social and Behavioral Sciences* 195, 1238–1245. <http://creativecommons.org/licenses/by-nc-nd/4.0/>. Doi: 10.1016/j.sbspro.2015.06.266.
- Venture Investment - Regional Aggregate Data. (2016). *National Venture Capital Association and PriceWaterhouseCoopers*. Retrieved on 08 July 2019 from <https://www.pwc.com/us/en/industries/technology/moneytree.html>.

WEF, (2019). WEF helps governments scale up the circular economy. Article by Sue Weekes: News editor, Smart Cities World on 7/11/2019 accessed on 2/1/2020 through <https://www.smartcitiesworld.net/news/news/wef-helps-governments-scale-up-the-circular-economy-4760>.

Yetisen, A.K., Volpatti, L.R., Coskun, A.F., Cho, S., Kamrani, E., Butt, H., Khademhosseini, A., & Yun, S.H. (2015). Entrepreneurship. *Lab Chip*. 15(18), 3638–3660. DOI: 10.1039/c5lc00577a. PMID 26245815.

Ziegler, A. (2013). Disentangling technological innovations: a micro-econometric analysis of their determinants. *Journal of Environmental Planning and Management* Volume 58(2), 315-335. <https://doi.org/10.1080/09640568.2013.855180>.

Rescuing African Youth Future from Unemployment through Early Strategic Training of Adolescents in Coding, Ai, and Robotics for Technopreneurship Opportunities

Chika Yinka-Banjo, Sunday Adebisi, & Joel Adebayo

University of Lagos, Nigeria

Abstract

In Africa, the rapid increase in the youth's population is fast casting a shadow over the economic growth of many countries, leaving one in five youth unemployed as a result of limited number of jobs and opportunities. Using a grass root approach, this paper seeks to show that how early exposure of the young people to trainings in areas like Coding, Artificial Intelligence (AI) and Robotics can help to proffer technological solutions to change the orthodox way of doing things, thereby creating future opportunities that can lead to employment. A training was created in Artificial Intelligence and Robotic Laboratory, University of Lagos. The maiden edition of the training was solely for girls with a goal of training 50 students within the age range of 10 and 16 years to foster problem solving and entrepreneurship zeal at an early stage. The subsequent editions had both boys and girls attended to. In the first edition, interested female students that enrolled through a form were to choose between the Web Application and Android Application Development Course and the training spanned 12 weeks (Saturdays only). The second edition was targeted for both Males and Females in Primary and Secondary schools depending on the track selected – Scratch Programming and App Inventor for Android Development. This edition lasted for 4 weeks of intensive hands on practical. The four weeks was equivalent of the 12 weeks done in the previous edition; this is because they utilized the one whole one month of their long vacation from school. In both trainings, projects from a CRUD Web Application, to an Android Application for locating one's car, to Quizzes and so much more were done by the students and a certificate of award was presented to each student that completed more than 70% of the exercises and projects. The exposure gotten by the students, provided them with design thinking and coding skills, which made them become strategic thinkers in providing technological solutions to the ever-increasing problem in their society. It is anticipated that before fully grown up into adulthood, with the kind of problem-solving skills acquired through such exposures, alternative self-dependent job opportunities would have been created by these set of adolescents thereby giving a career that is skill enabled and may not need to search for jobs.

Introduction

In a bid to reduce the exacerbating unemployment and underutilization of technology-related opportunities rate here in Africa, it is vital to spark up interest in technologies at an early age.

The technology industry is growing at an average of 6% each year and some of the dominating areas include AI, Software as a Service (SaaS), and Web Development [1]. With the increase in technology-related jobs and opportunities globally, it is of concern that unemployment in Africa is still increasing at an alarming rate. The United States' economic growth and international competitiveness are results of their leverage and investment in the technology sector [2].

It is evident that the utilization of the growth in the technology industry is not being or is underutilized here in Africa. Early strategic training of adolescents in areas like coding (also known as programming), Robotics, and Artificial Intelligence can serve as a solution to this menace.

Exposures of this nature can be called a STEM or Technology Bootcamp. Very similar to the conventional Coding Bootcamp, but in this case not restricted to only coding. Such training is an in-person type that exposes participants to the foundation of technologies, accompanied by project-based exercises to instigate competencies in tackling real-world problems using the acquired skill set. Such exposure is not focused on instant employability but rather on igniting creative thinking and equipping them with the relevant skills in creating products and solutions to problems that young ones come across in their sphere of existence.

Background of Study

This section explains why we embarked on this study and some literatures to back up the claims.

Increasing Population of Africa Youths

With an increase in the global youth population from 1 billion to 1.3 billion, the current unemployment rate for these categories of humans is 13.6% and they are three times likely as adults (25 years and older) to be unemployed [13]. The current estimated population of Africa is more than 1.358 billion [3], making it the second-most populous continent in the world. It is worthy to note that nearly 20% of this figure are youths. Youth in this context are individuals between the ages of 15 and 24 years old [4]. A forecast shows that the number of youths in Africa will have increased by 42% by 2030 [5]. Judith Rodin, president of the Rockefeller Foundation, suggests that the number of young people between the ages of 15 and 24 in Africa will double from 200 million to 400 million by 2045 [6].

Unemployment amongst African Youths.

With the alarming increase in the African youth population, there is also an increase in the rate of unemployment. Africa boasts of individuals aged 15 – 35 years old, but its saddening to note that one third are unemployed and discouraged, another third are vulnerably employed, and only one in six is in wage employment [7]. Based on current projections, only 3-5 million jobs will be created for the 10 - 12 million youth eligible to enter the formal economy annually, leaving approximately half of these youth with little prospect for employment [8]. This has resulted in increasing discord and vices on the continent.

Problem Statement

The increase in the population of the youth poses a threat to the economic stability of the continent but if properly exploited, can be a great prospect for the economic prosperity of the continent.

Aim and Objectives

The aim of this paper is to expose the ways University of Lagos, Artificial Intelligence and Robotics Lab (AiRoL) is exposing the young adolescents to skills like Coding, Robotics, and Artificial Intelligence. These skills if properly utilized, can help in providing the ever-increasing opportunities in the field of technology, hence, reducing unemployment amongst them when they become youths. The following are the objectives that support the aims of the project.

- Utilize software packages like Scratch and MIT App inventor to introduce coding and programming paradigm to young ones.
- Teaching the fundamentals of how the internet and web work.

- Understanding and using web development programming languages like HTML, CSS, to proffer web solutions to problems.
- Incorporate knowledge learned in building Create, Read, Update and Delete (CRUD) websites.
- Integrate a project-centered approach during the exposure.

Scope of the Research

The training concentrates on exposing young ones between 11 to 16 years old to Coding, Robotics, and Artificial Intelligence.

Significance of Research

- To expose young children to design thinking/ICT skills from an early age.
- To provide solution-oriented software development training that can foster entrepreneurial zeal at an early stage.
- To expose young girls and boys to programming skills that are essential for success in this digital revolution.

Methodology

This chapter depicts the model of exposure adopted by the Artificial Intelligence and Robotics Laboratory (AIROL). So far, three successful exposures have been organized for the grassroots in areas ranging from Coding to Robotics and Artificial Intelligence.

Training Overview, First Edition

The maiden training was held from October to December 2018, this spanned over 12 weeks and classes were held only on Saturdays at the University of Lagos. The training was divided into two tiers: Web Application Development and Android Application Development. Both tiers held the same day but during different time frames. The target number of students to be trained was 50, with a stated capacity of 25 students for each tier of the training. Figures 1 and 2 show the class of web development students and android app development students, respectively.



Figure 1: Members of the Web Application Development Class.

2: Members of the Android Application Development Class.

Second Edition

Due to the impact made from the maiden edition and the need for continuity, a second edition was organized from July to August 2019. This edition was run for both males and females and had two tiers as well: Scratch programming with robots for Primary School students around the University of Lagos community and App Inventor for Android application development for secondary school students around University of Lagos community. A project-centered curriculum was prepared by seasoned instructors and the hands-on training was delivered within this period. The students are about 40 in number. The classes were held at the Artificial Intelligence and Robotics Laboratory (AIROL), University of Lagos. Figures 4 and 5 show the two different classes with their instructors.



Figure 3: MIT App Inventor Instructor and the students

Figure 4: Scratch coding with Robots Instructor and the students.

First Lego League Tournament, FLL

From the Young Coders Academy (a community of innovative young minds) already created by the previous exposures, a team of 15 students was constituted and exposed to training in the field of Research, Programming, Robotics, and Artificial Intelligence in preparation for the Regional First Lego League competition that was to hold on 21st and 22nd of February 2020. 9 students were finally chosen from the 15 students that were exposed to the training to represent ‘Team AIROL’ at the competition.

The tournament had 4 major events:

- Project/ Innovation Challenge
- Core Values Presentation
- Robot Game Challenge
- Robot Design Presentation

For the Project/Innovation Challenge, the team was to come up with a solution to a problem in their city that would make it a smarter one. The students were taught how to make research and get sources from the internet and present their findings to the class. Out of various brilliant findings carried out by the students, we settled for one – The Smart Traffic System. This was to solve the issue of the ordinary traffic light showing green for a lane with no cars while the other is red and has traffic because of the time-based program that changes the color of the traffic light.

For the Robot Game, the team was to build an Autonomous Robot that would carry out tasks like the lifting of a bridge, picking up and placing objects in designated areas, ascending and descending a ridge and so much more using the LEGO Mind storm EV3 set. In achieving this feat, the students

were exposed to concepts such as mapping, pseudo-code writing, writing detailed programs using the EV3 software, debugging of the program, basic feedback control, PID Control, and so much more. Figures 5, 6 and 7 show different scenarios of the FLL challenge and presentations.



Figure 5: Final preparation before the Robotics Competition.



Figure 7: Team AIROL during the Robot Competition.

Training Model Adopted

Factors such as the technology to be taught, the duration of the program, and cost implications will determine how the training will run. The discussion below explains the process involved in running the classes.

Selection Criteria/Admission Process

The maiden edition was for female students from International School Lagos between ages 11 to 16 years. They were our target in this edition because of the poor involvement of females in technology or STEM. According to United Nations office for south-south cooperation (UNOSSC) [12], the Sub-Saharan Africa technology workforce is comprised of 30% women and 28% of professionals globally. An application form was made available at the Principal's office, and interested participants were to pick it up from there. Interested participants for the second edition showed interest by filling a Google form, accompanied by the advert through a link. This edition was for both males and females. The goal of the first two editions was to introduce this grass-root training to 50 students. Figures 15 to 20 show some of the major criteria adapted in the selection process of the second cohorts. The first cohorts of students were selected by the same process of filling and answering questions in a form though in a manual method unlike the second cohort which was filled online.

Curriculum

A project-centered curriculum was designed for all the exposures. The curriculum as shown in Appendix Table 1.0 depicts the run-down of the maiden edition. Starting from the basics of Web and Android Application development and gradually scaling up on concepts and projects to solidify the skills acquired. The programming languages taught for the web development batch include HTML5 and CSS (Cascade Styling Sheets). From the pool of available programming languages, these were selected because of their current relevance in the web development Industry. The leading front-end programming language for 2021 is currently HTML and CSS and they have both been dominating the top spot for a long time. There is currently almost no web application that will not involve using any of these two languages [9]. The students built simple static websites as their

projects after the training. PHP is also being used in back-end web development, and it also has other areas of applications such as drone control [10], however, it was chosen for their later classes. Each of the selected programming languages that were, has a different area of application in the technology industry. Some of which includes:

- HTML & CSS: Front end web development.
- MySQL: Databases
- PHP: Back-end web development.
- JavaScript: Front end Interactivity

The android application development class was chosen because of the dominance of the Google Android Operating System in the smartphone market. It currently boasts a 72.92% share of the OS market share worldwide from January 2012 - October 2020 [11]. The android app was taught using android studio software and the students built a calculator android application for their final projects. The second training was also structured in the same way and the projects displayed in Table 2 were carried out by the participants. Lastly, for the First Lego League Tournament, the training was structured to prepare the participants for the individual events. Aside from technical skills acquired by the students, they had the opportunity to develop their interpersonal skills. Some of the interpersonal skills include Listening, problem-solving, teamwork, and decision-making.

Mode of Training

The three exposures were in-person, which is the most common model for bootcamp or similar events. The maiden edition training spanned 12 weeks (Saturdays only), the second edition lasted for four (4) weeks, which is the equivalent of the 12 weeks done in the first edition; this is because they utilized the whole one month of their long vacation from school. The third edition (FLL tournament) was a blend of the initial two. The 2019/2020 FLL season started during the secondary

Figure 5: Final preparation period, they were coming to the Artificial Intelligence and Robotics before the Robotics Competition. at Olukoya Central Research Laboratory, the University of Lagos for the meetup. when school resumed, we resolved to meet only on Saturdays till the tournament was over in February 2020.

Cost Implications

For programs of this nature, the cost might vary widely. It might be taken care of by either the student's funds or discounts for early registrations or scholarships awarded for select participants, etc. All the training so far has been free for all the participants. They either made use of their laptop or got one to use throughout the course of the training. It is worthy to note that the first two programs were sponsored by the university of Lagos as her cooperate social responsibility for the schools within the university community through the help and initiative of the vice chancellor, Prof. Oluwatoyin Ogundipe.

Implementation and Results

The implementation of this work lies in the bulk of what the trained students achieved with the software and hardware exposed to them. Some of these achievements are explained in the subsequent sections.

Participant's Projects

Participants Projects ranged from animations, games, and interactive websites to android app development.

Some of them include:

- Step counter (Fitness Buddy) – an android application that counts the number of steps while holding the phone. This can be used during outdoor sports like running, walking, or jogging. It also tells the user the total distance covered. It counted steps can be reset for a new lap/session. Figure 8 shows the application user interface.
- Lady Bug Chase – Figure 9 shows the user interface of an android game that utilizes the orientation sensor to move the ladybug to eat up the bug. The user simply tilts the screen of the smartphone to control the ladybug to the moving bug. Once the ladybug comes in contact with the frog, it dies and you'll have to restart the game.

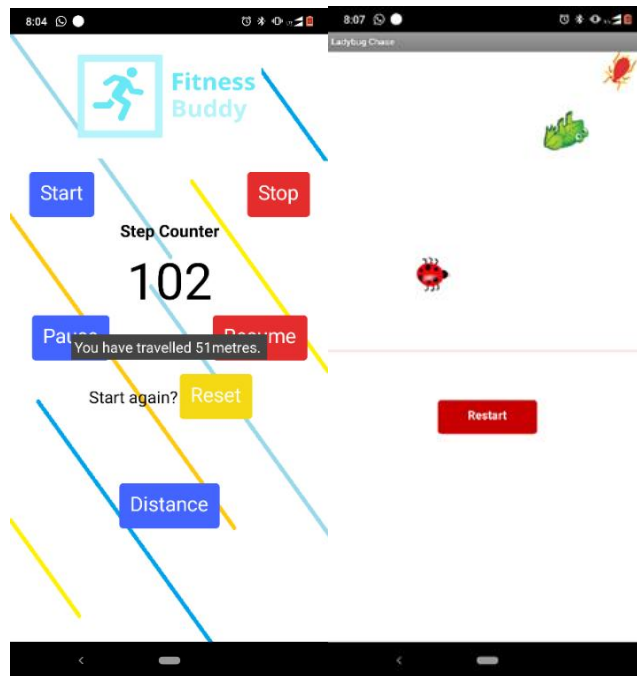


Figure 8: Step counter (Fitness Buddy) user interface.

Figure 9: Ladybug chase game user interface.

- Lagos Map Tour: this android application helps you in touring around Lagos, Nigeria. Once you launch the application, there appears a display to select from a list of already stored locations. After selection, nearby locations, and directions from your current location to the selected location will be activated. The various screens to tour the Lekki Conservation Center are shown in Figure 10. You can also manually input the desired location you want to tour and you'll get the result.

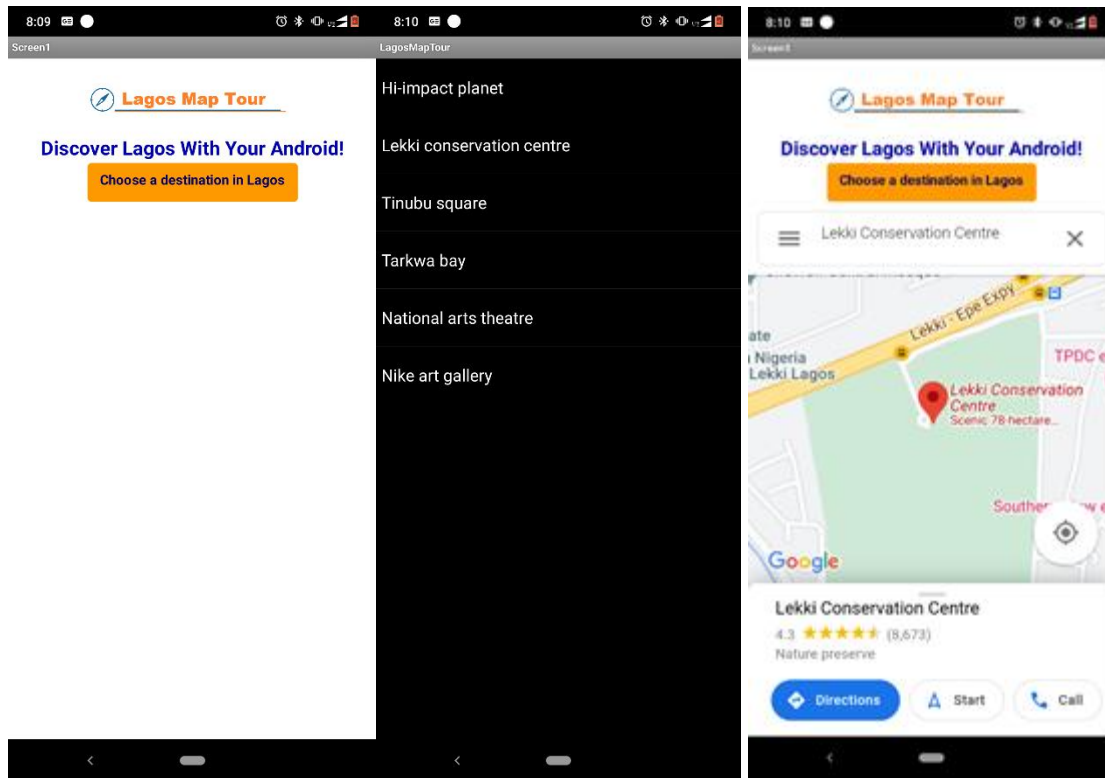


Figure 10: User Interfaces of locating the Lekki Conservation Center with the Lagos Map Tour Application.

- Guess the flag: Figure 11 shows the user interface of a flag guessing game developed with scratch by one of the students.

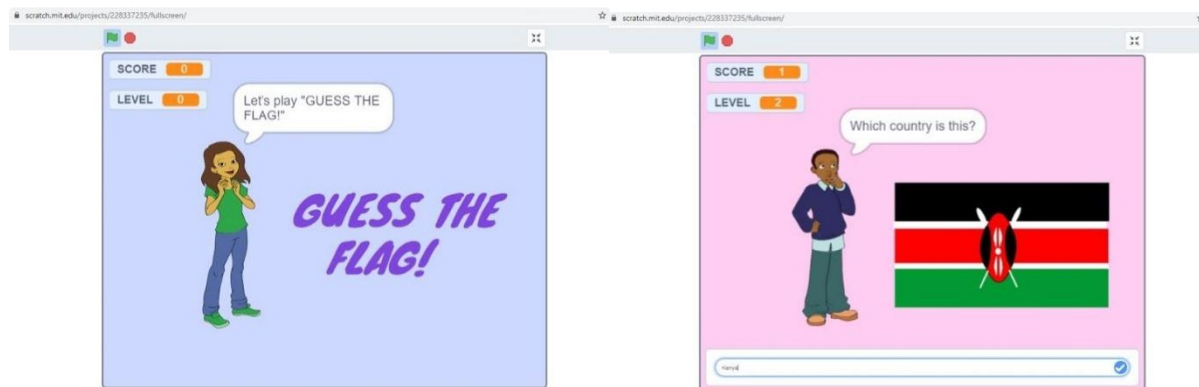


Figure 11: User Interfaces of the guess the flag scratch game

- A student applied the knowledge acquired from the scratch classes in animating a story as shown in figure 12 of a prince that was turned into a frog (a spell). A princess found him in the woods, took him to the palace and gave him a kiss. After the kiss, he turned back to human.

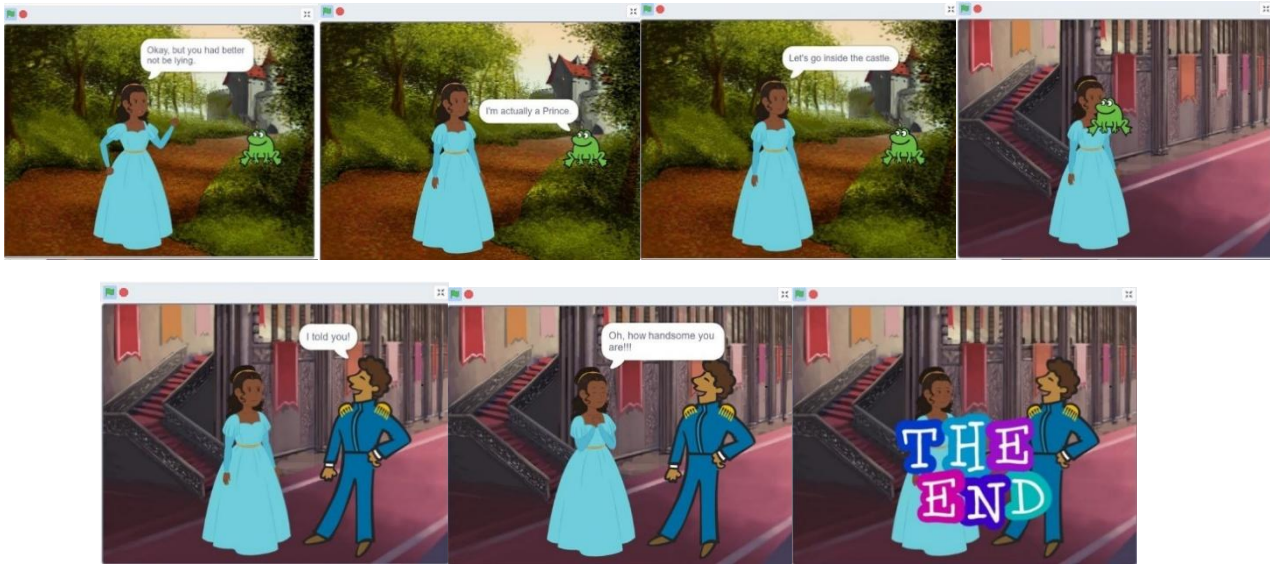


Figure 12: Story telling with Scratch.

Award and Trophy Presentation

In the course of the First Lego League (FLL) 2019/2020 season, out of 40 teams, the trained students emerged the Overall winner of the Core Values Presentation and 8th in the robotics Game Challenge. Figure 10 shows members of the team that represented us at Abuja for the FLL tournament when they were called to the podium to receive their medals. After the medal presentation, the winners for each event in the tournament were announced. We were announced 8th in the Robot Game event and 1st in the Core Values Event. Figure 11 shows students as they were celebrating with the presented trophy.



Figure 13: Medal Presentation to Team AIROL at the FLL National Tournament in Abuja.

Certificates

For the first two exposures, there was an end of training ceremony. During the ceremony, each student presents their product which is a function of they acquired from the training. Then



Figure 14: Certificate Presentation to the first and second cohort of the young coders club at AIROL UNILAG

a certificate is issued on the successful completion of the project. Figure 14 shows different cohorts certificate presentations by the Vice chancellor, Dean of science and Director of the entrepreneur center of the university of Lagos.

Conclusions

Having concluded two successful cohorts of training on programming and also an additional robotics training on some of the students trained in programming, we are confident that the world is their playground for solving real life problems. Technopreneurship is the way forward for these young youth soon.

Technopreneurship Opportunities

We are in the fourth industrial revolution, and opportunities that would be sufficing would be in areas such as 5G, AI, machine learning, big data, IoT, blockchain, cloud computing, virtual/augmented reality, and cybersecurity. Therefore, exposing young ones to Artificial Intelligence, Robotics, and Coding will make them relevant in this revolution. Even at a young age, they get to be involved with opportunities, such as innovation challenges and STEM competitions. If they are not well equipped with the necessary skill set, such opportunities become wasted. When the young ones that have been exposed to such training become youths in the society, they are positioned to grab technology-related opportunities that will come their way and have the know-how to create one themselves. Our world is gradually becoming digital, automated, and interconnected, birthing the demand for individuals with the required skill set in filling opportunities that are being created in the technology sector. Technology has created and will create a lot of jobs in the future.

Future Works

Artificial Intelligence and Robotics laboratory in collaboration with the entrepreneur center, university of Lagos are following up and guiding these young adults in achieving their full potentials in this space of technopreneurs.

References

- Technology - Vancouver Economic Commission Vancouver Economic Commission, (2021). Retrieved 17 January 2021, from <https://www.vancouvereconomic.com/focus/technology>
- Henry-Nickie, M., Frimpong, K., & Sun, H. (2019). Trends in the Information Technology sector. Retrieved 17 January 2021, from <https://www.brookings.edu/research/trends-in-the-information-technology-sector/#footnote-2>
- Population of Africa (2021) - Worldometer. Retrieved 17 January 2021, from <https://www.worldometers.info/world-population/africa-population/>

- Youth. Retrieved 17 January 2021, from <https://www.un.org/en/sections/issues-depth/youth-0/#:~:text=For%20statistical%20purposes%2C%20however%2C%20the,of%2015%20and%2024%20years.>
- Population Facts: Youth population trends and sustainable development. (2015). [Ebook]. Retrieved from <https://www.un.org/esa/socdev/documents/youth/fact-sheets/YouthPOP.pdf> Or ([Population Facts: Youth population trends and sustainable development](#), (PDF). UN Department of Economic and Social Affairs, Population Division. May 2015. [Archived](#) (PDF) from the original on 28 August 2017.).
- The Rockefeller Foundation Announces New Initiative to Create Digital Jobs in Africa - The Rockefeller Foundation. (2013). Retrieved 17 January 2021, from <https://www.rockefellerfoundation.org/news/rockefeller-foundation-announces-new/#:~:text=Africa%20has%20the%20youngest%20population,to%20400%20million%20by%202045.>
- Jobs for Youth in Africa – Catalyzing youth opportunity across Africa. (2016). [Ebook]. Retrieved from https://afdb-org.kr/wp-content/uploads/2018/02/Bottom_3_English.pdf "[Africa's youth: a "ticking time bomb" or an opportunity? - Africa Renewal online](#)". *www.un.org*. [Archived](#) from the original on 30 September 2017.s
- Horiachko, A. (2020). Top Programming Languages and Frameworks List For Software Development for 2021. Retrieved 18 January 2021, from <https://www.softermii.com/blog/top-programming-languages-and-frameworks-for-software-development-for-2020helicopter: Port of node-ar-drone which allows user to control a Parrot AR Drone over PHP: jolicode/php-ar-drone, JoliCode, 2019-01-11, retrieved 2019-02-23>
- Mobile OS market share 2019 | Statista. (2020). Retrieved 18 January 2021, from <https://www.statista.com/statistics/272698/global-market-share-held-by-mobile-operating-systems-since-2009/#:~:text=Android%20maintained%20its%20position%20as,of%20the%20global%20market%20share.>
- Creating a level playing field for women in technology in Africa - UNOSSC. (2019). Retrieved 18 January 2021, from <https://www.unsouthsouth.org/2019/02/01/creating-a-level-playing-field-for-women-in-technology-in-africa/>
- International Labour Office. (2020). Global Employment Trends for Youth 2020: Technology and the future of jobs [Ebook] (1st ed., p. 14). Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/publ/documents/publication/wcms_737648.pdf

APPENDIX

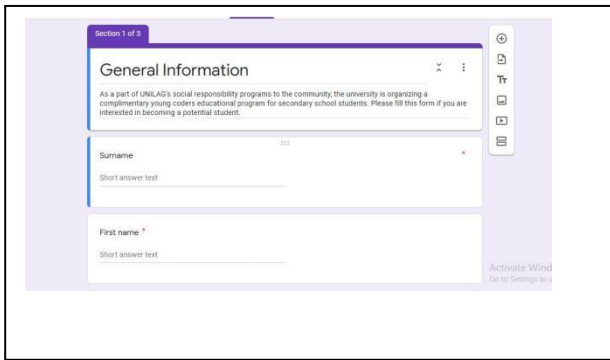


Figure 15: Screenshot of the Google form that applicants utilized during the Second edition.

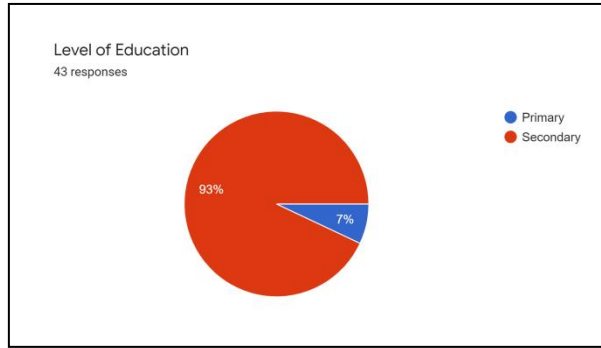


Figure 16: Level of Education responses by the applicants retrieved from the Google form.

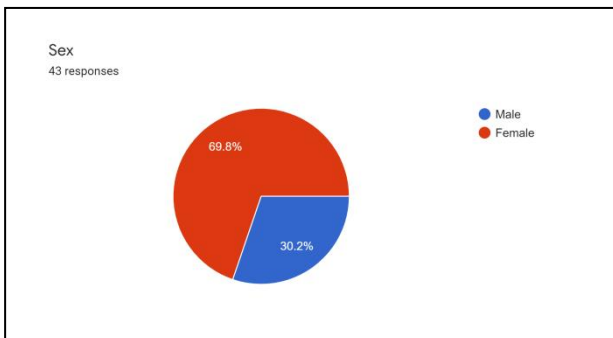


Figure 17: Gender responses by the applicants retrieved from the Google form.

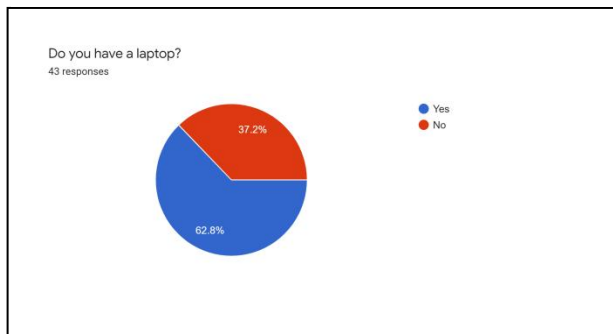


Figure 18: Number of Laptop owners' responses by the applicants retrieved from the Google form.

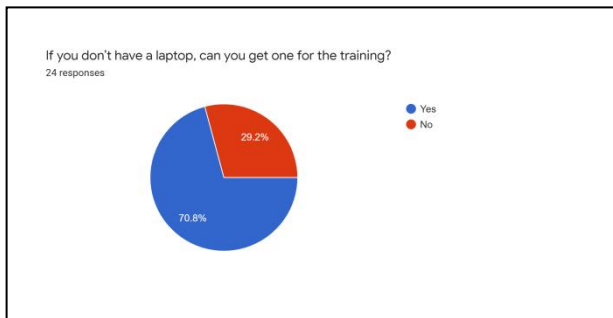


Figure 19: Applicants without laptop responses retrieved from the Google form.

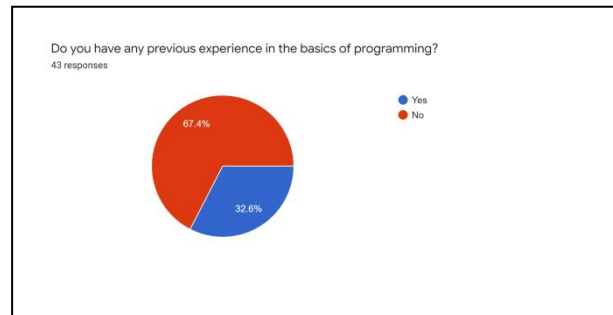


Figure 20: Existing programmers' responses by the applicants retrieved from the Google form.

Table 1.0: Breakdown of the curriculum for the first edition training.

Week	Web application development	Android application development
1.	Understanding how the Web works; Basic concepts in HTML	Introducing the android platform, and prepping the development environment
2.	Introduction to CSS	Starting a new Android project
3.	Introduction to JavaScript for frontend Web development	Creating the user interface

4.	Building a simple HTML website with (CSS and JavaScript)	Working with Visual designer for app previews
5.	Introduction to PHP and backend server-side development	Coding your application
6.	Going deeper with PHP	Responding to errors and thinking beyond app boundaries
7.	Building a simple database using MySQL	Understanding android resources
8.	Form processing using PHP and MySQL	Working with resources
9.	Building a CRUD website with HTML, CSS, JavaScript, MySQL, and PHP. (Student Project)	Turning the application into an app widget; Working with intents and pending intents
10.	Continuation of the Student project	Creating the app widget
11.	Hosting of student projects	Publishing your app to the Google Play store
12.	Conclusion and end of the program	Conclusion and end of the program

Table 2: A breakdown of the curriculum for the second edition training

Week	Day (Date)	Scratch Class (10 -11:30am) Tues. and Thurs. for Primary School	MIT App Inventor Class (12 -1:30pm) Tues. and Thurs. for Secondary School
1.	1 (6th)	Data & Information Usage	Project Reference (Hello Purr)
	2 (8th)	Introduction to Scratch Environment	Continuation Project Reference (Hello Purr)
2.	3 (13th)	A Basic Conversation	Project Reference (Mole Mash)
	4 (15th)	Creating Animations	Project Reference (No Texting While Driving)
3.	5 (20th)	Graphics and Sound	Project Reference (Where's My Car?)
	6 (22nd)	Robotic Development	Make Quiz and Take Quiz
4.	7 (27th)	Application of Robots	Time on Final project
	8 (29th)	Explore Your Imagination (Individual Games) Conclusion and end of the program	Final Project Conclusion and end of the program

Sustainable Entrepreneurship: A Panacea for Youth Unemployment in Nigeria

Oluwadamilare Odu-Onikosi

Department of Management Technology, Lagos State University, Ojo, Lagos

Email: dare.onikosi@gmail.com

Abstract

Entrepreneurship has long been recognized as an engine for societal and economic progress. Despite the importance of entrepreneurship to national development, unsustainable practices and poor performance continues to pervade our entrepreneurial space. Sustainable entrepreneurship is a phenomenon requiring a joint and long-term outlook that integrates social, economic, and environmental objectives. Today, real growth in the private sector often comes from developing and using environmentally better, socially efficient, and economically prudent means to produce and provide products and services and through creation of wealth and employment respectfully minding the changing expectations of the differing interests of enterprise stakeholders. This study seeks to authenticate the potency of Sustainable Entrepreneurship (SE) as a tool to generate lasting solution to the problem of youth unemployment in Nigeria. The objective of the study is to assess the relationship between sustainability and performance and to determine what drives Sustainable Entrepreneurship. The study will employ a qualitative approach. Key In-Depth Interview (KII) will be conducted in Six (6) Sustainability-Driven Enterprises in Lagos, Nigeria. Convenience sampling will be used to select the respondents based on proximity and accessibility for the researcher. Content Analysis will be used to analyze the responses from the respondents. Early findings revealed that Sustainable Entrepreneurship can be a critical factor in business success. Based on the findings of the study, it is recommended that if the government is anything serious about revitalizing the economic fortunes of the country, drastically reduce youth unemployment and generate more employment opportunities, sustainable entrepreneurship must be the winning strategy to assure economic, societal, and environmental prosperity.

Keywords: Sustainable Entrepreneurship, Sustainability Orientation, Sustainability-Driven Enterprises, Youth Unemployment, Value Creation

Introduction

Today, societies face great economic, societal, and environmental threats. Many of the world's population continue to live in abject poverty and one devoid of dignity. Inequality is gaining tremendous momentum. Natural resources are being depleted day-in day-out. Climate change remains one of the greatest challenges and its ravaging impact is undermining efforts at sustainable development United Nations (2015). These and many more call out to the entrepreneurs to rise to the occasion and act accordingly. Entrepreneurship has been touted as the necessary engine for economic and non-economic development, capable of accelerating job creation and improvement of products and services. (Schumpeter, 1934). Youth unemployment particularly is on the rise. Youth Unemployment has become a topic of interest in the global public conversations. According to Diran (2012), "*unemployed youth in Nigeria is in dire situation, faced with lack, untold hardship, propensity towards crime, hopelessness, mental, spiritual, and physical wariness, and political servitude*". But this situation does come with its own advantage as espoused by Narayan (2005), the

poor unemployed are a critical tool in the fight against unemployment as they possess the right sets of attributes: wild imagination, boldness, insights, first-hand experience, and motivation to turn things around.

Entrepreneurship has long been recognized as an engine for societal and economic progress. The remarkable success stories recorded at the Silicon Valley is a testament to entrepreneurship driving growth. Recent happenings, however, suggests that not all entrepreneurial activity represents gains for the society, and that some entrepreneurial activity exacerbates environmental degradation and acts as a drag on the society. Economic exploitation of opportunities often results in environmental depletion – the extraction and depletion of resources can have local and global environmental and societal impacts which are rarely given due consideration. Should today's entrepreneurs toe the same path to resources exploitation as done in the past, the additional threats on our already over-stretched resources would pose a serious risk to the wellbeing of man himself. Entrepreneurship by itself is thus not sufficient to arrest youth unemployment – it must become sustainable. This resonates well with the charge of the International Monetary Fund (IMF) that *“inequality and inability to sustain economic growth are both two sides of a coin.”* There is, therefore, a strong need to put social and environmental objectives on the same footing with economic ones. Hall et al. (2010).

Despite the importance of entrepreneurship to national development, unsustainable practices and poor performance continues to pervade our entrepreneurial space. The depth of research in sustainable entrepreneurship is still in its infancy stage. (Gibbs, 2009; Fellnoher et al., 2014; Katsikis, 2016). There is a need to revalidate the idea that sustainable entrepreneurship holds the key to promoting massive job creation for the teeming youths. Sustainable entrepreneurship, therefore, has been widely seen as the panacea to the social and environmental challenges (Zahra et al., 2009; Dean and McMullen, 2007). Given the understanding of the role of sustainable entrepreneurship, several interesting questions arise: What is the relationship between sustainable entrepreneurship and business performance? What are the drivers of sustainability in a business concern? Is sustainability consistent with the mission of the business? It is these questions that fuels this study.

The analysis contains in this study draws upon structured, in-person key in-depth interviews with six owner-managers of sustainable enterprises in different areas of Lagos. Six sustainable enterprises were purposively and conveniently selected to participate in the study because of proximity and available funds to the researcher. The six firms had their businesses focused on one of the following: Waste reduction and recycling, increased income and job opportunities for marginalized communities, education and training and skills development, women and youth empowerment and development of innovative green and inclusive value chain. Sustainable ventures with a focus on more than just the economic objective was the population of interest to this study. Lagos was strategically selected because of her strategic positioning as the economic nerve center in West Africa. The list of sustainable ventures was obtained from desk research via Google Search. The interviews were conducted using a guide with 10 questions divided into two major categories and followed an open-ended format to allow participants full expression of their thoughts and opinions about sustainable entrepreneurship. The interview guide was translated into two local languages – Yoruba and Pidgin English, this is in addition to the English version. A typical interview took 20-30 minutes to complete with individual respondent. Sustainable entrepreneurship questions included understanding of the concept of sustainability as well as its potential to create

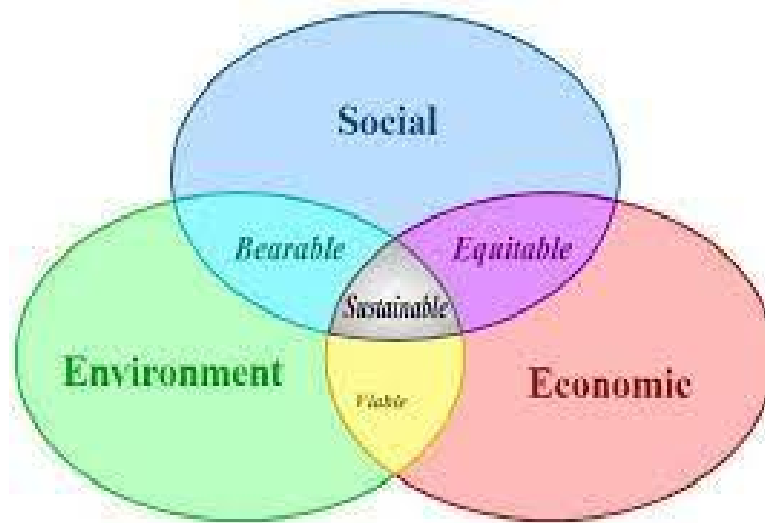
jobs for the teeming unemployed youth population in Nigeria. Socio-Demographic data included educational profile of the owner-manager and size of ventures. Data regarding the institutionalized processes to foster sustainability was obtained from secondary sources as most of the participants wasn't too open about their business models. This paper is organized into three parts. The first reviewed literature around the subject of sustainability in the business environment. The second part highlights the relationship between sustainability and business performance as perceived by participants. Drawn from the results of the survey, the third part outlines the drivers of sustainable entrepreneurship in Nigeria. The discussion of these drivers is complimented by participants response with regards to their essence.

Literature Review

Scholars have struggled to come to a generally accepted definition of the term entrepreneurship (Shane and Venkataraman, 2000). Schumpeter (1934) defined it as the *innovative process of creative destruction*. Some see it as the creation of new business or enterprise. This position was however countered by Shane and Venkataraman (2000) when they argued that entrepreneurship is not limited to start-ups. The Brundtland Report of 1987 defined sustainable development as “development meeting the present needs without compromising on the capability of future generations to meet theirs”. Elkington (1997) introduced the concept of the Triple Bottom Line (TBL) in his book *Cannibal with Forks: The Triple Bottom Line of Twenty-First Century Business*. His views provided a more practical balance for the three dimensions: economic, social, and environmental. Academic literature on sustainable entrepreneurship is poor despite the progress recorded by corporate social responsibility and green initiatives in the business arena. Cohan and Winn (2007) contend that the approaches failed to address the three fundamental dimensions of sustainability. According to Katsikis (2016), there are several attempts at conceptualizing the term sustainable entrepreneurship drawing upon the Austrian traditions as provided by Shane and Venkataraman (2000) as the notion of business entrepreneurship. Dean and McMullen in Katsikis (2016) defines sustainable entrepreneurship as the discovery, evaluation, and exploitation of economic opportunities inherent in market failings which detracts from sustainability, including issues that are of environmental concern. Sustainable Entrepreneurship can therefore be defined as the search, evaluation, and exploitation of opportunities to create value which in turn creates economic and inclusive prosperity which the focus on sustainable development. Cohen and Wann further defined the term as the exploitation of opportunities for creation of future goods putting economic, social, and environmental consequences to heart.

Sustainable Entrepreneurship can then be understood as the systematic fusion of business and sustainable development objectives. The three dimensions of economic, social, and environmental therefore becomes a subset of a broader of SE. ...posits *that the common ground between sustainability and entrepreneurship lies in the concept of impact, assurance of long-lasting goods, values, or services; preservation of current resources for future generations and developing unique solutions for the long run. The meeting point between Sustainable entrepreneurship, according to Iyigun (2015) lays in between for-profit and not-for-profit, in between cash and cause. The main goal of which should be ‘looking for prosperity’.*

Figure 1: Dimensions of Sustainable Entrepreneurship



Source: Ayodele and Ogunlola (2016)

The Role of Entrepreneurship

Entrepreneurship has been variously regarded as the mainstay of the economy as they contribute to economic growth and development in more than one way: they possess an innate ability to create innovations, increase productivity and social stability. Research has confirmed that nations with many such enterprises have benefitted from increased economic growth. Creech et al (2012). Globally, the ability of the informal sector to generate substantial employment and economic opportunities have been confirmed. (Goldmark, 2009; Quartey, 2020).

Bymott, Posthumus and Slob (2015) observed that the environment is conducive in developed countries thereby allowing enterprises to formalize and scale, but reverse is the case in developing countries where only few can grow. This, he retorted is a key challenge for developing countries who are looking the way of driving sustainable growth. The apparatus to drive entrepreneurship in Africa is weak and almost non-existent with poor infrastructure, weak legal systems, very poorly articulated tax systems and moribund financial systems. To grow, Entrepreneurship need help to break the ice to entry and growth and the right motivations to stir them towards the path of sustainability. This would mean, provision of mechanisms promoting that businesses integrate social, environmental with the existing economic benefits into their business model. Sustainable entrepreneurship are businesses adopting a Tripple Bottom Line (TBL) approach, providing solutions to local problems in the most socially and environmental beneficial means.

The Triple Bottom Line

Coined by John Elkington around the late 1990s, is a relatively new concept which aims to set out the range of values that business enterprises and organizations should aspire to for the attainment of

a more sustainable and inclusive business. The model is constituted by the social (People), economic (Profit) and the environmental (Planet) components. The social impacts are usually measured by indicators such as community engagement, employee satisfaction, ethical conduct, good governance and education and the economic impact by returns on investment, margins jobs creation. There is a need to define the economic, social, and environmental targets of a business to be able to measure progress and share learning's.

The Schumpeterian Effect

Using entrepreneurship to reduce unemployment is known as the “Schumpeter Effect”. Garofoli (1994), Audrestsch and Fritsch (1994) in Riti and Kamah (2015) found out that as new enterprises are established, employability is entrenched, and unemployment reduces substantially. This shows that unemployment is closely related to a low level of entrepreneurial activity.

Table 1: Sustainability and Business Performance

<i>Phenomenon described by sampled respondents</i>	<i>Frequency</i>
Sustainability has a positive relationship on the quality of business impacts	31
Solving local problems in the most socially and environmental beneficial means improves economic gains	25
Adopting SE approach is beneficial to the business on all fronts	22
SE leads to creation of long-lasting products, values and services	20
SE is antithetical to profit making	4
We don't make enough returns on the economic front, not to talk of focusing on the other two	4

Author Survey July, 2021, Sample size = 6

- The place of SE as a critical factor in business success was well appreciated by all the interviewees. One interviewee indicated that:

“The big benefit of having a sustainability mindset is that it makes business more humane”

Several benefits accruing from sustainable entrepreneurship, have been brought to light. One interviewee noted that the gains are immeasurable:

“I think that if the government is anything serious about revitalizing the economic fortunes of the country, drastically reduce youth unemployment and generate more employment opportunities, sustainable entrepreneurship must be the winning strategy to assure economic, societal, and environmental prosperity”

When it comes to profit, sustainable entrepreneurs believe that sustainable enterprises are more likely to succeed. This is because SE comes with innovation and competitive advantage with it. It goes on to show that strategic choices can maximize a business performance.

Drivers of Sustainable Entrepreneurship

Asked the question: What drives or moves an entrepreneur to engage in sustainable practices? Majority of the responses of the participants can be classified as both internal and external factors. Internal factors include belief system or concerns about social and or environmental issues, life experience or desire to cause change. External factors include societal problem, network, public acceptance, or social capital

Securing Finance

Sustainable ventures face challenges in the aspect of securing funding to maintain and expand their operations to focus on TBL. Securing funding is a major challenge for entrepreneurs in most developing countries because of their natural classification as high-risk by funding institutions. Funding is more accessible to large, low-risk businesses who have some considerable assets which can be used as collateral by the financial institutions and a good track record. Most early-stage entrepreneurs do not have these collaterals and track records to trade with. This lack of access to finance is troubling for would-be entrepreneurs coupled with the bureaucracy associated with securing funds from banks.

Business Model Design

The business model of most of the so-called sustainable entrepreneurs tends towards a hybrid of commercial and social businesses. However, hybrid it looks, it requires sound financial and operations management. Many of these enterprises are, however, deficient in skills necessary to drive these initiatives. The business model design is a key factor for success in sustainable entrepreneurship. The model includes among other things: making a case for sustainable investment and financing, collaboration with investors and gaining credible expertise.

Business Environment

Entrepreneurs face various problems in trying to become sustainable enterprises, because most of them are at the early-stage and the business environment poses a serious threat.

Collaboration and Community Engagement

Sustainable enterprises must develop the prowess to engage and leverage on a network of stakeholders as well as seek partnership to harness knowledge and organizational learning, to pool resources together and to easily navigate unfriendly business environment

Several interviewees indicated that business would function well when the SE approach is adopted and placed a greater weight on value-addition rather than mere profit making.

All the interviewees contend that that sustainable will, financial resources, geographical location, and recognition are key drivers of sustainable enterprises. One interviewee put it thus:

“The organizations willpower and fit with their vision coupled with geographical location plays an important role as certain locations demotes entrepreneurship, reflecting in low start-ups rate, and hence, and in a low probability of success”

Even though, sustainability makes sense, all the interviewee acknowledged the fact that funding and recognition for key players plays a significant role. One interviewee stated that:

“I think having the financial capabilities to balance social, economic and environmental objectives are very germane. Next to that is the issue of motivation.

I think organizations should be more appreciated for their efforts towards sustainability.”

Conclusion

The study concludes that sustainable entrepreneurship can be a critical factor in business success. Sustainable entrepreneurship can be triggered and nurtured in a nation desperately in search of innovative solutions to its towering problem of youth unemployment and its attendant ills. Sustainable entrepreneurship aims to create value which is beneficial to society

Policy Recommendations

Sustainable Entrepreneurship can be the panacea to youth unemployment in Nigeria. What kind of balancing strategy to adopt in the face of the conflicting objectives and the best practices to go about it are the tricky questions that faces all actors and stakeholders. Based on the findings of the preliminary study, the study recommends that if the government is anything serious about revitalizing the economic fortunes of the country, drastically reduce youth unemployment and generate more employment opportunities, sustainable entrepreneurship must be the winning strategy to assure economic, societal, and environmental prosperity.

The importance of sustainable entrepreneurship should be recognized, promoted, and incentivized. To see many business enterprises, make the transition to sustainable entrepreneurship, it is important that there's a shift of focus from value for shareholders to value for stakeholders. This can be done by giving the proper recognition to the importance of SE and by supporting the pioneers of SE.

Business development support is essential. Sustainable Entrepreneurship needs business development support to be efficient contributors to a sustainable economy. There's a need for them to be able to access capacity and skills development to avail them the necessary tools to sustain and flourish.

References

Audretsch, D. B & Fritsch, M., (1994). The Geography of Firm Births in Germany, *Regional Studies*, 28(4), 359-365.

- Ayodele, T., Ogunlola, A. A. (2016). Implementation of Sustainable development: The Impact of Social Sustainability. *International Proceedings of Chemical, Biological and Environmental Engineering*, Vol. 93.
- Brundtland, G., (1987). United Nation Brundtland Commission Report. Our Common Future.
- Bymolt, R., Posthumus, H., and Slob, B. (2015). Shaping Sustainable Development through Eco-entrepreneurship. (SEED/adelphi research): Amelie Heuer, Rainer Agster.
- Christenson C. M., (1997). The Innovator's dilemma: When new technologies cause firms to fail, Boston, Massachusetts, USA: Harvard Business School.
- Cohen, B. and Winn, M. I., (2007). Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22 (1), 29-49.
- Elkington, J., (1997). Cannibals with Forks: The Triple Bottom Line of Twenty-First Century Business. Capstone, Oxford, London.
- Garofoloi, G. (1994). New Firm Formation and Regional Development: The Italian Case. *Regional Studies*, 28(4), 381-394.
- Greco, A. and de Jong, G., (2017). Sustainable entrepreneurship: definitions, themes, and research gaps. Working Paper Series, 1706-CSE, Centre for Sustainable Entrepreneurship, University of Groningen: Netherlands
- Hall J. K., Daneke, G. A., Lenox, M. U. (2010). Sustainable development and entrepreneurship: past contributions and future directions. *Journal of Business Venturing* 25(5), 439-448.
- Iyigun, N. O., (2015). What could entrepreneurship do for sustainable development? A corporate social responsibility-based approach. *Procedia-Social and Behavioral Sciences*, 195, 1226-1231.
- Katsikis, J. N. (2016). The Concept of Sustainable Entrepreneurship: A Conceptual Framework and Empirical Analysis. *Academy of Management Annual Proceedings*.
- Narayan, D. (2005). Conceptual Framework and Methodological Challenges. In D. Naratan (Red.), *Measuring Empowerment: Cross Disciplinary Perspectives* (s. 3-38). Washington: The World Bank.
- Ostry, D., Berg, A., Tsangarides, C. (2014). Redistribution, inequality, and Growth. International Monetary Fund. <http://www.imf.org/external/pubs/cat/longres.aspx?sk=41291>.
- Riti, J. S. and Kamah, Miriam (2015). Entrepreneurship, Employment and Sustainable Development in Nigeria. *International Journal of Academic Research in Economics and Management Sciences* Vol/ 4, No.1.

Schumpeter (1934). *Capitalism, socialism, and democracy*. New York: Harper & Row.

Shane, S. and Venkataraman, S., (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.

United Nations Assembly (2015). *Transforming our World: the 2030 Agenda for Sustainable Development*. A Report of the Secretary-General. New York, NY: United Nations. Available at: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E (Accessed: May 27, 2021)

Entrepreneurship and People with Disabilities (Pwds) in Nigeria Analysis of Challenges and Prospects

¹Gunu, U.; ²Omolekan, O. J.; ³Olota, O. O.; & ⁴Ashiru, A.

^{1&4}Department of Business Administration, University of Ilorin, Ilorin, Nigeria

Email: umargunu@gmail.com; o.omolekan@gmail.com

Abstract

In most developing countries, People with Disabilities (PWDs) are generally seen as helpless, contemptible, and awful with their livelihood depending on people's sympathy. But recently, there has been a shift in the paradigm. PWDs now undertake viable businesses to make ends meet and contribute to national growth. Inherent challenges associated with small businesses are complicated with PWDs. Thus, this study evaluated entrepreneurship challenges faced by and the prospects of business success of PWDs in developing countries, Nigeria in particular. The research adopted survey design methodology. Four states in Nigeria have the highest number of PWDs that engaged in entrepreneurship according to information obtained from the Joint National Association of Persons with Disability (JONAPWD) and these states made up the population of this study. In selecting an appropriate sample size, the research used a multi-stage sampling technique. Social discrimination, family support, risk taking, entrepreneurial education, skills, and finance are the key variables of the study. Primary data sourced from respondents using the administration of structured questionnaires were employed. This study made use of Structural Equation Model (SEM) on the SMARTPLS 3 application to analyze the gathered data. The study found that social discrimination, family support and risk taking have a positive effect on PWDs business success, while finance, entrepreneurial education and skills top the list of challenges of PWDs business success. The study included that there are inherent challenges and possible prospects to PWDs business success. Key recommendations from this study is that entrepreneurial training, and skills acquisition ought to be modified to meet the needs of the PWDs entrepreneurs while access to finance should also be made available to enhance PWDs business success. Hence, the government - at all levels - should provide institutional vocational centers with needed human and material resources to educate PWDs as well.

Keywords: PWDs, entrepreneurship, skills, social discrimination, start-up capital, and education.

Introduction

One in ten individuals around the world are affected by disability, which is a widespread global occurrence. Currently, less developed nations are home to four out of every five disabled people (WHO & World Bank, 2011; ILO, 2011). With roughly a billion people, or 15% of the world's population, having some sort of disability, this group of people with disabilities is often referred to as "the world's largest minority group" (WHO & The World Bank, 2011). According to popular belief, both the total number of disabled people and the types of disabilities they experience are rising globally (Anderson & Galloway, 2012). Besides, academic literature, particularly those on economic activities and entrepreneurship, pays insufficient attention to this rather sizable.

Presently in Nigeria, the rate of poverty, unemployment and underemployment, corruption, and so many other social problems are on a steady rise; this has become a source of worry to the

government and citizenry without any feasible solutions at hand (Negedu, 2011). However, People with Disabilities (PWDs) are lacking in the economic and social evolution required to improve the welfare of the average Nigerian given that almost all persons with disabilities in Nigeria live on less than a half dollar per day, while others depend on begging to survive. Due to this, PWDs are marginalized and discriminated against in the hunt for jobs and opportunities. People with disabilities all over the world face obstacles to gaining formal employment. The only feasible solution open to such people, especially those who have some entrepreneurial skills, is self-employment. The process of setting up and growth of small businesses owned by persons with disabilities (PWDs) is, however, often limited by a number of factors including; restricted access to credit markets, physical barriers (depending on disability), prejudices, laudable education and recognized skills, insufficient knowledge and/or experience, a lack of or inadequate social networks, and other limitations arising from their physical conditions.

Starting a business is not an easy endeavour in general, but for entrepreneurs with disabilities (EWD), the process is made considerably more challenging. These people have a variety of disabilities, ranging in severity and type, as well as business aspirations. While some people are content to continue operating as a one-man business, providing services that make use of their unique skills, and adjusting their working hours to accommodate their impairment, others want to expand their small businesses into larger ones by hiring more employees. Whatever the objective, however, an entrepreneur with a disability typically encounters overwhelming hurdles when starting and running their business (Aldrich & Cliff, 2003).

Entrepreneurship is viewed by early scholars in differing fields from the standpoint of the entrepreneur who is described as one who invents, initiates, and innovates or more appropriately one who takes calculated risks (Duru, 2011). PWDs can undertake any and all business opportunities available to non-PWDs with special training and special equipment; hence the limitations of a disability can be reduced. Therefore, one can safely posit that entrepreneurship is essential to economic development and growth in a society. Thus, this study evaluates the PWDs entrepreneurship metrics influence on PWDs enterprise success with a focus on their challenges and prospects in Nigeria.

Literature Review

Concept of Disability: A disabled person described as one with some kind of incapacity whether physical, mental or sensory as well as a visible, practical speech or hearing impediment, which leads to a resultant physical social or cultural barriers that inhibit him/her from taking part, at an associate degree, on a level at par with other non-disabled people in the society, relating to activities or fields of employment that should otherwise be available to all members of society. Furthermore, the types of disabilities are widely varied and some are difficult to recognize or qualify. And so researchers mainly focus on those physical disabilities and how it affects entrepreneurial efforts. For one, physical disability is described by the Physical Disability Council (2015) as a condition that causes a limitation on a person's functioning, dexterity, mobility, and/or stamina. A person may become physically disabled from birth or through other circumstances like an accident, illness, injury, or as a result of the side effects of certain medical treatments (Physical Disability Council, 2015).

People living with Disabilities (PLWDs): Disabled people are who have one form of physical, mental or sensory incapability that prevents them from being able to live expected normal lives (Uromi & Mazagwa, 2015). PLWDs referred to disable people that have resigned to fate, live with their challenges and believe that they are not capable to live a good life without depending on capable people (JONAPWD, 2016). Rather, than being creative and engaged in productive enterprise, they resort to begging of alms for survival. PLWDs are outside the scope of this study.

People with Disabilities (PWDs): On June 2011, the World Health Organization with the support of World Bank released a report which indicated that the number of people living with disabilities has increased sporadically and that now one out of every seven people all over the world has a disability. These Persons with Disabilities have been left to live in extreme poverty regardless of the society they reside in, and so there is an unequal distribution of power observed in society and is emphasized by the negative stereotypes associated with disability (Hans & Patri, 2003) PWDs now think creatively by creating innovative enterprise to meet societal needs, contribute to economic growth and development and make a living rather than begging and depending on capable people.

These current statistics are expected to increase progressively (Meager & Higgins, 2011). This is largely due to some health, demographic and developmental factors that are relatively complex and multi-faceted in nature. Among these factors are poor nutrition (like a Vitamin A deficiency), the aging population, an increase in violence and conflicts, rise in cases of HIV/AIDS and other diseases like measles and polio, as well as occupational accidents and traffic, substance abuse and natural disasters (Anderson & Galloway, 2012).

The Joint Association of People with Disabilities (JONAPWD) (2016) grouped disabled people in Nigeria into five (5) clusters. They are the visually impaired, hearing impaired, physically impaired, the intellectually and communications impaired.

Visual Impairment: This disability referred to as loss or impairment of vision may be the inability to envision to an extent that causes issues that cannot be treated through usual means like corrective glasses. This impairment additionally embraces those persons who possess a small ability to envision as a result of not having access to prescriptive glasses and corrective contact lenses. Vision impairment is commonly outlined as a vision acuteness that is worse than vision levels of either 20/60 or 20/40. The concept of vision impairment usually describes a state of a complete or near-complete vision loss. Such a state might result in difficulties with common daily activities like walking, reading or socializing. Visual impairments can be credited to occurring partially due to cataracts (33%), uncorrected refractive errors (43%), and glaucoma (2%). These refractive errors include conditions like far-sightedness, close or short-sightedness, astigmatism, and presbyopia. Cataracts mostly lead to blindness in individuals (Duru, 2011).

Hearing Impairment; Known commonly as deafness, hearing impairment can be described as a partial or complete inability to hear in a person. This loss of hearing might occur in one ear or both the ears. Kids born with hearing issues will have difficulty in finding and learning language, while such a disability in adults will result in difficulties in interactions in social contexts. In some significantly older individuals, hearing loss can resort to loneliness. A loss of hearing could be temporary or permanent, and it could be caused by a variety of things like genetics, ageing, noise exposure, infections and trauma in the ears, birth complications and side effects of certain medications or toxins (Hans & Patri, 2003). Deafness or a disability in hearing care grouped into 3

main varieties namely; sensorineural hearing impairment, mixed hearing impairment, and semiconducting hearing impairment.

Physical impairment: Physical disabilities considerably impact physical performance and lifestyle activities and such impairments could be inborn (categorized as hereditary) or congenital (loss of hearing induced by birth trauma) as stated by the Clinical and Organizational Applications of Applied Behavior Analysis (2015). Physical disabilities usually affect a person's maneuverability, i.e. their ability to use their limbs effectively, ability to swallow food and even their ability to breathe unaided (Pretes & Black, 2007). Physical disabilities may also lead to limitations which may also affect other areas like speech, vision, cognition, language, bowel movement and hearing.

Intellectual Impairment: The difficulties typically associated with a person's general mental capacity that affect both adaptive functioning and intellectual functioning (such as problem solving, learning, and judgement), which are two functional areas that are essential for independent living and communication in daily life.

Communication Impairment: this can be defined as a disorder in communication such as speech or language disorder. It refers to problems in communicating and other related areas such delays in oral or motor functioning. These disorders will vary from shortcomings in the basic substitution of sound to limited know-how or usage of one's language (Gleason, 2001). Generally, this form of impairment usually confers on issues like speech expression and degree of expression that considerably get in the way of a person's actions and/or quality of life.

Concept of Entrepreneurship

The term 'entrepreneurship' is derived from a French word: 'entreprendre' which when roughly translated to means to set about or to undertake (Karlof & Loevingsson, 2005). Furthermore, an entrepreneur can be seen as a person who starts, runs and grows a business by engaging in innovative and creative activities such as; the introduction of new products/services to the market, the improvement of current production methods or procedures of service delivery (Tehseen & Ramayah, 2015). In the same vein, Macleod & Terblanch (2004), describes the entrepreneur as a person who sees problems within his/her environment and proceeds to solve those problems and take advantage of the market environment situation. Thus, we can say that an entrepreneur is one who can take more risks in a bid to increase personal interests or take hold of opportunities available in the market. Schumpeter (1949) however, opined that any person can be an entrepreneur when he or she makes a new discovery that goes on to form the main driver of development in the economy of the nation or society in which he or she resides. The "new combinations" will constitute a better way to create new products or meet consumer demands, and has the potential to make current technologies and products obsolete (what we term "creative destruction"). The innovative entrepreneur's establishment will experience growth through the joint dual process of increasing its market share as well as boosting overall demand that exists for their products i.e. extending the industry's threshold of economic activity.

Conceptualizing Entrepreneurs with Disabilities (EWDs)

In the view of Schumpeter (1949), anyone who engages in productive activities which can add value to the growth of the economy is an entrepreneur. Entrepreneurship is viewed from the productive functions of an entrepreneur such as inventing, imitating, innovating, and risk-taking (Duru, 2011). PWDs engage in some innovative and creative activities that answer a need. Though, the majority of EWDs are in an informal sector engaging in mini businesses such as cobblers, petty trading, tie and dye, phone repairs and accessories, sales of recharge cards, vulcanizing, tailoring, auto and locomotive repairs, barbing and the likes.

Entrepreneurship Challenges of People with Disabilities

Both the people who are not disabled people and those who are disabled alike face some common barriers to participation in the labor market but EWDs in particular also face specific factors that from barriers to entrepreneurship. Past research found that there is a consistently negative effect of disabilities in a person on his or her outcomes in the labour market like (un)employment rates, level of earnings and so on (Jones, 2008; Berthoud, 2008; Meager & Higgins, 2011; Lechner & Vasquez-Alvarez, 2011). Furthermore, disabled people often face some specific barriers when trying to enter and sustain entrepreneurship and these barriers often require a specifically-tailored response in policy. Some of these barriers tend to be very deep-rooted socio-structural constraining elements which impose serious limits on the life-expectancy of certain disabled people. Some of these barriers are; access to some start-up capital, limited knowledge and skills relevant to business, limited aspirations/lack of confidence, discrimination by consumers, lack of appropriate business support and unhelpful attitudes of business advisers.

In the context of this study, it became essential to identify and also understand some of the constraints that entrepreneurs with disabilities (EWDs) in Nigeria face. Disabled individuals in this nation face many obstacles which may hinder them from being effective partakers of society and it may also impede the success of their entrepreneurial businesses. These challenges that face entrepreneurs with disabilities include some of the following:

- I. **Discrimination:** Mandipaka (2014) defines discrimination as an unfavorable differentiation of one thing from another, Marumoagae (2012) is of the opinion that this discrimination is one of the most severe stigmas against people with disabilities that society still has not overcome. Mann, Maja, Sing, Naidoo and Steyn (2011) assert that this discrimination against disabled people stems from the negative attitudes, lack of awareness and knowledge among people in society. People with disabilities (PWDs) are mostly regarded by society as people, who are not able to contribute to anything, and most of the time is dependent on others and so they always wait to be helped.
- II. **Access to Capital:** Mauchi et al. (2014) regarded such things as a lack of access to capital, and other constraints of financial systems as the main factors that hinder potential entrepreneurs from achieving business innovation and entrepreneurial success in underdeveloped economies. People with Disabilities often have to face difficulties in financing their new businesses due to insufficient personal financial resources like savings or home ownership, and this is partly because of poor education on their part, less employment opportunities and a concentration of disable employees in low-paying

occupations. Other factors that impede the EWDs access to start-up capital are poor credit rating; discrimination/disinterest of the banks, lack of access to relevant information on sources of loans and grants (Black & Pretes 2008; Foster 2010) et cetera.

- III. Lack of Entrepreneurial Training and Skills: In the view of Steenekamp, Vander-Merwe and Athayade (2011) they opine that creative spirit, in a favorable environment, can serve to empower individual to the required level of business education and entrepreneurial skill in them. These factors are usually lacking in developing countries. Choto, Tengeh and Iwu (2014) explain that the education systems in developing countries is lacking in entrepreneurial training, their system do not encourage pursuing entrepreneurship as a careers, instead it is seen as what unemployed people do when they repeatedly fail to get gainfully employed or when they do not have a profession.
- IV. Market Prejudices: Prejudices that entrepreneurs face in the market may be because of their age, gender, caste, religion, and disability. Beyond these already existing prejudices, there is also an observable reduction in demand for goods and services produced by people with disabilities. Such prejudices can reduce the income that the EWDs get compared to other entrepreneurs (Jones & Latreille, 2011; Black & Pretes, 2008)
- V. Business Contacts: it is commonplace for entrepreneurs to make use of their formal or informal networks for experience and influence. However, disabled persons usually experience more difficulties when establishing and retaining business contacts (Antoncic & Hoang, 2003).

Theoretical Review

There are a number of theories that are related to the concept of PWDs entrepreneurship challenges and success. Some of the theories are personality traits theory, social capital theory and liquidity theories.

Personality traits Theory: Personality traits are defined by Coon (2004) as the “stable qualities that an individual shows in most every situation”. Trait theorists believe that entrepreneurs require particular enduring inborn qualities or individual potential that will naturally make him/her a successful entrepreneur. The theory seeks to answer the obvious question “What exactly are these traits/inborn qualities?” This not a question with a straightforward answer since we cannot directly pick specific traits that an entrepreneur needs to have. What this theory does give is some insight into these traits by identifying the basic characteristics popularly associated with an entrepreneur. Based on these, some common traits that entrepreneurs will require includes creativity, achievement, perseverance, determination, opportunism and technical knowledge.

Social Network or Social Capital Theory: Entrepreneurs are a member of a larger social structure that accounts for a sizable share of their potential (Clausen, 2006). In response, Shane and Eckhardt (2003) state that "an individual may be able to recognise that a specific entrepreneurial opportunity exists, but might lack the social ties to translate the potential into a firm starting. It is believed that having access to a wider social network could assist solve this issue. Foster (2010) continues by stating that the sociological school of thinking has four stages for social networks. According to all of the available research, a more solid social connection to resource providers will speed up the procurement of those resources and increase a business' chances of capitalising on opportunities (Shane & Eckhardt, 2003).

Entrepreneurs are a part of a larger social structure which makes up a significant proportion of their opportunity (Clausen, 2006). Concerning this, Shane and Eckhardt (2003) declare that “*an individual may have the ability to recognize that a given entrepreneurial opportunity exist, but might lack the social connections to transform the opportunity into a business startup. It is thought that access to a larger social network might help overcome this problem*” Following this, Foster (2010) states that social network has four stages in the sociological school of thought. All existing literature here agree that a stronger social relationship to providers of business resources will facilitate prompt acquisition of these resources and improve business’ prospects of opportunity exploitation (Shane & Eckhardt, 2003).

Liquidity/Financial Capital Theory: Empirical research demonstrates that the success of a new firm is more effective when people can access sufficient financial capital (Blanchflower, 2001). This theory draws from this and asserts that people with sufficient financial capital are usually more capable of acquiring resources to take advantage of entrepreneurial opportunities and establishing a business to do just that (Clausen, 2006).

Empirical Review and Hypothesis development

The inherent challenges embedded in entrepreneurship are enormous and varied based on the enterprise, but the issues with PWDs are more serious as different factors affect their entrepreneurial drive. There are divergent views about the inherent challenges the PWDs entrepreneurs face drawn from the opinions of different scholars. Researcher such as Coon (2004); Hans and Patri (2003); Meager and Higgins (2011) were of the opinion that PWDs only faced social discrimination while Karlof and Loevingsson (2005); Tehseen and Ramayah (2015) were of the view that finance is the major impediment to PWDs entrepreneurs. Besides, some authors (Negedu, 2011; Duru, 2011; Aldrich & Cliff, 2003) argues on the major components of PWDs entrepreneurial challenges as there are conflicting views on the challenges that militate PWDs entrepreneurship success. Thus, this study hypothesized;

H₀₁: Entrepreneurship metrics do not have significant influence on PWDs success

Methodology

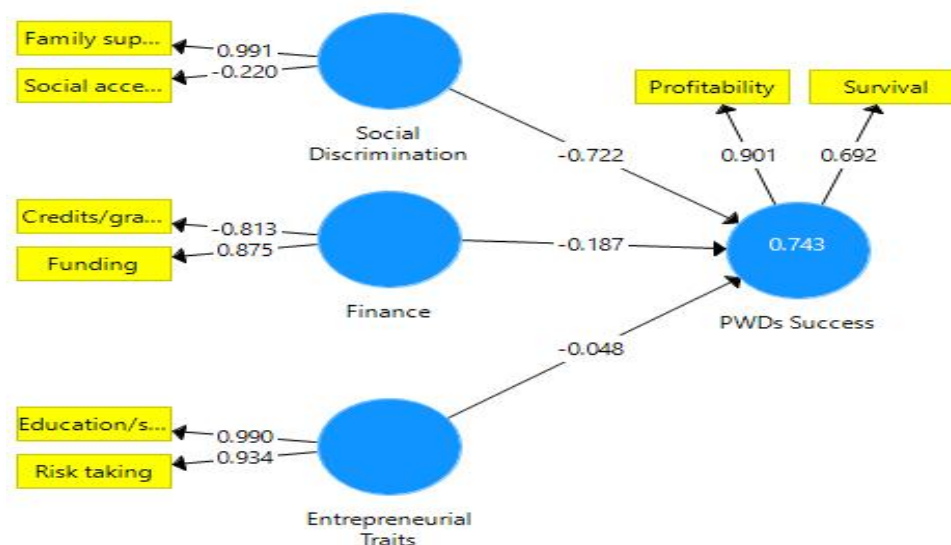
Adopted for this study is a survey research design. The study centered on four states in Nigeria with the highest number of PWDs engaged in business enterprises according to the information obtained from the Joint National Association of Persons with Disability (JONAPWD) in Nigeria and based on each state peculiarity. The selected states are Gombe, Kwara, Lagos and Oyo state. These selections were as a result of Lagos state being a commercial nerve center in Nigeria with high entrepreneurship opportunities and the involvement of both people with and without disabilities. Oyo state was selected as a result of the history of special education, (education for people with disabilities e.g. Special Federal College of education, Oyo) and it represents the geopolitical zone of the southwest. Gombe state was chosen to represent the northeast, because it is one of the peaceful states and PWDs tended to migrate to Gombe state due to its security and thereby establishing businesses such as shoe making, farming, tailoring, and the likes while Kwara state was chosen based on the geo-political zone for north central. A Cochran sample size determination formula for

proportion was used and the sample size of 384 was equally divided among the sample states. Multi-stage sampling techniques which comprises of stratified, purposive and simple random sampling were chosen to select the respondents. Data used for this research was primary data sourced with the aid of a structured questionnaire to gather relevant information from the respondents with a 7-point Likert scale. The chosen variables for the research were social discrimination (societal acceptance & family support); entrepreneurial trait (education & skills, and risk taking); finance (funding & credits/grants); and PWDs success (profitability & survival). Copies of the questionnaire were administered personally by researchers employing the help of some trained assistants with a keen understanding of sign language where it was necessary. Data obtained from the questionnaire were collated, scrutinized and analysed using Structural Equation Model (SEM using SMARTPLS 3 software).

Findings from Analysis

Data collected were thoroughly examined and the usable questionnaires were three hundred and fifty-two which represents a 91.7% success rate. The identified variables for the path-model are shown below;

Figure 1: Entrepreneurship and PWDs path model



Source: Researcher’s Path Model, 2020

The path-model analysis on the entrepreneurship metrics that influence on PWDs success in Figure 1. Entrepreneurship metrics used in the study were social discrimination – with family support and social acceptance as chosen proxies; finance – proxied by funding and credits/grants; and entrepreneurial traits – proxied by education/skills and risk taking. These variables were examined against the PWDs success which was proxied by enterprise survival and profitability. Figure 1 present the effects on interaction when more than one variable contributes to the latent variables.

Table 1: PLS Path Coefficients

	Entrepreneurial Traits	Finance	PWDs Success	Social Discrimination
Entrepreneurial Traits			-0.048	
Finance			-0.187	
PWDs Success				
Social Discrimination			-0.722	

Source: SMARTPLS Output, 2020

As shown in Table 1, all the PWDs entrepreneurs’ metrics involved showed a negative contribution to the latent variable. Entrepreneurial traits showed the weakest path coefficients with -0.048, closely followed by finance with -0.187 and the strongest path with -0.722 were social discrimination. These negative coefficients imply that these factors do present challenges to PWDs enterprise success. The absolute magnitude of social discrimination has a better coefficient being approximately thrice the coefficient of variables of entrepreneurial traits. This therefore means that social discrimination, finance, and level of education/skill and risk taking observed in EWDs are useful determinants of their success in business. These identified variables significantly contribute to the prediction of PWDs success in the study’s sample.

Table 2: Outer Loadings

	Entrepreneurial Traits	Finance	PWDs Success	Social Discrimination
Credits/grants		-0.813		
Education/skills	0.990			
Family support				0.991
Funding		0.875		
Profitability			0.901	
Risk taking	0.934			
Social acceptance				-0.220
Survival			0.692	

Source: SMARTPLS Output, 2020

The outer model revealed contribution of the observed indicators to the value of the latent variables. The closer the loading is to the coefficient 1 the better. The findings revealed that outputs, social acceptance, survival, and credits/grants could possibly have been ignored but dropping those indicators did nothing to improve the total reliability. The outer weight models vary from zero to an absolute maximum less than 1, thus establishing that the more indicators there are for a latent variable, the lower the maximum and the average outer model weight. These results justify why such a weak loading weight could not be neglected as all the other loading weights were greater than 0.50 excluding social acceptance. These variables were also major participatory elements of the latent variables from the PWDs literature.

Table 3: R Square

	R Square	R Square Adjusted
PWDs Success	0.743	0.741

Source: SMARTPLS Output, 2020

The measure of size of common effect in the path shows an R square of 0.743, thus meaning that 74.3% of the variance in PWDs success can be explained by the joint model of PWDs entrepreneurship metrics proxied finance, entrepreneurial traits and social discrimination. This shows that the identified variables have a strong influence on PWDs success, implying that 25.7% of the variance is a result of other influencing variables not imputed in the model. Although, an R-square value greater than 80% reflects the possibility of a multi-collinearity problem (where Tolerance = 1 – R²) but in this case, there exists no multi-collinearity problem because the tolerance in this data set is at an extreme greater than 0.25. After adding required predictors to the regression model, the adjusted R-square is 0.741. This closeness of the unadjusted R square in this model is due to few number of variables included in the model.

Table 4: f Square

	Entrepreneurial Traits	Finance	PWDs Success	Social Discrimination
Entrepreneurial Traits			0.005	
Finance			0.033	
PWDs Success				
Social Discrimination			0.405	

Source: SMARTPLS Output, 2020

The F-square table shows the weights and importance of the identified variables, the F-square results revealed the strength of the path in effecting change in PWDs success. The observed changes in entrepreneurship metrics on the latent variable of PWDs are 0.005, 0.033 and 0.405. These variances in the change effects of disabled entrepreneurs are seen to be wide apart and ranges from insignificant to significant effect. From these, we can assert that disabled entrepreneurship traits - education/skill and risk taking –has an insignificant change effects on PWDs success, but the weight path coefficient is negative which implies that PWDs are willing to take risks despite their low level of education/skills. The change effect of finance (proxied by credits/grants and funding) and social discrimination (proxied by family support and social acceptance) are major impediments to PWDs entrepreneurship success. The change effect on the F-square table shows that the variables of social discrimination have a stronger effect than finance metrics. This therefore implies that family support, social acceptance, funding, credits/grants contribute have the most significant change effect of PWDs success as regards entrepreneurship survival and profitability. It then becomes more important for the government and stakeholders on PWDs to take these variables seriously to enhance PWDs entrepreneurship success.

Table 5: Bootstrapping Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Entrepreneurial Traits -> PWDs Success	-0.048	-0.046	0.053	0.897	0.370
Finance -> PWDs Success	-0.187	-0.189	0.080	2.328	0.020
Social Discrimination -> PWDs Success	-0.722	-0.716	0.080	8.972	0.000

Source: SMARTPLS Output, 2020

The PLS bootstrapping output as shown above shows the t and p value coefficient. From these results, we can see that social discrimination and finance indices significantly contributes to the prediction of PWDs success at .005 probability level while entrepreneurial traits are relatively insignificant, even though all the identified variables of the study were capable of predicting PWDs success in the study area.

The results of this analysis thus revealed that for the disabled people that engage in entrepreneurship to record success in terms of profitability which is capable of enhancing business survival and continuity, there is need for PWDs families to support their entrepreneurship drive. The society should be ready to patronize them and give them the necessary support. Funds should be made available for seed and survival capital for the smooth running of their businesses and windows of opportunities such as credits/grants should be made available by the government through specialized banks or micro finance institutions to encourage and support PWDs. Though, finance has been a general challenge of entrepreneurs in Nigeria for both PWDs and non-PWDs but PWDs experience more acute difficulties in accessing finance because some of them cannot meet up with standard requirements such as collateral and other requirements. Likewise, avenues should be created for entrepreneurship drive and success as the majority of the sampled respondents are willing to take risks. The study revealed also that the loading weight of PWDs enterprise survival was below the minimum criterion of 70% suggested for the loading weight. The enterprise survival may increase if social acceptance and credits/grants are enhanced. However, PWDs entrepreneurship metrics influence PWDs success in Nigeria.

Discussion of Findings

From this study, we can see that social discrimination has a significant influence on PWDs success. This is in tandem with the findings of the studies by De Vries (2003); Anderson and Galloway (2012) whose studies revealed that persons with disabilities are exempted from the world of economics, politics and social disorder. Also, it was revealed that laudable entrepreneurial education and skills have a serious effect on PWDs success which conforms to the findings of Duru (2011); and Choto, et al. (2014) who stressed the fact that limited training and education of PWDs in business was a key inhibiting factor of growth of entrepreneurship in tour economy. Furthermore, the study revealed that funding and credits/grants constitute major setbacks to PWDs success. This is also in agreement with the study of Blanchflower, Oswald, and Stutzer (2001); Aldrich and Cliff

(2003); and Anderson and Galloway (2012) whose different studies revealed that capital is one of the challenges of disabled entrepreneurs.

Conclusion and Recommendations

Generally, the challenges faced by the entrepreneurs are enormous and varied based on the structure, size and nature of the enterprise but the PWDs entrepreneurs faced some specific challenges that militate the success of their enterprise. They study concluded that social discrimination, finance and entrepreneurial traits influence PWDs entrepreneurship success. Also, the study observed that social discrimination (as proxied by family support and societal acceptance) and finance (as proxied by credits/grants and funding) posed serious challenges to the success of enterprise owned by the disabled while entrepreneurship skills/educations can enhance risk capacity of PWDs. The study therefore recommend based on the findings that:

- i. To accommodate the needs of PWD entrepreneurs, entrepreneurship education and skill development should be improved.
- ii. To increase PWDs' business performance, access to finance should be made possible.
- iii. All levels of government should give institutional vocational centres the necessary financial and human resources so they can teach disabled individuals how to use their skills to support themselves.
- iv. Efforts should be made to set up workshops on skill acquisition and capacity building which will ensure that there is a rapid growth/development of entrepreneurship as well as technological advancement among PWDs of the society.

References

- Aldrich, H.E., & Cliff, J. (2003). The pervasive effects of family on entrepreneurship: toward a family embeddedness perspective. *Journal of Business Venturing*, 18, 573-596.
- Anderson, M. & Galloway, L. (2012). The value of enterprise for disabled people. *The International Journal of Entrepreneurship and Innovation*, 13(2), 93-101.
- Berthoud, R.H. (2008). Risk taking propensity of entrepreneurs. *Academy of Management Journal*, 23, 509 - 520.
- Black, C & Pretes, A. (2007). Who wants to be an entrepreneur? A study of Adolescents interested in a Young Enterprise scheme. *Journal of Economic Psychology* 12, 465- 478.
- Blanchflower, D., Oswald, A., & Stutzer, A. (2001). Latent entrepreneurship across nations? *European Economic Review*, 45, 680-691.
- Blanck, P. D., Sandler, L. A., Schmeling, J. L., & Schartz, H. A. (2000). The emerging workforce of entrepreneurs with disabilities: Preliminary study of entrepreneurship in Iowa. *Iowa Law Review*, 85(5), 1583-1668.

- Choto, S. Tengeh, H., & Iwu, S. (2014). Assessing entrepreneurial inclination: Some approaches empirical evidence. *European Journal of Work and Organizational Psychology*, 9(1), 7-30
- Clausen, T.H. (2006). "Who identifies and Exploits entrepreneurial opportunities", Retrieved from www.ccsr.ac.uk
- Clinical and Organizational Applications of Applied Behavior Analysis, (2015).
- Coon, D. (2004). *Introduction to Psychology* (9thed) Minneapolis: West Publishing Company.
- Deafness and hearing loss Fact sheet N°300", (March 2015). Archived from the original on 16 May 2015. Retrieved 23 May 2015.
- Duru, L. (2003). Workforce development: the case of disabled people towards economic empowerment and entrepreneurship, paper presented at ICSB World Conference, November, Belfast.
- Foster, S.A (2010). Opportunities and Entrepreneurship. *Journal of Management*, 29 (3), 333 - 349.
- Handicap International, (2006). Good Practices for the Economic Inclusion of People with Disabilities in Developing Countries: Funding Mechanisms for Self-Employment, Retrieved on March 02, 2018 from https://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?referer=https://www.google.com/&httpsredir=1&article=1295&context=glad_net_collect.
- Hoang, T.S. &Antonic, H.C., (2003). Differences in psychological characteristics between entrepreneurially inclined and non-entrepreneurially inclined accounting graduates in Singapore. *Entrepreneurship, Innovation and Change: An International Journal*, 1, 43-54.
- Joint Association of People with Disabilities (JONAPWD) (2016). Report on people with disabilities entrepreneurship drive. Fact sheets
- Jones, P., & Latreille, L.A. (2011). The Impact of financial, human and cultural capital on becoming a Nascent Entrepreneur. Working paper.
- Karlof, B., & Loevingsson, F. (2005). *The A-Z of management concepts and models*. London, UK: Thorogood.
- Lechner, H.& Vazquez-Alvarez, A. T. (2011). The Roots of Entrepreneurship Research, Conference proceedings, Lyon, France, November 26-27.
- Macleod, M., & Terblanche, D. G. (2004). A review of the evidence on the effectiveness of children's vision screening. *Child: Care, Health and Development*. 36(6), 756–80. doi:10.1111/j.1365-2214.2010.01109.x. PMID 20645997.

- Maja, P., Mann, A. Sing, S., Steyn, G. & Nidoo, B. (2011). Human capital, social capital, entrepreneurship and disability: An examination of some current educational trends in the UK. *Disability & Society*, 21(3), 217–229.
- Mandipaka, P.D., (2014), Sociology and entrepreneurship: concepts and contributions. *Entrepreneurship: Theory & Practice*, 16(2), 47-70
- Mauchi, S., Mutengezanwa, T., & Damiyano, J. (2014). Entrepreneurial competencies and SMEs business success: The Contingent role of external integration. *Mediterranean Journal of Social Sciences*, 6(1), 50-61.
- Negedu, R., (2011). Defending Deaf Culture: The Case of Cochlear Implants (PDF). *The Journal of Political Philosophy*. 13 (2). Retrieved 30 November 2014.
- Shane, S.A., Eckhardt, S. F., (2003). *A General Theory of Entrepreneurship: The Individual-Opportunity Nexus*. Cheltenham:
- Steenekamp, D., Vander-Merwe, G. A, & Athayde, T. A. (2011). The promise of entrepreneurship as a field of research. *Academy of Management Review*.
- WHO (2011). The global burden of disease: 2004 update (PDF). Geneva, Switzerland: World Health Organization. p. 35. ISBN 9789241563710. Archived (PDF) from the original on 2013-06-24.
- World Health Organization (2005). Disability and rehabilitation status: Review of disability issues and rehabilitation services in 29 African countries. 2003. < www.who.int (Version current at May 13, 2005)

The Impact of Lagos Innovation Hubs and COVID-19 Realities on Wealth Creation

Adegbiji, Adebayo Peter¹ & Adebisi, Sunday Abayomi²

¹*Distance Learning Institute, University of Lagos*

²*Entrepreneurship and Skills Development, University of Lagos*

Email: adebayo@unilag.edu.ng; sadebisi@unilag.edu.ng

Abstract

Focused, well-articulated and properly developed entrepreneurship endeavor and activities will engage both young and old productively, engage their intuitive mind for creative results and products. It will also increase the quality of lives of citizens and the wealth of nations. Poverty and inequalities have been ravaging the world prior to the emergence of the Corona Virus novel infections (COVID 19), but the emergence of the infections exposed humans to far more pressure and uncertainties than before. This article examined the impact of the technology hubs in Lagos, Nigeria and evaluates their impact in youth engagement and wealth creation. A hybrid of qualitative and quantitative research approaches was used in this study, 29 of the technology hubs owners were interviewed while users/patrons from 31 out of about 40 technology hubs in Lagos responded to questionnaire through the provided google link or the physical copies administered. Despite the concentration of most of technology incubation hubs in Nigeria in Lagos, this study conclude that the numbers of technology incubation hubs were not adequate in number compared to the volume of youths and their numerous ideas that needs to be nurtured and developed into full fledged profitable products and services. This study also discovered that the services being rendered by more than 81% of the few technology hubs are merely provision of co-working spaces and internet services, the conscious programs and efforts that will help young startups and entrepreneurs grow and crystalize their likely business ideas into real businesses is lacking amongst the list of services being rendered by the technology hubs; the consciousness of this discovery will help current and emerging entrepreneurs, funders, investors and even private and government agencies to approach the issue of technology entrepreneurship from a more conscious and well thought out perspectives so as to reap more benefits for the various entrepreneurship efforts and endeavours because wealth is created only when the ideas are developed into products that are patronized by consumers.

Keywords – Creativity and Innovation, Entrepreneurship, COVID 19, Technology Innovation Hubs, Wealth creation, Lagos

Introduction

Entrepreneurship and Innovations Development

Entrepreneurship as a process whereby new and/or different activities is performed for wealth creation, is a rewarding and risky venture that challenges status quo in a bid to first give the entrepreneur an experience, then help mold his or her thoughts and actions in the process of exchanging values (goods and services) for money. It could be the creation of a new thing in its entirety or the doing of an old thing in a different way, which in turn will generate wealth for the individuals and value for the society (Gumus & Gumus, 2015; Leite & Moraes, 2015; Mehta,

Chandani, & Neerajac, 2014). Klein (2016), Schwaab (2017) and Memon (2016) support the description of the entrepreneurial act as the acquisition, combination, and recombination of heterogeneous resources under conditions of uncertainty. Innovations in the way humans work and play, travel and eat, start our families, and raise our children all create opportunities for entrepreneurs to build businesses and organizations that will exploit new technology and trends. We can also say that entrepreneurship is a self-perpetuating phenomenon: If a society has it, more is likely to come (Dollinger, 2008).

Innovation hubs are training and empowerment centres established towards equipping current and future entrepreneurs, for networking and for strategizing. Innovation hubs help potential entrepreneurs who have enough burden and ideas to crystalize their ideas and translate it into a business plan that is marketable and fundable by potential investors. The number of technology hubs and innovation centres are spreading fast around the globe, In Africa alone as at 2016, there are over Three Hundred and Fourteen (314) active technology hubs, while there are about Two Hundred and Eighty Seven (287) in South and South East Asia (excluding India), (Sanbuli & Whitt, 2017; Kelly & Firestone, 2016). In the face of the ravaging COVID 19 disease, this paper answer the research question, to what extent does the incubation hubs in Lagos contribute to wealth creation and entrepreneurship development?

1a. Research question

To what extent do the incubation hubs in Lagos contribute to wealth creation and entrepreneurship development?

2. Review of Relevant Literature

2.1 Innovation Hubs

Innovation hubs have several activities that they engage in on a daily/weekly basis to enlighten, expose and spur upcoming entrepreneurs to a productive action. Amongst other activities and responsibilities, Incubation hubs are expected to provide guidance, training and support for their patrons; such support and trainings varies from one to another. Some of such support and guidance include, evaluation of business ideas to determine the ones that can be worked on to become a business, provision of lead to finance, training on development of business plan, pitching techniques, product and service development, business finance and strategy formulation (Bay & Cil, 2016) (Jelonek, 2015)etc. Being conscious of the facts that the development of any worthwhile innovative solutions (good or services) takes not only time but out-of-the box ingenuity and tenacity, innovation hubs are expected to provide motivation and encouragement using the success stories of others and network of successful entrepreneurs to encourage their patrons and see their thoughts crystalized into products and services that offers concrete business values (Kumara, Luthrab, Manglad, & Garge, 2015) (Miranda, Farias, Schwartz, & Almeida, 2016).

Entrepreneurship is filling necessary gaps in improving quality of lives. Quite a whole lot of factors determine how successful an entrepreneurial adventure will be; such factors include the motivation for the entrepreneurship adventure, the personality of the visionary and drivers, experience and

exposure, the character, the products or service being provided, the environment etc. (Kelly & Firestone, 2016; Lager, 2016).

Resource Based Theory of Entrepreneurship

The theoretical framework of *Resource Based Theory of Entrepreneurship* (RBV) focuses on the strengths, assets, and capabilities of entrepreneurs; this helps the entrepreneurs to be practical and efficient (Dollinger, 2008). RBV though, incorporates competition. Market opportunities, industry structure etc., it places prominence on *resources, skills* and *capabilities*. Anything that is useful and of a quality state can be referred to as a resource, it could be knowledge based (intangible) or property based (tangible). RBV helps to compare the resources, skills, and capabilities of various entrepreneurs operating under similar or different environments. It theorizes that sustainable competitive advantage is crafted when businesses possesses and employs resources and capabilities that are *valuable, rare, imperfectly imitable* and *non-substitutable*.

Motivation for Entrepreneurship

People starts or operates businesses for different reasons, each of them having different level of push and influence on the actions of the entrepreneurs. Motivation could be seen as the “tipping points” that triggers the individuals to start the process of business creation. Some businesses were started out of necessity while some out of opportunity (Stephan, Hart, Mickiewicz, & Drews, 2015). The report of the research conducted by (Pipirigeanu, Zaman, Strasser, Arama, & Strasser, 2014), (Stephan, Hart, Mickiewicz, & Drews, 2015) posits that autonomy followed by financial motives are the leading motivation for entrepreneurship.

It indicated that seven dimensions as captured below provides entrepreneurial motivation in sufficient breadth and depth as (1) Achievement, challenge & learning, (2) Independence & autonomy (3) Income security & financial success, (4) Recognition & status, (5) Family & Roles, (6) Dissatisfaction^[SEP] and (7) Community & social motivations. The Job Creation Unit of the Office of the Vice President, Federal Republic of Nigeria, reported on the economic activities that could be targeted to stimulate job creation through a One hundred and fifty six (156) pages report. The report is a multi-sectoral study and analysis carried out by Dalberg and Accenture Development partnership and funded by the UK Department for International Development (DFID) as captured (Office of the Vice President, Federal Republic of Nigeria, 2017). In the report, four sectors namely (i.) Agro Allied (ii.) Trading [Wholesale and retail] (iii.) Construction and (iv.) Information and Communications Technology were identified as strategic economic clusters that should be targeted to incite employment creation. In a 2016 World Development Report titled “How Tech Hubs are Helping to drive Economic Growth in Africa” written by Tim Kelly and Rachel Firestone in (Kelly, & Firestone, 2016); the patterns of origin of technology hubs, why they were created, why they have high failure rate and what makes for their successes were reported. The paper tracks about One Hundred and Seventeen (117) technology hubs across Africa. The report was empirical in stating how the rapid spread of digital technology across Africa has not yielded its corresponding dividends. However, no statement was made on whether the spread is commensurate with what is required to have digital independence. No doubt, each of the Technology Incubation Centres and IT hubs has produced results at different degrees and as results of various factors.

Sanbuli & Whitt (2017) is a research report of the Institute of Development Studies, which emphasizes the need for technology Incubation Centres founders to engage policy makers and funders in a more strategic approach. The authors view a Technology Incubation Centre as a space and community that reduces the barriers to co-creating positive solutions, provides opportunities to build technological skills and competencies in a participatory culture, apply technological know-how and entrepreneurial strength into solving problems, and thinks much more than profitability by including social innovation, community empowerment, and human-centred development.

Lagos as Centre for Innovation Hubs

Lagos State is one state in Nigeria that has a at least one representative of all other states, local governments and tribes as its resident, the state has the acronym 'Centre of Excellence' and is proudly addressed as the economic capital of Nigeria with well over 10% of the population of the entire country, surrounded by waters and a home to many, both young and old, more than 80% of the nation's import is being handled in Lagos, a former Federal Capital of Nigeria (ASPEN Network of Development Entrepreneurs (ANDE) West Africa Regional Chapter). There is an estimation of about 500-700 viable and functioning technology startups in Lagos, worth over 2 billion US dollars, which is the highest in Africa. (Schwaab, 2017) (Ikebuaku, 2016). As reported by (ASPEN Network of Development Entrepreneurs (ANDE) West Africa Regional Chapter), some of the entrepreneurial opportunities in Lagos are growing need to attract talent for growing small and medium scale enterprises (SMEs), increasing demand for affordable co-working spaces, opportunity for stronger collaboration between the government and private institutions, opportunities for intermediary to deepen support for building viable technology based businesses, opportunities for intermediaries to guide and assist SMEs in having access to funding etc. (Beer, Millar, Mwangi, Nzomo, & Rutenberg, 2017) (Dereli, 2015) (Ikebuaku, 2016).

The consistency in the political leadership that Lagos State enjoys since the beginning of the current unbroken democratic style of governance in Nigeria contributes a great deal to the economic stability, policy sustenance, and steady growth the state is witnessing currently except for the #ENDSARS protest that recently disrupted the relative peace and conducive business atmosphere that the state enjoys.

Creativity, Innovation and Entrepreneurship

Creativity is defined as the re-arrangements of new relations and connections between components in order to make up new things or bodies (Carayannis, 2013); a serious minded entrepreneur should therefore see creativity not as an option but as a necessity for crystal clean results. Creativity is made easier and possible when ongoing activities and relationships are studied, and the purpose of each element involved in the whole is understood in the right context. Creativity in any entrepreneurship endeavor requires depth and clear understanding of the current systems, components and processes; this will allow the entrepreneur to engage his/her ingenuity in the creation of new products, services, processes and relationships that will reduce cost, increase quality, acceptable and connect with the current days realities (Carayannis E. , 2013) (Guda, Tanase, & Purcareia, 2017).

Creativity could be either adaptive or innovative. Adaptive creativity uses existing solutions and techniques, then adapt it to a changing or new scenarios while innovative creativity are thoughts that resolves into new solutions, new techniques, new methods, new products or/and new services. For businesses, adaptive creativity is much more common, easier to apply, much more supported than innovative creativity, whereas innovative creativity can bring about an entire new business line, procedure or services. For innovative creativity to be adopted, it must have a point for social contact, be relevant and useful or perceived to be relevant and have the potential to generate desired value or much more (Carayannis, 2013) (Akanle & Abraham, 2017) (Camison-Habaa, Clemente-Almendros, & Gonzalez-Cruza, 2018) (Drucker, 1984).

The adequate deployment of creativity and innovation to business ventures and processes provides and edge for any entrepreneur or business man who is strategic enough to identify, crystalize and pursue such creative ideas within his operating environment. Entrepreneurship Innovation could be said to be any or combination of (i.) Creation of a new product or service (ii.) Changes in the distribution pattern, properties, packaging etc. of an existing products or service (iii.) Positive shift in the operational strategy of an organisation (vi.) Creation of new markets for new and existing products or/and (v.) Better efficiency in production and product quality (Mehta, Chandani, & Neerajac, 2014) (Carayannis, 2013) (Carayannis, Samara, & Bakourous, 2015).

Within the Nigeria business operating space, most (above 90%) of the technology organisations can be classified as small or at best medium sized organizations (Adegbiji & Azeez, 2016), this shows the volume of people whose capacity are being currently engaged and employed in productive entrepreneurship activities. MTN Nigeria, one of the telecommunications giant operating within the Nigeria space got listed on the Nigeria Stock Exchange barely over one (1) year ago. The characteristics of a SME (Small and Medium Scale Enterprise) are much feasible in almost all the technology service providers and operators in Lagos. As expressed in Bayarcelik, Tasel, & Apak (2014), SMEs are strategic drivers of innovation and competitiveness in any economy.

COVID-19 and its realities

COVID-19 pandemic brought the entire world, to its knees, created a lot of confusion, fears and uncertainties. As at 28th October, 2020, over 1.2 million people across the globe has been lost to the pandemic, it reduces social contacts, physical meetings and even traditional physical communications and the ways we related and interact with one another, it is indeed a re-definition of lifestyle. It affected the economies of both under-developed, developing and the developed nations of the world, the entire human race has to face a test of preparedness, a test of strength and the battles is yet, not over. It has no respect for race, culture, colour and affiliation of any sort, we were all vulnerable, we were all afraid, the news of the infection occupied the centre stage at all forums and levels, several postulations and theories were flying in the air, many were being infected, many were dying, (Leach, MacGregor, Scoones, & Wilkinson, 2020), (Clement, 2020). There are several thinking and re-thinking because the outbreak unlike previous ones poses as great threat with dreadful and threatening capacity to infect all, both young and old. This brought quite a lot of thoughts on the new ways of life, even after the survival because its fears is still very much with us as new cases of infections are recorded on a daily basis, till now.

Economies that were weak prior to the pandemic got weaker and the supposedly stronger ones were

all afraid as collection of government incentives and palliatives becomes a mainstay of survival for citizens, production lines were cut, storage capacity affected and the products become very scarce and of course, much more expensive.

Research Methodology

Research methodology is very significant because it bequeaths the systematic ways adopted in responding to the research question and providing solution to the research problem(s) identified. Research design provides a blueprint on how a specific research endeavor is being carried out; it provides a sequential plan on how the research questions were accurately and objectively answered in this work (Fabiana, Edson, & Marcela, 2016; Mack, Woodson, MacQueen, Guest, & Namey, 2011). It determines the relevant data and how the data were collected and analyzed.

Multiple case research by visitation, website reviews; qualitative approach using in-depth interview with initiators of incubation hubs and quantitative approach using survey questionnaires administered on patrons of incubation hubs were used in this study.

Qualitative research was used together with quantitative methods, and it helps us to decipher and better appreciate the complex actuality of the situation and the repercussions of quantitative data. One benefit of qualitative methods in exploratory research is that use of open-ended questions and probing furnishes participants the opportunity to answer in their own words, rather than compelling them to pick from fixed responses, as quantitative methods does (Bhattacharjee, 2012).

In-depth interviews are one of the most usual qualitative methods. One reason for their recognition is that they are very effective in giving a human face to research problems. In addition, conducting and participating in interviews can be a rewarding experience for participants and interviewers alike (Mack, Woodson, MacQueen, Guest, & Namey, 2011); and such is the experience in this work. During the in-depth interview sessions, the owners of the hubs that were being interviewed are considered the expert and the interviewer is considered the student. The interviewing techniques are motivated by the desire to learn everything the participant can share about the research topic (in this case, the technology incubation hubs), and this was the case during the interview sections with the initiators of innovation hubs that were interviewed during the course of this work.

Qualitative Research Design

The website of the 40 (forty) hubs were visited to get first-hand information on the content of their website as regards their services and offerings, management, goals and motivation, this is adequately reported in the next section for reporting findings of this work. In depth interviews were conducted for 29 (twenty –nine), 72.5% out of the 40 innovation hubs initiators/co-founders identified in Lagos. The questions bothered on mode of ownership, funding, details of operation and services, motivation, impacts and challenges being faced by these entrepreneurs and trainers.

Quantitative Research Design

Quantitative approach was used for the patrons and users of the hub; Google form was used as responders' mode of participation while some hard copies were also on hand to be administered to

those who feel comfortable using such. The first section of the questionnaire requested for the details of the respondent such as age, sex, academic qualification, years of experience and years of patronage of the incubation hub. The second section sought to get answers to questions bordering on the entrepreneurial activities of the users of the hub, some the questions borders on company registration, years of engagement in entrepreneurial activities, products and services being offered and the sectors of the economy enjoying such services or products. Other questions are focused on funding of their entrepreneurial plans and activities, the type of offerings being enjoyed at the incubation hub and open-ended questions regarding challenges and opportunities. Some of the quantitative questions in the questionnaire are written out in the section discussing findings.

Population of the Study

Lagos, the most densely populated city in Nigeria with a population of over twenty million people and African's 5th mega city; have about 40 innovation hubs (Office of the Vice President, Federal Republic of Nigeria, 2017; KPMG in Nigeria, 2016; Akanle & Abraham, 2017; ASPEN Network of Development Entrepreneurs (ANDE) West Africa Regional Chapter). Lagos, by virtue of its population has its own unique internal mechanisms maintaining interethnic, interreligious and social balances. A foremost seat of federal power as a former capital of Nigeria right from the creation of the state has had its own developmental processes in between different governments and administrations.

Lagos, as an emerging independent economy has embraced model city approaches, welcomed new technologies and increasingly and consistently improving on its fiscal management towards more growth, funding, private and foreign direct investment. The state is described as one of the most urbanizing state in the world, from a modest population of 25,00 in 1866 to 665,000 in 1966, became over 10 million in 1995 and that makes it a mega city by UN definition, the city now has well over 20 million people as its inhabitants (Okoye, 2016).

The total population for the study is 40 and same numbers were used as sample, considering the small number of the population.

Sampling Technique

Purposeful sampling and quota sampling were used to select the respondents in this work. Purposeful sampling is adequate because of the fewer numbers of the incubation hubs and the specificity nature of their physical location and ownership. Purposeful sampling was used in the selection of the hubs initiator to talk to, few of the incubation hubs numbering about 16 (sixteen), 40% were initiated by individuals while about 10 (ten), 25% were owned and managed by a registered corporate organisation and the remaining were owned by joint ventures including individuals, non-governmental organisations and the organised private sector. In case of multiple ownerships, the choice of who was spoken to is determined by level of stake/ownership and availability.

Quota sampling was used in the administration of questionnaire to the patrons of the hubs visited. Questionnaires were administered to some of the patrons on ground during the period of physical contact and visitation with the hub; minimum of 2 (two) and maximum of 5 (five) questionnaires

were administered at each centre. Considering the small number of incubation hubs in Lagos, numbering 40, the entire population was taken as sample, however only twenty nine (29), 72.5% of the initiators were accessible for questioning while questionnaires were administered on patrons in 33 (thirty-three) of the locations.

Data Collection Method

Aside website, relevant literature and other documents insights, primary data collection through structured in-depth interviews and questionnaire administration were employed as the major means of data collection. The structuring of the questions was systematic enough to provide insights and answers that will lead to giving the correct and sincere answers to the research questions.

Data Analysis Method

Data analysis transforms the research data into useful information, systematically arranged and presented to convey meaning that should adequately represent the thoughts and expression of the respondents in a sequential and coordinated manner, and lead to further actions (Bhattacharjee, 2012). The recordings for the in-depth interviews were transcribed, properly coded and the salient answers relevant to this work are presented in the findings section, being conscious of the fact that qualitative research analysis is largely dependent on the investigative, integrative skills and personal knowledge of the researcher. The quantitative data were analyzed using various statistical descriptive methods and Microsoft Excel data analysis tools were employed for this purpose, the details of the quantitative analysis are properly put to shape and relevant ones were discussed during the findings presentation hereunder.

Research Findings

As explained in the research methodology section, hybrids of both quantitative and qualitative methods were used in this research work. The results of the qualitative research will be presented first while that of the quantitative one will follow thereafter. First, the table containing the technology innovation hubs contacted and their details is being presented.

Table 4:1 shows the list of the forty hubs used as sample including their uniform resource locator (url also called website address) and physical contact addresses.

S/N	Uniform Resource Locator (Online Website Address of Hub)	Name of Hub	Physical Contact Details of Hub
1	https://wennovationhub.org/	“We”nnovation Hub	
2	https://cchubnigeria.com/	Co-Creation Hub	294 Herbert Macaulay Way, Yaba 101212, Lagos

3	http://spark.ng/	Spark	
4	http://440.ng/	440.ng	
5	https://l5lab.com/	L5lab	
6	http://leadpath.com.ng/	Leadpath Nigeria	Address: 70 Olonode St, Alagomeji-Yaba 100001, Lagos Hours: 7AM – 7PM Email: info@leadpath.com.ng
7	https://techlaunchpad.com.ng/	Techlaunchpad	
8	https://www.passionincubator.ng/	Passion Incubator	Address: 70 Olonode St, Alagomeji-Yaba 100001, Lagos Hours: 7AM – 7PM Phone: 0703 357 9178 <i>Price: 35k – 40k, depending on package and facility.</i>
9	http://incubatorafrika.org/	Incubator Africa	Suite 104- 109, 1 st Floor, East Wing, City Hall, Lagos Island. Lagos, Nigeria. E-Mail – contact@incubatorafrika.org
10	http://idea-nigeria.org/	iDEA	Address: iDEA Hub, Herbert Macaulay Way, Sabo yaba 101212, Lagos Hours: 7am – 4PM Phone: 0809 078 0170
11	https://veniabusinesshub.com/	Venia Business Hub	Address: Plot 8 The Providence St, Lekki Phase I, Lekki Hours: 7AM – 6PM Phone: 0809 111 8902 <i>Price: 25k – 30k, depending on package and facility.</i>
12	https://theleadspace.co/ by Passion Incubator	The Leadspace hub	Address: No 17, Akinsanya street Ojodu Berger, Beside FRSC, 100213 Hours: 7AM – 7PM Phone: 0816 245 1670 <i>Price: N25k – N35k, depending on package and facility.</i>
13	https://zonetechpark.co/	Zone Tech Park	Address: Plot 9 Gbagada Industrial Scheme, Beside UPS, Gbagada Expressway Hours: 7AM – 7PM Phone: 0903 041 1878
14	https://www.coworker.com/nigeria/lagos/nicademia-hub	Nicademia Hub	Address: 315, Herbert Macaulay Way, Yaba 101212, Lagos Hours: 7am – 7PM Phone: 08099447049
15	http://www.virtualhub.com.ng/	Virtual Hub	5, Isaac John Street G.R.A, Ikeja

			Lagos, Nigeria. +2349076942812 +234-1-4482731
16	https://www.coworker.com/nigeria/lagos/sinet-hub	Sinet Hub	32 Providence Street, Maruwa Bus stop, Lekki Phase 1, Lekki, Nigeria, Lagos, Nigeria
17	https://godohub.org/	Godohub	Visit Us: 53 Oladipo Bateye Street, GRA, Ikeja, Lagos. Phone Us: +234 (0)906 000 9512, +234 (0)909 054 9443
18	https://workcityng.com/	WorkCity Hub	Polystar building, 2nd Roundabout, Lekki, 3rd and 4th floor, Lagos, Nigeria 07002229222
19	https://www.cubehubng.com/	Cube Hub NG	Adebola House (Rear Car park wing), 38 Opebi Road, Lagos, Nigeria
20	https://impacthublagos.com/	Impact Hub	7A, Milverton Road, Ikoyi – Lagos lagos@impacthublagos.com tel:+234810-054-3027
21	https://www.seedspace.co/ https://www.seedspace.co/en/co-working/lagos/	Seedspace Hub	23 Agodogba Ave, Parkview Estate, Ikoyi, Lagos
22	https://gclhub.com/	GCL Hub	19 Gbemisola Street, Off Allen Junction, Ikeja, Lagos. Email: info@gclhub.com Phone: +234 8145959298
23	https://www.startuprockstar.club/coworking-space/innovation-centre-lekki/	Innovation Centre, Lekki	29 Awudu Ekpekha Boulevard St, Lekki Phase 1, Lagos +2347035835636
24	https://www.coworkbooking.com/africa/nigeria/lagos/the-learning-hub	The Learning Hub	8a Olayinka Balogun Crescent, Magodo phase 2, Lagos, Nigeria
25	https://www.smartxbusinesshub.com/	Smart X Business Hub	16B Mobolaji Bank Anthony Way, Lagos, Nigeria +234 (0) 808-371-1891
26	http://cranium-one.com/	Cranium One	Adeola Odeku Street, Victoria Island, Lagos, Nigeria info@cranium-one.com
27	https://www.coinboxlimited.com.ng/product/coinbox-coworkspace/	Coinbox Cowork Space	30, Lanre Awoloku Street, Gbagada Phase 2, Lagos +2349084824985 info@coinboxlimited.com.ng
28	https://www.360creativehub.com/	360 Creative Hub	34 Ajao road off Olufemi Street, Surulere, Lagos, Nigeria

29	https://www.fcmb.com/hub-one/	Hub One by First City Monument Bank (FCMB)	10, Hughes Avenue, Off Herbert Macaulay Street, Yaba, Lagos hubone@theleadspace.co +2348080712332
30	https://v8africa.com/	V8 Africa	7B, Dr S Ezekuse Close, Off Admiralty Road, Lekki Phase 1, Lagos, Nigeria. +234-809-952-6038 info@v8africa.com
31	https://www.enterprisehubs.com/homepage/	Enterprise Hub	22 water Corporation Road, Victoria Island, Lagos, Nigeria +2349060009684 +2349060009685 info@enterprisehubs.com
32	https://capitalsqua.re/	CapitalSquare, Lekki	2nd Floor, The Garnet Building, Km 14 Lekki-Epe Expressway, Lekki, Lagos, Nigeria 0817 22 33 774 0817 22 33 775
33	https://hub30.net/	Hub 30	No 3, 41 Road, G Cl, Festac Town 102312, Lagos +234-905-824-1154 +234-701-554-4350 Email us: hello@hub30.net
34	https://avalanchespaces.com/	Avalanche Spaces	33, Saji Ayangade Street, Anthony Village Lagos +234 802 802 5494 hello@avalanchespaces.com
35	https://t-hub.com.ng/	T Hub	2nd Floor, Edmondsean and Eunice plaza, No 17 Badore Road, Ajah, Lagos Phone No : +234 7037778518, +234 8181356424, +234 9021263749 Email : info@t-hub.com.ng
36	https://www.989workspaces.com/989-coworking	989 Coworking Operate 10 different workspaces in different parts of Lagos	80, Adetokunbo Ademola Street, Victoria Island, Lagos, Nigeria 0807 778 4904 sales@989coworking.com
37	http://www.parachtech.com/synergyhub/	ParaTech Synergy Hub	Aperin House (3 rd Floor) Plot 27, Budo Layout (Beside God is Good Motors). Ajiwe Lekki – Epe Expressway Ajah, Lagos info@parachtech.com

			+234-813-303-2775 +234-817-147-5425 +234-902-452-7494
38	https://www.coworker.com/nigeria/lagos/goldville-virtual-hub	GoldVille Virtual Hub	8/10 Ilupeju Bypass, Lagos, Nigeria
39	https://imisi3d.com/	IMISI 3d Specialised innovation Hub	3 rd Floor, 8, Montgomery Road, Yaba – Lagos hello@imisi3d.com +234-908-336-8210
40	https://www.coworker.com/nigeria/lekki/dominion-co-working-hub	Dominion Co-Working Hub	Nicole Balogun St, Lekki Penninsula II, Lagos, Eti-Osa, Lekki, Nigeria, 01-6304503, Lekki, Nigeria 0706 229 5199

Only 6, 15% of the technology hubs have been in existent for over 10 years, while 14, 35% were barely 2 years old; from the interview conducted, the motivation of each of the innovation hubs differs one from another, some of their answers bothering on the motivation for establishing an incubation hub are as follows in quote:

“I looked at an average Nigerian youth and put them in my shoes, the struggles I managed alone in my life and the long road I took before gaining some traction and stability in my business; I said to myself let me create a platform for some of these serious boys and let’s see if there will be some changes. I started by offering two tables in my former office to four of them to share and from there we are here today having an average of twenty five people per day coming around to work, mingle with others and learn”

“It all started right from school, I just thought that I can’t cope dropping CV from office to office and we started like a joke, three of us; before we left school, we got a small job and that was more than a push. As boys, after NYSC some of our friends who could not get jobs and who live close by begin to come around, thank God for one of our church member who was an angel to us providing guidance, network and sometime funds for us and today we have two IT services and to create space for our friends and colleagues, this hub started and growing; as you can see we are all young, If government give us funding fine, and if not, we will keep rolling small small”

“This is a private sector owned technology hub, it is part of the community social responsibility of the bank to have a technology hub where future techies can be groomed and help contribute their quota to national development”

Another important aspect of our question is the type of services being rendered at the hubs; this is displayed for clarity using a chart below. It clearly shows that all of the hubs rendered co-working spaces (mostly paid for by the patrons), 20 of them also have training rooms that is leased or rent out to users and just 5 intentionally have a plan to train and groom the hubs users. All the 5 hubs that have concrete plans and programs to identify, provide platforms and groom the patrons have each developed at least one new product or service since their inception and 2 of the 5 have launched new businesses out of the products being developed at the hub.



During the interactive session, questions relating to the challenges encountered as technology hubs owners were thrown at them and their answers identified problems such as power, lack of funding for expansion, lack of exposure and depth by the patrons of the hub. Other problems identified include lack of patience and due diligence on the part of the patrons to enable their idea yield desired results, some of the ideas are not sellable and the process of refining them seems longer because some of the idea owners thinking process are not broad or strong enough. Another major problem identified is the inability of some of the ‘boys’ readiness to share some part of the business with others.

Conclusion

This work has brought to the forefront again, the engagement of technology hubs and their contribution to wealth creation and national development, a hybrid of research approach adopted to engage both patrons and owners of the incubation hubs has exposed some of the areas that needs to be improved upon, which when worked on will translate to a more prosperous society.

Suggestions and future directions

The number of incubation hubs and the geographical spread compared with the population of the budding youth resident in Lagos State is grossly inadequate if our journey to wealth creation and entrepreneurship would be worth its while. Entrepreneurship development should be a conscious effort and the driver should understand its clear difference from mere trading. Successful entrepreneurs in each Local Government should be identified and be engaged so that proper training, mentoring and guidance would be made available from a pool of ‘seniors’ who will be ready to multiply themselves in others via a structured and constant engagement. One of the areas where great feat can be attained in creating indigenous and global products and services is in the area of technology; so, technology entrepreneurship should be driven with far more rigor, style and strategy

that will harness the mental and physical strength of our youths towards self-sufficiency, wealth creation and national development especially as the ravaging effect of COVID 19 has reduced the very few available jobs prior to its emergence.

References

- Adegbiji, A. P., & Azeez, N. A., (2016). A Review of Context Aware Surveillance and Detective Systems. *26th National Conference and Exhibition* (pp. 115-124). FCT, Abuja: Nigeria Computer Society.
- Adegbiji, A. P., & Uwadia, C. O. (2018). An investigation into the Implementation of Intelligent Transport System in Lekki-Epe Axis of Lagos, Nigeria. *Faculty of Environmental Sciences, University of Lagos*. Lagos: Faculty of Environmental Sciences, University of Lagos.
- African Union Commission, (2014). *Science, Technology and Innovation Strategy for Africa 2024*. African Union Commission. African Union Heads of State and Government.
- Akanle, O., & Abraham, O., (2017). Prospects of Incubation Hubs as a Development Driver in Southwest Nigeria. *Nigerian Anthropological and Sociological Practitioners Association (NASA) 22nd Annual Conference on Contours of Change, Modern Conflict and Mode of Production in Nigeria*. Ibadan: Nigerian Anthropological and Sociological Practitioners Association (NASA).
- ASPEN Network of Development Entrepreneurs (ANDE) West Africa Regional Chapter. (n.d.). *Lagos Entrepreneurial Ecosystem Snapshot*. Ikeja, Lagos: ASPEN Network of Development Entrepreneurs (ANDE) West Africa Regional Chapter.
- Bay, M., & Cil, U. (2016). How Well Do Companies Manage Innovation? An Analysis on Low-Tech Industries. *12th International Strategic Management Conference, ISMC 2016, 28-30 October 2016*. Antalya, Turkey: 235, 709-718. *Procedia: Social and Behavioural Sciences*,.
- Bayarcelik, E. B., Tasel, F., & Apak, S. (2014). A Research on Determining Innovation Factors for SMEs. *10th International Strategic Management Conference*. Istanbul, Turkey: 150, 202-21. *Procedia: Social and Behavioural Sciences*.
- Beer, J. D., Millar, P., Mwangi, J., Nzomo, V., & Rutenberg, I. (2017, May 1). A Framework for Assessing Technology Hubs in Africa. *NYU Journal of Intellectual Property and Entertainment Law*, 237-270.
- Bhattacharjee, A. (2012). *Social Science Research: Principles, Methods, and Practices* (Vol. 3). Florida, USA: University of South Florida.
- Camison-Habaa, S., Clemente-Almendros, J. A., & Gonzalez-Cruza, T. (2018). How Technology-Based Firms Become also Highly Innovative Firms? The Role of Knowledge, Technological and Managerial Capabilities, and Entrepreneurs' Background. *Journal of Innovation and Knowledge*.

- Carayannis, E. G. (2013). *Encyclopedia of Creativity, Invention, Innovation, and Entrepreneurship*. Washington DC, USA: Springer Reference.
- Carayannis, E. G., Samara, E. T., & Bakourous, Y. (2015). *Innovation and Entrepreneurship: Theory, Policy and Practice*. (E. G. Carayannis, Ed.) Washington DC, Washington DC, USA: Springer.
- Clement, A. T. (2020, August). Economic, social and political issues raised by the COVID-19 pandemic . *Economic Analysis and Policy*, 68, 17-28.
- Dereli, D. D. (2015). Innovation Management in Global Competition and Competitive Advantage. *World Conference on Technology, Innovation and Entrepreneurship Istanbul*. Turkey: 195, 1365-1370. *Procedia: Social and Behavioural Sciences*.
- Dollinger, M. J. (2008). *Entrepreneurship: Strategies and Resources* (4th Edition ed.). Lombard, Illinois, USA: Marsh Publications.
- Drucker, P. F. (1984). *Innovation and Entrepreneurship: Practice and Principles*. Happer Collins EBooks.
- Fabiana, M. d., Edson, A. d., & Marcela, B. d. (2016). Innovation Development Process in Small and Medium Technology-Based Companies. *Innovation and Management Review*, 13, 176-189.
- Guda, M. C., Tanase, N. M., & Purcarea, A. A. (2017). Proposals for Improving Innovation and Technology Transfer Policies in Romania. *10th International Conference Interdisciplinarity in Engineering, INTER - ENG 2016*. 181, pp. 984-990. *Procedia: Engineering*.
- Gumus, S., & Gumus, H. G. (2015). Marketing of Innovation in Business. *3rd International Conference on Leadership, Technology and Innovation Management* . 181, pp. 261-268. Istanbul, Turkey: *Procedia: Social and Behavioural Sciences*.
- Ikebuaku, K. M. (2016). *Expanding Entrepreneurial capabilities through Business Incubators: A Case Study of the iDEA HUB Nigeria*. University of Western Cape, South Africa.
- Jelonek, D. (2015). The Role of Open Innovations in the Development of E-Entrepreneurship. *International Conference on Communication, Management and Information Technology (ICCMIT 2015)*, 65, 1013-1022. ELSEVIER.
- Kelly, T., & Firestone, R. (2016). How Tech Hubs are helping to Drive Economic Growth in Africa. *Background Paper for the World Development Report 2016: Digital Dividends* .
- Klein, P. G. (2016). Why entrepreneurs need firms, and the theory of the firm needs entrepreneurship theory. *Revista de Administração*, 51, 323-326.

- Kumara, S., Luthrab, S. H., Manglad, S. K., & Garge, D. (2015). Identification and Evaluation of Critical Factors to Technology Transfer using AHP Approach. *International Strategic Management Review*, 3, 24-42.
- Lager, T. (2016). Managing Innovation & Technology in the Process Industries: Current practices and future perspectives. "SYMPHOS 2015", *3rd International Symposium on Innovation and Technology in the Phosphate Industry*. 138, pp. 459-471. Procedia: Engineering.
- Leach, M., MacGregor, H., Scoones, I., & Wilkinson, A. (2020, October). How and why COVID-19 requires us to rethink development. *World Development*, 1-25.
- Leite, Y. V., & Moraes, W. F. (2015). The ability to Innovate in International Entrepreneurship. *Revista de Administração [RAUSP]*, 50(4), 447-459.
- Mack, N., Woodsong, C., MacQueen, K. M., Guest, G., & Namey, E. (2011). *Qualitative Research Methods: A Data Collector's Field Guide*. Family Health International.
- Mehta, M., Chandani, A., & Neerajac, B. (2014). Creativity and Innovation: Assurance for growth. *Symbiosis Institute of Management Studies Annual Research Conference (SIMSARC13)*. 11, pp. 804-811. Procedia: Economics and Finance.
- Memon, N. (2016). Entrepreneurship in the Eyes of Network Science. *Information Technology and Quantitative Management (ITQM 2016)*, 91, pp. 935-943. Procedia: Computer Science.
- Miorita, U., Pop, N., & Ungureanu, N. (2016). Innovation and Technology Transfer for Business Development. *International Conference on Manufacturing Engineering and Materials, ICMEM 2016, 6-10 June 2016*. 149, pp. 495-500. Nový Smokovec, Slovakia: Procedia: Engineering.
- Miranda, M. Q., Farias, J. S., Schwartz, C. d., & Almeida, J. P. (2016). Technology Adoption in Diffusion of Innovations Perspective: Introduction of Abstract an ERP System in a Non-Profit Organization. *Innovation and Management Review*, 13, 48-57.
- Office of the Vice President, Federal Republic of Nigeria. (2017). *Catalyzing Growth in Nigeria through Regional Innovation: Opportunities and Challenges for Developing ICT-Led Innovation Hubs across Nigeria*. Office of the Vice President, Federal Republic of Nigeria, Job Creation Unit, Abuja.
- Pfotenhauer, S. M., Wood, D., Roos, D., & Newman, D. (2016). Architecting Complex International Science, Technology and Innovation Partnerships (CISTIPs): A Study of Four Global MIT Collaborations. *Technological Forecasting & Social Change*, 104, 38-56.
- Pipirigeanu, M., Zaman, G., Strasser, H., Arama, R., & Strasser, C. (2014). Academic entrepreneurship and scientific innovation in context of Bio-economy strategy. *Ist*

International Conference 'Economic Scientific Research - Theoretical, Empirical and Practical Approaches', ESPERA 2013. 8, pp. 556-562. Romania: Procedia: Economics and Finance.

Rampersad, G., Plewa, C., & Troshani, I. (2012). Investigating the Use of Information Technology in Managing Innovation: A Case Study from a University Technology Transfer Office. *Journal of Engineering and Technology Management, 29*, 3-21.

Sanbuli, N., & Whitt, J. P. (2017). *Technology Innovation Hubs and Policy Engagement* . Institute of Development Studies. Brighton: IDS: Making All Voices Count.

Schwaab, J. (2017). *Scale Up! Entrepreneurs' Guide to Investment in Nigeria*. German Federal Ministry for Economic Cooperation and Development (BMZ), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) . Lagos, Nigeria: Tech Entrepreneurship Initiative Make-IT in Africa (GIZ).

Soloduch-Pelc, L. (2015). Searching for Opportunities for Development and Innovations in the Strategic Management Process. *4th International Conference on Leadership, Technology, Innovation and Business Management* . 210, pp. 77-86. Procedia: Social and Behavioral Sciences .

Stephan, U., Hart, M., Mickiewicz, T., & Drews, C.-C. (2015). *Understanding Motivations for Entrepreneurship*. Aston Business School, Birmingham, UK, Department of Business Innovation & Skills, Birmingham,.

Szlapka, J. O., Stachowiak, A., Batz, A., & Fertscha, M. (2017). The level of innovation in SMEs, the determinants of innovation and their contribution to development of value chains. *27th International Conference on Flexible Automation and Intelligent Manufacturing, FAIM2017, 27-30 June 2017. 11*, pp. 2203-2210. Modena, Italy: Procedia: Manufacturing.

Takakuwa, S., & Veza, I. (2014). Technology Transfer and World Competitiveness. *24th DAAAM International Symposium on Intelligent Manufacturing and Automation, 2013. 69*, pp. 121-127. Procedia: Engineering.

The African Institution of Technology Inc. (United States of America) . (2015). *The Geography of Science and Technology Innovation in Nigeria*. FCT Abuja: AfriCapitalism Institute.

Youth Entrepreneurship Training, Employment and National Development in the Post-Pandemic Period: Evidence from Ekiti State

Janet Monisola Oluwaleye

Department of Political Science, Ekiti State University, Ado-Ekiti, Nigeria

Email: jmoluwaleye@gmail.com; monisola.oluwaleye@eksu.edu.ng; +2348060058158

Abstract

The development of the youths is germane to the development of a country. Their character of being energetic and innovative can be channeled aright to bring about the desired development in the country. The rate of youth's unemployment in Nigeria is alarming. African in Focus, in a situation analysis of youth unemployment in Nigeria, identified the lack of requisite skills for gainful employment as a major reason for youth's unemployment in the country. The Nigerian tertiary institutions are mandated to provide entrepreneurial training to their students. This is to enable graduates to have requisite entrepreneurial skills for self-employment and jobs creation instead of looking for white-collar jobs after graduation. This study, therefore, with evidence from tertiary institutions in Ekiti State, examines the hurdles to effective training in entrepreneurial skills with the aim to consider how to make the best out of the scheme. A Mixed method research (MMR) approach was adopted. The study used a self-designed and administered questionnaire to collect data from 154 respondents chosen through simple random sampling from two institutions in the state. Quantitative data were analyzed with percentages while qualitative data were analyzed descriptively, using content analysis. It discovered that inadequate curriculum, lack of needed infrastructures, and unfavourable ecology, have hindered the objectives of the training. The study, therefore, recommends necessary amendments in the curriculum with practicable time for the training, grants or bursary from the government, and recruitment of experienced and knowledgeable trainers with good scores apportioned to each course.

Key Words: COVID-19, Entrepreneurship, Development, Employment, Skill

Introduction

Unemployment among the youths is a serious developmental challenge in Nigeria. About five thousand graduates are produced annually in addition to those who schooled in other countries (Oluwaleye, 2019). The report of Akinwumi, (2019) showed that only 23 per cent of annual job seekers are employed. Most graduates in Nigeria are graduating into a world of uncertainty. The rate of youths' unemployment in Nigerian as of the third quarter of 2018 was estimated at over 40 percent (Fasogbon, 2019). The 2020 pandemic further worsened the rate joblessness as a result of the stay at home order given by government to reduce the spread of the disease. A large numbers of employed youths were retrenched as a result of the economic downturn brought on by the stay at home order. The rate of unemployment was forecast to be 33.5% by 2020 by the Minister in charge of labour (Olurounbi, 2020). Lack of needed skills, among other factors, has been identified as a factor for unemployment in Nigeria. Ajufo, (2013) and Akande, (2014) opined that failure to possess the needed skills by job seekers contributed to youth unemployment in Nigeria. Similarly, a report of survey on criteria lacked by graduates in Nigeria who were seeking for job showed that:

44% rated Nigerian Science graduates as average in competence, 56% rated them as average in innovation, 50% rated them average in rational judgement, 63% as average leadership skills, and 44% as average in creativity. However, 60% of the respondents rated the graduate as very poor in the needed skills such as literacy, oral communication, information technology, entrepreneurship, analytical, problem-solving and decision-making (Oviawe cited in Olorundare, and Kayode (2014:157).

To create an avenue for the acquisition of necessary skills for graduates, government came up with the policy of compulsory entrepreneurship training for students in higher institutions in Nigeria from 2007/2008 session (Olorundare, and Kayode, 2014). The NUC embarked on entrepreneurship skill training in Nigerian Universities irrespective of the area of specialisation with the objectives of impacting the skills that would help them to be gainfully engaged (The Nigerian Voice, 2011). However, the level of effectiveness of the training has hindered the full realization of the objectives of the training. Many Nigerian graduates are still hunting for unavailable government paid jobs. Besides, COVID-19 pandemic has impacted negatively on the already struggling job markets in Nigeria. There is a need for urgent measures to be taken to address the problem of unemployment among the Nigerian youths to enhance national development. The study, therefore, answers these questions: What are the motives of introducing entrepreneurship training to Nigeria's tertiary institutions? What are the challenges to effective entrepreneurship training in Nigeria's tertiary institutions? How can entrepreneurship be positioned to attain the purpose of creating employment for the youths and also enhance the desired development in the country in the post-pandemic period?

Conceptual Framework

The word entrepreneur is from the French word 'entreprendre', which indicates an act in which the individual attempt, try, adventure or undertake an act of some sort (Steemit, 2008). International Centre for Technical and Vocational Education and Training describes entrepreneurship training as a training scheme to develop persons for self-employment or for organizing, financing and/or managing an enterprise (UNESCO-UNEVOC, 2014). The ultimate aim of entrepreneurship, according to UNESCO-UNEVOC, is to develop persons with abilities and capabilities to set and be in charge of their own business. It is notable from the above definition that entrepreneurship involves formalized training and the motive is to ensure socio-economic development. The training is to enable people to acquire knowledge to be creative to manage personal and community businesses. Olorundare, and Kayode (2014) also described the training as efforts that would inculcate interest and creativity in youths to make them rely on themselves instead of looking for government paid employment. To them, entrepreneurship training would change the perception of students on reference for white collar jobs and make them self-reliant instead of depending on salary jobs from the government.

Scholars have identified types of entrepreneurs. This includes i. Craftsman entrepreneurs who have little education and no management skill. It was mainly by men through self-financing and support from relations (Smith cited in Campo and Luis, 2010). ii. Opportunistic entrepreneurs are described as those who have a middle-class background, they are more educated.

Kruger (2004) and Gautam and Singh (2015) identified the characteristics of entrepreneurial training as a discipline which are:

- i. Innovation. It involves innovation, the discovery and commercial exploitation of some new product, process, market, material, or organization.
- ii. It is concerned with the creation of a new business unit.
- iii. It involves risk-taking. There should be the ability to accept the potential losses or failure of a business unit.
- iv. It is also concerned with the intention of high growth or profit through a business unit.
- v. It involves improving qualities to meet the taste of customers.

Youth: The age description to be categorized as youth differs among countries. The National Population Commission (NPoC, 2013 cited in Akande, 2014) described the youths as persons of between age 15-35. Ajufo (2013:309), describe youths as those that have strength, who can still act and produce to support the nation. There was no age limit to his description of who a youth is.

Employment: To International Labour Organisation (2020), “employment comprises all persons of working age who during a specified brief period, such as one week or one day, were in the following categories; a) paid employment (whether at work or with a job but not at work); b) self-employment (whether at work or with an enterprise but not at work). People of age 15 and above were categorized by ILO (2020) as the working-age population.

Unemployment: According to International Labour Organisation (ILO) (2003), “the unemployed comprise all persons above a specific age who during the reference period were: without work, that is, were not in paid employment or self-employment during the reference period; currently available for work, that is, were available for paid employment or self-employment during the reference period; and seeking work, that is, had taken specific steps in a specified recent period to seek paid employment or self-employment”. ILO (2012) identified types of unemployment to include; Keynesian unemployment, where there are more job seekers than available jobs, it is also referred to as cyclical unemployment; structural unemployment, where there is a mismatched between available jobs and desired jobs; frictional unemployment, it indicates job taken temporarily; long-term unemployment, jobs being done for more than six months; specific unemployment, specified groups who find it difficult to be employed. Youths and women usually fall within this group. To Onan and Okwuosa (2016), causes of unemployment include increase in population, emmasse movement to urban areas, dormant agricultural system, fast expansion of education system and scarce training in entrepreneurial skills.

The World Health Organisation (2020) described coronavirus as a large family of viruses which may cause illness in animals or humans. Several corona virus’s are identified as causing respiratory infections ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) while the recently discovered coronavirus causes coronavirus disease COVID-19 (World Health Organisation, 2020). (WHO, 2020; Africa CDC, 2020; Kakodkar, Kaka and Baig, 2020). Kakodkar, Kaka and Baig, 2020) traced the origin of COVID-19 to December 31st 2019 when the Wuhan Health Commission in the Hubei Province of the Republic of China notified the National Health Commission, China CDC and WHO of a cluster of 27 cases of pneumonia of unknown etiology. They further identified the symptoms to include fever, dyspnea, dry cough, and bilateral lung glassy opacities. They also revealed that all the 27 cases were traced to Huanan Seafood Wholesale Market which trades live species of bats, snakes, pangolins, and badgers.

On the impacts of COVID-19 on Nigeria, Bakare and Fatai (2020) identified four different ways the pandemic could affect the country. These, according to them include; firstly, trade and investment disruptions. They believed that trade and investment would decline globally, raising the risk of economic recession. They revealed that Nigeria's manufacturers relying on imported raw materials would face difficulties and inability to import drugs which would affect households and the healthcare system. Secondly, they observed that a decline in oil price would lower the financial capacity of government to support the economy while the sub-national government would struggle to pay employees' wages and related costs. Thirdly, they also envisaged less spending for the already under-funded health and education sector as well as the critical infrastructure which portends a bad indication for the country. Finally, they revealed the likeliness of elevated unemployment and poverty due to the disengagement of certain workers in essential businesses.

Development: To Todaro (Rashid, 2020), is a process of improving human lives with three equally important aspects; i. increase in availability and improvements in the distribution of food, shelter, education, health, protection, etcetera, through the relevant growth process, ii. Improvements in levels of living, including income, jobs, education etcetera by creating conditions conducive to growth through establishments of social, economic and political systems and institutions which promote human dignity and respect. iii. expansion in the range of economic and social choices available to individuals and nations, for example, varieties of goods and services (Rashid, 2020).

Scholars have written on the purpose of entrepreneurship education (Oyebola, Olaposi, and Adeyemi, 2015; Evoma, 2017; Okoro, Achonu, and Okoli, 2019) while others have considered the obstacles to the actualization of the goals. However, the researcher, in addition to secondary data combined an empirical survey to collect data from both undergraduates and graduates' students of entrepreneurship training to examine the impacts and challenges of the training. The main contribution of this paper is the addition of empirical knowledge to the sparse research on the impacts and challenges of entrepreneurship training by qualitatively investigating whether entrepreneurship training has the potential to serve as a way out of youth unemployment and enhance development in Nigeria in the -post-COVID-19 period.

Theoretical Framework

The study employs the Psychological theory of Entrepreneur. Dedekuma, and Akpor-Robaro (2015) identify three pioneer theories of entrepreneurship into three distinct categories: sociological, psychological and economic perspective with the major proponents being Max Weber, David McClelland and Joseph Schumpeter respectively. The psychological theory of entrepreneurship focuses on individuals. The theory emphasized that individuals become entrepreneurs for three popular views which are: i. achievement motive ii. Locus of control and innovation.

- i. Achievement motive: David McClelland formulated the Theory of Achievement Motivation in 1961 (Simpe, 2011; Redaksi, 2013). The theory argued that human beings have three social motives; achievements, affiliation and power (Okhomina, 2020). He believed motivation for high achievement is inherent in entrepreneurs that would be successful. As a result, McClelland believed that participating in a training that can motivate would enhance the tendency for achievement (Redaski, 2013). The theory argued that it is those with high tendency for achievement that can take reasonable risks. (Dedekuma, and

Akpor-Robaro, 2015). Taking risks in business is to embark on business which may result in low success. (Okhomina, 2020). Such risks are believed to stimulate them to greater efforts.

- ii. Locus of Control: Rotter (1966) described Locus of Control as an individual perception of the underlying main causes of events in his/her life (Simpe, 2011). It is the belief about whether the outcome of our actions is contingent on what we do (internal control orientation) or on events outside our control (external control orientation). Ratter believed in internal motivation or courage for an for an entrepreneur that would succeed. (Redaski, 2013). Supporters of McClelland, Thomas Begley and David Boyd, in the 1980s, studied the literature on the psychology of entrepreneurship to ascertain the dominant factor which propels entrepreneurship and identified the internal locus of control as a determinant entrepreneurial emergence (Dedekuma and Akpor-Robaro, 2015). Okhomina (2020) posited that those with self-motivation do not depend on external factors to do what they intend to do while others depend on environmental factors for motivation. Such people tend to resolve to fate instead of making frank efforts to fix their lives.
- iii. Innovation: Entrepreneurs is to strategise on new ways of producing better products to meet the taste of the consumers (Leibenstein cited in Redaksi, 2013). Okhomina (2020) reported a correlation between self-motivation and creativity. Youths that are motivated by courage are likely to appropriate the entrepreneurial skills to create jobs and be self-reliant.

McClelland has been criticized by Birley (Dedekuma and Akpor-Robaro (2015) on the ground of emphasizing entrepreneurial motivation and risk-taking in starting a business. He posited that these traits may be inherent but requires motivating environment factors to bring it into fruition. However, the theory is relevant to this study. The introduction of acquisition of entrepreneurial skills into tertiary institutions is to meet the achievement motive of Nigerian youths, especially in the dearth of white-collar jobs. Acquisition of entrepreneurial skills in schools would enable the students to create jobs for themselves and for others. The theory is relevant to solving the problem of unemployment in Nigeria through job creation and the provision of jobs to others.

Methodology

The study employs a mixed method to examine entrepreneurship, job creation and national development in the post-pandemic period, using Ekiti State as a case study. The study was carried out in Tertiary institutions in Ekiti State. The sample population includes one federal (Federal University Oye Ekiti) and one State university (Ekiti State University, Ado Ekiti). Simple random and purposive samplings were used to choose the respondents. Current and past students of the sampled tertiary institutions in Ekiti State were randomly selected to examine the reasons for and investigate the obstacles to training in entrepreneurial skills in the institutions. Purposive sampling was used to choose the interviewees which include the Director of Entrepreneurship courses, Instructor/Tutor and class Governors of students. Data were gathered through online survey from current and past students with the use of research assistants among the current and past students of the chosen institutions between year 2014 and 2020. The total of responses was 154. Secondary data

were obtained from textbooks, newspapers, publications and the internet. Primary data were analysed with statistical tools such as simple percentages while qualitative data were analysed descriptively.

Results of Findings

Question 1: What are the reasons for introducing of training in entrepreneurial skills into tertiary institutions in Ekiti State?

Responses from both undergraduates' students and graduates to the reasons for the introduction of entrepreneurial courses to the school curriculum showed that many of them are not ignorant. Of most respondents, 94.6% attested to the fact that entrepreneurship training is to make graduates self-employed and self-reliant while 5.4% had a contrary opinion. The majority of the respondents, 92% agreed that making graduates job creators and not job hunters is another major reason while 6% disagreed and 2% were neutral. There was a consensus among the respondents, with 94.6% in the affirmative, that entrepreneurship training is to make young graduates creative and innovative while 4.7% disagreed and 0.7% were neutral. Most of the respondents, 87.25% also agreed that learning entrepreneurial skills in the tertiary institution can reduce poverty while 8.72% disagreed and 4.03% were neutral. Furthermore, 85.8% opined that training in entrepreneurial skills is a catalyst for economic development, 6.1% disagreed and 8.1% were neutral. Also, most respondents 63.1% supported that entrepreneurship training is to reduce rural-urban migration while 25.5% disagreed and 11.4% were neutral. Besides, 92.6% of the respondents agreed that entrepreneurship training is relevant to encourage and provide young graduates with training and support for careers in small and medium businesses, 6.76% disagreed and 0.68% were neutral. The above findings are in line with scholarly works. Amadi and Amakodi, (2019) noted the importance of entrepreneurship education in Nigeria which are having skill to identify and make use of new opportunities by coming up with new ideas to establish a new business. In the same vein, Onuma, (2016:19) highlighted the objectives of NUC for the programme which are: imparting courage, establishment of jobs, employing new strategies in business, and giving financial support to students. Entrepreneurship skills would empower graduates to be gainfully employed, to have the confidence to create employment and be employers of labour. The study is also in consonance with Ojeifo, (2012) who submitted that entrepreneurship skills would enable graduates to be self-employed, reduce rural-urban migration and also serve as an impetus for economic growth. Similarly, Okoye and Okoye (2019) opined that entrepreneurship education creates opportunities, instils courage and enhances the economy.

The contents of entrepreneurship training in tertiary institutions in Ekiti State: Various courses were coined in tertiary institutions to inculcate the act of entrepreneurship in the students. For instance, there are courses like ESC 101, Introduction to Entrepreneurship 1 and ESC 102, Introduction to Entrepreneurship 2. The first gives the basic introduction to the course as a whole. Students are taught how to choose a business, and how to handle and manage it. The second one, ESC 102, is a follow-up to the first on business management. Others include ESC 211, Entrepreneurship Study 1, in which students are introduced into entrepreneurial skills, with theories. Also, ESC 311, Practice of Entrepreneurship, brings students to the practical aspect of the entrepreneur. They are introduced to various areas of entrepreneurial skills such as interior decoration, event planning, barbing, carpentry, fashion design, hairdressing, tie and dye, cosmetology, soap making, cream making, et

cetera. Students are encouraged to specialize in any of the skills. They are given the assignment to do and submit samples of their practice as part of their continuous assessment (Field Survey, 2020). Most of the courses are one unit each (Field Survey, 2020).

Question 2. What are the challenges to effective entrepreneurship training in tertiary institutions in Ekiti State?

A lot of factors constitute an obstruction to effective entrepreneurship training in tertiary institutions in Ekiti State. The majority of the respondents agreed that are challenges to effective entrepreneurship training. On the challenge of physical structure, 63.2% supported the claim while 24% did not support and 12.8% were did not air their view. Also, 73% affirmed the challenge of inadequate course curriculum while 14.9% disagreed and 12.2% were neutral. Akande (2014) in the same vein revealed that deficient curriculum hindered the impartation needed skill to meet market demand. Ineffective implementation of entrepreneurship curriculum as a hindrance to the achievement of its goals was supported by Sofoluwe, Shokunbi, Raimi, and Ajewole (2013). Similarly, ineffective trainers/inadequate knowledge by entrepreneur lecturers was seen by 83% of the respondents as another challenge to entrepreneurship training in Nigeria's tertiary institutions while 11.6% disagreed and 5.4% were neutral. This finding was corroborated by other scholars. Lack of expertise was identified by Olorundare and Kayode (2014) as hindrance skills needed. Nwosu and Chukwudi (2018) argued that poor quality delivery of entrepreneurship training is unconnected to shortage of capable tutors for practical training. Shofoluwe, et al (2013) identified the ineffectiveness of entrepreneurship trainers/lecturers and the paucity of entrepreneurship textbooks. On poor societal attitude to vocational education as another challenge to entrepreneurship training in Nigeria's tertiary institutions, 76.7% of the respondents agreed while 15.1% disagreed and 10.3% were neutral. This is in line with the finding of Ajufu, (2013) on the perception of policymakers and students that employment is a job you do for others to get salary. This belief has made curricula and training to be tailored towards formal sector jobs (Ajufu, 2013). Also, inadequate budgetary allocation for education by the government was noted by 83.6% of the respondents as a challenge to effective entrepreneurship training in Nigeria's tertiary institutions while 9.6% disagreed and 8.8% were neutral. Also, the majority 92.5% of the respondents supported that inadequate facilities and equipment for teaching is another challenge while 6.2% disagreed and 1.4% were neutral. This is similar to the findings of Nwekaeku (2013) who submitted that the poor state of infrastructures in Nigeria Universities is worrisome and embarrassing and, to him, could only be worsened by the introduction of entrepreneurship education. Similarly, inadequate funding by university administrators to the training was identified by 85% of the respondents as another major challenge while 8.2% disagreed and 6.8% were neutral. Nwekaeku, (2013) also discovered that inadequate or outright lack of funds a hindrance to effective entrepreneurship training in Nigerian tertiary institutions. He noted that new classrooms, workshops, laboratories, books, academic Journals, computers and other materials to enhance learning cannot be made available due to paucity of funds. In the same vein, Agboola (2010) identified poor funding and misappropriation of the available as a hindrance to the provision of adequate and modern training facilities and the inability to employ the service of professional tutors. Of most respondents 78.89% confirmed that lack of time allocated to the training is a major obstacle to effective entrepreneurship training in Nigeria's tertiary institutions while 14.4% disagreed and 6.8% were neutral. Furthermore, 77.4% of the respondents supported that the lack of interest of some students

is seen to hinder students from getting the best from the training, 13.7% were of contrary opinion while 8.9% were neutral.

Besides, the majority of graduates of entrepreneurship training revealed the challenges that hindered them from getting the best from the training to include: lack of interest in the training while in school; not being taught well; having no time for the training; no fund to establish a business; search for white collar job and societal poor attitude to vocational work (Field Work, 2020).

The problem of training students in entrepreneurial skills in Ekiti State were further corroborated by one of the Director of the Entrepreneurship Centre to include inadequate workshops for practical training, University management unnecessary bureaucracy, lack of students' interest and passion, instructors' inability to assist the students in their area of interest, clashes on the general time-table, inadequate government encouragement in terms of soft loans to boost the morale of the students, some of the equipment provided is obsolete and not functioning, the entrepreneurship Centre is not attractive enough to warrant students interest, lack Hilux vehicle for utility purposes and lack of town and gown partnership which makes publicity and patronage inadequate (Field Work, 2020). Also, one of the employed professional tutors identified other problem to the training which are; failure to pay the professional well for their services, inadequate time to teach the students, the use of obsolete and fake equipment, and lack of entrepreneurship training (seminars, workshops) for the trainers (Field Survey, 2020).

Entrepreneurship, Employment Creation and National Development

Entrepreneurship is a crucial key to economic growth. It has the potential to create employment and enhance national development, especially in the -post-COVID-19 period when countries are struggling to adjust and overcome the impacts of the pandemic. Entrepreneurial skill has been identified as germane for socioeconomic development because it creates job. It also gives room for alternatives business opportunities while serving as avenue for growth in national economy (Santos, 2020).

Entrepreneurship training will help to orientate students and redirect their perception about employment. The training will create positive thinking and interest in students about entrepreneurial activities while they focus less on white-collar jobs. The graduates, as a result of entrepreneurship training, would not need to join the queue of applicants but become creators of jobs (Olorundare and Kayode, 2014). This will reduce unemployment and poverty and further strengthen the economy.

Unemployment is a major root of other socio-economic problems which are endemic to development. The consequences of unemployment include poverty, a vicious cycle of poverty, criminality, and insecurity (Ajufo, 2014). Entrepreneurship can create employment and reduce unemployment. Reduction in unemployment through entrepreneurial skills would transform into a reduction in socio-economic problems in the country. It would lead to a reduction in poverty and its attendance effects such as crime and insecurity, thereby making the country a haven for investment and economic growth. There would be an increase in the standard of living and overall national development. Income generated from entrepreneurship would increase the Gross Domestic Product (GDP) and boost the national economy.

Agboola (2010) argued that the major way to step up development in a competitive and dynamic global economy is through entrepreneurial skills. He noted that the needed training to acquire the skills and positive attitude that can promote and sustain national development is through entrepreneurial training. Entrepreneurial training helps potential entrepreneurs to generate ideas to make them self-reliant and create jobs, thus contributing to development.

Dodgson and Gann (2020) submitted that entrepreneurship is germane to global recovery in the post-COVID-19 period. They revealed that entrepreneurial skills will be needed to navigate post-COVID-19 instabilities of existing organizations whose routines have been fundamentally disrupted. With millions of jobs lost, entrepreneurial ability is needed to create new products and services, thereby generating employment and enhancing sustainability.

Furthermore, the introduction of training to tertiary institutions would change the perception of people about entrepreneurship. According to Dodgson and Gann (2020), Universities possess a reservoir of knowledge, policies, incentives and centres designed to develop and encourage entrepreneurship. For instance, Dr Tope Aroge is a medical doctor turned farmer after he got a sum of \$5 million from the African Development Bank (Akinwumi, 2019).

The relationship between entrepreneurship, employment and development was further corroborated by the findings of Vivarelli (2012) on practice and achievements of entrepreneurship, covering 60 developed and developing countries (Vivarelli, 2012:2). It reported the high number of new business and personal business throughout the globe. It, however, noted that some of the new businesses were motivated by opportunities and some by necessity on (Vivarelli, 2012:2, 5).

According to Adebambo (2019),

the basic truth is that skills needed to be much sought after and become successful in life are not found within the walls of classrooms. Your certificate is just proof that you are teachable... You are full of possibilities when you think beyond your degrees and certificates.

Entrepreneurial skill acquisition is a major key to unemployment and individual development, which would also transform into national development.

Conclusion

This study investigates the missing gap in the training of students in entrepreneurial skills, to solve the problem of unemployment and bring about development, using Ekiti State as a case study. It reveals the reality of the high youth unemployment rate, scarcity of white-collar jobs and wide job loss due to economic downturn brought about by government stay at home order to curb coronavirus pandemic. The study identifies the need for entrepreneurship training in Nigerian tertiary institutions which includes to; make youths to be self-employed and self-reliant; make graduates creators instead of being seekers of jobs; making young graduates creative and innovative; reduce poverty; to catalyze economic growth; reducing movement of youths to urban areas; encourage and provide youths with knowledge and ability to own personal businesses. It further reveals the challenges to effective entrepreneurship training in Ekiti State, among others, to include; physical structure, inadequate course curriculum; ineffective trainers/lack of adequate knowledge by

trainers; inadequate budgetary allocation, inadequate facilities and equipment for teaching; lack of adequate time allocated and very low unit allocated to entrepreneurship courses. The study established a relationship between entrepreneurship training in Nigerian tertiary institutions, the creation and provision of employment and the realization of the development needed by the country, especially in the post-pandemic period. It recommends, among others, a comprehensive and precise curriculum, realistic time for the practical's, grants from government as motivation for practice, recruitment of experienced experts as trainers and award of motivating scores for the courses.

Recommendations

The study makes the following recommendations to re-position entrepreneurship training in Nigeria's tertiary institutions to create jobs and enhance development in the post-COVID-19 pandemic in Nigeria.

- i. Timely and adequate budgetary allocation to the scheme. The special allocation should be allotted to entrepreneurship training in tertiary institutions. Besides, funds should be sourced from public and private-spirited people to supplement government allocation.
- ii. Entrepreneurship training should be included on the university general timetable like other courses. Also, entrepreneurship courses should be rated high (not as 1 unit course) and made part of the required courses for graduation so that students can be serious about it.
- iii. General reorientation of the youth to key into the scheme. This should be included as part of the university orientation programmes for new intake every year. New intakes should be made to know from the onset the benefits of giving attention to the various entrepreneurial courses.
- iv. Employment of quality professional to handle the scheme by providing updated training for the youth. Lecturers and instructors should be trained and re-trained a yearly within and outside the country, this would enable them to give the best training to students.
- v. Stability and fixing of energy and increasing the megawatts generated throughout the country would also enhance entrepreneurial efforts. The constant availability of electricity is essential to learn and practising some entrepreneurial skills.
- vi. Tertiary institutions should create small enterprises where students can be encouraged to supply their products and make some gains. This would serve as further encouragement for their interests in the training.
- vi. Provision of soft loans that is interest-free to young school leavers to make them self-reliance. The university management should consult Non-Governmental Organizations for soft loans.
- vii. Government should criminalize illegal means of making money like Yahoo, Yahoo Plus, or other Internet fraud being practised by the youths. This would enhance the interest of youths in entrepreneurial skills as a source of reliable income.
- viii. The government can equally Institute exchange programs for the youth by availing them the opportunity of travelling abroad to learn from technologically developed countries.
- ix. Rural agricultural development can also be encouraged. The introduction of technology-based agricultural practices with soft loans as backup would be of immense encouragement to steer the interest of the youths.

- x. Entrepreneurship training should be introduced early to students in secondary schools up to tertiary institutions to ensure mastery of the skills. The little time allocated in tertiary institutions coupled with other lectures is usually not adequate for mastery of various skills.

References

- Adebambo, Gbenga (2019). Danger of Graduates that Don't Think Beyond their Certificates. *The Guardian*, November 16. <https://guardian.ng/saturday-magazine/danger-of-graduates-that-don't-think-beyond-their-certificates/>
- Agboola, B. M. (2012). Entrepreneurial Education in Nigeria Tertiary Institutions and Sustainable Development. From <https://files.eric.ed.gov/fulltext/ED512732.pdf>
- Ajufo, Beatrice Ifeoma (2013). Challenges of Youth Unemployment in Nigeria: Effective Career Guidance as a Panacea. *African Research Review*, Vol. 7(1) Series No. 28, January, pp. 307- 321
- Akande, Tunji (2014). Youth Unemployment in Nigeria: A Situation Analysis. *African in Focus*, September 23. From <https://www.brookings.edu/blog/Africa-in-focus/2014/09/23/youth-unemployment-in-nigeria-a-situation-analysis/>.
- Akinwumi, A. Adesina (2019). Convocation Speech of AfDB President Dr. Akinwumi A. Adesina at Bowen University, December 2. From <https://businessday.ng/uncategorized/article/afdb-president-dr-akinwumi-a-adesinas-speech-at-bowen-university-convocation/>
- Amadi E. A. and Amakodi, S. E. (2019). Factors Influencing the Implementation of Entrepreneurship Education in Tertiary Institutions in Rivers State. *International Journal of Innovative Social and Science Education Research*, 7(2), 22-36, April - June
- Bakare, Adedayo and Fatai, Razaq (2020). 4 Ways the Nigerian Government can Minimise the impact of COVID-19. *ONE*, 25 March, from <https://www.one.org/africa/blog/how-nigeria-minimize-impact-covid-19/>
- Campo, Martinez and Luis, Jose (2010). The Propensity for Entrepreneurship: Psychological and Sociological Factors. *Cuadernos Latinamericanos de Administration*, 6(10), pp. 51-76
- Dedekuma, S. E. and Akpor-Robaro, M. O. M. (2015). Thoughts and Theories of Entrepreneurial Emergence: A Critical Review of the Pioneer Perspectives and their Relevance in Nigerian Society of Today. *IIARD International Journal of Economics and Business Management*, 1(8), pp. 104 – 119
- Dodgson, Mark and Gann, David (2020). Great Reset: What Universities Entrepreneurship can bring to the Post COVID World. *World Economic Forum*. From <https://www.weforum.org/agenda/2020/07/university-entrepreneurship-post-covid-19-world/>
- Evoma, (2017). 7 Roles of Entrepreneurship in Economic Development of a Country, retrieved on 11/1/2020 from <https://evoma.com/business-centre/7-roles-of-entrepreneurship-in-economic-development-of-a-country/>

- Fasogbon, O. (2019). Nigeria: Addressing Nigeria's Rising Youth Unemployment, *ThisDay*, July 19 retrieved on 19/ 01/2020 <https://allafrica.com/stories/201907190644.html>
- Gautam, Manish Kumar and Singh, Sunil Kumar (2015). Entrepreneurship Education: Concept, Characteristics, and Implication for Teacher Education. *Shaikshik Parisamvad (International Journal of Education)*, 5(10) January, pp. 21-35.
- ILO (2003). Unemployed - ILO. *Glossary of Statistical Terms*. Retrieved from <https://stats.oecd.org/glossary/detail.asp?ID=2791>
- ILO (2012). Towards the Right to Work, A Guidebook for Designing Innovative Public Employment Programmes, Turin-Italy, *International Training Center of the ILO*. From https://www.ilo.org/wcmsp5/groups/public/---ed-emp/documents/publication/wcms_559273.pdf
- ILO (2020). ILO Glossary of Statistical Terms. From <https://www.ilo.org/ilostat/files/Documents/Statistical%20Glossary.pdf> *International Labour Organisation* (2020). Employment by Status in Employment. From https://www.ilo.org/ilostat/files/Documents/description_STE_EN.pdf
- Kakodkar, Pramath, Kaka, Nagham, & Baig, M.N. (2020). A Comprehensive Literature Review on the Clinical Presentation, and Management of the Pandemic Coronavirus Disease 2019 (COVID-19). *Cureus* 12(4): e7560. Doi:10.7759/cureus.7560
- Kruger, M. E. (2004). Chapter 3: Entrepreneurship Theory and Creativity. From <https://repository.up.ac.za/bitstream/handle/2263/27491/02chapter02.pdf>
- Nwekaeku, Charlie (2013). Entrepreneurship Education and Challenges to Nigerian Universities. *Journal of Education and Practice*, Vol. 4, No. 3, pp. 51 – 56.
- Nwosu, J. C. and Chukwudi, J. H. (2018). Entrepreneurship Education and the Challenges of Graduate Employability in Nigeria. *International Journal of Innovation, Management and Technology*, 9(5), October, pp. 189 – 193.
- Ojeifo, Suday Aide' (2012). Entrepreneurship Education in Nigeria. *Journal of Education and Practice*, Vol. 3, No. 14
- Okhomina, Donatus A. (2020). Entrepreneurial Postures and Psychological Traits: The Sociological Influences of Education and Environment. *Research in Higher Education Research*. From <https://www.aabri.com/manuscripts/10464.pdf>.
- Okoro, B. C., Achonu, C. V. and Okoli, I. E. (2019), Entrepreneurship and Development, A Review, retrieved on 11/1/2020 from <http://eprints.gouni.edu.ng/1897/1/Confrence%at20Unizik%20on%20Entrepreneurship%20and%20development%20a%20review%20-%20Copy.pdf>
- Okoye, Victor O. and Okoye, Chinasa R. (2019). Entrepreneurship Education in Tertiary Institutions: A Paradigm for Sustainable Development. *International Journal of Research Grnthaalayah*, Vol. 7 (Issue 9), September.

- Olorundare, Adekunle Solomon and Kayode, David Jimoh (2014). Entrepreneurship Education in Nigerian Universities: A Tool for National Transformation, *Asia Pacific Journal of Educators and Education*, Vol. 29, 155 - 175
- Oluwaleye, J. M. (2019). Youth Unemployment, Rising Criminality and the Challenge of Sustainable Peace in Nigeria, Conference Paper Presented at the International Conference of the Social Sciences, University of Nsukka, 9 – 12th July.
- Olurounbi, Ruth (2020). Nigeria: Pandemic to Poverty in the Post COVID Future. *The Africa Report*, July 13. From <https://www.theafricareport.com/33300/pandemic-to-poverty-nigeria-in-the-post-covid-future/>
- Onah, Nkechi G. and Okwuosa Lawrence N. (2016). Youth Unemployment and Peace in Nigerian Society. *Mediterranean Journal of Social Sciences*, 7 (1), pp. 52 – 58.
- Onuma, Nwite (2016). Entrepreneurship Education in Nigerian Tertiary Institutions: A Remedy to Graduates Unemployment. *British Journal of Education*, 4(5), pp. 16 – 28, May
- Oyebola, Olaposi and Adeyemi, (2015). Evaluation of Entrepreneurship Education in Selected Nigerian Universities, *Journal of Entrepreneurship and Innovation Management*, Volume 4, Issue 2, December
- Rashid Tahmina (2020). International Development, Discipline/Multi-discipline or Trans-disciplinary Field. From [https://governanceinstitute.edu.au/magma/media/upload/ckeditor/files/International%20Development\(1\).pdf](https://governanceinstitute.edu.au/magma/media/upload/ckeditor/files/International%20Development(1).pdf)
- Redaksi Dari (2013). The Entrepreneurship Theory: An Overview. Manajemen. From <https://manajemenppm.wordpress.com/2013/07/05/the-entrepreneurship-theory-an-overview/>
- Simpe, Kwabena Nkansah (2011). Entrepreneurship Theories and Empirical Research: A Summary Review of a Literature. *European Journal of Business and Management*, 3(6), pp. 1 – 8.
- Sofoluwe, A. O., Shokunbi, M. O., Raimi, L. and Ajewole, T. (2013). Entrepreneurship Education as a Strategy for Boosting Human Capital Development and Employability in Nigeria: Issues, Prospects, Challenges and Solutions. *Journal of Business Administration and Education*, 3(1), pp. 25-30.
- The Nigerian Voice*, (2011). Why We Set up Entrepreneurship in Studies in Universities – FG, retrieved on 13/01/2020 from <https://www.thenigerianvoice.com/news/35849/why-we-set-up-entrepreneurship=studies-in-vvarsities-8211.html>
- UNESCO-UNEVOC, (2014). Entrepreneurship Education/Training. Retrieved from <https://unevoc.unesco.org/go/php?q=TVETipe+Glossary+A-Z&id=206>
- Vivarelli, Marco (2012). Entrepreneurship in Advanced and Developing Countries: A Micro- Economic Perspective. *IZA Discussion Paper*, No 6513. From <http://ftp.iza.org/dp6513.pdf>
- World Health Organisation*, (2020). Coronavirus Disease (COVID 19) Pandemic. From 2019?gclid=EAIaQobChMxcKKvaHe6QIVzfRCh2p-gRHEAAYSAAEgKpefD-BwE

World Health Organisation, (2020). Q & A on Coronavirus (COVID-19).
<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-coronaviruses>

Assessing the Relationship between Emotional Intelligence, Organizational Commitment, and Entrepreneurship during the COVID-19 pandemic: A Nigerian Perspective.

Moruf Akanni Adebakin, Risikat F. Adeoye, & K. O. Ganiyu.

Abstract

This research examines the relationship between emotional intelligence and organizational commitment among a sample of entrepreneurs in Lagos, Nigeria putting COVID-19 pandemic in context. A self-administered questionnaire was distributed to 98 entrepreneurs in Lagos State, with a response rate of approximately 65%. This study's data were examined and analyzed using both descriptive and inferential statistics. The results show a strong positive and significant relationship between emotional intelligence measures (i.e. self-awareness, self-management, and relationship management) and organizational commitment. The study was able to demonstrate that entrepreneurs with adequate emotional intelligence will likely become more devoted to their businesses. On the other hand, this commitment will contribute to the long-term development and sustainability of the businesses. Given the challenges posed by the COVID-19 pandemic, the study revealed the importance of emotional intelligence training as a potent organizational commitment tool for attaining sustainability in small and medium enterprises (SMEs). The study highlights the significant of emotional intelligence and dedication as a determinant of entrepreneurial sustainability for the formulation and implementation of policy.

Keywords: Emotional Intelligence, Organizational Commitment, Entrepreneurship.

Introduction

Emotional intelligence (EI) is a critical aspect of individual and organizational performance which has received sufficient attention in the field of organizational psychology. EI refers to the capacity to recognize, understand, and manage one's own emotions, as well as those of others, in order to 'work effectively towards common goals in a constructive and transparent environment' (Cherniss & Goleman, 2001).

It is important to note that the relationship between EI and various human activities and behaviors, including job performance, job satisfaction, organizational citizenship behavior, and organizational commitment have been established (Cherniss, 2010). Additionally, research has shown that EI is a predictor of leadership effectiveness, stress management, and well-being (Zeidner, Roberts, & Matthews 2008; Suar, & Khuntia 2019). Furthermore, high levels of emotional intelligence can improve social networks and business relations, particularly for entrepreneurs (Grewal & Salovey, 2006).

Emotional Intelligence (EI) is a well-researched construct in the field of organizational study and has been found to predict many important organizational outcomes including job performance, job satisfaction, organizational commitment and organizational citizenship behaviour. EI helps people collaborate creatively in a transparent setting by controlling their emotions. When managers value their employees' emotions, employees in return, are likely to feel valued, in a way that would enhance the organization's success. Emotional intelligence involves the ability to reason with emotions and to use emotions to enhance thinking. It includes the ability to perceive emotions more accurately, contribute to thought and knowledge, and regulate intellectual growth reflectively. No

wonder, Cherniss, & Goleman (2001) defines EI as the ‘ability to monitor one's own and others' feelings and emotions, discriminate among them, and use this information to guide one's thinking and action’. Emotions are seen to be valuable sources of information that aid people in understanding their social surroundings.

Goleman, & Boyatzis (2008) conceptualized EI as a non-cognitive ability involving five broad skill areas which includes intrapersonal skills (identify, understand and express oneself); interpersonal skills (awareness, understanding, and relationship to others); adaptability (strong emotions and control one's impulses); stress management (control of stress under different situation); and general mood (adaptation to change and solve personal and social problems). These skills help individuals become more effective in dealing with environmental demands and pressures: EI has been studied and applied in psychology, education, and management (Chiaburu, Diaz, & DeVos, 2013), and has been found to be related to social interactions, resistance to stress, and academic achievements (Canter, Kessler, Odar, Aylward, & Roberts, 2012), performance, leadership and well-being (Graen, & Uhl-Bien, 2015).

Emotional intelligence is important for entrepreneurs' social effectiveness and success. Higher emotional intelligence is positively related to better social networks, and better business relations (Grewal, Brackett, & Salovey, 2006). Commitment on the other hand is an essential element for effective change implementation in organizations, and employees and managers must be committed to the change from initiation to implementation as no change can occur without willing and committed employees (Meyer, Srinivas, Lal, & Topolnytsky, 2007; Bennis 2000). However, the need for globalization, deregulation, the desire to remain competitive, and strategic adaptability have made it imperative for managers and employees to be committed to change initiatives (Jaros, 2010).

Since low or no emotional intelligence can affect entrepreneurs' commitment to their businesses, the possible solution is for people to be aware of their emotional state, how they react to stress, manage stress, and maintain good health. Hence, high emotional intelligence correlates with a positive attitude and happier outlook on life, better communication of feelings, and better performance in human relationships. In addition, people's inability to regulate their emotions and manage others' emotions can lead to conflicts and occupational stress. This often manifest as exhaustion, anxiety, depression, irritability, and loss of interest in the job with adverse effects on productivity. At the workplace, emotions such as anger and jealousy can push aside logic and rationality.

Models of Emotional Intelligence

Based on the existing literature, there are various models of emotional intelligence, each with its own unique perspective and approach. First is the *Ability model* proposed by Mayer and Salovey (1997) and further developed by Goleman (1998). It defines EI as the ability to perceive, understand, regulate and manage emotions in oneself and others. Ability itself is seen by this model as comprising perceiving emotions; using emotions to facilitate thinking; understanding emotions; and managing emotions.

Second is the *Mixed model* proposed by Bar-On (1997). It posits that EI involves a range of abilities, traits, and self-perceived abilities. The mixed model identified four domains of EI namely self-

awareness; self-management; social awareness; and relationship management. *Self-awareness* entails comprehension and awareness of one's own emotions, assets, weaknesses, and values including recognition of how your emotions influence your thoughts and actions, as well as the ability to accurately evaluate your own performance. *Self-management* domain entails the capacity to regulate and control one's own emotions and behaviours in various situations including the ability to control impulsive responses; adapt to change; and maintain a positive outlook in the face of obstacles. *Social awareness* domain entails the capacity to comprehend and empathize with the emotions and points of view of others. It involves recognising the dynamics of various social situations in addition to being able to accurately interpret social indicators and signals. *Relationship management* entails the ability to communicate effectively with others, build and maintain positive relationships, and work collaboratively to achieve common objectives. It also requires the ability to manage interpersonal relationships in addition to resolving conflicts, negotiating effectively, and providing constructive feedback. These four domains are very crucial to people's personal and professional interactions (according to the mixed model). By strengthening these domains, people can develop their capacity to control their own emotions, comprehend and empathise with others, and form enduring beneficial relationships.

Third is the *Trait model* proposed by Petrides and Furnham (2000). According to this model EI is a set of emotional and social skills and personality traits that influence how people perceive, understand, and manage emotions. It is based on personality and behavioral dispositions that impact emotional functioning (Petrides, and Furnham 2001).

This study adopts the mixed model of EI because it is considered to be the most relevant model to organizational commitment. This is because the mixed model focuses on the practical application of emotional intelligence in everyday life, including the workplace. In particular, the mixed model emphasizes the importance of both personal and social competencies in emotional intelligence. Personal competencies, such as self-awareness and self-management help individuals manage their own emotions and behaviours in the workplace, which can contribute to their level of commitment to their organizations. Social competencies, such as social awareness and relationship management, enable individuals to understand and navigate social dynamics in the workplace. This can also impact their level of commitment.

The mixed model of EI has been proved to predict organizational commitment. For example, a study by Sanchez-Alvarez, Extrema, and Fernandez-Berrocal (2016) found that EI was positively related to organizational commitment among a sample of Spanish employees. Taking into consideration both personal and social competencies, the mixed model of EI provides a comprehensive framework for understanding the relationship between EI and organizational commitment.

Organizational commitment refers to an individual's attachment to and involvement with their organization. This attachment can manifest in a number of ways, including a desire to continue working for the organization, willingness to put forth extra effort on behalf of the organization, and a belief in the values and goals of the organization.

Meyer, and Allen (1991) identified three dimensions of organizational commitment. The first is *Affective commitment* which is the emotional attachment and identification of an employee with an organization. For example, employees with a high level of affective commitment experience a sense

of loyalty and pride in their organization, and they are likely to remain with the organization despite the existence of other opportunities. The second is *Continuance commitment* which refers to an employee's perception of the costs associated with leaving the organization, such as seniority, benefits, and relationships. For instance, employees with a high level of continuance commitment believe they cannot afford to leave even if they may not have a strong emotional attachment to the organization. Third is *Normative commitment* which refers to an employee's sense of obligation or responsibility to remain with the organization or its customers. Employees with a high level of normative commitment feel a moral or ethical obligation to remain with the organization because they see this as a sense of duty to the organisation or its customers. These three dimensions of organisational commitment (included in this study) have been the subject of extensive research and are regarded as reliable measures of employee commitment to organizations.

Several factors do influence organizational commitment, these includes job satisfaction, perceived organizational support, and leadership style. EI has also been found to play a role in shaping organizational commitment. Research has shown that individuals with high emotional intelligence are more likely to feel committed to their organization ostensibly because they are better able to navigate and manage their own emotions and the emotions of those around them in the workplace. For example, a study by Sánchez-Álvarez et al. (2016) found that EI was positively related to organizational commitment among employees in the hospitality industry. Another study by Kabat-Farr and Cortina (2018) discovered that among healthcare workers, perceived organizational support and organizational commitment were mediate by emotional intelligence. Furthermore, a study by Suar and Khuntia (2010) found EI as a significant predictor of affective and normative commitment, but not continuance commitment. This suggests that employees with higher emotional intelligence may likely stay with an organization because of their emotional attachment and sense of obligation, rather than simply because of practical reasons like salary or benefits. Similarly, a study by Kim and Kim (2018) found that EI was positively related to affective and normative commitment among Korean employees. These results point to the fact that EI is crucial to the understanding and promotion of organizational commitment in the workplace.

Theories Linking Emotional Intelligence and Organizational commitment

Several theories have been proposed to explain the relationship between emotional intelligence and organizational commitment. One such theory is the *Affective events theory* (AET) by Weiss and Cropanzano (1996). The AET suggests that emotions play a significant role in the formation of employee attitudes and behaviours, including commitment. Specifically, emotional experiences and perceptions of work-related events can influence employees' attitudes towards their work and their organization.

Also important to this discussion is the *social exchange theory* (SET). The theory posits that employees' level of commitment to their organization is explained by their perceptions of the exchange relationship between themselves and the organization. Specifically, employees who perceive that they receive fair treatment and support from their organization are more likely to feel committed to the organization (Adebakin and Okon 2019). Emotional intelligence influences the perception of fairness and support by enabling employees to accurately perceive and control their own and others' emotions. This would promote constructive social interactions in the workplace.

Also important is the *social control theory* (SCT) which focuses on the role of social bonds and socialization in preventing deviant behaviour. This theory suggests that society can reduce the likelihood of deviance and promote greater adherence to social norms by strengthening social bonds and promoting socialization (Pratt & Cullen 2000).

It is important to note the difference between social exchange theory and social control theory. For instance, SET focuses on the economic and social transactions between individuals and how they contribute to social relationships. This implies that people make decisions about their relationships on account of cost-benefit analysis. In other words, they aim to maximize benefits and reduce costs. In the contrary, SCT emphasizes the importance of social bonds, relationships, and institutions in regulating human behaviour. It suggests that individuals are generally encouraged to respect social norms and expectations so as to maintain social bonds and avoid social sanctions. As both theories seem concerned with the relationship between individuals and society, they differ in their focus and underlying assumptions. For instance, SET is concerned with the individual pursuit of self-interest, while SCT relates to the role of social bonds and relationships in regulating behavior.

Emotional intelligence is crucial to social control, since the ability to manage one's own emotions and that of others (Goleman, 2001) is required to achieve greater social control. This argument highlights the significance of social control theory to the comprehension of emotional intelligence as a subset of social intelligence. For instance, Salovey and Mayer (2010) defined EI as a form of social intelligence involving the capacity to monitor one's own and others' feelings and emotions, to differentiate between them, and to use this information to influence one's thinking and behaviour.

According to the aforementioned, the argument that the social control theory (SCT), affective events theory (AET), and social exchange theory (SAT) provide useful insights into how emotional intelligence might improve organisational commitment, is still valid and relevant to the present study.

An entrepreneur is a person who has been able to identify opportunities and mobilise resources to exploit these identified opportunities in order to generate wealth. However, the process of launching, running, and expanding a new company endeavour in Nigeria is referred to as entrepreneurship. It frequently exhibits a great drive for independence, creativity, and innovation. Nigerian entrepreneurs are renowned for their tenacity, resourcefulness, and capacity to spot prospects for lucrative initiatives despite difficult social and economic circumstances (Adekunle, Oyedokun, & Oyelekan 2019).

Like any other parts of the world, entrepreneurship in Nigeria is a way to provide employment possibilities, combat poverty, and foster economic growth and development. These pivotal roles which entrepreneurship play in the nation's economy made the Nigerian government to adopt a number of policies and programmes aimed at fostering and supporting entrepreneurship.

In addition, the cultural and social environment of Nigeria also has an impact on entrepreneurship. For instance, some of the qualities (hard labour, tenacity, and perseverance) crucial to successful entrepreneurship are highly valued in Nigerian culture. In Nigeria, social networks and ties to the community are vital for fostering entrepreneurship because they give people access to resources,

knowledge, and support systems. Hence, a rising understanding of the need to foster an environment that supports entrepreneurs is emerging, especially with the less expected COVID-19 pandemic.

COVID-19 is an infection of the respiratory system induced by a novel coronavirus. The virus first surfaced in Wuhan, China, in December 2019, from where it ravaged the rest of the world, causing a global pandemic. The first case of this virus in Nigeria was discovered on February 27, 2020 when an Italian man who arrived the country tested positive for COVID-19. Since then, confirmed cases of the virus have been reported in all 36 states and the Federal Capital Territory (FCT) of Nigeria. Nigeria has recorded over 2.8 million confirmed cases and over 60,000 fatalities as of April 27, 2023. In response to the pandemic, the Nigerian government has instituted several measures to contain the spread of the virus. Some of these measures include lockdowns, travel restrictions, and vaccination campaigns. The pandemic has had a substantial impact on the Nigerian economy, especially on tourism, transportation, and small enterprises. There is no gainsaying the fact that only business owners with the appropriate emotional intelligence will withstand the pandemic's destructive effects on their industry.

Linking Emotional Intelligence, Organizational Commitment, and Entrepreneurship during COVID-19 in Nigeria:

Since the objective of this study is to explore the relationship between emotional intelligence, organizational commitment, and entrepreneurship during the COVID-19 pandemic in Nigeria, it might be necessary to establish a nexus between all the concepts.

Studies exist to prove positive relationship between emotional intelligence and organizational commitment (Chen & Tjosvold, 2007; Sánchez-Álvarez et al., 2016). For example, emotional intelligence enables individuals to manage their emotions and the emotions of others effectively, so as to enhance their job satisfaction, motivation, and commitment to their organization. This relationship is particularly relevant in times of crisis, such as the COVID-19 pandemic, where emotional intelligence can help employees manage stress and uncertainty and maintain their commitment to their organizations (Serafim, Ferreira, Pereira, & Lopes 2021).

The COVID-19 pandemic has had a significant impact on the entrepreneurship landscape in Nigeria. Many small businesses have struggled to stay afloat due to restrictions on movement and reduced economic activity (Adeola & Evans, 2021). However, some entrepreneurs have shown resilience and adaptability by pivoting their business models to meet the changing needs of customers during the pandemic (Ologbenla & Ojo, 2021). EI play significant role in the success of these entrepreneurs by enabling them to navigate the challenges of the pandemic while they maintain their commitment to their businesses.

The COVID-19 pandemic has presented challenges for entrepreneurs in Nigeria, including decreased demand, supply chain disruptions, and limited access to financing (Onuoha, Duff, & Ameh 2020). However, entrepreneurs with high emotional intelligence may be better equipped to navigate these challenges and maintain their commitment to their businesses. Emotional intelligence can enable entrepreneurs to manage stress and uncertainty, adapt to changing circumstances, and maintain positive relationships with customers and employees (Serafim et al., 2021). By fostering emotional intelligence in their employees, organizations can also promote greater commitment to

the organization and support entrepreneurial activities within the company (Sánchez-Álvarez et al., 2016). Therefore, in the light of the COVID-19 pandemic in Nigeria, emotional intelligence, organisational commitment, and entrepreneurship are all crucial factors. By fostering emotional intelligence in entrepreneurs and employees, organisations can foster organisational loyalty and promote entrepreneurial activities that can drive economic growth and development despite the pandemic.

To examine these claims the following research hypothesis was formulated:

“The measures of emotional intelligence (self-awareness, self-management, social awareness, and relationship management) among entrepreneurs are not significantly related to the dimensions of organizational commitment.”

Methodology

The research utilized a descriptive survey research design to investigate the relationship between emotional intelligence, organizational commitment, and entrepreneurship during the COVID-19 pandemic in Nigeria. Initially, a sample of 150 entrepreneurs was selected using Taro Yamane's (1967) formula, but only 98 returned the questionnaires and were included in the study. To measure emotional intelligence, the Bradberry and Greaves (2003) emotional intelligence questionnaire was employed, which consists of 28 items capturing Goleman's four dimensions of emotional intelligence: self-awareness, self-management, social awareness, and relationship management. Organizational commitment was measured using the Allen and Meyer (1990) organizational commitment scale, which is a 12-item Likert scale measuring three dimensions of organizational commitment: affective commitment, continuance commitment, and normative commitment. The internal consistency of the research instruments was evaluated using Cronbach's Alpha Coefficient of reliability, and values ranging from 0.774 to 0.814 were obtained for both instruments. Pearson product moment correlation analysis was used to determine the level of association between emotional intelligence and organizational commitment. (Serafim et al., 2021).

Results and Discussions

Table 1 below provides a summary of the demographic characteristics of the respondents. This comprises of 98 entrepreneurs from Lagos. The respondents' age ranged from 31 – 40 years (45.9%), most of them were males (63.3%). Majority of respondents were married (55.1%) while their educational level was more at the B.Sc./HND (48%). However, respondents' experience in entrepreneurship ranges between 11-15 years (32.7%). We can deduce from this table that the entrepreneurs were of age, educated and have been in business for a reasonable number of years.

Table 1: Demographic characteristics of respondents (N=98).

Variables	Description	Frequency	Percentages (%)
Sex	Male	62	63.3
	Female	36	36.7
Age	18 - 30 yrs	35	35.7
	31-40 yrs	45	45.9
	41- 50 yrs	16	16.3
	51 – 60 yrs	02	2.0
Marital Status	Single	18	18.4
	Married	54	55.1
	Divorced	26	26.5
Academic qualification	O`Level	8	8.2
	A` Level	24	24.5
	B.Sc./HND	47	48.0
	M.Sc.	19	19.4
Work experience	1 - 5 yrs	24	24.5
	6 - 10 yrs	27	27.6
	11 - 15 yrs	32	32.7
	16 - 20 yrs	13	13.3
	21yrs and above	2	2.0

Source: Field Survey (2020)

Table 2: Correlation Matrix for all variables (N=98)

Variables	Mean	SD	1	2	3	4	5	6	7
1, Self-Awareness	27.31	8.36		.644**	.594**	.683**	.480**	.458**	.617**
2. Self-Management	32.57	9.40			.588**	.730**	.448**	.660**	.743**
3. Social-Awareness	15.92	5.92				.582**	.778**	.760**	.836**
4. Relationship Management	29.90	8.95					.511**	.727**	.765**
5. Affective Commitment	12.35	5.07						.763**	.753**
6. Continuance Commitment	14.90	5.79							.867**
7. Normative Commitment	19.69	6.07							

**Correlation is significant at the 0.01 level (2-tailed).

Source: Field Report (2020)

The results of the correlation matrix in table 2, indicated that there is a strong and positive significant relationship between Self-Awareness and dimensions of organizational commitment ($r = 0.99, p = 0.01$). Hence, hypothesis 1 is rejected. Furthermore, the result shows that there is a strong and significant positive relationship between Self-Management and dimensions of organizational commitment ($r = .448, .660, .743, p = 0.01$). We therefore reject the null hypothesis and conclude that self-management has strong and significant positive relationship with dimensions of organizational commitment. The correlation table also shows that there is strong and significant positive relationship between social awareness and dimensions of organizational commitment ($r = .778, .760, .836, p = 0.01$). Hence we reject the null hypothesis and conclude that there is strong and significant positive relationship between social awareness and dimensions of organizational commitment. The table further revealed a strong and positive significant relationship between relationship management and dimensions of organizational commitment ($r = .511, .727, .765, p = 0.01$). We can therefore reject the null hypothesis and conclude that there is a strong and significant positive relationship between relationship management and organizational commitment.

In the same vein, the table shows strong and significant positive relationship between each measure of emotional intelligence and measures of organizational commitment. Self-awareness and affective commitment ($r = 0.480, p = 0.01$), Self-awareness and normative commitment ($r = 0.458, p = 0.01$) and self awareness and continuance commitment ($r = 0.617, p = 0.01$). Self-management and affective commitment ($r = 0.448, p = 0.01$), normative commitment ($r = 0.660, p = 0.01$) and continuance commitment ($r = 0.743, p = 0.01$). Social awareness and affective commitment ($r = 0.778, p = 0.01$), normative commitment ($r = 0.760, p = 0.01$) and continuance commitment ($r = 0.836, p = 0.01$). Relationship management and affective commitment ($r = 0.11, p = 0.01$), normative commitment ($r = 0.727, p = 0.01$) and continuance commitment ($r = 0.765, p = 0.01$).

Moreover, the table also shows that there is strong and significant positive relationship among the measures of emotional intelligence. Self-awareness has strong and significant positive relationship with self-management ($r = 0.644, p = 0.01$), with social awareness ($r = 0.594, p = 0.01$) and with relationship management ($r = 0.683, p = 0.01$). Self-management has strong and significant positive relationship with social awareness ($r = 0.588, p = 0.01$) and with relationship management ($r = 0.730, p = 0.01$). Lastly, the result revealed a strong and significant positive relationship between social awareness and relationship management ($r = 0.582, p = 0.01$).

Findings of the study revealed that there is strong and significant positive relationship amongst self-awareness, self-management, social awareness, relationship management and organizational commitment. This conforms with the results obtained by Naseer, Chisti, Rahman, and Jumani (2011), although the result negates the findings of Mahmood and Hannafi (2013). This could be attributed to the use of mixed model approach of emotional intelligence. The relationship found amongst the measures of emotional intelligence and measures of organizational commitment has support in the works of Letam (2017); Zeidner, Matthews, and Roberts (2004); and Mayer and Salovey (1997).

Meanwhile the relationship found amongst the measures of emotional intelligence seems to be novel and thereby contribute to the literature by providing additional understanding as to how the commitment of entrepreneurs could help sustain the business especially when they have the right emotional intelligence.

Conclusion and Recommendation

Overall, the findings of the study indicate that small and medium-scale business owners, managers, and entrepreneurs are highly concerned about the impact of emotional intelligence on organizational commitment within their organizations. Specifically, the study reveals a positive correlation between emotional intelligence and organizational commitment among this group. The results also highlight the significant influence of self-management and social awareness on entrepreneurs' commitment levels, with individuals possessing higher levels of these competencies exhibiting greater commitment. Consequently, it is recommended that HR departments consider providing training on emotional intelligence, with a focus on developing emotional self-control, transparency, adaptability, achievement, initiative, empathy, organizational awareness, and service. Such training can lead to improved self-management and social awareness among entrepreneurs and ultimately increase their level of commitment.

However, based on the conclusions of the study, we made the following recommendations:

1. Organizations should implement emotional intelligence programs to enhance the capacity of entrepreneurs and cultivate strong workplace relationships with employees. By so doing, there would be increased engagement, trust, and integrity, the result of which would manifest in more effective teams, employee retention, and enhanced commitment to the organization..
2. Emotional intelligence tests should be incorporated into workplace practices, such as promotions, staff reviews, and recruitment, to ensure that individuals with high levels of emotional intelligence are identified and given priority.
3. Organizations should provide adequate recreational facilities to reduce job-related stress and promote positive relationships between supervisors and subordinates.
4. Organizations should ensure effective utilization of manpower by matching employees' skills and abilities with appropriate roles and responsibilities. This can increase job satisfaction and enhance overall productivity.

Implementing these recommendations can help organizations in Nigeria to cultivate a positive and productive work environment, which can lead to increased organizational commitment and entrepreneurship during the COVID-19 pandemic.

However, the study encountered a few limitations. Firstly, the research sample was limited to only 98 entrepreneurs based in Lagos State, and this may raise questions about the generalizability of the study findings. Additionally, all data was collected at a single point in time, which may limit the scope and validity of the results. These limitations point towards potential areas for future research. Larger sample sizes and possible alternative research design that allows for data collection over an extended period can be used in future studies. This would enable researchers to analyze changes over time and validate the research findings. Furthermore, exploring the relationship between EI and commitment in other organizations and industries would enable a more comprehensive comparison of the relationships.

Despite these limitations, the study highlights the significance of EI and commitment in determining entrepreneurial sustainability and provides valuable insights for policy formulations and implementations.

References

- Adebakin, M.A., Okon, S.E (2019). Procedural justice, job satisfaction and organizational citizenship behavior within small and medium scale enterprises in Nigeria. *Journal of Economics and Management*, 38 (4), 5-45. <http://doi.org/10.22367/jem.2019.38.0>.
- Adekunle, A., Oyedokun, T., & Oyelekan, O. (2019). Entrepreneurship and economic growth in Nigeria: Empirical analysis. *International Journal of Economics, Commerce and Management*, 7(2), 14-27.
- Adeola, O., & Evans, O. (2021). COVID-19 pandemic and entrepreneurship in Nigeria: Challenges and prospects. *Journal of Enterprising Communities: People and Places the Global Economy*
- Allen, N. J., & Meyer, J. P. (1990). Affective, continuance, and normative commitment to the organization: An examination of construct validity. *Journal of vocational behavior*, 49(3), 252-276. <https://doi.org/10.1006/jvbe.1996.0043>
- Bar-On, R. (1997). The Bar-On Emotional Quotient Inventory (EQ-i): Technical manual. Toronto, Canada: Multi-Health Systems.
- Bennis, W. (2000). *Leadership of change*. In M. Beer & N. Nohria (Eds), *Breaking the code of change*. 113-121. Boston, MA: Harvard Business School Press.
- Bradberry, T.R., & Greaves, J.M. (2003). *The Emotional Intelligence Appraisal™ Technical Manual*. San Diego: TalentSmart, Inc.
- Canter, K. S., Kessler, E. D., Odar, C., Aylward, B. S., & Roberts, M. C. (2012). Perceived benefits of mentoring in pediatric psychology: A qualitative approach. *Journal of pediatric psychology*, 37(2), 158-165. <https://doi.org/10.1093/jpepsy/jsr064>
- Chen, N. Y. F., & Tjosvold, D. (2007). Guanxi and leader member relationships between American managers and Chinese employees: Open-minded dialogue as mediator. *Asia Pacific Journal of Management*, 24(2), 171-189.
- Cherniss, C., & Goleman, D. (2001). *The Emotionally Intelligent Workplace: How to Select For, Measure, and Improve Emotional Intelligence in Individuals, Groups, and Organizations*. John Wiley & Sons.

- Cherniss, C. (2010). Emotional intelligence: Toward clarification of a concept. *Industrial and Organizational Psychology*, 3(2), 110-126. <https://doi.org/10.1111/j.1754-9434.2010.01203.x>.
- Chiaburu, D.S., Diaz, I. & De Vos, A. (2013). Employee alienation: Relationships with careerism and career satisfaction. *Journal of Managerial Psychology*, 28(1), 4-20. <https://doi.org/10.1108/02683941311298832>
- Goleman, D. (1998). The emotional intelligence of leaders. *Leader to Leader*, 10, 20-26. <https://doi.org/10.1002/ltl.40619981008>.
- Goleman, D. (2001). Emotional intelligence: Issues in paradigm building. In C. Cherniss & D.
- Goleman, D., & Boyatzis, R. (2008). Social intelligence and the biology of leadership. *Harvard Business Review*, 86(9), 74-81
- Grewal, D. D., & Salovey, P. (2006). Benefits of emotional intelligence. A life worth Contributions to positive psychology, *Oxford Publishers*, 104-119. <https://doi.org/10.1037/t35736-000>
- Jaros, S. (2010). Commitment to organizational change: A critical review. *Journal of Change Management*, 10(1), 79-108. <https://doi.org/10.1080/14697010903549457>
- Kabat-Farr, D., & Cortina, L. M. (2018). Perceived organizational support, emotional intelligence, and organizational commitment. *Journal of Vocational Behavior*, 105, 127-139.
- Kim, D. K., & Kim, B. Y. (2018). The effect of emotional intelligence on job satisfaction: A case study of SME Management Consultants in Korea. *The Journal of Asian Finance, Economics, and Business*, 8(5), 1129-1138.
- Letam, D. B. (2017). Emotional intelligence and organizational commitment in three industrial sub-sectors in Rivers State. *International Journal of Advanced Academic Research*, 3(9), 1-17.
- Mahmood, R., & Hanafi, N. (2013). Entrepreneurial orientation and business performance of women-owned small and medium enterprises in Malaysia: Competitive advantage as a mediator. *International Journal of Business and Social Science (IJBSS)*, 4(1), 82-90. <http://ijbssnet.com/index.php/home>
- Mayer, J. D., & Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications*, 3(31). New York: Basic Books.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, 1(1), 61-89. [https://doi.org/10.1016/1053-4822\(91\)90011-Z](https://doi.org/10.1016/1053-4822(91)90011-Z)

- Meyer, F. P., Srinivas, E. S., Lal, J. B., & Topolnytsky, L. (2007). Employee commitment and support for an organizational change: Test of the three-component model in two cultures. *Journal of Occupational and Organizational Psychology*, 80, 185-211. <https://doi.org/10.1348/096317906X118685>.
- Naseer, Z., Chisti, S., Rahman, F. & Jumani, N. B. (2011). Impact of emotional intelligence on team performance in higher education institutes. *International Online Journal of Educational Sciences*, 3(1), 30-46.
- Ologbenla, P., & Ojo, A. (2021). Entrepreneurship and resilience in the face of Covid-19 in Nigeria. *Journal of Enterprising Communities: People and Places in the Global Economy*.
- Onuoha, B. C., Duff, A., & Ameh, O. J. (2020). Surviving the COVID-19 pandemic: Strategies and recommendations for Micro and Small Enterprises in Nigeria. *Journal of Enterprising Communities: People and Places in the Gl*
- Petrides, K. V., & Furnham, A. (2000). On the dimensional structure of emotional intelligence. *Personality and Individual Differences*, 29(2), 313-320.
- Petrides, K. V., & Furnham, A. (2001). Trait emotional intelligence: Psychometric investigation with reference to established trait taxonomies. *European journal of personality*, 15(6), 425-448. <https://doi.org/10.1002/per.416>.
- Pratt, T. C., & Cullen, F. T. (2000). The empirical status of Gottfredson and Hirschi's general theory of crime: A meta-analysis. *Criminology*, 38(3), 931-964.
- Salovey, P., & Mayer, J. D. (2010). Emotional intelligence. Imagination, cognition and personality, 9(3), 185-211.
- Sánchez-Álvarez, N., Extremera, N., & Fernández-Berrocal, P. (2016). The relation between emotional intelligence and subjective well-being: A meta-analytic investigation. *Journal of Positive Psychology*, 11(3), 276-285.
- Serafim, A. B., Ferreira, C. M., Pereira, R. M., & Lopes, H. F. (2021). Emotional intelligence and organizational commitment: The mediating role of work engagement in a Portuguese healthcare context. *Journal of Healthcare Leadership*, 13, 137-146. <https://doi.org/10.2147/JHL.S307384>.
- Suar, D., & Khuntia, R. (2019). Emotional intelligence and its relationship with leadership practices. *Journal of Human Behavior in the Social Environment*, 29(4), 525-537. <https://doi.org/10.1080/10911359.2018.1509195>
- Yamane, T. (1967). *Statistics: An introductory analysis*. New York: Harper and Row.

- Weiss, H. M., & Cropanzano, R. (1996). Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior: An annual series of analytical essays and critical reviews*, 18(1–74). Greenwich, CT: JAI Press.
- Zeidner, M., Matthews, G., & Roberts, R. D. (2004). Emotional intelligence in the workplace: A critical review. *Applied Psychology*, 53(3), 371-399.
- Zeidner, M., Roberts, R. D., & Matthews, G. (2008). The science of emotional intelligence: Current consensus and controversies. *European Psychologist*, 13(1), 64-78.
<https://doi.org/10.1027/1016-9040.13.1.64>.

That we may not be left behind: Analysis of Entrepreneurship Education Policies and Curricula for Teacher Education in Nigeria

Oyetero, Oyebode Stephen

Department of Arts and Social Science Education, Faculty of Education, Obafemi Awolowo University, Ile-Ife, Nigeria

Email: oyebode_oyetero@hotmail.com; +234(0)8105656202; ORCID: 0000-0002-7515-6806)

Abstract

This study becomes necessary on account of aspersions on the adequacy of Entrepreneurship Education (EE) being implemented at the tertiary education level and the scarcity of context-specific studies that assessed the EE policies and curricula provisions for teacher education in Nigeria. The specific objectives of the study are to: determine the considerations for entrepreneurial skills development of teacher trainees as contained in the *National Policy on Education (NPE)*, the *National Teacher Education Policy (NTEP)*, the National University Commission's *Benchmark Minimum Academic Standards for Education (BMAS-E)* and *Nigeria Certificate in Education Minimum Standards for General Education (NCEMS)*; examine the curricula provisions for teacher trainees' entrepreneurial skills development as specified in the documents and; determine the extent to which the provisions for entrepreneurial skills development of teacher trainees are related to best practices in the entrepreneurship education field. The study being qualitative research employed content analysis in order to answer the research questions asked. Findings indicated that there is a fair consideration for teacher trainees' entrepreneurial skills development in the four documents. Findings also depicted that the curricula considerations for teacher trainees comprise general entrepreneurship studies courses and units with indications of entrepreneurship course(s) for few programmes that are vocational subject matters. Lastly, it was reported that while there are evidences that elements of best practices in entrepreneurship education are present in the overall teacher education programme such evidences are elusive for the specified entrepreneurship education courses in teacher education programmes. The implications of the findings for EE policy and practice in teacher education were discussed.

Keywords: Education policy, Entrepreneurship education, Teacher education, Pre-service teachers, Policy analysis

Introduction

Numerous scholars, such as Ifedili & Ofoegbu (2011) Izedonmi & Okafor (2011) Odia & Odia (2019), Ojeifo (2012), Okey, Ayang & Ndum (2012), Olokundun (2017), Odia & Odia (2019), Olorundare & Kayode (2014), Onuma (2016), Uduak & Aniefiok (2011), and Olokundun, Ibidunni, Falola, Salau, Oyafunke-Omoniyi (2018), have acknowledged the significance of entrepreneurship

education (EE) in enhancing the acquisition of entrepreneurial skills and shaping the entrepreneurial inclination of Nigerian school system graduates; educational agencies and various policy documents chief of which is the National Policy on Education (Nigerian Educational Research Development Council, 2013). The quest for the translation of the importance of EE into educational experiences through the school curricula, teaching and learning and assessment activities has generated many templates, postulations and practices (cf. Akudolu, 2010; Oyetoro, 2015). For instance, in the tertiary education sector, internship, industrial attachments and teaching practice are being strengthened for effectiveness in helping students acquire vital entrepreneurial skills. Yet in some institutions (e.g. Tai Solarin University of Education, Ijagun, Ogun State and Oduduwa University, Ipetumodu, Osun State) students are made to learn vocations/ trades with the intent that the process of acquiring knowledge and skills in these trades and vocations will help in the development of students entrepreneurial competencies.

The various innovative practices in entrepreneurship education most especially in tertiary institutions in the nation seems to emanate from an increasing consensus that the present practice of making students take general elective courses in entrepreneurship with no capstone project deviates from established best practices in entrepreneurship education. Other best practices include: “top management support, comprehensive entrepreneurship education provision, skilled entrepreneurship education teachers, continuing professional development (CPD), entrepreneurial pedagogic, mentoring/incubator facilities, strong links to employers and business community, evaluation of entrepreneurship education provision, formal tracking of graduates” (Tom Martin and Associates, 2016). Adherence to best practices ensures the improvement of employability for graduates; enhanced partnerships with the private sector and industry; improved publicity, marketability and enhanced status of both academic and professional programmes (Simiyu, 2010).

In spite of the advances made in EE in the nation’s tertiary institutions, teachers-in-training are not adequately catered for. Observations reveal they are often exempted from EE courses and when provisions are made for them to offer these courses, the scope are too general for meaningful acquisition of intended transversal and entrepreneurial skills. Suffice it to mention that there are three routes- two at the undergraduate levels and one at the postgraduate level- to becoming teachers in Nigeria. The first is through the Colleges of Education which offer the Nigerian Certificate in Education to its graduate after the completion of three years of training. The NCE is the minimum qualification required of those who are to teach. The second at the undergraduate level is through the four-year programmes offered in Faculties of Education in the Universities. The graduates of Education programmes are awarded Bachelor of Arts in Education (B.A. Ed.), Bachelor of Science in Education (B.Sc. Ed.), Bachelor in Education (B. Ed.) depending on the teaching subjects. Some Universities recently started offering five years B.Tech. Ed. for technology related courses. The third route is for those who had their first degrees in a teaching subject area only and later supplemented it with a teaching certificate- Postgraduate Diploma in Education (PGDE) or Masters in Education (M. Ed.). Effective professionally trained teachers are expected to

share certain characteristics which include the identification of alternative pathways for students to learn content and focusing on stimulating thinking and learning (Beteille & Evans, n.d.). Hence, the roles of teachers have shifted from: preparing students for tests to preparing them for success in life; providing students with content mastery to the need to focus on context mastery. The changing roles of teachers translate to teachers themselves having a growth mindset and becoming life-long learners (Beteille & Evans, n.d.). These latter assertion calls for the training of entrepreneurial teachers who possess appropriate entrepreneurial pedagogy for developing the entrepreneurial competencies of learners.

The training requirements and work of teachers are becoming onerous as societal expectations of their job have increased. The unending debate on increasing the years of training for professional teachers aside those in technology tracts to five years attests to this. Yet, their increasing workload is not met by corresponding job prestige and compensation. In fact, attempts by teachers to earn extra income by moonlighting as private tutors is often frowned at and has been reported to compromise their integrity as teachers and devalue the profession (Jayachandran, 2014 in Beteille & Evans, n.d.). The onset of the COVID-19 outbreak, the realities of dwindling economic wealth and the reduced motivation for in-service teachers in real and relative monetary terms has accentuated the need for pre-service teachers to be entrepreneurial and indeed own enterprises in order to meet their needs when they transit to the world of work. Equity of access to educational opportunities implies that those who are being trained to become teachers should also be exposed to appropriate entrepreneurial training.

In spite of the need for increasing the access of teachers-in-training to entrepreneurship courses and programmes, the author is of the opinion that the design and implementation of appropriate entrepreneurial courses and programmes for teachers could be hampered by the societal belief that the *rewards of teachers are in heaven*. Also, the institution of a viable entrepreneurship programme for teachers-in-training could be limited by existing policy statements and written curricula provisions as nothing meaningful could be done outside these elements. Policy according UNESCO (2013), “refers to broad statement that sets out government’s main goals and priorities and which defines a particular stance, aiming to explore solutions to an issue” while curricula, the plural form of curriculum, refer to the contents and activities that are designed to ensure the transfer of specific observable skills to learners usually within a specific period of time. Policy statements and curricula are often specified in documents that are published and revised often by relevant governmental agencies. Creating and executing educational policies and teacher curricula that equip, encourage, and inspire educators to excel in their profession is crucial.

Four documents that contain statements on the goals and priorities and the curricula for teacher education in Nigeria include: the National Policy on Education (NPE) (Nigerian Educational Research and Development Council, 2013), the National Teacher Education Policy (NTEP) (Federal Ministry of Education, 2014), the National University Commission’s Benchmark Minimum Academic Standards for Education (BMAS-E) (National Universities Commission, 2018)

and Nigeria Certificate in Education Minimum Standards for General Education (NCEMS) (National Commission for Colleges of Education, 2012). These documents should contain statements on the curricula that would help pre-service teachers acquire entrepreneurial skills. As important elements that could either make or mar the implementation of programmes, there is a need to evaluate both existing policy statements and curricula provisions for teacher trainees' development to assess their suitability for the training of entrepreneurial teachers who are also expected to respond to the triad needs namely self, students' and societal needs. The need for the evaluation becomes more imperative when considered against the background that undoubtedly, there are gaps in major educational policies, either due to a lack of political determination to enforce them or because of the uncertain nature of the policy environment (Adelabu, 2019).

Purpose and Objectives of the study

The aim of the study is to evaluate four relevant documents that are related to the training of teachers in order to determine their suitability for entrepreneurial skills development of teachers-in-training in Nigeria. Three specific questions that have been asked for this study are:

What is the importance attached to the entrepreneurial skills development of teacher trainees as revealed by the documents?

What are the curricula provisions for teacher trainees' entrepreneurial development as specified in the documents?

Are the provisions for the implementation of entrepreneurial skills development of teacher trainees related to best practices in the entrepreneurship education field?

Theoretical Framework

Two theories have been found to be of important to the present study. They are the CIPP evaluation model and SWOT analysis.

CIPP evaluation model

The CIPP model, created by Dan Stufflebeam in 1971, stands for Context, Input, Process, and Product. It is a decision-oriented evaluation model that collects information to identify strengths and limitations in program content or delivery to improve program effectiveness (Zhang, Zeller, Griffith, Metcalf, Williams, Shea & Misulis, 2011). The CIPP model is versatile and used in various fields for evaluation. It guides evaluators and stakeholders in asking relevant questions and conducting assessments at the beginning (context and input), during (input and process), and end (product) of a project. *Educational policies* fit into the first two of the four categories in this model namely: the

Context and *Input* components. A deficiency in the outcomes of a program would necessitate that the goals and mission of the program and the plans and inputs outlined for it as contained in the policies be re-assessed in relation to their strengths and limitations in content or delivery.

The main goal of the CIPP model is to initiate an ongoing evaluation process that improves itself by eliminating ineffective parts or processes of the organization. This frees up resources to focus on more productive components. However, implementing the CIPP model can be challenging due to the need to define data collection procedures, criteria for categorizing data, and processes for ensuring that study results have a significant impact on institutional decision-making.

SWOT analysis

This is a tool found to be of importance to the present study. SWOT stands for Strength, Weaknesses, Opportunities and Threats. SWOT analysis has been used in the (business) management disciplines for analyzing and developing business strategies irrespective of the size and orientation of the organization. The model is presently being adopted for use in education and curriculum fields as could be seen in the works of Adepoju and Famade (2010), Orr (2013), Ssentamu (2013), Gruber, Matenaers, Staszuk, Birk and Ehlers (2014), Ali, Buruga and Habibu (2019), Longhurst, Stone, Dulohery, Scully, Campbell, and Smith (2020) and Santanru Calonge, Connor, Hultberg, Shah, and Medina-Aguerreberere (2022) to mention a few. The use of the model in educational settings as was in industrial settings has been attributed to the similarities in the administrative functions performed by the heads in both settings (Adepoju & Famade, 2010). Strengths and weaknesses are regarded as internal factors to the entity being evaluated while opportunities and threats are regarded as external factors. Observably, the scope of SWOT analysis has been delineated to physical and operational (internal) environments. Policies could be conceptualized as part of the operational environment and it defines the scope of other internal environments and of course, physical environments. Policies provide appropriate contexts for comprehending and analyzing the SWOT of educational programmes such as entrepreneurship education in teacher education as considered by this study. The interrelatedness between CIPP model and the SWOT analysis is such that since the CIPP model does not specify the nature of data to be collected from stakeholders, information on the analysis of the SWOT of each component of CIPP could provide valuable information that could guide decision making for progressing with the evaluation process.

Literature Review

Evaluation of policies for Nigeria's educational landscape

Policies are statements codified in relevant publications that provide the framework that guides the activities that take place in a particular sector or a cluster of sectors. Policies are statements of intents that guide actions towards the accomplishment of those intents. They usually define the

contexts of aims, goals and objectives; inputs and resources needed for goals accomplishment; processes involved and anticipated outcomes from the interaction of goals, processes and resources. The nature of policies as overarching framework that are relatively stable demands that they are well thought out with inputs from majority if not all of concerned stakeholders. Nigeria's educational landscape has benefitted from diverse policy statements from the colonial era till now, the post-colonial era. The present review does not cover the history of these policies.

It is instructive to state that successive policies are usually based on the perceived deficits of earlier promulgated policies. Yet, there is the need to look beyond deficits in prior policies for the sheer sake of promulgating new ones without accounting for lag in and lack of implementation of old policies. It appears that there is a magnanimous consensus among policy researchers in Nigeria that the nation's education policies are relatively adequate and contextually relevant but are mostly stifled by the implementation plague. Hence, the challenges of education policy formulation and development include: ambiguous overall philosophy; frequent changes in policies; bureaucratic bottlenecks; inadequate understanding of the role of advocacy and lobbying in policy formulation and implementation processes; paucity (non-inclusion) of technocrats; inadequate funding of the policy cycle (Odukoya, Bowale & Okunlola, 2018; Unachukwu, 2009); unpredictability of policy environment (Adelabu, 2019); lack of political determination to implement the policies (Nzeako, 2016; Adelabu, 2019); rarity of institutional frameworks for the monitoring of policies among the multiple education agencies; bias and unfavourable perception and attitude of stakeholders towards some policy statements; seeming lack of synergy among related policy statements. The challenges highlighted above holds true for entrepreneurship education policies.

The historical background of EE in Nigeria have been captured by Aladekomo (2004), Umaru and Matthew (2015), Nzeako (2016), and Babatunde (2016). There is however the need to harmonize the literature on the history of EE in Nigeria across the educational to include the efforts of parastatals and ministries that are connected with employment and employability. The activities of these bodies and the emanating policies from their activities should be also be well synthesized. This allows for synergy and avoidance of duplicity of efforts in addition to cost savings. This submission is the way forward to the observation made by Aladekomo (2004) that there is lack of coherence between educational policies and employability/entrepreneurial skills for self-employment. In conclusion, as this research is layered on the adequacy of entrepreneurship policies for the entrepreneurial skills development of teachers, Unachukwu's (2009) submission on EE in the Higher Education Institutions (HEIs) in Nigeria yet holds sway. Unachukwu remarked that the introduction of EE courses into the curriculum of universities is an impressive but yet limited progress. As emphasized, a significant number of Nigerians, particularly young graduates, continue to face difficulties in accessing entrepreneurship resources or EE. Even with the relative access to EE, the question of whether practices in our EE align with best practices in EE comes to the fore.

A review of best practices in entrepreneurship education programmes

The literature as earlier established is replete with the merits of EE while attempts at including it in school curricula reveals divergence in the contents and administration of EE courses and programmes the world over. With research evidences that has pointed to the nexus between EE and economic outputs, countries of the world continue to learn from each other via adapting practices in EE that are perceived to account for such economic growth. These identified practices are codified as best practices. Best practices refer to “a procedure that has been shown by research and experience to produce optimal results and that is established or proposed as a standard suitable for widespread adoption” (Merriam-Webster, n.d.).

The differences and best practices in EE across regions have been documented in an empirical study by Nieuwenhuizen, Groenewald, Davids, van Rensburg and Schachtebeck (2016). According to the study, effective entrepreneurship education practices entail offering general entrepreneurship courses at the undergraduate level and avoiding excessive specialization. The modules are also mostly structured as electives which allow students to consider their personal preferences in their selection of courses. However, at the postgraduate level, it was indicated that programmes are often specialized in entrepreneurship. At the undergraduate level, the programs typically have a strong interdisciplinary focus, with engineering and other sciences being popular areas of specialization. Perhaps, the best practices identified in the study include that practical assignment and teaching tend to be favoured in entrepreneurial teaching rather than traditional-based approaches. Nieuwenhuizen and colleagues found that entrepreneurship centers and hubs are primarily independent entities that have loose connections to well-established universities. These units operate with their own mandate and practices. According to Tom Martin and Associates (2016), effective entrepreneurship education practices involve various elements, such as top-level management support, a comprehensive provision of entrepreneurship education, qualified entrepreneurship teachers, Continuing Professional Development (CPD), entrepreneurial teaching methods, mentoring or incubator facilities, strong connections to employers and the business community, evaluation of entrepreneurship education provision, and formal tracking of graduates. Adherence to best practices ensures the improvement of employability for graduates; enhanced partnerships with the private sector and industry; improved publicity, marketability and enhanced status of both academic and professional programmes (Simiyu, 2010).

It is imperative to add that as research continues to be carried out in the EE field so as to establish best practices that impact the entrepreneurial characteristics of school graduates; stakeholders should avoid the hegemony of EE knowledge and practices from supposedly well-developed countries. Imported EE practices from other lands should be contextualized for the benefits of all.

Entrepreneurship Education for Teacher Education

The centrality of 21st century (teaching) skills in teacher education has been identified by policy documents and research (Adeosun, 2011; Emmanuel & Wilfred-Bonse, 2013; NERDC, 2013; FME, 2014). Specifically, the *Foreword* of the National Teacher Education Policy (NTEP) highlighted that:

“The policy objective is to produce highly knowledgeable, skilled and creative teachers who are capable of producing learners who can compete globally, while it’s the goal its goal is to ensure that teachers are adequately catered for and made adaptable to our (sic) changing world” (Foreword, NTEP (FME, 2014; piii)).

The characteristics depicted in the above *Foreword* namely- high knowledgeability, skillfulness, creativity and adaptability relates to entrepreneurship skills. One of the ends of the possession of these skills for teachers is that they are able to produce learners who can compete globally. Yet, the other end which is stated with a high degree of subtlety is- teachers’ adaptation to the changing world. The realities and intricacies of the changing world for teachers in Nigeria’s educational landscape includes:

- i. The societal status accorded to teaching as a profession is on the decline (Beteille & Evans, (n.d.); Dolton, Marcenaro, De Vries, & She, 2018; Stromquist, 2018).
- ii. The reality of declining social status of teachers (Dolton, Marcenaro, De Vries, & She, 2018; Stromquist, 2018).
- iii. There is a growing need for the use of information and communication tools in facilitating and delivering instruction. This is made complex with the need to distinguish specific ICT tools that could be used to teach specific topics within a subject curriculum (Technology Pedagogical Content Knowledge research).
- iv. Uncertainties in the world systems and the need to adapt curricula and pedagogy to these events.
- v. Emphasis on the need for individuals to have multiple streams of income to absolve the uncertainties in the cost of living.
- vi. The moral dilemma of teachers’ engagement with other business interests and its trade off on the learning outcomes of students.
- vii. The dilemma of private tutoring provision despite the identified need for increased income for teachers.
- viii. The relative lack of avenues for continuing professional development for teachers to keep abreast of the aforementioned issues and other emergent issues.

In the light of the above realities and the identified need for entrepreneurship education for teachers, it appears that teachers should be exposed to two forms of entrepreneurship education. One is that it

enables them to teach entrepreneurship concepts and values to students using entrepreneurial strategies and pedagogies, and second, is EE that will enable them contribute to economic growth and development through venture creation. Okon (2021) highlighted the generic nature of EE in Nigeria stating that they do not cater for the heterogeneity of entrepreneurship needs among persons and segments. Ezeonwurie (2017) observed and submitted that some higher education programs frame their entrepreneurship education as vocational or technical education, rather than fostering an entrepreneurial mindset by encouraging entrepreneurial activities and performance across various disciplines. Deveci and Seikkula-Leino (2018) analyzed studies on EE in teacher education (TE). The findings of their study indicated that most of the studies on EE in TE are from European Union countries most especially Finland. The study also revealed that existing studies on EE in TE: highlighted the importance of entrepreneurship in TE; laid emphasis upon methods, techniques, models or strategies used in EE; and put forward recommendations mostly for the basic level of education.

In the light of the observations on the generic nature of EE programmes and courses (Okon, 2021), the trend towards vocational and technical education (Ezeonwurie, 2017), the perceived lack of empirical studies on the extent of the provisions of policies for EE in TE and the ambidexterity nature of EE for teachers as highlighted in this study, there is the need for detailed analysis of existing documents and policies on EE in order to determine the provisions for EE for teachers in Nigeria.

Methodology

Research Design

This is a qualitative study that utilizes documentary analysis, with content analysis being the method used to address the research questions. Content analysis is a qualitative data analysis technique that is used to evaluate patterns within one or more pieces of content/source of communication. This technique was considered appropriate for this study as patterns of EE objectives and curricula for TE in four policy documents are analysed in order to reach conclusion on their adequacy for the development of entrepreneurial skills of teacher trainees.

Sample and Sampling Technique

This study examined four policy documents that are central to teacher education in Nigeria: the National Policy on Education (NERDC, 2013), the National Teacher Education Policy (FME, 2014), the National University Commission's Benchmark Minimum Academic Standards for Education (NUC, 2018), and the Nigeria Certificate in Education Minimum Standards for General Education (NCCE, 2012). These documents were purposefully selected as they are key policy documents that address teacher education in Nigeria.

Brief descriptions of the appraised policies

A brief description of each of the policies to be analysed are briefly explained in this section.

National Policy on Education

The National Policy on Education on Education is the foremost publication that contains the goals and philosophy of education in Nigeria. It also contains broad based objectives for all levels and forms of education including- basic education, post-basic education and career development, mass and nomadic education, tertiary education (*university education, teacher education and technology education*), open and distance education and special needs education. Also included in the NPE are the goals, functions and coordination of different educational support services; the planning and administration and funding of the educational system. It contains a total of 10 sections. Stakeholders in education often primarily find recourse to this document in order to understand the intents of the government per time. The presently consulted edition- 6th edition was published by the Nigerian Educational Research and Development Council (NERDC) in 2013.

National Policy on Teacher Education

In 2014, the National Policy on Teacher Education (NPTE) was enacted to address the need for enhancing the quality of initial and ongoing professional development of teachers. It arose as a result of the inadequacies and inappropriateness of the NPE in establishing a coherent connection between pre-service teacher education and in-service teacher education; giving full recognition to the role of in-service teacher education in teacher motivation and ensuring continuous improvement in the quality of teaching and learning (FME, 2014; p.1).

National University Commission's Benchmark Minimum Academic Standards for Education

Benchmark Minimum Academic Standards (BMAS) were produced by the National Universities Commission (NUC) for the major disciplines/faculties in Nigeria. These disciplines are: Administration; Management and Management Technology; Agriculture, Forestry, Fisheries and Home Economics; Basic Medical and Health Science; Education; Engineering and Technology; Environmental Sciences; Law; Pharmaceutical Sciences; Medicine and Dentistry; Science; Social Sciences and; Veterinary Medicine. Universities who intend to run the programmes under these disciplines and get accreditation for them must ensure high compliance with the benchmarks. The BMAS-Education is highlighted to be an outcome-based benchmark rather than being content-based as previously obtained (NUC, 2007). The BMAS-Education has a general information section that gives a summary of the programmes captured, the philosophy and objectives of education which are copiously copied from relevant sections in the NPE, admission and graduation requirements, the staff/student workload, degree classification, resource requirement, etc. A typical benchmark for each education programme specifies a general information about the programme, the philosophy and objectives of the programme, the basic admission and graduation requirement and, course

contents with course descriptions for each year. Drafts of a revised BMAS for Education was sent to the Department of the researcher for inputs in 2018. Though the revised draft is yet to be publicly available, it was adopted for use in this study.

Nigeria Certificate in Education Minimum Standards for General Education

The Nigeria Certificate in Education Minimum Standards for General Education (NCEMS) contains near elements as those contained in the BMAS for universities save for subject matter courses of course combinations. It thus contains the objectives of NCE programmes, the general admission requirements, facilities, personnel, mode of teaching, modus operandi of the teaching practice exercise, project, brief reference to subject combinations, semester-by-semester outline of compulsory and elective courses for the three years programme and the general studies education programme.

Results

Research Question One

What is the importance attached to the entrepreneurial skills development of teacher trainees as revealed by the documents?

The study examined the policy documents for statements emphasizing the significance of developing entrepreneurial skills among teachers. The findings are presented in Table 1, which suggests that curriculum designers recognize the importance of entrepreneurship skill development for teacher trainees. The policy documents contain objective statements regarding the cultivation of various skills such as high motivation, conscientiousness, effective teaching skills, critical thinking, creativity, sociability, proficiency in ICT, literacy, adaptability to change, teamwork, reflection, and action research skills (refer to Table 1).

Research Question Two

What are the curricula provisions for teacher trainees' entrepreneurial development as specified in the documents?

In order to answer this question, the BMAS-E and NCEMS were analysed for express statements on activities and offered courses that are christened entrepreneurship courses and/or have elements of entrepreneurship education in them. The findings made are reported in this section. The NCEMS provides for a General Studies course titled GSE 224 titled *Introduction to Entrepreneurship*. The course is divided into twelve units of one unit per week. The course is a one credit unit course that must be offered before students graduate from the NCE programmes. The units of the course relate to the general content on entrepreneurship with unit eight tagged *Business windows* that has a sub-

unit on *formal and informal education*. Similarly, the revised BMAS-E provides for GST 223 (Introduction to Entrepreneurial Skills), GST 224 (Leadership Skills) and GST 311 (Entrepreneurship Studies). Each of the courses are 2 credit units with 30 lecture hours except GST 223 that has a 40-hour lecture period. The objectives of the entrepreneurship studies courses as specified in the draft BMAS-E are as specified in Appendix 2. Some other courses were noted in the BMAS-E that are related to entrepreneurship skills development in some of the programmes. They include: Perception and Productivity (EAE 261) and Management of small-scale industries (EAE 314/344) in the Adult Education Programme, Farm Business Management (EAS 305) and Fish farming and management (EAS 314) in the Agricultural Science Education Programme. Others include Entrepreneurial Studies II with no course code in the Fine and Applied Arts Education Programme. Yet, programme-specific entrepreneurship courses are grossly lacking in the traditional teaching subject programmes such as Arabic Education, Biology Education, Business Education, Chemistry Education, etc. The teaching practice exercise is another curricular provision for developing entrepreneurial skills among pre-service teachers.

Research Question Three

Are the provisions for entrepreneurial skills development of teacher trainees related to best practices in the entrepreneurship education field?

Although the policy statements in the general teacher education program include elements of best practices in entrepreneurship education, they do not specify the best practices that should be implemented in the courses designed to facilitate the acquisition of entrepreneurial skills. Put simply, there are no particular provisions for best practices in the specific courses intended for teaching entrepreneurship.

Discussion

This section discusses the findings of this study. Upon examination of the documents regarding the significance of developing entrepreneurial skills for trainee teachers, it was reported that the development of entrepreneurial skills for teacher trainees is of relative importance to the policymakers and curriculum designers in teacher education. Policy statements, objectives of EE for TE and the EE curricula in the documents are considered fair on account of their generic nature. It was observed that deference to entrepreneurship skills in the objectives for TE were to few general transversal skills that are geared towards changes in the pupils than the teachers' ability to create ventures. The relative silence on the need for teachers to develop express core entrepreneurship skills may not be unconnected to the shortage of teachers and the societal expectations that teachers

are providers of a social good and should therefore stick to their profession instead of developing skills that could make them later consider greener pastures.

The study also revealed that EE curricula provisions for TE are generic and are included as electives. This finding is in consonance with practices in other countries of the world as reported by Nieuwenhuizen *et al* (2016). The course descriptions, contents and the timelines for implementation did not contain capstone projects which are the hallmarks for EE. There are however some core entrepreneurship-based courses in one professional and two vocational/technical teacher education programme namely Adult Education and Education/Agricultural Science and Education/Fine Arts. Even though generic EE programmes of elective course nature are the present trend, there is the need to reconsider this for teacher trainees so as to tackle the problem of turnover intentions and absenteeism among teachers. The implicit assumption that teacher trainees may not enter teaching when exposed to EE may not hold true in the light of other factors that determine retention in the profession. In fact, the fear of absenteeism by employers of teachers may make them improve on the working conditions and salaries of teachers.

Lastly, the study revealed the need for EE courses and programmes for TE to reflect best practices in the EE field as the best practices indices were only evident in the TE programme as a whole and not the EE for TE. It is perceived that the inclusion of the indices of best practices in the EE for TE will improve the status of TE and teaching as a profession and more students might be attracted to the TE field.

Conclusion and Recommendations

The results of this study emphasize the importance of aligning the content of teacher education documents to emphasize the acquisition of entrepreneurship skills and competencies by trainee teachers. In practical terms, the call for revision of policies that relate to teacher education should be made within a similar time frame in order to allow for this synergy. In order to address the gap in the current curricula, it is essential to revise them to include specific enterprise and entrepreneurial skills development for pre-service teachers. This approach would be more beneficial than providing general entrepreneurship courses. Furthermore, it is necessary to distinguish between Education for Entrepreneurship and Entrepreneurship for Education. This study highlights the importance of having a national entrepreneurship education policy that includes a distinct section on entrepreneurship education and entrepreneurial skills development for teachers, including both pre-service and in-service teachers.

References

- Adelabu, M. A. (2019). *As it was in the beginning so it is now: Politics and education policies in Nigeria*. Inaugural lecture series 334 delivered at Obafemi Awolowo University, Ile-Ife, Nigeria.
- Adeosun, O. (2011). Teacher education programmes and the acquisition of 21st century skills: Issues and challenges in Nigeria. Retrieved on 28th September, 2021 from <https://cice.hiroshima-u.ac.jp/wp-content/uploads/2014/03/4-2-91.pdf>
- Adepoju, T. L. & Famade, O. A. (2010). The application of strength, weaknesses, opportunities and threats (SWOT) analysis for managing vocational and technical education (VTE) programmes for improved efficiency in Nigeria. *Educational Research and Reviews* 5 (7), 354-361.
- Akudolu, L. (2010). A curriculum framework for entrepreneurship education in Nigeria. *Unizik Orient Journal of Education* 5 (2), 1-11.
- Aladekomo, F. O. (2004). Nigeria educational policy and entrepreneurship. *Journal of Social Science* 9 (2), 75-83.
- Ali, G., Buruga, B. A. & Habibu, T. (2019). SWOT analysis of blended learning in public universities of Uganda; A case study of Muni University. *Multidisciplinary Scientific Journal* 2019 (2), 410-429. DOI: 10.3390/j2040027
- Babatunde, S. A. (2016). *The impact of entrepreneurship education on developing entrepreneurial graduates: A comparative study of similar Nigerian and UK higher education institutions*. An unpublished PhD thesis submitted to Birmingham City University.
- Beteille, T. & Evans, D. K. (n.d.). *Successful teachers, successful students: Recruiting and supporting society's most crucial profession*. Washington, D.C: World Bank.
- Deveci, I. & Seikkula-Leino, J. (2018). A review of entrepreneurship education in teacher education. *Malaysian Journal of Learning and Instruction* 15 (1), 105-148.
- Dolton, P., Marcenaro, O., De Vries, R., & She, P.-W. (2018). *Global Teacher Status Index*. The Varkey Foundation. Retrieved from <https://www.varkeyfoundation.org/media/4867/gts-index-13-11-2018.pdf>
- Emmanuel, E. A. & Wilfred-Bonse, U. K. (2013). The need to integrate Entrepreneurship education into science education teachers' curriculum in Nigeria. *Journal of Science and Vocational Education* 7, 111-123.
- Ezeonwurie, O. A. (2017). Strategies for improving entrepreneurship education in Nigeria: Evidence from entrepreneurship teachers in Katsina state. *Nigerian Journal of Business Education (NIGJBED)* 4 (1), 135-145.
- Federal Ministry of Education (2014). *National Teacher Education Policy*. Abuja: Author.

- Gruber, Ch., Matenaers, C., Staszuk, C., Birk, S., & Ehlers, J. P. (2014). SWOT analysis as a tool for curriculum evaluation. *Poster AMEE Conference, Milano, Italy*. Retrieved from https://www.researchgate.net/publication/275886708_SWOT_analysis_as_a_tool_for_curriculum_evaluation on 23rd September, 2021. DOI: 10.13140/RG.2.1.2146.6963
- Ifedili, C. J. & Ofoegbu, F. (2011). Managing entrepreneurship education in Nigerian Universities. *European Journal of Educational Studies* 3(1), 101-109.
- Izedonmi, P. F. & Okafor, C. (2010). The effect of entrepreneurship education on students' entrepreneurial intentions. *Global Journal of Management and Business Research* 10 (6), 49-60.
- Longhurst, G. J., Stone, D. M., Dulohery, K., Scully, D., Campbell, T. & Smith, C. F. (2020). Strength, Weakness, Opportunity, Threat (SWOT) analysis of the adaptations to anatomical education in the United Kingdom and Republic of Ireland in response to COVID-19 Pandemic. *Anatomical Sciences Education* 0: 1-11. DOI: 10.1002/ase.1967
- Merriam-Webster (n.d.). Best practice. In *Merriam-Webster.com dictionary*. Retrieved September 28, 2021, from <https://www.merriam-webster.com/dictionary/best%20practice>
- National Commission for Colleges of Education (2012a). *Nigeria Certificate in Education Minimum Standards for General Education Courses*. Abuja: Author.
- National Commission for Colleges of Education (2012b). *Curriculum implementation framework for Nigeria Certificate in Education*. Abuja: Author.
- National Universities Commission (2007). *Benchmark minimum academic standards for undergraduate programmes in Nigeria (Education)*. Abuja: Author.
- National Universities Commission (2018). *Benchmark minimum academic standards for undergraduate programmes in Nigeria (Education)*. Abuja: Author.
- Nieuwenhuizen, C., Groenewald, D., Davids, J., van Rensburg, L. J. & Schachtebeck, C. (2016). Best practice in entrepreneurship education. *Problems and Perspectives in Management* 14 (3-2), 528-536. Doi: 10.21511/ppm.14(3-2)/.2016.09
- Nigerian Educational Research and Development Council (2013). *National policy on education*. Lagos: NERDC Press.
- Nzeako, C. U. (2016). Challenges and prospects of educational policies and implementation in Nigerian secondary schools. *Journal of Resourcefulness and Distinction* 12 (1), 18-27.
- Odia, J. O. & Odia, A. A. (2019). Entrepreneurship education and entrepreneurial intention of undergraduate students in Nigeria. *International Journal of Business Management* 4 (2), 30-40.

- Odukoya, J. A., Bowale, E., and Okunlola, S. (2018). Formulation and implementation of educational policies in Nigeria. *African Educational Research Journal* 6(1), 1-4
- Ojeifo, S. Aide' (2012). Entrepreneurship education in Nigeria. *Journal of Education and Practice* 3 (14), 78-82.
- Okey, S., Ayang, E. E., & Ndum, V. E. (2012). Entrepreneurship education in Nigerian tertiary institutions: A bridge for self-reliance and sustainable development. *The Nigerian Academic Forum* 23 (1), 1-6.
- Okon, E. A. (2021). Entrepreneurship studies education in tertiary institutions in Nigeria: Theories and practices. *International Journal of Vocational and Technical Education Research* 7 (1), 35-42.
- Olokundun, A. M. (2017). *Perceptions of students on entrepreneurship education and entrepreneurial intentions in selected Nigerian universities*. Unpublished doctoral thesis. Covenant University, Ogun State, Nigeria.
- Olokundun, A. M., Ibidunni, A. S., Falola, O. H., Salau, O. P., & Oyafunke-Omoniyi, C. O. (2018). Entrepreneurship curriculum contents and entrepreneurial development of university students in Nigeria. *International Journal of Entrepreneurship* 22 (1), 1-9.
- Olorundare, A. S. & Kayode, D. J. (2014). Entrepreneurship education in Nigerian universities: A tool for national transformation. *Asia Pacific Journal of Educators and Education* 29, 155-175.
- Onuma, N. (2016). Rationale for students participation and entrepreneurship education in the face of global economic crisis in Nigeria. *Journal of Education and Practice* 7(12), 200-204.
- Orr, B. (2013). Conducting a SWOT analysis for programme improvement. *US-China Education Review* 3 (6), 381-384.
- Oseni, E. F. (2017). The relevance of entrepreneurship education to the development of Micro, Small and Medium Enterprises (MSMEs). *International Journal of Small Business and Entrepreneurship Research* 5 (5), 1-8.
- Oyetero, O. S. (2015). The realities of teaching entrepreneurship education vis-à-vis the provisos of transformative learning theory in Nigeria's educational system. *Ife Journal of Theory and Research in Education* 16(1), 94-111.
- Santanru Calonge, D., Connor, M., Hultberg, P., Shah, M. A. & Medina- Aguerrebere, P. (2022). Contactless Higher Education: A SWOT analysis of emergency remote teaching and learning during COVID-19. *Journal of Educational Studies and Multidisciplinary Approaches (JESMA)* 2 (1), 17-36. DOI: 10.51383/jesma.2022.22
- Simiyu, J. (2010). Entrepreneurship Education as a tool to support self-employment in Kenya. *TVET Best Practice Clearing House (Issue 2)*. Germany, UNESCO-UNEVOC International Centre for Technical and Vocational Education and Training.

- Ssentamu, P. N. (2014). Opportunities and threats to learning: Lessons from a pedagogical workshop for faculty at a higher education institution. *Journal of Education and Training Studies* 2 (1), 127-138. DOI: 10.11114/jets.v2i1.248
- Stromquist, P. N. (2018). *The global status of teaching and the teaching profession*. Education International. Retrieved from http://ei-ie-al.org/sites/default/files/docs/2018_ei_research_statusofteachers_eng_final.pdf
- Stufflebeam, D. L. (1971). The relevance of the CIPP evaluation model for educational accountability. *Journal of Research and Development in Education* 5, 19-25.
- Tom Martin and Associates (2016). *Best practice in entrepreneurship education and training in the further education and training sector (Final report)*. Dublin: Author.
- Uduak, I. E. & Aniefiok, O. E. (2011). Entrepreneurship education and career intentions of tertiary education students in Akwa Ibom and Cross States, Nigeria. *International Education Studies* 4 (1), 172-178.
- Umaru, R. I. & Matthew, U. D. (2015). Issues and challenges with entrepreneurial education in Nigeria. *World Educators' Forum* 6 (1), 1-9.
- Unachukwu, G. (2009). Issues and challenges in the development of entrepreneurship education in Nigeria. *African Research Review* 3 (5), 213-226.
- United Nations Educational, Scientific and Cultural Organization (2013). *UNESCO Handbook on education policy analysis and programming, Vol. II: UNESCO programming*. Bangkok: UNESCO.
- Zhang, G., Zeller, N., Griffith, R., Metcalf, D., Williams, J., Shea, C. & Misulis, K. (2011). Using the context, input, process, and product evaluation model as a comprehensive framework to guide the planning, implementation, and assessment of service-learning programs. *Journal of Higher Education and Outreach Engagement* 15 (4), 57-83.

APPENDIX I

Objectives of the entrepreneurship education programme (as contained in BMAS-E) are to enable students:

1. Understand the relationship of enterprise, entrepreneur, business entrepreneurship, innovation and creativity.
2. Analyse the historical perspective of entrepreneurship in Nigeria, and relate it to the recent trend of unemployment, underemployment and job dissatisfaction, personal, national and global economic recession.
3. Identify the roles of entrepreneurial development agencies and regulatory bodies.
4. Cultivate the spirit of entrepreneurship.
5. Correct wrong attitudes and mindsets and develop high entrepreneurial potential in student
6. Select possible business ideas.
7. Build the capacity to develop business plan to start to start a business.

GST223: Introduction to Entrepreneurship

Introductory Entrepreneurial skills: Relevant Concepts: Enterprise, Entrepreneur, Entrepreneurship, Business, Innovation, Creativity, Entreprising and Entrepreneurial Attitude and Behaviour, History of Entrepreneurship in Nigeria, Rationale for Entrepreneurship, Creativity and Innovation for Entrepreneurs, Leadership and Entrepreneurial Skills for coping with challenge. Unit Operations and Time Management, Creativity and Innovation for Self-Employment in Nigeria, Overcoming Job Creation Challenges, Opportunities for Entrepreneurship, Forms of Businesses, Staffing, Marketing and the New Enterprise, Feasibility Studies and starting a New Business, determining capital Requirement and Raising Capital, Financial Planning and Management, Legal Issues, Insurance and Environmental Considerations.

GST 224: Leadership Skills

Transformation is a fundamental shift in the deep orientation of a person, organization or society such that the world is seen in new ways and new actions and results become possible that were impossible prior to the transformation. Transformation happens at the individual level but must be embedded in the collective practices and norms for the practices to be sustained. Leadership Development Programme (LDP) proposes novel approaches to teaching and learning, which emphasizes the practical involvement of participants. It is interactive and involves exercises and actual implementation of breakthrough projects by teams that make difference in the lives of the target population. In this course, leadership concepts comprising of listening, conversation, emotional intelligence, breakthrough initiatives, gender and leadership, coaching and leadership, enrolment conversation and forming and leading teams will be taught.

GST311: Entrepreneurship

Profiles of business ventures in the various business sectors such as Soap/Detergent, Tooth brush and Tooth paste making; Photography; Brick making; Rope making; Brewing; Glassware production/Ceramic production; Paper production; Water treatment/conditioning/packaging; Metal fabrication, Tanning industry; Vegetable oil extraction; Farming; Fisheries/aquaculture; Plastic making; Refrigeration/Air-conditioning; Carving, Weaving; Bakery; Tailoring; Printing; Carpentry; Interior Decoration; Animal husbandry etc. Case Study Methodology applied to the

APPENDIX II

CONTENTS OF THE GENERAL STUDIES ENTREPRENEURSHIP COURSE (as contained in the NCEMS)

GSE 224-Introduction to Entrepreneurship

Wk 1 Introduction to Entrepreneurship

- a. The meaning and scope of Enterprise
- b. The history of Entrepreneurship in Nigeria
- c. The types, characteristics and rationale of Entrepreneurship
- d. The role of Entrepreneurship in economic development
- e. Entrepreneurial characteristics and attitude
- f. The key competencies and determining factors for success in Entrepreneurship
- g. The motivational pattern of Entrepreneur

Wk 2 Practice of Entrepreneurship

- a. Techniques for generating business ideas as well as for identifying and assessing business opportunities
- b. Evaluate a business idea for developing an enterprise
- c. Methods of product selection
- d. Process and procedure for starting an Enterprise
- e. Various techniques that will affect the management of an Enterprise
- f. Various existing industries and support agencies in Nigeria
- g. Role of commercial and development banks in small scale industries development
- h. Role of personal savings and portfolio investment in National Economic Development

Wk 3 Small and Medium Scale Enterprises (SMEs)

- a. Definition and importance
- b. Organisation, sole trade, partnership, franchising, public limited liability company
- c. How to finance SMEs
- d. Common problems of SMEs and why they fail

Wk 4 Feasibility Study and business plan

- a. Definition, objectives and purpose
- b. Content and structure
- c. Importance of a bankable business plan

Wk 5 Risks in Business

- a. Definition and scope
- b. Types and management
- c. Reduction strategies
- d. Intellectual property right

Wk 6 Investment education and wealth creation strategies

- a. Identify and harness SWOT
- b. Develop financial literacy
- c. Multiple streams of income

Wk 7 E-marketing

- a. Meaning, role and importance
- b. Strategic application
- c. Dynamism in e-marketing

Wk 8 Business windows

- a. Formal and informal education
- b. Agriculture and agro-allied
- c. Reprographic outfit
- d. Internet
- e. Health and related outfit, etc.

Wk 9 Funding institutions in Nigeria

- a. Roles and importance
- b. Type's example, SMES, NBCL, SICIS, NIBFUND, etc.
- c. Terms of participation and benefits

Wk 10 Marketing Strategies

- a. Customer oriented product/services
- b. Different medium of creating awareness for goods and services
- c. Creating winning image, brand, trademark and service delivery
- d. Strategies for winning competitors

Wk 11 Documentation

- a. Need, importance and format of:
 - a. Original books of accounts
 - b. Cash book and bank reconciliation
 - c. Final accounts
 - d. Other relevant documents in business

Wk 12 Regulatory and Supervisory Laws for SMEs in Nigeria

- a. Example guidelines for micro finance, industrial, investment and commercial banks.

Table One: Sample policy statements that showed the importance attached to entrepreneurial skills development for teacher

S/N	Document	Section where found	Sample statements that emphasized the development of entrepreneurial skills	Remarks-Relatedness and Sufficiency
1.	National Policy on Education	University Education	1. 'intensifying and diversifying its programmes for the development of high-level manpower within the context of the needs of the nation' (Sect. 5 par. 86, sub. par. a) 2. 'making entrepreneurial skills acquisition a requirement for all Nigerian universities' (Sect. 5, par. 86, sub. par. 4)	Related but general to university education.
		Teacher Education	(a) produce highly motivated, conscientious and efficient classroom teachers for all levels of the educational system. (b) further encourage the spirit of enquiry and creativity in teachers. (c) help teachers fit into the social life of the community and society at large and enhance their commitment to national goals. (d) provide teachers with the intellectual and professional background adequate for their assignment and make them adaptable to changing situations (Sect. 5 par. 93, sub. par. a-e)	More specific and had elements of entrepreneurial skills and competencies for teacher education.
2.	National Teacher Education Policy	Foreword	The policy objective is to produce highly knowledgeable, skilled and creative teachers who are capable of producing learners who can compete globally, while it's the goal its goal is to ensure that teachers are adequately catered for and made adaptable to our (sic) changing world. (Foreword, NTEP) Developing in teachers, the skills of team work and reflection, mastery and application of ICT, as well as action research (Sect. 5d). Literacy promotion as an integral part of teacher education programmes. (Sect. 5e)	More specific to teacher education and entrepreneurial competencies to be developed in teachers.
3.	National Colleges of Education Minimum Academic Standards	As specified in the citations in column 4.	The National Commission for Colleges of Education (NCCE) is guided in all of its activities by its vision to produce "well-motivated teachers with high personal and professional discipline, integrity and competence" (NCCE, 2012b, p8). The NCCE has developed Teacher Standards to ensure that, amongst others: -Teachers exhibit professional knowledge and competency regarding how teachers learn and how to teach effectively; -Teachers have professional skills to plan for and assess effective learning;	Specific to teacher education and development of teaching-entrepreneurial skills.

			<p>-Teachers provide and maintain conducive learning environments. (NCCE, 2012b; p16)</p> <p>The mission of Teacher Education in Nigeria should, among others, include:</p> <ul style="list-style-type: none"> *Production of well-motivated teachers with high personal and professional discipline, integrity and competence for all levels of the educational system; *Preparation of teachers with appreciable expertise in curriculum planning, development and delivery, as well as competence in <i>research</i>, guidance and counselling; *Production of professionals who can combine the <i>use of conventional teaching strategies and worlds' unfolding ICT in the generation</i> and imparting of knowledge, attitude and skills; *Continuous preparation and upgrading of teachers who can stand out for their professional competence, sense of social responsibility and commitment, to function effectively as constructive socio-economic, moral and spiritual change agents needed to promote goodwill, peace and progress not only in the country, but also in the 21st Century (NCCE 2012a; p9). <p>Others include the objectives of NCE programmes and teaching practice as specified in NCCE 2012a; pp9-10 and p42 respectively.</p>	
--	--	--	---	--

Table Two: Policy statements on the nature of curricula provisions for teacher trainees' entrepreneurial development

S/N	Document	Section where found	Relevant Statements that emphasized the development of entrepreneurial skills	Remarks- Adequacy and Specificity
1.	National Policy on Education	University Education	<ol style="list-style-type: none"> 1. Promote and encourage scholarship, entrepreneurship and community service. 2. 'making all students' part of <i>a general programme</i> of all-round improvement in university education, to offer general study courses such as history of ideas, philosophy of knowledge, nationalism, and Information Technology (Sect. 5 par. 86, sub. par. a). 	Adequate but general.
		Teacher Education	<ol style="list-style-type: none"> 1. Provide teachers with the intellectual and professional background adequate for their assignment and to make them adaptable to changing situations (Sect. 93 par. 93, sub. par. d). 2. All teachers in educational institutions shall be professionally trained. Teacher education programmes shall be structured to equip teachers for the effective performance of their duties. Information Technology (IT) training shall be incorporated into all teacher training programmes. 	Adequate but general.
2.	National Teacher Education Policy (NTEP)	Curriculum & Instruction	<ol style="list-style-type: none"> 1. All student teachers irrespective of stream or programme shall take <i>a compulsory course</i>, relevant to each programme, in Special Education and <i>Entrepreneurship Education</i> (NTEP, 2014, p11; No 13). 	Adequate but too general. Teaching practice is related to the development of competencies for teaching. No provision for placements or capstone activities to develop the enterprise creation abilities of pre-service teachers
		Teaching practice and Induction	<ol style="list-style-type: none"> 2. Every student teacher shall be exposed to professional training in the school system through the Teaching practice exercise (NTEP, 2014, pp 13(1)). 	
3.	The Nigeria Certificate in Education Minimum Standards for General Education (NCEMS)	General Studies Education (NCCE, 2012a, p.275)	See Appendix II.	Moderately adequate and moderately specific.

Table Three: Relatedness between the provisions for entrepreneurial skills development for teacher trainees with best practices in the entrepreneurship education field

S/N	Best Practices in EE	Relevant Statements in Documents that are related to best practices	Remarks-Relatedness, Relevance and Sufficiency
1.	Top management support	Appointment and retention of academically and professionally qualified persons as teachers and heads of educational institutions (NERDC, 2013- Sect. 5 par. 101a)	Relevant, general and sufficient
2.	Comprehensive entrepreneurship education provision	'Technologically-based professional courses in the universities shall include, as components, exposure to relevant future working environment (NERDC, 2013- Sect. 5 par. 90, sub. par. a)'	Relevant, general and Insufficient
3.	Skilled entrepreneurship education teachers	'It is imperative that teachers' in professional fields have relevant industrial and professional experience and exposure' (NERDC, 2013- Sect. 5 par. 90, sub. par. b). All teachers in educational institutions shall be professionally trained. Teacher education programmes shall be structured to equip teachers for the effective performance of their duties. Information Technology (IT) shall be incorporated into all teacher-training programmes. (NERDC, 2013- Sect. 5 par. 95). Other relevant sections of the NPE include par. 96 & 97, 100 sub pars b & c.	Relevant, general and sufficient
4.	Continuing Professional Development (CPD) Teachers shall be regularly exposed to innovations in the profession (NERDC, 2013- Sect. 5 par. 96) In-service training shall be regularly exposed an integral part of continuing teacher education. It is mandatory that all school proprietors provide in-service education for teachers (NERDC, 2013- Sect. 5 par. 97b). Other relevant statements are: Sect. 101c (NERDC, 2013) Focus on life-long learning: The policy promotes continuous professional development of all teachers throughout their careers, couple with appropriate rewards and recognition of all self-improvement efforts (NTEP, Sect. 6, par 3.).	Relevant, general and sufficient
5.	Entrepreneurial Pedagogics	Teacher education shall continue to take cognizance of changes in methodology and in the curriculum. Teachers shall be regularly exposed to innovations in the profession (NERDC, 2013- Sect. 5 par. 95).	Relevant, general and sufficient
6.	Mentoring/incubator facilities	Newly qualified teachers shall serve a period of one (1) year internship (NERDC, 2013- Sect. 5 par. 100c) The following services and facilities shall be provided: x. laboratories and workshops xi. IT hardware and software laboratories. (NERDC, 2013- Sect.8, par. 127)	Policy statements are targeted towards producing teachers for classroom teaching and not mentoring and

		After graduation from any Teacher Education programmes every new teacher shall be registered by the TRCN after at least one year of successful internship with mentoring to qualify for license (NPTE, pp. 20)	providing incubator facilities for teachers to create enterprises. The highlighted policy statements are relevant, albeit general & insufficient.
7.	Strong links to employers and business community	Sect. 5 par. 100c as highlighted under <i>mentoring/incubator facilities</i> above. Reduce skill shortages through the production of skilled manpower relevant to the needs of the labour market. (NERDC, 2013- Sect. 5 par. 81c) Provision of a more practical based curriculum relevant to the needs of the labour market (NERDC, 2013- Sect 5 par. 82f) Generation and dissemination of knowledge, skills and competencies that contribute to national and local economic goals which enable students to succeed in a knowledge-based economy (NERDC, 2013- Sect. 5 par. 82g). Technologically-based professional courses in the universities shall include, as components, exposure to relevant future working environment (NERDC, 2013- Sect. 5 par. 90a)	Moderately relevant and related to the best practice being highlighted. The policies highlighted are also specific & sufficient
8.	Evaluation of entrepreneurship education provision	Teacher education shall continue to take cognizance of changes in methodology and in the curriculum (NERDC, 2013- Sect. 5 par. 95)	Relevant, general and insufficient
9.	Formal tracking of graduates	Encourage Technology Education institutions to conduct applied research relevant to the needs and aspirations of the nation (NERDC, 2013- Sect. 5 par. 103)	A general policy statement that is open different meanings and interpretations. The research could be targeted towards the indices of tracking the students, destination data on progression to higher education and in terms of which universities and courses, explicit recording and monitoring of students'