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JOURNAL of African Employment Entrepreneurship and Skills Development (JAEESD)



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

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JOURNAL DESCRIPTION

The Journal of African Employment, Entrepreneurship, and Skills Development (JAEESD) is an interdisciplinary, continental and peer-reviewed Academic and Research Journal with the objective of publishing insightful, persuasive, original articles that have constructive evidence-based analysis on the subject of employment, entrepreneurship, innovation and skills development across the continent of Africa. The ARUA, Centre of Excellence for Unemployment and Skills Development Centre (ARUA, CoE-USD) engenders strong 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

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From the Table of Editor-in-Chief

It gladdens our hearts at the ARUA CoE for Unemployment and Skills Development Centre to present in three rolls, brilliant articles that are products of ‘*Best Paper Awards*’ from our 3rd International Conference in Nairobi, Kenya, titled: ‘*Sustainable and Workable Solutions for Youth Unemployment in Africa*’. This 3rd Special Edition comprises of the best papers from the different Authors who featured in the conference and won in each of the tracks’ categories. These set of papers in this edition have actually received a GBP200 each for the outstanding research and understanding of the various issues that were the sub-themes of the conference. These award winning articles were peer-reviewed, accessed by subject matter experts of the conference tracks and passed through many integrity tests of the JAEESD’s system of review before finally qualified to be published as scholarly articles of our Centre. This Special Edition only has in it the best articles of the conference that actually received the awards.

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 endeavours to overcome the menace of Youth Unemployment. 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.

I have no doubt that this 3rd Special Edition marks the box of sustainability for JAEESD having been consistently published for three years with quality articles. The contents in this Special Edition are good resources for Postgraduate Students and their teachers in pursuing quality understanding on issues related to identification of workable solutions to the menace of youth unemployment in Africa. I acknowledge the hard work of each of the authors that won the awards that qualified their articles to appear in this very scholarly edition

The Centre thank sthe 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.

Professor Sunday Abayomi, Adebisi
Director, ARUA CoE USD
Editor-in-Chief
December, 2022

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Underprivileged Conditions Influencing Youths' Participation in Sports for Future Employment

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Abstract

Over the years sporting activities serve different purposes in the life of many people – for fun, fitness, and combating diseases, among others. However, for the youths, sports remain a veritable tool for self-development, empowerment or employment opportunities. The popularity and financial empowerment successful sports personalities enjoy could be a motivation to ambitious youths who want to eke out a living from sporting activities. The beauty of sports is that it cuts across gender, race, educational background and socio-economic status to benefit those who have the resilience, rigour and discipline to brave the odds. The variety of sporting events and different human resources needed is an indication of how broad the platform could be, to accommodate different interest groups for self-development. This study examined the nexus of how underprivileged conditions [such as birth place (rural/urban), loss of parent(s), among others] could influence the choice of sports for self-development and employment. A cross-sectional multistage sampling method was used to select 400 youths who participated in the March, 2022 Nigerian University Games Association (NUGA, 2022) hosted by the University of Lagos, Nigeria. The questionnaire administered to the respondents consists of structured self-report inventory. Data obtained was analyzed with the use of frequency tables, chi-square and logistic regression. The results show that underprivileged conditions could be a catalyst for youths' involvement in sports for the purpose of future employment opportunities. In view of this, there should be concerted efforts by stakeholders in sports to expand and maintain facilities and sports festivals to accommodate different interest groups of youths who utilize this avenue for self-development and future employment. This could go a long way in redirecting the energy of our teeming youths away from being recruited into social vices and focus on meaningful self-development sporting programmes that could create viable future employment roles in sports.

Keywords: Self-development, Sports, Underprivileged, Youth employment

Introduction

Sports had been seen as a youth friendly industry and had been in the forefront of providing entertainment, fitness and employment for different categories of people. A lot of these employment opportunities in sports are usually geared towards youths who have the right energy for the games. Sports clubs usually engage in regular scouting or surveillance of either formal or informal sporting events as a means of recruiting youths with expected skills for future development and employment. These expected skills are mostly physical and could be less of intellectual and social skills, therefore, youths of different educational and socio-economic

backgrounds could be enlisted for training and development. However, when recruited, sports present veritable platform for youths training, discipline and development in physical, psychological and social skills among others. Seemingly, sports could provide a unifying factor between the rich and the poor and could provide a leverage to jumpstart good employment for the skillful youths, even among those with vulnerable background. Poverty is an essential part of the vulnerable background limiting youths' development. Globally, among youths engaged in employment, a little above one-tenth (12.8%) live below US\$2 per day, a situation classified as extreme poverty (ILO, 2020). This implies that young people are less likely to connect to decent employment that could guarantee impressive wellbeing (UNDESA, 2018). Even youths' employment climate looks gloomy as those within 15 to 24 years have 3times less likelihood of securing jobs than the older populace (ILO, 2019). These unimpressive figures could be worse in Africa where 60% of youths are unemployed and about 10 million of them joining the unemployment queue each year (Ighobor, 2017; African Development Bank, 2018). This perhaps, suggests some structural anomalies around the world of works in youth (ILO, 2015; UNDESA, 2018). This could explain the high migrants (27%) of youths from African region, usually within the age bracket of 15 to 29 years (UNDESA, 2019) in search of better living condition. The employment opportunities in sports varies, ranging from the active participation in the field for the players, to managerial roles, research and development roles, marketing and branding roles among others. Presumably, recruitment into sports is neutral to gender, sexual orientation and socio-economic backgrounds. The study, therefore, examined how underprivileged conditions [such as birth place, separation/death(s) of parent(s), poor academic performance] could influence the choice of sports as means of employment. The study, therefore, examined the following four hypotheses:

1. There is a relationship between nature of place of birth (Urban/Rural) and youths' participation in sports for future employment in Nigeria.
2. There is a relationship between parental family structure and youths' participation in sports for future employment in Nigeria.
3. There is a relationship between parental sponsorship of education and youths' participation in sports for future employment in Nigeria.
4. There is relationship between academic performance and youths' participation in sports for future employment in Nigeria.

Review of Literature

Sports provide lots of opportunities to the populace. Some of the opportunities include fitness and wellbeing, networking, and social interaction (Tonts, 2005; Downward & Rasciute, 2011). However, for the youths, defined as people within the transitional spectrum of adolescence to adulthood who are beginning to be conscious of their position and duties within their community (United Nations Educational Scientific and Cultural Organization [UNESCO], 2017), sports perhaps, could provide a veritable means for future employment. Youths with deep interest and involvement in sports could be implicated less often in social vices, hence, sports could be used as a diversion programme to minimize youths' restiveness (Nelson & Gordon-Larsen (2006). More so, previous studies had emphasized that the quality of life of children who lack appropriate parental care can be enhanced through participation in sports (Kuntz, 2009; Nashwa, & Nagla, 2011).

In examining the factors that determine choice of sports as future employment, place of birth could be an area of interest. Some studies see sports as an urban event (European Union, 2017). Eurostat data, (2021), corroborated the urban nature of sports by citing urban-rural discrepancies (66.2% V 60.1%) in sports participation in Europe.

However, in South America, the Brazilian street football (*pelada*) is an informal and rural, self-organized activity with lots of improvisation, and had been shown to be a workshop for creativity and skill acquisition in football (Freire, 2011), in the midst of 13.5 million Brazilians experiencing extreme poverty (IBGE, 2019). Skills are developed in the natural but rather tasking environment (Araújo et al., 2010; Uehara et al., 2018, 2019). Nevertheless, football greats and world cup heroes such as Pele and Zico played *pelada*, bare footed in a non-grassed environment (Araújo et al., 2010; Pimenta, 2009, 2013) and presumably, made a decent living through employment in sports. Some authors believe in this rural model, while agreeing that, intentional training only explains less than one-fifth (18%) of high successes in sports (Macnamara, Moreau, & Hambrick, 2016) that could yield meaningful youth employment.

The youths' consideration of meaningful employment through sporting activities could be heavily influenced by family inputs, especially the parents (Yesu & Harwood, 2015; Elliott & Drummond, 2016; Schwebel, Smith, & Smoll, 2016). In the developed world, the interest of parents in their children's sporting activities is growing by the day, though parents would rather not be viewed as having undue interference (Holt & Knight, 2014; Burgess, Knight, & Mellalieu, 2015).

Parental positive involvement in youths' sporting activities, motivates them, and could facilitate their professionalism in sports (Fredricks & Eccles, 2004). Such support could involve financial and, therefore, frees youth sports personnel, from the struggles of financial management in their early careers ('University of Denver', 2002). Hopefully, such parental support could arise from the understanding that sports help to equip students and youths with valuable skills in leadership and communications which could be utilized at other spheres of life (Maslen, 2015). There is need to understand the factors that influence young people to choosing sports as their possible future employment. However, there is paucity of research on how youths negotiate their professionalism in sports through underprivileged family conditions, such as parental separation/divorce, or death of the parent(s). However, sports provide a deep sense of belonging to participating members and sometimes sports community transforms into a second family especially for the underprivileged, such as orphans (Maglica, 2020). Also, examining who is behind sponsorship of education of youths participating in sports, and how it influences the youths' sports professionalism (choice of sports for employment), have not received adequate attention. The study will, therefore, help to fill this gap in literature.

A study involving 662 9th grade students which considered students of different ethnicity showed that young black students (41%) and young Latino students (25%) with less educational grades desired to be professional athletes than young white men (21%) (Davis, 2013). Previous studies had shown different outcomes of the influence of sports or physical activity on academic performance. A cross-sectional study in Brazil among school children between ages 12-17 years, demonstrated that children who were physically active, were at least 2 times more likely to have better grades than those that were rather sedentary (OR = 2.15, $p < 0.05$) (Ezequias, Wellington, Luiz, Francisco & Emanuel, 2018). However, a longitudinal study in Spain that involved 1778 young people aged 6 to 18 years conducted within 3 years showed that physical activity had a

negative relationship with grade achievement (Esteban-Cornejo, 2014). Other opposing outcomes from different studies on physical activity and academic performance include; negative relationship between the two variables that examined 255 children in grades 7 and 9 (Van Dijk et al., 2014), a neutral relationship between physical activity and academic performance with sample size drawn from 970 young people between 9 to 15 years (Syväoja et al., 2018), and a positive relationship between physical activity and academic performance that involved 285 children between 9 to 11 years (Maher et al., 2016). The different sample sizes of the study that involved children at different stages of development, perhaps, could explain these variations in outcomes between physical activity and academic performance. However, the role of grades in determining youths' choice of sports as future career has not been fully examined, hence, the need to include it in this study. This study focuses on the university students participating actively in sports who presumably, understand the stakes of leveraging on the platform to make an all-important decision of future employment in sports.

Theoretical Framework

The study is anchored on the Trait and Factor Theory by Frank Parson 1909. which was highlighted in his book *choosing a vocation*. The emphasis of this theory is that we are attracted to a particular occupation based on what we know about ourselves (personality) – like skills, values, interests, career goals and limitations (e.g., underprivileged conditions) and then chose an occupation that will match the traits. This theory is apt in developing countries with high unemployment where few rewarding jobs might need referrals from prominent citizens to achieve. This poses a limitation to lots of youths. Resilience youths from disadvantaged background (underprivileged conditions), therefore, see professionalism in sports as an open platform for a rewarding employment opportunity to achieve their life goals. It is not strange therefore, that South American footballers from low socio-economic status (especially from Brazil and Argentina) dominate the world of football. Perhaps, this also could account for the dominance of sporting activities by blacks in the United States of America. In this study, perhaps, interest must have been established simply by the voluntary participation of students in the highest university games in the country – the Nigerian University Games Association (NUGA, 2022). Underprivileged conditions or the limitations of the students examined in the study include the rural/urban place of birth, separation/divorce/loss of parent (s), sponsorship of education other than by parents or through scholarship and low academic performance. Nevertheless, to make success in sports, there must be an appropriate self-inventory on the individual personality traits which will help determine the suitable sporting world of work that could maximize their attributes.

Methods:

Population of the study comprised of university students who participated in the in the 26th edition of the Nigerian University Games Association (NUGA 2022) which was hosted by University of Lagos from 16th to 26th March, 2022.

Sample Size and Sampling Technique

Yamane (1967) was used to estimate the sample size.

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

Where n is the sample size, N is the population size, and e is the level of precision. When this formula is applied to the above sample

N = 4, 772 (total number of athletes), e = 5% (= 0.05)

Applying the formula,

$$n = \frac{4772}{1 + 4772(0.05)^2}$$

$$=369 \approx 400$$

Sampling Technique

The study utilized cross-sectional survey design. Federal and state universities were chosen because they have the right mix of students from different socio-economic conditions and constituted close to 90% of the universities in attendance at the Nigerian University Games 2022 (Federal 35, State 34, Private 8) (University of Lagos NUGA Local Organizing Committee, 2022). Data from organizing committee showed that total population of athletes was 4,772, with 4,252 (89.1%) of them coming from federal and state universities. Multistage sampling technique was used and involve the following stages:

Stage. 1 The participating states were grouped into 6 geopolitical zones that make up the country (North Central, North East, North West, South East, South South and South West). The federal and state universities within the 6 geopolitical zones were identified.

Stage. 2 Two universities were selected (one state and one federal) in each zone using simple random sampling method. This produced 12 universities for the study.

Stage. 3. For each university selected, the number of respondents to be included in the survey was determined by applying the proportionate sampling.

Table1: Proportionate sampling of the federal and state universities that participated in NUGA, 2022

Zone/university	Total number of athletes	Proportionate calculation	Sample size
North Central			
Kwara State University	49	49/1065*400	18
University of Jos	117	117/1065*400	44
North East			
Adamawa State University, Mubi	54	54/1065*400	20
Abubakar Tafawa Balewa University, Bauchi	99	99/1065*400	37
North West			
Kaduna State University	65	65/1065*400	24
Bayero University, Kano	30	30/1065*400	11

South East			
Imo State University, Owerri	58	58/1065*400	22
Nnamdi Azikiwe University	114	114/1065*400	43
South South			
Ambrose Ali University, Ekpoma	66	66/1065*400	25
University of Port Harcourt	168	168/1065*400	63
South West			
Lagos State University, Ojo	60	60/1065*400	23
Obafemi Awolowo University	185	185/1065*400	70
TOTAL	1065		400

Source: *University of Lagos, NUGA Local Organizing Committee, 2022*

Interviewing of the athletes took place during their trainings at different centres for the games. A suitable time for the interview was given by each university's official. Introduction of the study was made and athletes aged 18 and above were purposively identified. With the prospective respondent identified, informed consent was obtained and questionnaire administered. Items on the questionnaire include age, place of birth (rural/urban), educational level of parents, form of marriage of father (monogamy/polygyny), family structure of parents, athletes' birth position, number of parents alive, sponsorship of education, students' assessment of their economic situation (indigent/not), academic performance (CGPA), and future sporting ambition (fitness/fun vs professional [employment]). Data obtained was analyzed using frequency tables, chi-square and logistic regression.

Ethical consideration: this was a non-invasive study and there was no expectation of harm. Prospective respondents were given enough time to go through the questionnaire and decide whether to be part of the study or not. Consent was then obtained from interested athletes and the questionnaire administered. Confidentiality was assured and personal identifiers that could lead to deductive disclosure were not collected.

Content/face validity: Experts in sociology, human resources and employment relations and sports psychology were consulted for the content and face validity and corrections were carried out to improve the questionnaire

Pilot study: University of Lagos athletes were used for the pilot study. Fifty of such students were involved in the pilot study. The outcome of the pilot study helped in rephrasing some of the ambiguous statements and correcting some missing options. The Cronbach's Alpha was 0.630.

Results

Table 2: Frequency distribution of underprivileged conditions influencing participation in sports

	Frequency	Percent
Birthplace		
Rural	108	27.0
Urban	292	73.0
Parental family structure		
Married	291	72.8
Separated/Divorced/Widowed	109	27.2
Sponsorship of education		
Parents	316	79.0
Self/Others	84	21.0
CGPA		
<3.5	194	48.5
≥3.5	206	51.5
Sports future ambition		
Fitness and fun	122	30.5
Professional (future employment)	278	69.5

Table 2 shows that close to three-quarters (73%) of the respondents had place of birth as urban with their parents still in marital union and alive (72.8%). However, a little above three-quarters (79%) of the respondents have their education being sponsored by their parent(s) and close to half of the respondents (51.5%) have very good academic standing of at least second-class upper division. Most of the respondents (69.5%) want to eke out a living by going professional in future.

Table 3: Bivariate analysis of underprivileged conditions and sports ambition for youth employment (professionalism)

	Sports Ambition		N	Total	%
	Fitness and fun	Professionalism (Youth employment)			
Birthplace					
Rural	25 (23.1)	83 (76.9)	108		100
Urban	97 (33.2)	195 (66.8)	292		100
Total	122 (30.5)	278 (69.5)	400		100
$\chi^2 = 3.772, df = 1, sig. = 0.048$					
Family structure of parents					
Married	94 (32.3)	197 (67.7)	291		100
Separated/Divorced/Widowed	28 (25.7)	81 (74.3)	109		100
Total	122 (30.5)	278 (69.5)	400		100
$\chi^2 = 1.637, df = 1, sig. = 0.201$					

Sponsorship of education

Parents	97 (30.7)	219 (69.3)	316	100
Self/Others	25 (29.8)	59 (70.2)	84	100
Total	122 (30.5)	278 (69.5)	400	100

$\chi^2 = 0.027$, $df = 1$, $sig. = 0.869$

CGPA

<3.5	46 (23.7)	148 (76.3)	194	100
≥3.5	76 (36.9)	130 (63.1)	206	100
Total	122 (30.5)	278 (69.5)	400	100

$\chi^2 = 8.19$, $df = 1$, $sig. = 0.004$

Table 3 shows a bivariate analysis of underprivileged conditions of youths and their choice of sports for future employment. The respondents with rural birth place are more likely to use sports for future employment than those of urban birth. However, this is statistically significant ($\chi^2 = 3.772$, $df = 1$, $sig. = 0.048$). When students participating in sports are on the lower grades of academic performance (maximum of second class lower), they are more likely to engage in sports as means of future employment than those with higher academic performance. This relationship is statistically significant ($\chi^2 = 8.19$, $df = 1$, $sig. = 0.004$). Students participating in sports whose parents are either separated, divorced or widowed are more likely to use sports for future employment than those whose parents are alive, though this is not statistically significant ($\chi^2 = 1.637$, $df = 1$, $sig. = 0.201$). More so, when parents are involved in sponsorship of their children's education, the children are less likely to endorse sports for future employment than when sponsorship is by self or by others, however, this is not statistically significant ($\chi^2 = 0.027$, $df = 1$, $sig. = 0.869$).

Table 4: Overall model summaries for logistic regression of Youths' underprivileged conditions and choice of sports for youths' employment (professionalism)

	Chi-square	df	Sig.	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
Step	11.451	2	.003	480.582	.028	.040
Block	11.451	2	.003			
Model	11.451	2	.003			

In the table 4, the overall model summary showed that the independent variables cumulatively explained the dependent variables in 4.0% of the cases.

Table 5: Logistic Regression coefficient and odds ratio of Youths' underprivileged conditions and choice of sports for youths' employment

	B	S.E.	Sig.	Exp(B)	95% C.I. for EXP(B)	
					Lower	Upper

Birth place (Urban) Reference category				1.000		
Birthplace (Rural)	0.459	0.262	0.08	1.583	0.947	2.648
CGPA ≥ 3.5 Reference category				1.000		
CGPA < 3.5	0.608	0.223	0.006	1.836	1.185	2.844
Constant	0.433	0.155	0.005	1.542		

Table 5 shows that university students participating in sports are 1.6 times more likely to choose sports as means of future employment if their birth place is rural rather than urban, though this is not statistically significant (OR = 1.583, $p > 0.05$, 95%CI: 0.947, 2.648). However, for the sports students who have lower academic grades (CGPA < 3.5 – maximum of second class lower), they are 1.8 times more likely to choose sports as means of youth employment than those with higher grades and this is statistically significant (OR =1.836, $p < 0.01$, 95%CI: 1.185, 2.844).

Discussions

The study examined how underprivileged conditions of athletes influenced youths' choice of sports for future employment. Four hypotheses were examined on the relationships between birthplace (rural/urban), absence of parents through separation/divorce or death, sponsorship of education other than by parents and low academic performance and the choice of sports for future employment. The results show that youths underprivileged conditions such as rural birth place, separation/divorce/death of parents, sponsorship of education other than by parents and low academic grades have more likelihood of choosing sports for future employment than those without underprivileged conditions. The higher percentage of youths that indicated interest in sports for future employment might not be unconnected with less likelihood of youths securing decent jobs (UNDESA, 2018; ILO, 2019). Sports, therefore, became an outlet for physically skillful youths to latch on for possible decent youth employment.

At the univariate level, the lower proportion of students with rural birth place perhaps, implies that urbanization is rapidly increasing and sports seemingly, in line with the views of European Union (2017) and Eurostat data, (2021), is fast becoming an urban event. However, more youths from rural background are more likely to endorse sports for future employment than those of urban birth. This corroborated studies in South America, where natural skills were developed in rural football within unconventional playgrounds (*pelada*), which nevertheless had produced football greats (Pimenta, 2009, 2013; Uehara et al., 2018, 2019; Araújo et al., 2010). High unemployment among youths could influence university students to tilt their energy towards sports rather than academics and this imbalance could lower their grades. This seemingly explains why students with low grades (CGPA < 3.5) are more likely to choose sports for future employment than those with high grades. Youths with underprivileged conditions arising from parental separation/divorce or deaths could be propelled into choosing sports for future employment. This choice, serves two purposes: for youth employment and, as a second family for this vulnerable sub-population (Maglica, 2020). Perhaps, the outcome of this study would help the stakeholders to understand how to utilize sports for effective youth employment.

Conclusion

Youth employment has been a source of concern because high unemployment among youths distorts social order and magnifies complexities of crime. However, a lot of youths in the developing countries might not have the requisite academic skills and qualifications to compete both locally and globally. Such youths presumably, might have underprivileged factors like rural birth place, impaired family structure (such as parental separation/divorce/deaths), which could be a burden in their educational financing and possibly producing lower academic grades. The study has shown that such underprivileged conditions could motivate interest towards choice of sports for future employment especially in developing countries where good job offers could require referrals from prominent citizens which might not be accessible to this group of youths. The outcome of the study could pave way to consciously create a platform in sports geared towards stimulating youths of vulnerable socio-economic background towards enhancing their wellbeing through active participation in sports especially as a future employment opportunity. If the right attitude is achieved in sports administration, it could serve as a social vaccine to youths' restiveness and criminality, offering employment to the youths, especially the underprivileged sub-population who are more vulnerable to social vices.

Conflict of interest: No conflict of interest

Recommendations

1. There is need for sports scouts to take recruitment drive towards sporting activities in the rural areas where talent is natural and more resilient and zeal to use sports for future employment is high.
2. Students with lower academic performance might have other extracurricular activities they might be good in, and sports could be one of them. There is need therefore, to navigate such students through some vocational skills and sports to ascertain their core area of interest and high performance. This could be a source of their robust future employment.
3. Sports participation might be a good therapy for youths with family structure dislocation [i.e., parental separation, divorce or death(s) of parent(s)]. Sports community could serve as both for youth employment and a second family.

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Improving Employability Skills in Biomedical Engineering Students Through Project Based Learning

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Abstract

Quality engineering education is essential to the technological development of any nation. The purpose of teaching is to impart knowledge and improve learning outcomes in students. In a globally competitive environment, it is imperative for students to be sufficiently trained using innovative teaching methodologies that can enhance their employability skills. In recent times, many employers have complained that fresh university graduates lack the needed employability skills required at the workplace necessitating compulsory retraining of these graduates. To address this problem, the use of project-based learning (PBL) is proposed. The aim of this paper is to discuss a case study in which PBL was used to improve the employability skills of biomedical engineering students. The aforementioned teaching methodology was used to teach a topic on power rectification in a course on microelectronics. A total of nineteen fourth year students' ages 20 – 25 years of the Department of Biomedical Engineering, University of Lagos registered and participated in the class. The students were given assignments to design and develop power supply units for medical devices. The students were divided into 4 different groups with 5 members in the first 3 groups and 4 members in the last group. At the completion of their projects, the students did a group presentation of their work. The projects were examined to ensure their workability. Each of the students was allowed to make presentation and was graded accordingly. After the presentation, the students filled a questionnaire. The questionnaire assessed their ability to learn from this teaching methodology and the employability skills acquired which include team work, analytical, problem solving, technical and presentation skills. The study revealed that many of the students were able to acquire some employability skills after completing the assignment. Majority of the students' expressed preference for the use of PBL in teaching the microelectronics course. Therefore, PBL should be frequently used as a teaching methodology in order to help students acquire employability skills.

Keywords: Biomedical Engineering, Employability Skills, Project Based Learning, Teaching Methodology.

Introduction

The need for recent university graduates to have desirable employability skills has generated widespread interests amongst employers. Employability is generally defined as an individual's

capability to obtain and keep a job based on his capacity to handle responsibilities assigned to him as well as realise his potentials through sustainable employment (Abdul Hamid *et al.*, 2014). Beyond the knowledge, skills and abilities an individual possesses, employability also includes how these assets are presented to employers (Kazilan *et al.*, 2011). Employers generally show preference to job seekers with the right blend of employability skills who will require only minimum training to become effective on the job. Many industry employers place high premium on graduates with practical problem-solving skills and capable of delivering timely and implementable solutions to overarching industry problems (Aliu and Aigbavboa, 2020). However, there have been serious complaints of poor performance of recent university graduates. Since academic rigour is considered the hallmark of a high-quality university education, this should be reflected by the quality of university graduates (Wyse and Soneral, 2018). Generally, undergraduate engineering education in Nigeria exposes students to rigorous academic training in a broad spectrum of compulsory and elective courses. The students are also required to carry out research projects and participate in Students Industrial Work Experience Scheme (SIWES). These are all designed to broaden their horizon while instilling the requisite knowledge, skills and competences that will enhance their employability. Equipped with a well-rounded university education, a fresh university graduate is expected to be employable as universities are designed to improve students' employability (Cheng *et al.*, 2021). For a university graduate to be considered employable, he should possess an appropriate combination of hard and soft skills (Parasuraman and Prasad, 2015). Hard skills are measurable skills that a person learns or acquires by training. Examples of hard skills are web design, statistical analysis, computer networking etc. On the contrary, soft skills comprise a combination of several personality traits and tendencies that relate to a person's behaviour or methods of thinking or approaching problems in a social environment (Claxton *et al.*, 2016). The ten most desired soft skills for job seekers are: communications, critical thinking and decision-making, interpersonal, negotiation, problem solving, self-confidence, self-management, teamwork and worth ethics (Balcoba and Basa, 2016; Patacsil and Tablatin, 2017). It has been observed that most engineering curricula place more emphasis on hard skills giving rise to genuine concerns about the deficiency of soft skills in many entry-level engineering graduates (Hirudayaraj *et al.*, 2021).

Therefore, educators should ensure that their course modules are fortified with relevant content to impart desirable hard and soft skills in students to improve their employability skills (Maxwell *et al.*, 2009). There are growing concerns about the quality of fresh university graduates. The high university graduate unemployment rate in Nigeria has been attributed to the disequilibrium and incongruence between the skills required by employers and those acquired by graduates (Adejimola and Olufunmilayo, 2009). Companies often complain of their inability to find suitably qualified candidates to fill vacant positions owing to the deficiency of employability skills in recent graduates.

In order to enhance student's learning experiences, engineering education should be innovative. The traditional pedagogical approaches alone are inadequate in producing engineering graduates of the desired quality (Khalaf and Zin, 2018; Markjackson *et al.*, 2021). Therefore, universities should seek to adopt more innovative pedagogical methods in order to improve the quality of its graduates. Innovative pedagogical practices have been found to increase students' participation, as well as enhance critical and creative thinking (Santos *et al.*, 2019). Interestingly, students are required to play a critical role for learning to be successful (Sobral and Campos, 2012). This will serve as possible catalyst to trigger innovation in students.

Common examples of these innovative pedagogical practices include Project Based Learning (PBL), Flipped Classroom, Collaborative Learning, Spaced Learning, Gamification and Self-Learning. Of the various innovative pedagogical methods, PBL is the main focus of this paper. PBL is a pedagogical technique that allows students to work in groups to solve challenging problems (Solomon, 2003). As an active student-centred learning methodology, PBL is characterized by students' autonomy and collaboration. It has been proposed as an alternative to the traditional teaching methods (Kokotsaki *et al.*, 2016). PBL presents learners with substantial opportunities to acquire technical and problem-solving skills which are essential for developing engineering students (Monteiro *et al.*, 2017; De Maria *et al.*, 2021).

Biomedical Engineering is the application of engineering principles to solve problems in medicine and biology (Enderle and Bronzino 2012). Innovations in biomedical engineering have revolutionized healthcare delivery. Biomedical engineers are required to have not only theoretical knowledge but also practical skills necessary to solve these problems. In addition, they also work in multidisciplinary teams as well with other healthcare professionals. One of the major branches of biomedical engineering is medical device design, development and maintenance which requires a good knowledge of electronics. Hence, microelectronics is a compulsory course designed to equip undergraduate students with a good foundation in biomedical engineering. Teaching of microelectronics and related courses in biomedical engineering using the traditional pedagogical approaches are ineffective in imparting desired employability skills in students. The main thrust of this paper is the use of PBL to improve employability skills in Biomedical Engineering students. The objectives of the study are to:

1. Determine the role of PBL in the acquisition of hard and soft skills.
2. Determine students' satisfaction rating of PBL as a teaching methodology.
3. Evaluate the correlation between active participation in PBL group projects and employability skills.

Literature Review

Employability skills and PBL have received considerable research interests. Jun (2010) adapted PBL methodology in teaching undergraduate computer science students for 3 years and found this methodology to be manageable and effective for increasing students' teamwork capability. Palmer and Hall (2011) evaluated a PBL initiative in engineering education at Griffith University in Australia and observed that students enjoyed the approach with the paper presentation aspect receiving the lowest satisfaction rating. Lima *et al.*, (2017) evaluated the model and changing process of PBL in the ten years of integrated Master's degree programme of Industrial Engineering and Management at the University of Minho, Portugal. Gerhana *et al.*, (2017) investigated the effectiveness of PBL in the teaching of trigonometry and observed that PBL was more effective in generating students' interest in the study of trigonometry. They noted that PBL improved the students' learning achievement as it enhanced their active participation and creativity.

In another study, Hart (2019) carried out a study on the use of interdisciplinary PBL as a means of developing employability skills in undergraduate science degree programs. There is strong indication from a number of studies that PBL is strongly linked to improvement in students'

employability skills. Ekwue et al., (2019) investigated the strategies for improving employability skills acquisition of business education students. Nielsen et al., (2019) evaluated how the qualities of nuclear medicine technology programmes and graduates associate with employability and observed multiple graduate and program qualities that affect the employability of nuclear medicine technology graduates.

Chowdhury (2020) explored major challenges of engineering education with focus on student engagement and employability skills. The author emphasized the need to improve students' engagement by implementing PBL. Furthermore, Winberg *et al.*, (2020) did a systematic review of the research literature on developing employability in engineering education by seeking to identify curricular and pedagogical arrangements that prepare graduates for work in the 21st century was identified. The study revealed an interdependent relationship between engineering knowledge and professional skills that enabled engineering graduates to attain employability. Dogara *et al.*, (2020) developed a conceptual framework for integrating soft skills among students of technical colleges using PBL. The study revealed that the various stages of PBL such as preparation (planning), application, commitment, and assessment techniques have a positive significant impact on soft skill improvement among students of technical colleges. For instance, Isa et al., (2020) sought to determine effective strategies for enhancing woodwork technology education student's employability skills through PBL at Colleges of Education Technical in Nigeria. The authors however found that the curriculum lacked the necessary ingredients that would enhance students' employability skills.

Reedy et al., (2020) investigated the impact of PBL on employability skills of undergraduate students of a chemical engineering course by using a combination of non-placement Work Integrated Learning with a problem-oriented PBL methodology. The authors used a problem-solving tool, referred to as the Integrated Product and Process Design (IPPD) framework in carrying out the study. The study revealed that the model of non-placement Work Integrated Learning evaluated was effective in building the defined employability skills but noted that there are opportunities for iterative enhancement.

Cake et al., (2021) reviewed employability as a guiding outcome in veterinary education-its conceptualisation, utility, core elements and dimensions, and pedagogical approaches-through a summary of the findings of a major international project. Also, Lu (2021) developed an industry-academia strategy to help undergraduate sport management students enhance employability through practical experiential learning (PEL) in a specific sporting event and identified the necessary employability skills, attitudes, and traits that students should possess before graduation. Gilbert et al., (2022) applied sequential mixed methods to measure the perceived employability of commencing undergraduate students of a project management degree at an Australian university and found the need for universities to include career education at the early stages of their programme to enhance the development of preparatory skills. Rio and Rodriguez (2022) investigated the application of PBL to teach a lab activity of mechanical design in two different engineering degrees (Mechanical and Chemical Engineering). The authors demonstrated the efficacy of PBL but suggested the need for improvement in some aspects of the lab activity.

Methodology

Research Approach

This study adopted mixed methods approach to data collection and analysis. The study aimed to improve employability skills in biomedical engineering students through PBL. Primary data were collected by means of questionnaires. Quantitative and qualitative data were collected using questionnaires and structured interviews. The research type was both descriptive and experimental. The questionnaires were administered through Google Forms to nineteen 4th year students of the Department of Biomedical Engineering, University of Lagos, Akoka, Lagos State, Nigeria who registered and participated in the Microelectronics course. The questionnaire sought to elicit respondents' perception of the effectiveness of PBL and the employability skills acquired during the project.

The Department of Biomedical Engineering, University of Lagos Nigeria has a very innovative undergraduate curriculum designed to ensure that students acquire not only essential knowledge but the relevant skills to enhance their creativity and effectiveness in the workplace after graduation. Microelectronics is a compulsory course for all 4th year students of Biomedical Engineering. PBL was used to teach a topic on power rectification. The students were given group projects to design and develop power supply units for medical devices. The students were divided into 4 different groups with 5 members in the first 3 groups and 4 members in the last group. At the completion of their projects, the students did a group presentation of their work. The projects were examined to ensure their workability. Each of the students was allowed to make presentation and were graded accordingly. Students were assessed based on the technical quality of their projects and the quality of their presentation.

Research Questions

1. How effective is project-based learning in teaching microelectronics to undergraduate biomedical engineering students?
2. In what ways does project-based learning improve the employability skills of undergraduate biomedical engineering students?
3. How effective is project-based learning in imparting practical skills in undergraduate biomedical engineering students?

Sampling Strategy

The target population were nineteen 4th year biomedical engineering students who registered for microelectronics course. Convenience sampling strategy was used in this study. To be eligible to participate in the research, participants should be:

1. 4th year students of the Department of Biomedical Engineering of the University of Lagos, Nigeria.
2. Students who have registered for the microelectronics course.

The sample size was calculated using the Cochran formula for sample size calculation for small populations as shown in equation (1):

$$n_0 = \frac{Z^2 pq}{e^2} \quad (1)$$

e = Desired level of precision

p = Estimated proportion of the population

$q = 1 - p$

The sample size was computed at 90% confidence level. Hence,

$$z = 1.65, p = q = 0.5, e = 0.10$$

$$n_0 = \frac{1.65^2(0.5)(0.5)}{0.1^2} = 68$$

$$n = \frac{n_0}{1 + \frac{(n_0 - 1)}{N}} \quad (2)$$

Where, Cochran's sample size recommendation, $n_0 = 68$, the population size, $N = 19$.

$$n = \frac{68}{1 + \frac{(67)}{19}} \approx 15$$

A minimum sample size of 15 was calculated.

Method of Data Analysis

Data were analyzed using R.4.1.3 software, an open-source data analytics software. The data collected from the study were analyzed using both descriptive and inferential statistics. The Spearman Correlation, a non-parametric test that determines the strength of a relationship between two variables was used in testing the hypothesis. Non-parametric tests are not based on the assumption of normal distribution and are suitable for ordinal variables (Forthofer et al., 2007). The Spearman's correlation r_s is given by:

$$r_s = 1 - \frac{6 \sum d_i^2}{n(n^2 - 1)} \quad (3)$$

d_i = difference in ranks between two variables

n = Total number of observations

Research Hypothesis

The research hypothesis postulated for this study were:

1. **Null Hypothesis (H_0):** There is no correlation between active participation in PBL and the acquisition of hard skills.
2. **Null Hypothesis (H_0):** There is no correlation between active participation in PBL and teamwork.

Results

Descriptive Statistics

A total of 16 students responded to the online questionnaire on Google Form. The ages of the students range between 20 and 26 years. The mean age of students is 21.56 years as shown in Fig. 1 with 14(87.5 %) males and 2(12.5 %) females. Feedbacks from participants are shown in pie charts in Fig. 1 to Fig. 10. The definition of PBL was correctly answered by all the respondents. The role of PBL in enhancing an understanding of the topic received a very high satisfaction rating as 8(50%) students strongly agreed, 5(31.3%) agreed, 2(12.5 %) disagreed while 1(1.5 %) strongly disagreed. The role of PBL in imparting practical skills on students received a high satisfaction rating as 7(43.8%) participants strongly agreed, 7(43.8%), agreed, 1(6.3%) disagreed and 1(6.3%). Respondents also highly rated PBL as facilitating teamwork as revealed by the positive response with 6(37.5%) strongly agreed, 9(56.3%) agreed, 1(6.3%) disagreed and none strongly disagreed. All the participants agreed that PBL improved their presentation skills as 5(31.3%) strongly agreed while 11(68.8%) agreed. All the students in response to the question

on active participation in their respective groups agreed to have actively participated as 10(62.5%) strongly agreed while 6(37.5%) agreed. Majority of the participants 12(75.0%) preferred PBL to the traditional pedagogical approach for teaching. Conflicts during the group projects were minimal with 7(37.5%) positive response. All the participants agreed that their group projects were successfully completed. Majority of the participants 13 (80.95 %) agreed that they encountered some challenges during the project.

What is project based learning?
16 responses



Fig 1: Feedback on the definition of PBL

The group project on power supply unit design in the Microelectronics course helped me to understand the topic
16 responses

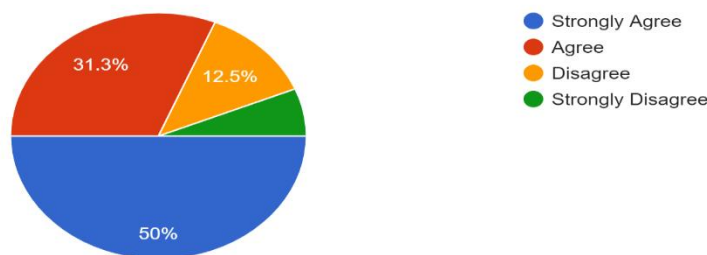


Fig. 2: Feedback on understanding the topic through PBL

The group project on power supply in the Microelectronics course helped me to acquire practical skills like soldering
16 responses

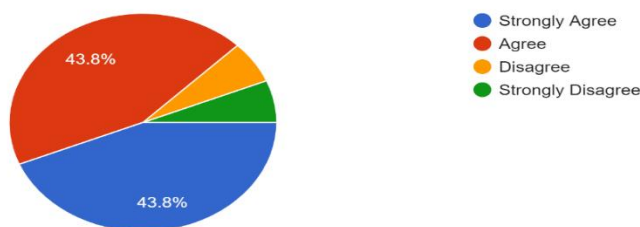


Fig. 3: Feedback on acquisition of practical skills using PBL

The group project in the Microelectronics course helped me to work better in a team
16 responses

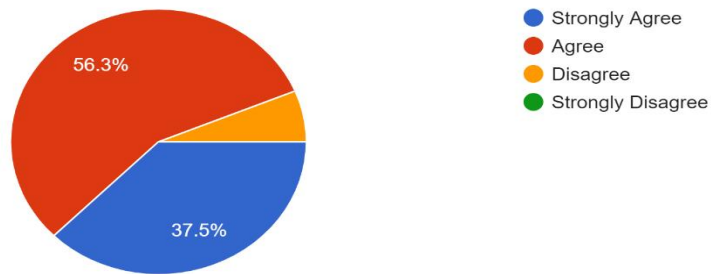


Fig. 4: Feedback on Teamwork

The group project in the Microelectronics helped me to improve my presentation skills
16 responses

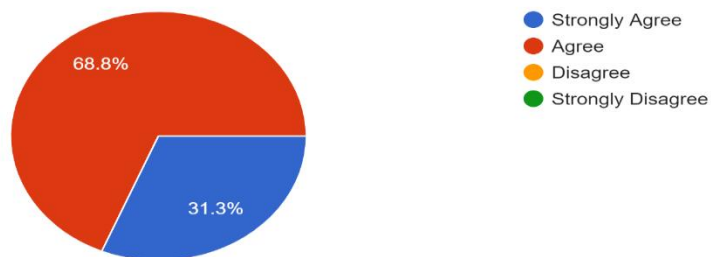


Fig. 5: Feedback on Presentation Skills

In the microelectronic course, I participated actively in the group project
16 responses

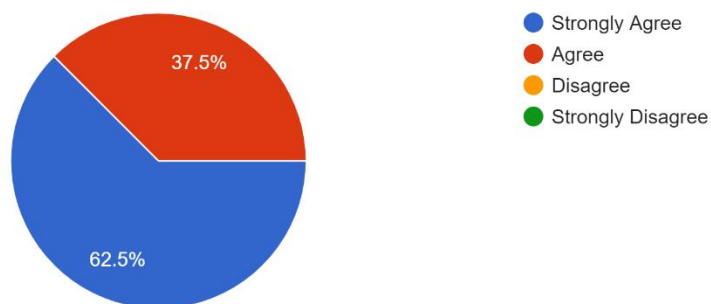


Fig. 6: Feedback on Active Participation in the Project

In the microelectronic course, I prefer the group projects to the regular lectures

16 responses

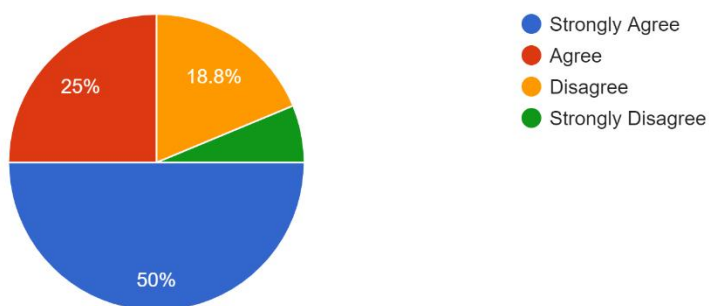


Fig. 7: Feedback on Preference for PBL

In the microelectronic course, we encountered conflicts with group members while implementing the project

16 responses

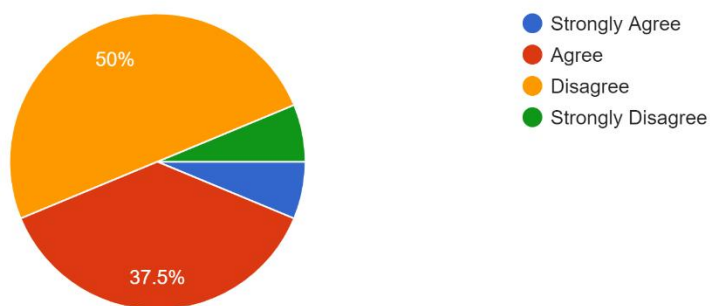


Fig. 8: Feedback on conflicts in the team

In the microelectronic course, our group project was successfully completed

16 responses

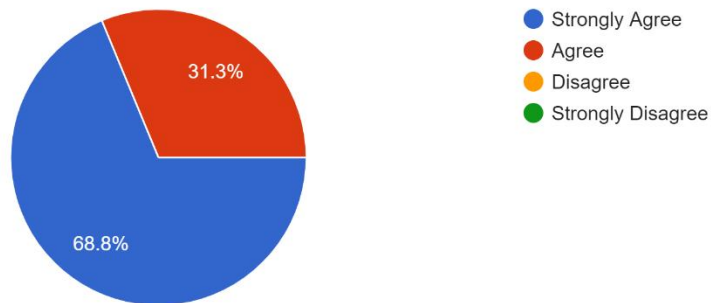


Fig 9: Feedback on successful completion of the project

In the microelectronic course, our group project was encountered various challenges before completion

16 responses

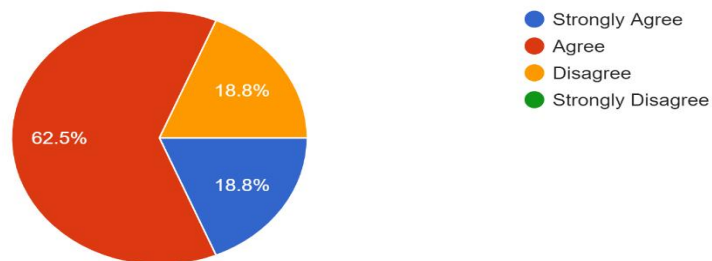


Fig. 10: Feedback on challenges encountered

Testing the Research Hypothesis

Hypothesis 1

Null Hypothesis (H_0): There is no correlation between active participation in PBL and the acquisition of hard skills.

Hypothesis 2

Null Hypothesis (H_0):

There is no correlation between active participation in PBL and teamwork

Table 1: Relationship Between Active Participation and Hard Skills

r_s	T	P-Value	n
0.293	480.75	0.2707	16

The results in Table 1 showed a correlation coefficient of 0.293. This revealed a positive correlation between active participation in the project and acquisition of employability skills. Therefore, the null hypothesis is rejected.

Hypothesis 2

Table 2: Relationship between Active Participation and Teamwork

r_s	T	P-Value	n
0.267	496.26	0.317	16

The results in Table 2 showed a correlation coefficient of 0.267. This revealed a positive correlation between active participation in the project and the acquisition of teamwork. Hence the null hypothesis is rejected.

4.3 Interview Findings

Interview findings from two voluntary participants are hereby presented.

Participant 1: The response from this participant showed he had a level of satisfaction from the project. On the effectiveness rating of PBL as a teaching approach, he rated PBL 8 out of 10. The challenges he encountered in the project was circuit implementation. He also revealed that PBL improved his familiarity with some components he was hitherto not familiar with. He rated his level of participation as 6 out of 10. He suggested that to improve learning outcomes, PBL should be used to teach early in the semester to increase students.

Participant 2: The second participant however differed on the effectiveness of PBL. She pointed out a number of challenges including difficulty in component sourcing and congregating as a team. She also cited lack of basic knowledge and the time-consuming nature of such projects. She also responded that the approach was not effective in imparting practical skills. She suggested having a thorough knowledge of the subject matter before embarking on the practical aspect of the project.

Discussion

PBL as an active learning method is widely reputed for its inventiveness and effectiveness in imparting the desired technical knowledge and skills to undergraduate engineering students (Jeon et al., 2014). The effectiveness of this teaching methodology is corroborated by this study which revealed a high satisfaction rating. This is not unexpected, as students have been reported to enjoy the use of PBL in engineering education (Palmer and Hall, 2011). However, despite the

several benefits of PBL, the study revealed a few factors capable of affecting its effectiveness as a teaching methodology as revealed by responses of few dissatisfied students. Implications from the response of the second interview participant suggests that students with weak foundation in pre-requisite electronics courses found it difficult to cope with higher level courses. Evidently, to overcome this challenge, it is imperative for such students devote more time to studying fundamental topics on basic electronics and practical circuit design. Correcting this deficiency is necessary to enable such students develop relevant hard skills. Given the growing demands by MedTech and Biotech companies for high employability skills in engineering graduates (White et al., 2020), it is imperative for students to actively participate in group projects in order to meet such demands after graduation. Lecturers are to harness available resources and strategies to improve students learning experiences particularly in institutions with limited resources.

Findings from this study revealed a positive correlation between active participation in PBL and the acquisition of hard skills. Since PBL involves practical problem solving, students who actively participate in group projects to the end are more likely to acquire better hard skills than passive group members. Furthermore, our findings suggest that PBL helps to improve students' problem-solving skills, considered indispensable in engineering practice (Sangwan and Singh, 2022). Problem-solving is a critical element of engineering education that most institutions, regulatory bodies and companies expect entry-level engineering graduates to possess. Hard skills in engineering design and problem solving are acquired by regular practice which can be achieved by consistent use of PBL, to teach such courses. The high satisfaction rating to the problem-solving skills acquired by respondents is an indication consistent use of this approach is needed in producing competent and trainable biomedical engineers.

Engineering involves a great deal of teamwork, which is a very important employability skill required from engineering graduates by both employers and accreditation bodies. The benefits of teamwork in engineering practice are well documented (Lingard and Barkataki, 2011). This study revealed a positive correlation between active participation in PBL and teamwork. Participants gave this methodology a high satisfaction rating for promoting teamwork. Working in teams not only improves learning, but makes it more enjoyable. PBL remains a sustainable approach that promotes a collaborative learning environment. With the immense benefits of teamwork, it was no doubt the reason participants in this study relished working in their various teams. One of the very important skills promoted by teamwork is conflict management, an essential skill in the workplace. Based on responses by participants, it was found that during the project, there were minor conflicts between group members which were resolved. Learning quite early in life to manage conflict is desirable in young biomedical engineers.

Moreover, engineers are not only needed to work in the workshop but are often required to make formal technical presentations. The high satisfaction rating to the question on improvement in presentation skills suggests the need to make technical presentations compulsory in PBL. Regular practice of technical presentations sharpens students' presentation skills, an essential soft skill in the corporate world. This agrees with previous studies that found PBL to be effective in enhancing the communication skills of science students (Putri and Hudayat, 2019). Despite the relatively high satisfaction rating received by PBL, some identified shortcomings necessitate a blend of PBL with other learning pedagogical approaches to improve students

learning as suggested by concerns from few of the dissatisfied students. The concerns of these set of students should not be ignored.

Conclusion

In this study, improving employability skills in biomedical engineering students through the use of Project-Based Learning was investigated. The objectives of the study were to: (1) Determine the role of PBL in the acquisition of hard and soft skills; (2) Determine students' satisfaction rating of PBL as a teaching methodology and (3) evaluate the correlation between active participation in PBL group projects and employability skills. The limitations of the study include the sample composition is due to the size of the class. This study demonstrated that PBL as an innovative pedagogical approach, is capable of imparting both hard and soft skills to undergraduate biomedical engineering students. Future study will consider using PBL in a larger student population with multiple PBL classes conducted over an academic session.

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Agropreneurship Opportunities Presented by Russia-Ukraine War: Harnessing Cassava Innovation in Africa

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With the world's supply of flour gradually waning due to threats posed by the Russian-Ukrainian war, there is an urgent demand to find alternatives to the two major sources of flour- wheat and maize. Russia had been the world's largest supplier of wheat, and Ukraine, the fifth largest producer of maize. Cassava (*Manihot esculenta*) has been considered a worthwhile substitute for both maize and wheat. This is due to its prominent position as the fourth most important staple crop and its competitive tendency to deliver as much value as the both of them. This rising demand for viable alternatives is likely going to spur the industrial revolution of cassava globally, concomitantly providing employment opportunities for millions of youths in Africa. Nigeria is the world's largest producer of cassava, with an estimated 59 million tons produced annually, accounting for a 20.4% share of the global production of cassava. There is an expedient target for cassava's export to reach at least \$5 billion and for this to be viable, the applicability of cassava must be diverse, such that it amasses a very wide range of utilization for both domestic and industrial consumption. At present, only about 20% of cassava root tubers are transformed into other products such as syrup, starch, and flour for confectioneries, leaving the remaining 80% to be consumed traditionally, inclusive of the fraction that goes into loss. This study employs an exploratory approach through an in-depth analysis to survey a case of products obtained from cassava, including innovations from the International Institute for Tropical Agriculture (IITA). A predictive method is also incorporated in this study by carrying out a field sampling of cassava-derived products in 10 of the biggest retail stores in Lagos State, Nigeria. This is to determine the extent of utilization of cassava and the prospects for extending its market reach, thus, expanding the diversity of products that can be derived from it. Current innovations from IITA Cassava Breeding Unit are also highlighted in this article, these include composite cassava bread, cassava chips, cassava bits (also known as combo bits or tidbits), cassava chin-chin, cassava doughnut, cassava cookies, cassava cake, tapioca, garri, cassava starch and casstard (custard made from cassava). The store surveys reveal that only a few products derived from cassava are currently being commercialized. This study, therefore, demonstrates the robust potential of cassava; reviews some of the existing innovations from it; and exposes the prospects to be explored in making cassava a highly sought-after flour substitute in global demand. Based on the findings of this study, cassava's potential has been hitherto under-utilized, leaving much room for opportunities to be taken advantage of by agropreneurs in Africa.

Key Words: Agropreneurship Opportunities, Russia-Ukraine War, Cassava Innovation, Africa

Introduction

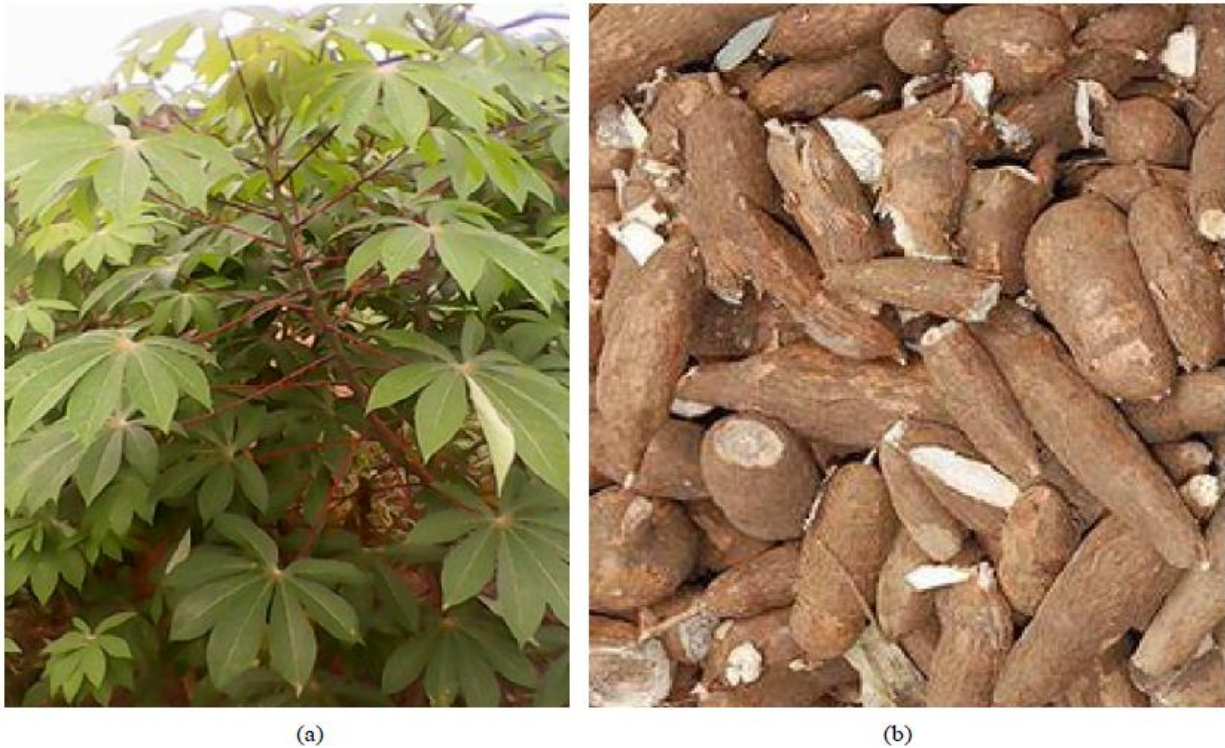
Nearly 1 billion people in the world are either faced with severe hunger or malnourishment (FAO, 2021). Efforts to reduce this number had thrived by several World Food Programmes until recently when the Russia-Ukraine war began, leaving between 7.6 and 13.1 million people affected with food insecurity (Behnassi & Haiba, 2022). More millions of people are projected to be affected by this continuous upheaval, aggravating the world food crisis.

The second goal of the United Nations Sustainable Development Goals, “zero hunger” was brought about to mitigate problems associated with hunger and undernourishment worldwide. From when this was introduced till now, the global food insecurity problem has been drastically reduced, but this current state of upheaval driven by the Ukraine-Russia war has compromised the achievements of the consolidated world food security goal. In the event that this war is sustained, global food security will continue to be threatened, leaving many more people in severe hunger, as the World Food Programme currently gets 50% of its grains from Ukraine (Behnassi & Haiba, 2022).

Ukraine and Russia account for 30% of the world’s wheat export and as a matter of fact, all African countries import all of their wheat from both Ukraine and Russia (United Nations, 2022). At present, the war has resulted in looming food crises in some countries such as Egypt, Lebanon, and Tunisia which depends heavily on wheat export from Ukraine and Russia (United Nations, Lederer, 2022).Wheat and maize are the two major sources of flour. Russia supplies the larger share of wheat, while Ukraine is a major exporter of both wheat and maize. A shortage in the availability of these has created a lacuna in the global food market. This opens up a new vista in exploring and utilizing substitutes like cassava to allay the current food crises. This in turn will create opportunities in the agro sector, giving countries in Africa an opportunity to key into the present situation for the supply of flour substitutes, thus, creating employment for youths and opportunities for key actors (agropreneurs) rising up to the challenge of seeking viable solutions and innovation in cassava production.

Cassava (*Manihot esculenta*) is renowned as the world’s largest staple crop after wheat, maize, and rice, providing the necessary food energy intake for nearly 1 billion people in 105 countries worldwide (Li et al., 2017). The crop is believed to have its origin in the northeastern part of Brazil/Paraguay 4000 years ago. It was introduced to the western part of Africa in the year 1588 through some Portuguese merchants and it was first cultivated in the Gulf of Guinea and the Congo Basin (Otekunrin & Sawicka, 2019). In the nineteenth century, the crop gained much attention with an increase in its consumption and demand.

Fig 1: (a)-Cassava Leaves, (b)-Cassava tubers



Source: Tonukari et al., (2015)

The production of cassava is higher in Africa than in the rest of the world (FAOSTAT, 2019). A vast percentage of the African population depends on cassava as food to meet their daily dietary needs. This is because cassava, being the cheapest source of carbohydrate, is mostly cultivated by peasant farmers. The multifarious plant has a wide variety of uses. As the cheapest source of starch, it is employed for use in over 300 industrial products. Its most popular product in Nigeria is garri (white or yellow). Other products from cassava include flour, fufu (or “fofoo”), popular in Ghana, Nigeria, and Congo); livestock feeds, textiles, glues, and confectionaries. (Akitoye et al., 2020)

Nigeria, located in West Africa sits on a vast landmass of about 924,000 Km² and lies roughly within the region of latitudes of 4°N to 14°N and longitudes of 3°E to 14°E (Ozoegwu et al., 2017). It is the largest producer of cassava in the world (1P:9). Cassava possesses a high potential for various applications due to its versatility and has been regarded as the number 1 crop for food security. This study aims to explore and review the current utilization of cassava and explore its potential for its diversification and substitution as the new world’s “wheat”.

Methodology/Framework of Studies

The study employs an exploratory approach through an in-depth analysis to survey current products obtained from cassava, including innovations from the International Institute for Tropical Agriculture (IITA). A predictive method of study is also incorporated by carrying out a field sampling of cassava-derived products in supermarkets in Lagos State, Nigeria as a case study. One supermarket popular in Oyo State was also studied during visit to IITA. During the

collation of this work, a nationwide trade fair/SME exhibition supported by a Government Industry bank was also visited to extend the scope of the study.

Reliable secondary data were referenced when needed, reviewing past works and blending them into obtained data. The supermarkets visited were selected based on popularity, centrality, and diversity, in order to portray a true picture representative of the Nigerian/African market environment.

Supermarkets present in major local government areas in Lagos State were sampled. The studied stores were selected based on the premise that Lagos state is a market hub of Nigeria and each of these locations represents a huge market potential owing to the population density within each area of study. The supermarket sampled in Ibadan was selected based on its proximity to IITA, Ibadan, and many cassava farms.

Most of the supermarket visits were made during sales peak periods to ensure that proper supplies of goods were made around the time. Questions on counter supplies were asked from the supermarket respondents when needed. The shelf products were carefully surveyed, taking notes of products based on any form of flour or starch. The grocery sections of the supermarkets were focused on, while the morsel foods were also perused along with the confectionaries and biscuits sections. Cassava products found in each category were recorded.

The innovations in IITA were studied by observation, demonstration and questioning during a training visit to the Cassava Breeding Unit/Cassava Transformation Unit and the Food and Nutrition Unit. The products made there were sampled and tasted. The exploration at IITA also included visits to the IITA farm, the Bakery, the Sensory lab, the analytical laboratories, the flour-making section, and the derived products section where grinding, pressing, grating, and other processing activities took place.

IITA, in Ibadan, Oyo State was established in 1967 with a mission to improve the quality of tropical foods. The Cassava Breeding Unit is the center for research for cassava root tubers, cultivation, and processing into several products.

Cassava Pro Ducts/Innovations Observed In IITA

High Quality Cassava Flour (HQCF):

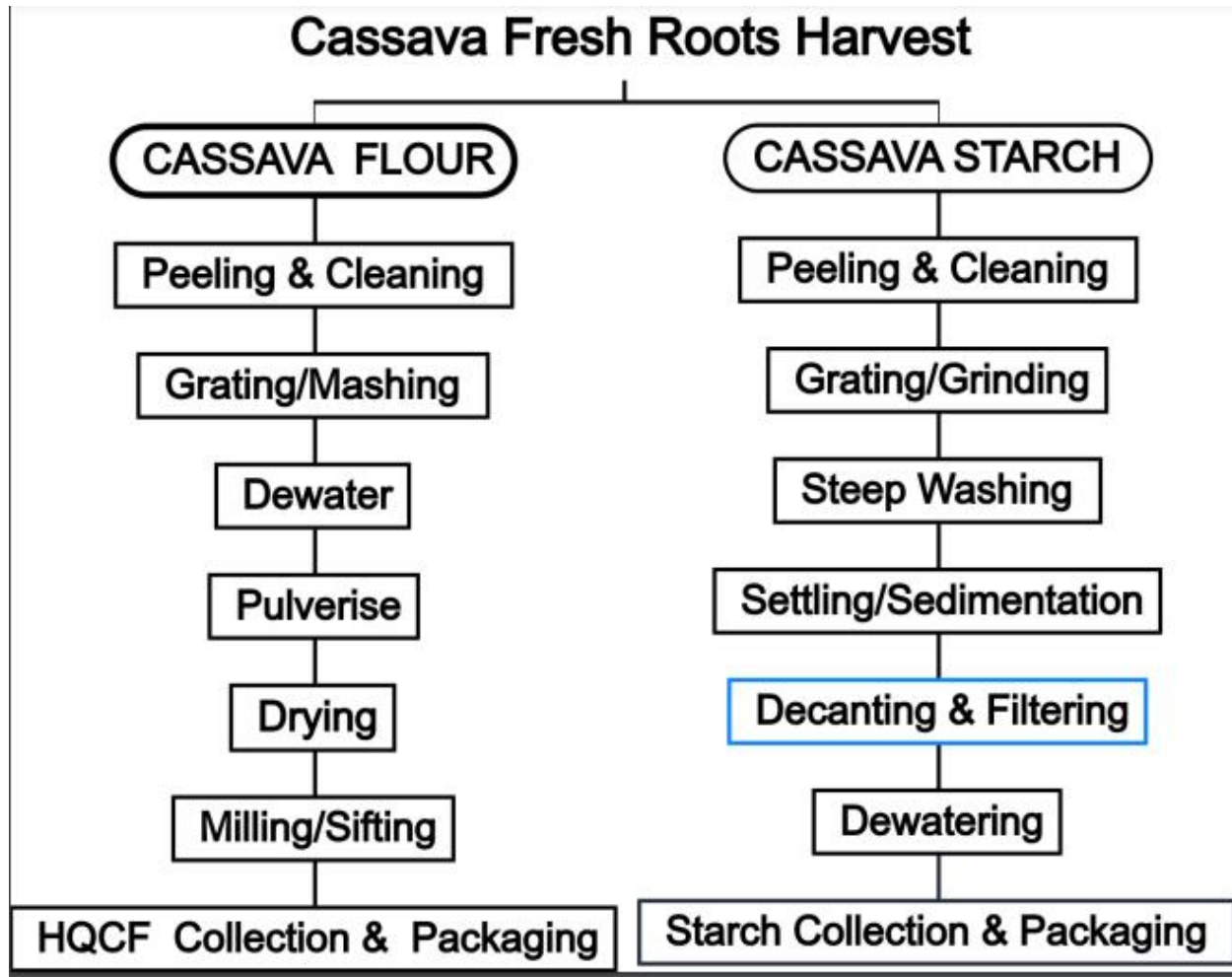
HQCF was produced in a simple six-step process in the cassava transformation facility. Fresh cassava was harvested and sorted. Then the harvested roots were peeled and grated, afterward dewatered by pressing. The pressed mash was then mechanically pulverized into fine granules, dried in a flash dryer, and milled. Other methods for drying the granules include sun-drying and rotary drying, depending on the scale of production. This process is a speedy process requiring completion within 24 hours to prevent fermentation of the cassava in any form, as fermentation would reduce the overall quality of the HQCF.

Cassava Starch:

The production of starch from cassava tubers required grating and grinding. After which it was continuously washed into a deep container with lots of water several times and filtered through a muslin bag. The residue was then allowed to settle down within 4-6 hours (depending on the cultivar). The supernatant was decanted off the starch sediment and the sediment was further

drained of water and spread over a large metallic tray, after which it sundried for some time to allow loss of water.

Figure 2.1: Process Flow Diagram of Cassava Flour & Starch from Fresh Cassava Roots



Source: Author's Process Flow Diagram

Fufu:

For the production of fufu, the peeled cassava was washed and soaked for 3 to 5 days, after which it was blended and derived in the same procedure as with starch.

Garri

Garri is the most common cassava derivative consumed by almost all Nigerians. The preparation includes using the industrial grater to blend the cassava roots after they have been peeled. The ground cassava was allowed to ferment, after which the fermented pulp was pressed using the mechanical presser to dewater the pulp. The roasting process followed afterward on a griddle pan over moderate heat with continuous mixing with a flat stick.

Tapioca

Tapioca was made from the slightly damp starch obtained during the starch production process described above. The damp starch was extruded by pressing the starch onto a large-sized mesh to obtain uniform granule sizes and then transferred unto the dry bed fryer and allowed to roast over low temperature with constant stirring using a flat stick until the formed granules were dried.

Casstard:

As with tapioca, the starch was obtained through the same procedure described for the cassava starch above, (fig 2.1). The obtained starch is mixed with flavorings or other additives (optionally), then allowed to roast in a griddle to obtain casstard of desired taste and quality.

Cassava Chips:

Cassava chips were made through a simple process of peeling, washing, blanching, slicing, seasoning, and frying. The slicing involved cutting the blanched cassava into consistent thin slices for crunchiness and size consistency. The slices were deep-fried in oil after which the oil was allowed to drain off from the chips. The dried chips were packaged in an airtight polythene bag. Only the sweet cultivar types can be used for this product.

Composite Cassava Bread:

The process followed to produce cassava bread is the same as the normal process for bread making, only that the dough mixture was comprised of different fractions of wheat and cassava flour in the ratio 9 to 1 (the ratio can be adjusted depending on desired result and taste). As with the normal bread-making process, all Ingredients were weighed, mixed with water to form dough and kneaded on a clean slab, transferred neatly into baking pans and allowed to rise before loading into the oven. Ingredients used in composite cassava bread include Cassava flour, Wheat flour, Sugar; Margarine, and Yeast. Chocolate flavor was added to make the chocolate bread option.

Cassava Flour Doughnuts:

Cassava-based doughnuts were made using cassava flour, sugar, salt, eggs, yeast margarine, baking powder, and nutmeg which were first mixed using warm water, followed by the standard doughnut-making procedure which includes whisking egg into the mixture, molding the dough into a doughnut shape, deep-frying and oil-draining.

Combo Bits:

This savory cassava derivative is made with a combination of 2 major ingredients: Cassava Flour and Cowpea (beans) flour. Other added ingredients include onions, salt and baking powder. Adding ginger, pepper, or other spices and seasoning to the mixture is optional. The ground cowpea slurry was mixed with cassava flour (in the ratio 1 to 5), and other ingredients to form a stiff dough. This dough was extruded into different shapes and deep-fried in hot oil to attain crunchy, golden brown flakes.

Tidbits:

Except for the addition of whisked eggs to the combo bit mixture above, the making of the tidbits follows practically the same procedure as that of combo bits described above.

Cassava-Based Cookies:

Cassava cookies were made using cassava flour, margarine, sugar, vanilla flavor, nutmeg, and baking powder. The ingredients were mixed with water in appropriate proportions and procedures. The dough was kneaded into desired thickness and different cookie shapes were cut out using cookie cutters of different fancy shapes. The surface of the cookies was decorated with fork holes and glazed with egg whites before taken into the oven and baked at 350°F until ready. Composite cassava cookies was also prepared using the above procedure with an inclusion of 10% maize flour to achieve more grit texture for the cookies, although, this was supplemented with more fat to avoid brittle.

Cassava-Based Chin-Chin:

The ingredients and mixing procedure for the cassava-based chin-chin is similar to that of the cookies, except that the ingredients were mixed in different proportions and the dough was rolled into a board without prior kneading. The chin-chin was cut into desired shape, size and length with a knife, deep-fried in oil and ladled into a sieve bowl to drain out excess oil.

Other Cassava-Based Food Products From IITA & Publications

The Cassava Transformation unit and Food Science and Nutrition Department make other products not covered during my visit to the establishment, most of them are covered “Cassava Recipes for Household Food Security” handbook. A summary table and charts have been made from the compilations.

Table 1: Cassava-Based Food Products

Product	Ingredients
Short crust pastry	Cassava flour, sifted, Margarine, Egg, Salt, Baking powder, Water
Meat Filling	Cassava flour, sifted Minced meat, cooked Onion, finely chopped Garlic, finely chopped Soy sauce Salt Vegetable oil Water Black pepper White pepper Maggi
Cassava root fritters	Cassava roots, grated Onions, grated Eggs, whisked Salt Vegetable oil
Cassava croquettes	Cassava roots, finely grated Coconut, finely grated Salt Meat filling Vegetable oil
Cassava roots buns	Cassava roots, grated, dewatered Banana, ripe, mashed .

	Sugar, granules Yeast Vegetable oil
Product	Ingredient
Short crust pastry	Cassava flour, sifted, Margarine, Egg, Salt, Baking powder, Water
Meat Filling	Cassava flour, sifted Minced meat, cooked Onion, finely chopped Garlic, finely chopped Soy sauce Salt Vegetable oil Water Black pepper White pepper Maggi
Cassava root fritters	Cassava roots, grated Onions, grated Eggs, whisked Salt Vegetable oil
Cassava croquettes	Cassava roots, finely grated Coconut, finely grated Salt Meat filling Vegetable oil

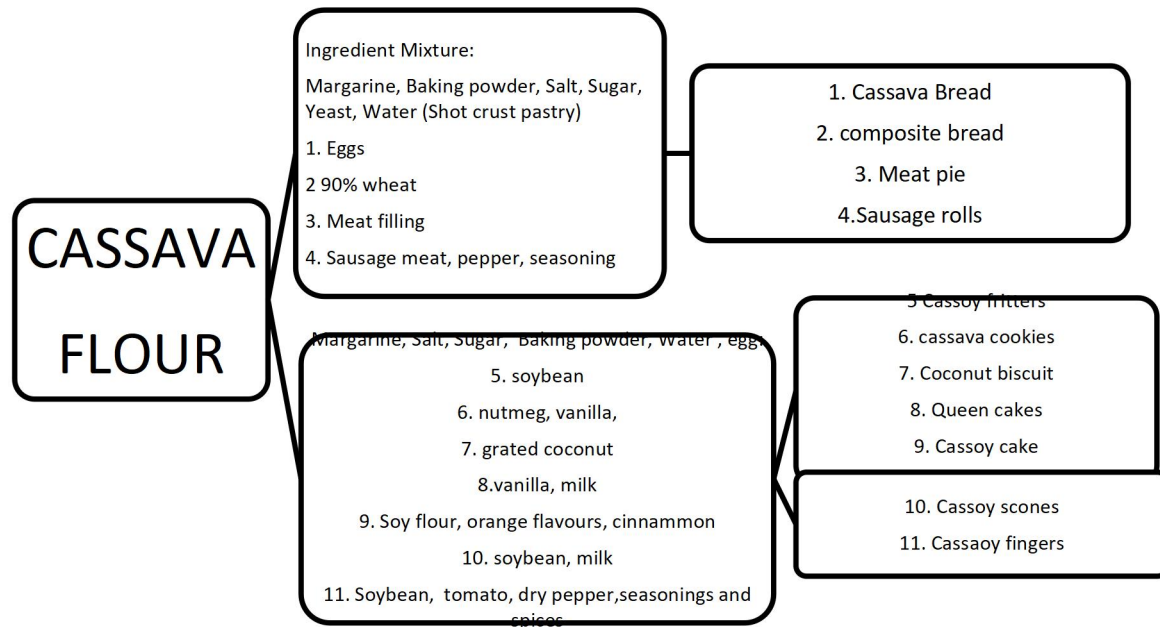
Table 1.1: Cassava-Based Food Products from Different Cassava Sources

Cassava Source	Ingredient Mixture	Final Product
CASSAVA FLOUR	Ingredient Mixture: Margarine, Baking powder, Salt, Sugar, Yeast, Water (Shot crust pastry) 1. Eggs 2 90% wheat 3. Meat filling 4. Sausage meat, pepper, seasoning	1. Cassava Bread 2. composite bread 3. Meat pie 4.Sausage rolls
	Margarine, Salt, Sugar, Baking powder, Water , egg: 5. soybean 6. nutmeg, vanilla, 7. grated coconut 8.vanilla, milk 9. Soy flour, orange flavours, cinnamon 10. soybean, milk	5. fry- cassoy fritters 6. cassava cookies 7. Coconut biscuit 8. Queen cakes 9. Cassoy cake 10. 10. Cassoy scones

	11. Soybean, tomato, dry pepper, seasonings and spices	
CASSAVA ROOTS	Ingredient Mixture Salt, oil, (or seasonings) 1. Onion, eggs 2. Coconut, meat fillings 3 Banana, yeast, sugar 4. Dewatered + seasoning 5. Eggs, Sugar 6. Minced meat, pepper 5.	1.Fritters 2. Croquettes 3. Root Doughnuts 4. Cassava crisps 6. Meat Balls
	Grated & Dewatered Roots: 4.6.,5, 3 10. Minced meat, breadcrumbs 12. Minced meat, egg, spices 13. Fresh fish, groundnut, curry 14. Groundnut, soybean, tomato	10. cassava meat cake 12. Cassava chaps 13. Cassava wraps 14. Cassava relish 0
CASSAVA STARCH	cassava starch, water, salt 1. Whisked egg, margarine, 2.seasoning 3. Coconut, spices, 4. Mustard, vinegar, sunflower oil, egg yolks 5 coconut milk, Evaporated milk,	1. Bread buns (baked) 2.Cassava cracker 3. Gurud 4.Salad Cream i
	Margarine, Salt, Sugar, Baking powder, Water, egg: 5. soybean 6. nutmeg, vanilla, 7. grated coconut 8.vanilla, milk 9. Soy flour, orange flavours, cinnamon 10. soybean, milk	5. fry- cassoy fritters 6. cassava cookies 7. Coconut biscuit 8. Queen cakes 9. Cassoy cake 10. 10. Cassoy scones

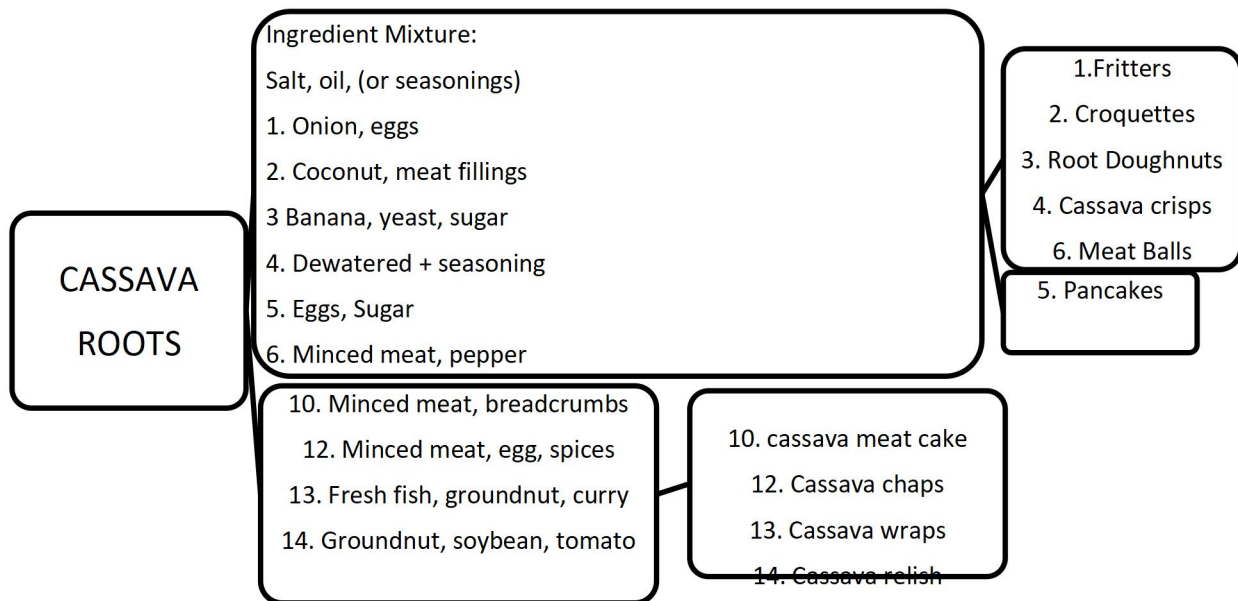
Author's compilation from Sanni et al., (2006)

Figure 2.2: Products made from Cassava Flour



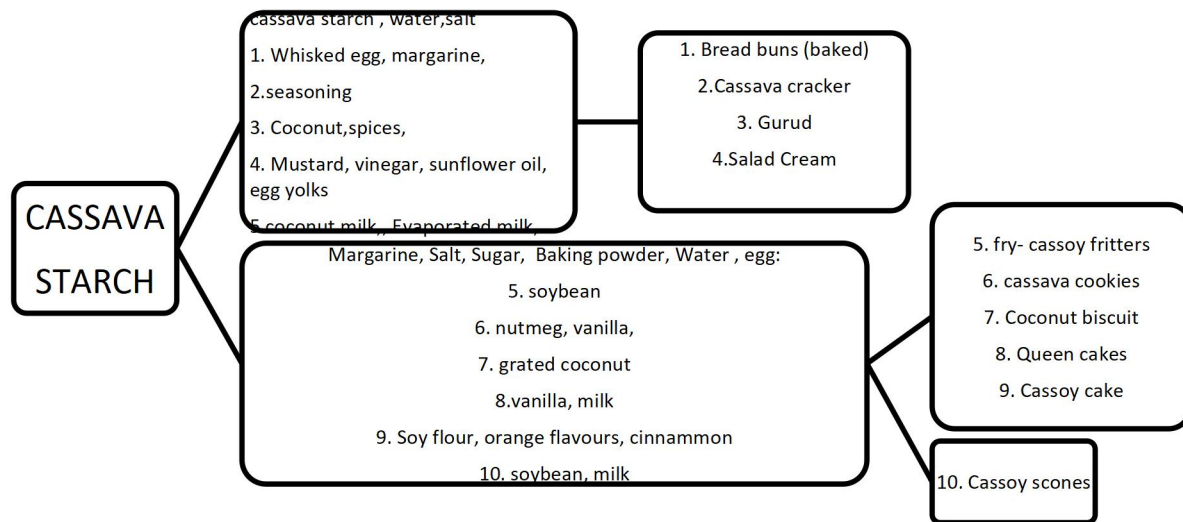
Source: Author's Compilation from Sanni et al., (2006)

Figure 2.2: Products made from Cassava Roots



Author's compilation from Sanni et al., (2006)

Figure 2.3: Products made from Cassava Starch



Author's compilation from Sanni et al., (2006)

Survey of Cassava Products Available in Stores

The food industry, in general, is dominated by products primarily made using flour, along with other ingredients such as sugar, butter/margarine, and flavoring as materials for their production. Most biscuits, cookies, quick meals, noodles, spaghetti, packaged breakfast meals, and packaged dinner meals are all based on flour. These were the primary products focused on during the supermarket survey.

The following supermarkets were explored: Shop R, Shop P, Shop Y, Shop J, Shop F, Shop A, Shop C, Shop Q, 2 major online stores were sampled namely Shop J, and Shop K. The supermarkets surveyed are popular stores located in high-brow, commercial hubs of Lagos State and Ibadan, which includes Akoka, Surulere, Tejuosho, Ikeja, Ejigbo, Oshodi, and Lagos Island. The two biggest online stores spanning the whole of Nigeria were also investigated. The supermarkets have been coded to conceal the exact identity of these stores. During the time of the study, an exhibition fair was also attended. It was a nationwide trade fair organized for small and medium enterprises across Nigeria with roughly 80 exhibition stands present.

As stated above, flour-based Items commonly found on the shelves of these supermarkets include biscuits, wafers, cookies, noodles, cereals, custards, and chips. These categories were surveyed.

In Shop Y supermarket, a wide product range based on wheat, maize, oats, and potatoes was found in their snacks and FMCG section. Most of these products were in form of biscuits, cookies, wafers, chin-chin (all mostly based on wheat), and chips (mostly based on potato and plantain). Many of these wheat flour-based products were combined with soy, peanuts, sesame

seeds, and other spices or plant protein sources to attain several varieties. Cassava-based products were largely missing in this section. The only product in this section found to be based on cassava was the coconut chips which used cassava flour and starch as its base and binder.

The breakfast meals and cereals section contained more products based on maize, wheat, and oats. Many of these products were cornflakes of different brands, oatmeal, granola, muesli (based on oats), and a wide range of custard varieties and brands made from maize.

The nuts section was found to have taken advantage of innovation as most of the products based on nuts were found to have evolved greatly in terms of their packaging, and compositions. This section also housed the dried fruits products which have taken different forms, shapes, and combinations to make them more appealing. Common nuts and fruits found in this section included mainly peanuts, cashew nuts, almond nuts, dried coconuts, dried pineapple, dried mango, and dried grapes. Many of these nuts were spiced and garnished to give more appeal to consumers.

The pasta section was comprised of different brands of spaghetti, macaroni, and noodles all principally based on wheat. This section was found to be highly patronized, while the morsels/package dinner meals section housed 2 different brands of garri, which was the only form of cassava-based product found in that section. The section also was largely dominated by oat flour, plantain flour, wheat flour, and semolina based on wheat.

Shop P

Shop P supermarket, with locations in 5 major cities in Nigeria is predominantly visited by shoppers (including foreigners) who want the best buy on a variety of products ranging from FMCG to home and kitchen materials. As expected, the store was packed with different products, and over one-third of the store is dominated by food consumables. In the biscuits/cookies/nibbles section, a wide array of biscuits, cookies, and wafers were seen on the shelves. The blend was of both local and imported varieties and of these, with their ingredient list properly reviewed, none was found cassava-based.

Interestingly, a brand of the cassava-based product was spotted In the chips section, along with other imported chips products, this had “Cassava chips” as its name with three different flavors. The product package wore an attractive look and the taste was also appealing. This discovery lighted up a gleam of hope for the possible utilization and classification of cassava among top-tier chips products made from potatoes which primarily dominate the chips market. A coconut chips brand made with cassava flour was also found in this section.

The breakfast meals and cereals gave the same characteristics as Shop Y and the nuts section was also packed with various forms of garnished and packaged nut products delightfully combined and packaged with other dried fruits options as observed in Shop Y (but with a broader and larger product base).

The pasta section as recorded for Shop Y was also comprised of different brands of spaghetti, macaroni, and noodles all principally based on wheat. The morsels/ dinner flour session recorded a wider range of flour products made from ground rice, plantain flour, yam flour, potato flour, oat flour, wheat flour, semolina (also made from wheat), and corn meal flour. Assuringly, the section also contained a brand of cassava flour for morsels (fufu) and two different brands of garri (also made from cassava).

Shop R

Shop R is Africa's largest supermarket retailer operating more than 2943 (websearch). Its Lagos main store located at the heart of Lagos State's capital was visited. One of the striking observations made at Shop R included the robust product range based on wheat flour that the store displays, including a packed pet foods section.

Each of the sections in Shop R as with other supermarkets was found to have similar products, but a broader range of innovative packages and combinations were more prominent, offering the consumer the luxury of selecting from a diverse range of products. For instance, its chips section was found to be several times more loaded than any other store, comprising a large variety of potato-based products of numerous flavors and "appealing appellations". The nuts section also delivered the sensation as with other previous stores, although with a larger product base. As expected, most of the products were based on wheat or maize, even in the vet/pets section. Only the chips section again offered a surprise with a brand of cassava chips product innovatively packed with 5 different flavors.

The breakfast section offered similar characteristics as with the above stores, except for a much bigger product base. In this section, cereals were also made using rice grits, barley, and fruits to give cereals of different flavors and delicacies. The tour in this section of Shop R demonstrates the endless possibilities attainable for the use of cassava.

This store, based on its product dynamics can inspire innovative ideas in transforming cassava into different types of cookies as the store offered various forms of flour-based products.

The morsel flour/dinner meals section recorded a much wider range of flour products made from ground rice, bean flour (of different varieties),

plantain flour (of more than 5 varieties), yam flour, potato flour, oat flour, wheat flour, and semolina. It was also encouraging enough to see cassava flour in different forms (fufu, garri of different brands) in this section of Shop R

Shop J

Shop J supermarket is equally a big store designed to serve many residential areas in the developing parts of Lagos State. The store offered a wide range of products similar to Shop R, and more interesting discoveries were made in this store as it displayed a wider range of SME-produced goods.

The breakfast section surveyed featured a cassava-based product for a change, compared to other stores visited. A teeming range of custards was observed in the custard area of the breakfast section, and sitting in this area was packaged tapioca (cassava granules) along with its other counterpart maize-based products. Although no custard product was found on its shelves, the wide range of custards found in this section can give ideas to innovations for custard made from cassava. Shop J would have been the most probable place to find such unpopular cassava products, given that the supermarket supported and promoted products and innovations from small and medium enterprises. Several new products from the Lagos SME incubation hub were featured on its shelves, which means that cassava food innovation entrepreneurs are indeed scarce from the collections. In the dinner/morsel flour section there were about 5 different brands of garri and only one brand of fufu. Other packaged morsels present include semolina, wheat meal, oatmeal, plantain flour, pound potato, and "poundo" yam.

Many types of assorted biscuits, be they imported, locally produced, or SME-produced were found sitting on the shelves of Shop J. Many of these were combined with peanuts, chocolates,

cashew nuts, and ginger. The store also featured different multigrain biscuits, a first of its kind, including several kinds of diabetic cookies. All of these however were based on wheat flour. There were also different types of chips based on potato, including a brand of kettle vectored potato chip, an idea that can be applied to cassava.

In the breakfast meals/cereals section of Shop J, most of the flakes and breakfast meals were also observed to be made from corn, wheat, rice flour, barley, and soya. This depicts the fact that a cassava-based breakfast meal innovation will be a breakthrough in that aspect.

Smaller stores like Shop F, Shop Q, Shop A and Shop C didn't feature any form of cassava products at the time of this visit. In these stores, Even the common cassava-based morsel flours like fufu and garri were missing.

The two online stores surveyed were explored using "cassava" as search keywords. For Jumia, only 3 different cassava-based products of different brands (packaged fufu, gari, and cassava chips) popped-up at the search button but most packaged products found when the general food section was searched included flours of beans, plantain, yam, semolina (Websearch).

Four products based on cassava were found on Konga, falling majorly in the morsel flour category. These included different brands of fufu, garri, laafun (cassava starch-flour), and tapioca (Websearch).

The exhibition attended also showed a dearth in cassava innovation, as the only form of cassava brand displayed was garri, although with the introduction of different flavors.

The bread section of all the supermarkets toured consisted of different bread brands also primarily based on wheat flour.

The FCMG section of all these stores also features products (such as chewing gum and all kinds of toothpaste) that used sorbitol as a sweetener (which can be derived from cassava)

Table 2: Summary of Findings from Store Surveys

	Store	Traditional Cassava-based products	Food-based Innovations made from cassava	Packaged snacks, biscuits or other confectionaries made cassava	Substituted raw materials
	Shop Y	1 (packaged garri)	1 (cassava coconut chips)	Nil	Nil
	Shop P	2 (packaged garri and fufu)	2 (cassava chips & cassava coconut chips)	Nil	Nil
	Shop R	2 (packaged garri and fufu)	2 (cassava chips & cassava coconut chips)	Nil	Nil
	Shop J	3 (packaged garri, fufu & tapioca)	Nil	Nil	Nil
	Shop F	Nil	Nil	Nil	Nil
	Shop A	Nil	Nil	Nil	Nil
	Shop Q	Nil	Nil	Nil	Nil

	Shop C	Nil	Nil	Nil	Nil
	Shop J (online)	2 (packaged garri, fufu)	1 (cassava chips)	Nil	Nil
	Shop K (online)	4 (packaged garri, fufu laafun & tapioca)	Nil	Nil	Nil
	Exhibition Fair	2 (packaged garri & fufu)	1 (cassava coconut chips)	Nil	Nil

Discussions

Gaps and opportunities in Cassava production

From the supermarket surveys, it can be concluded that cassava utilization has been largely untapped, especially when only about 3% of the number of possible products from cassava have been hitherto harnessed.

This is based on a study that reveals that up to 300 products can be derived from cassava tubers (Zainuddin et al., 2018). Cassava is utilized in the production of flour, ethanol, food seasonings, starch, and animal feeds. It has also found use in oil drilling, food packaging industry, paint industry, beauty care products, coal mining, paint industry, bakery/ confectionery products, pharmaceuticals, meat production, and textile processing. it is equally useful in the production of sorbitol, citrus extract, glucose syrup, high fructose syrup, and maturation nutrients such as lysine (Sanni et al., 2006, Otekunrin & Sawicka, 2019).

It is paradoxical that a country like Nigeria still depends largely on the export of starch, flour, and sweeteners when cassava can provide a substantial raw material substitute (Onyenwoke & Simonyan, 2014)

The demand for cassava keeps increasing as more discoveries are made about its usage. In a compilation by Otekunrin & Sawicka, 2019, using Nigeria as a case study, the potential demand for cassava for use in the industrial value-added production chain for starch, flour, sweeteners, dried chips, animal feeds, fuel ethanol, and high export garri is estimated at 12, 758,429 metric tons of fresh root cassava, with a synchronous tendency of creating up to 1,020,674 jobs (Otekunrin & Sawicka, 2019).

Studies have shown that 1 tonne of fresh cassava roots (with 38% Dry matter) can produce 450 kg of dry chips (85% DM), 160-200 L of ethanol, 250-300 kg of native starch, and 440 kg of hard pellets, while 1tonne of dry cassava chips of 85% dry matter produces 350-420 L of ethanol, 770 kg of sorbitol (70%), 770 kg of maltol (70%), 500 kg of crystal sorbitol, 500 kg of mannitol, 665 kg of native/modified starch, and 665 kg of liquid glucose (Howeler, 2006)

The cassava initiative projected a generation of US\$5 billion in export revenue by 2007 (Phillips et al., 2004). As of 2017 (a decade after), only US\$ 1.25 million was generated in export value (Otekunrin & Sawicka, 2019). This is not even up to 1% of the projections.

All these facts and figures provide an untapped opportunity for agropreneurs to wield. The total export value for all African countries is also quite distant from the US\$5 billion export goal. Below is a table displaying the total export value for leading African countries.

Table 3: Cassava Export Value for African Countries

Rank	Country	Percentage share in world cassava export (2017)	Total Export Value (in USD)
1	Egypt	0.94	20.7M
2	Senegal	0.36	6.99M
3	Uganda	0.24	5.27M
4	South Africa	0.14	3.06M
5	Ghana	0.14	3.02M
6	Tanzania	0.13	2.76M
7	Niger	0.11	2.45M
8	Cameroon	0.073	1.61M
9	Mali	0.063	1.38M
10	Nigeria	0.057	1.25M
11	Cote D'Ivoire	0.051	1.12M
12	Burkina Faso	0.050	1.09M
13	Togo	0.023	515K
14	Madagascar	0.011	237K
15	Zambia	0.0099	216K
16	Morocco	0.0060	132K
17	Kenya	0.0052	114K
18	Rwanda	0.0015	33.9K
19	Malawi	0.000063	1.39K

Source: Culled from Otekunrin & Sawicka, (2019)

Cassava's Potential for Job Creation

At least 44 million productive youths are currently facing the despair of unemployment/underemployment in Nigeria. A viable way to address this challenge is through value chain addition in the agricultural sector (Asekun & Agunbiade, 2021). Innovations for cassava will open up a new vista for the cassava global market by contributing an estimated at least 1,020,674 jobs through cassava industrialization and processing (Otekunrin & Sawicka, 2019). This is based on cassava demand at an estimated 13 million tonnes, which is not even up to a quarter of the current production of cassava in Nigeria. This underlines the huge potential that exists in that market, especially when more sophisticated, mechanized farming and processing methods are employed in cassava production.

Cassava as Raw Materials in the food industry and possible innovations

Cassava is considered an energy-dense food, providing approximately 250,000 calories per hectare, ranking it before maize, rice, sorghum, and wheat (Onyenwoke & Simonyan, 2014) Its

energy reserves range between 32 and 35% (fresh weight basis) and between 80 to 90% (on a dry matter basis) (Montagnac et al., 2009). The crop has also been referred to as “food for famine” and provides the best option for food security compared to other major energy crops. This is owed to the fact that it is an easily adaptable crop with the least restriction on soil type (Ozoegwu et al., 2017).

In the food industry cassava can be useful for making a wide variety of products such as sorbitol, citrus extract, glucose syrup, high fructose syrup, bouillons, noodles, pre-gelled starch, and food seasonings. In a secondary chain, 1 tonne of cassava starch produces 1,087 kg of glucose syrup, 1,111 , kg of sago, 833 kg of sorbitol, 770 kg of glucose, and 665-1000 kg of maltose (Howeler, 2006). Starch from cassava has been found to be technically more superior than that of maize starch (Onyenwoke & Simonyan, 2014).

Cassava also possesses a considerable level of nutritional value which qualify it for application in the food industry. The nutritional value for cassava varies on different factors such as cultivar type, geographic location, plant age, environmental conditions, and soil type. Both its leaves and tubers are relevant, although the tubers are more useful for industrial purposes. A compilation of its nutritional value has been culled from (Onyenwoke & Simonyan, 2014)

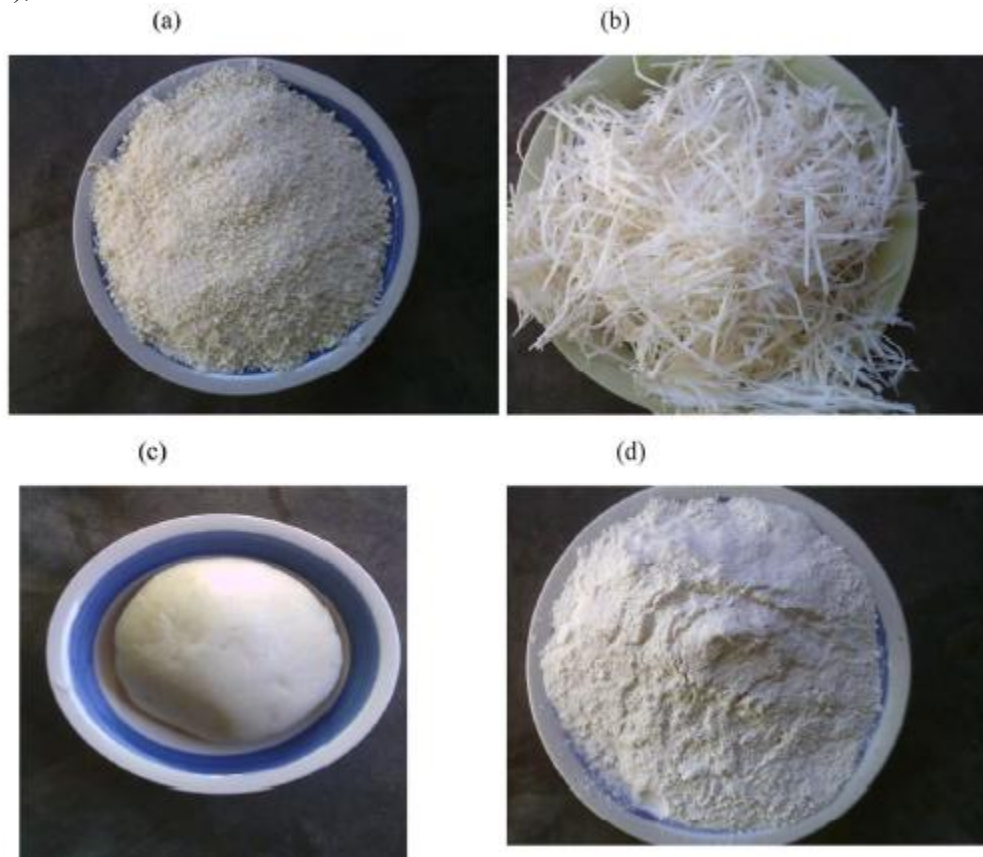
Table 4: Table of Nutritional Value for Cassava,

Nutrient	Whole root	Peeled root	Boiled root
Wet root (g)	100	77.0	87.6
Dry matter (g)	40.0	32.3	28.3
Calories	157	127	112
Protein (g)	1.0	0.48	0.38
Fat (g)	0.1	0.1	0.04
Carbohydrates(g)	37.9	31.0	27.4
Fiber (g)	1. 3	0.6	0.5
Ash (g)	0.90	0.57	0.46
Calcium (mg)	26	13	12
Phosphorus (mg)	47	39	31
Iron (mg)	3.5	0.4	0.4
Thiamin (µg)	72	31	20
Riboflavin (µg)	34	18	16
Niacin (mg)	0.73	0.52	0.41
Vitamin C (mg)	33	20	1

Source: Onyenwoke & Simonyan, (2014), Institute of Food Technologists (2009)

With Nigeria being the most populous country in Africa and one of the world's most populous nations, the demand to meet requirements in the food industry is as vast as its population and with this, meeting the food need of the population is critical (Ozoegwu et al., 2017). In Nigeria, 84% of cassava produced is consumed as food, with 70% processed into garri and 14% processed into other traditional products such as fufu/akpu (fermented cassava starch), Lafun (Fermented cassava flour), tapioca and abacha (Ozoegwu et al., 2017). With this, only about 16% of cassava produced is converted into other industrial products.

Figure 3: Most common forms of cassava products: (a) garri (b), abacha (c) fufu in cooked form (d), laafun or fermented flour.



Source: Ozoegwu et al., (2017)

African Heads of state during the African Union Summit held in July of 2003 pledged to prioritize agriculture in their countries by raising budgetary allocations for agriculture to a minimum of 10% within 5 years. In line with this pledge, several other conferences involving top leaders around Africa through the Pan-Africa Cassava Initiative have also recommended that cassava be promoted to ameliorate food insecurity and alleviate poverty (Phillips et al., 2004). Possible food innovations based on ideas garnered from the supermarket survey are as follows: Sandwiched biscuits of different flavors (e.g., chocolate, vanilla, strawberry, etc.).

Based on the survey, it is observed that recently, biscuit products are harnessing more innovation by combining the flours with different healthy spices and protein sources such as ginger, cinnamon, sesame, soybeans, and even cowpea. The flour used in these combinations can be substituted with cassava flour. Other possible innovations can include cassava-based wafers and

rolls, cassava bits embedded in chocolates, chips of different attractive shapes, garnished with different flavors and different exciting appellations such as kettle-cooked “cassava chips”, home-baked “cassava chips”, etc, as seen in Shop R which offered the largest variety of potato-based chips compared with other stores. The “Cassanova Chips” brand based on cassava (having 5 flavors) was the only chips brand based on cassava found in this store against hundreds of its potato chips counterparts. All chin-chin products surveyed in all the stores were completely based on wheat, even though the “chin-chin” industry is also wielding innovation by the introduction of different flavors and shapes, the use of cassava is purely absent. The popularity of cassava flour in producing chin-chin was surprising, as the cassava-based chin-chin made in IITA proved to offer a large similarity in the taste appeal and crunchiness of a standard wheat-based chin-chin. Some chocolates and jellies found in the stores visited contained sorbitol as their sweetener, which can be derived from cassava. Sorbitol is also used in all the kinds of toothpaste looked through in those stores. In the pet section of Shop R, most of the food items were based on maize and wheat. This can also be replaced with cassava flour-based products for pets or cassava partially-substituted food products. The pasta industry is a very large industry mainly based on wheat flour, a consideration for cassava-based substitutes will be a breakthrough in this sector, thus increasing the demand for cassava.

The drink industry can also find cassava products useful as a substitute or semi-substitute for some of its ingredients like xanthan gum and microcrystalline cellulose used as a thickener.

Potential Cassava as Raw Materials for other Industrial Products

Cassava’s potential for delivering several industrial products is so high that the crop has been termed our “white gold” (Tonukari et al., 2015, Sanni et al., 2006). Cassava is a multifarious plant with a variety of uses cutting across production as livestock feeds, textiles, glues confectionaries dextrin. It is also used in the production of biodegradable products, monosodium glutamate, plywood, paper, and drugs, while cassava chips and pellets are mostly used in animal feed and alcohol production (Onyenwoke & Simonyan, 2014). Other industrial uses include its use for the production of syrups, coating of tablets and capsules, use in detergent making, plastic making, and adsorbent for dyes (Tonukari et al., 2015). Up to 300 industrial products have been associated with cassava as a potential raw material (Zainuddin, I. M., Fathoni, A., Sudarmonowati, E., Beeching, J. R., Gruissem, W., & Vanderschuren, H. (2018). Cassava post-harvest physiological).

The multiplier effect of cassava processing into several product types will help provide more food availability and generate employment opportunities for the growing population in both the urban areas and rural areas (Sanni et al., 2006). Millions of cassava farmers are engaged in cassava cultivation in Africa, and Intervention from IITA across Africa has ensured the breeding of cassava varieties with higher values and qualities such as the "vitamin A" cassava, and other pest-resisting varieties. Technological innovations have also been introduced to drive the production systems of cassava in order to achieve large-scale production of the crop. All these aim to drive the productivity and marketability of the crop. However, commercialization of the commodity in the African context is still a far cry from advancement. The subsistence mode of cassava production and commercialization is responsible for the inability to expand industrially.

As a cash crop, cassava generates income for a large number of households in Nigeria compared to other crops, up to 35% of total household farm income in some states in Nigeria (Ozoegwu et

al., 2017). The crop has also been marked as a means of poverty alleviation by IFAD due to its ease of cultivation, availability, and processing-ability (Ozoegwu et al., 2017). However, in terms of industrial value creation, cassava is hardly recognized, because only a negligible portion of its production is set aside for industrial purposes with most of its cultivation consumed for food purposes only in Africa. This also explains the dismal percentage it holds on the global market export share.

The industrial demands for cassava vary based on region and this determines its production. Its most popular product in Nigeria is garri (white or yellow), fufu (or “fofoo” popular in Ghana, Nigeria and Congo). In China, it is mainly used for industrial purposes, the Guangxi Zhuangzu autonomous region in southern China produced 139 million litres of ethanol from cassava in 2007 and 1.27 billion litres in 2010, (Akitoeye et al., 2020). In the Democratic Republic of Congo, cassava leaves have more market value. Thailand dominates the world trade in pellets and modified starch along with Indonesia and Brazil which is also major consumer of cassava flour in addition to most of Latin America (Onyenwoke & Simonyan, 2014).

Potential for Cassava Wastes

The potential for cassava wastes, either from its stems, its peels, and its by-processing waste products is very high, especially for its use as an alternative source of energy which is of pressing interest for the Nigeria Energy sector at the moment. This is given that the crude oil reserve (including the undiscovered one) is projected to be exhausted within the next 50 years or less, putting into account the growing population and the concomitant energy requirements (Ojolo et al., 2012). The rate of growing industrialization is also a factor to determine how quickly the oil reserves draw close to exhaustion. Wastes from cassava are first generated when the root tubers are separated from the stems (with the stems constituting the first set of wastes), along with the peels that constitute between 10 to 35% of the tuber weight depending on the peeling method (Omah & Okafor, 2015)

Cassava waste peels innovation has been recently advocated for transformation into other viable products since they make up a considerable fraction of the tubers. They have been found useful for the production of animal feeds, and research has shown that cassava peels provide the same value as maize and can be considered a dietary source for non-ruminant animals. Replacing feeds with cassava peels also results in significant economic benefits. In some animals, a significant fraction of maize feeds has been replaced by cassava peels and supplemented with at least 15% of plant or animal-based proteins to balanced animal performance (Tewe and Iyayi (1995). The nutritional value of cassava peel wastes has been given as 42.6% carbohydrate, 1.6% protein, 12.1% ether extract, 5.0% total ash, and 22.5% crude fibre (Obadina et al., 2005)

Recent research interests are beginning to consider cassava stems as a bio-energy resource, justified by reports of its high starch content of up to 30% dry matter in the stems (Nuwamanya et al., 2012). The use of the cassava stems in the production of ethanol can contribute an additional 26% compared to using the roots only, depending on the genotype, area of cultivation, and harvest time. (Wei et al., 2015).

Other energy products such as biogas have also been produced using a combination of cassava peel wastes with cow dung, poultry droppings, and piggery manure (Adelekan et al., 2009), making cassava peels a very viable candidate for bio-energy. The viability of cassava waste residues has been pronounced as a more suitable candidate among other agricultural wastes for use in biofuel production is owed to its high potential for conversion without posing any serious threat to food security (Ozoegwu et al., 2017).

Trends and progress of cassava production in Nigeria

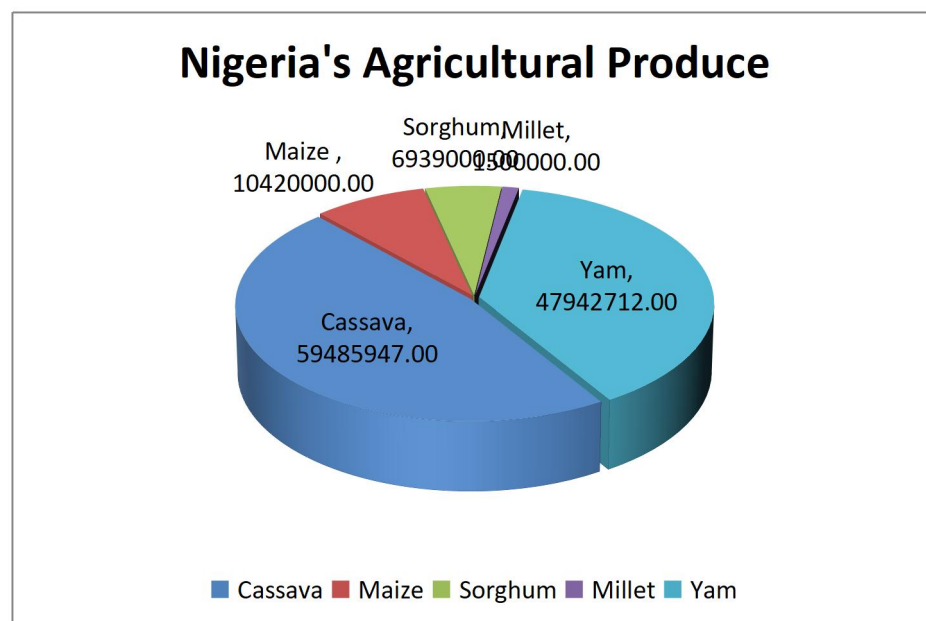
Nigeria, acclaimed the “Giant of Africa” sits on a vast landmass of about 924,000 Km² in West Africa. In the early years of Nigeria’s independence, agriculture accounted for close to 60% of Nigeria's Gross Domestic Product (GDP) and 80% of its export earnings (Phillips et al., 2004). In recent times, agriculture only accounts for 1/3rd of the country’s earnings and less than 1% of its export earnings (Phillips et al., 2004), this is disheartening as Nigeria is a major producer of many crops including yam, millet, and sorghum.

Table 4: Nigeria’s production of major agricultural products:

Crop	Value (tonnes)
Cassava	59485947.00
Maize	10420000.00
Sorghum	6939000.00
Millet	1500000.00
Yam	47942712.00

Author s table based on
FAOSTAT 2019 data

Figure 4:
Author s
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Author's chart compiled based on FAOSTAT (2019) data

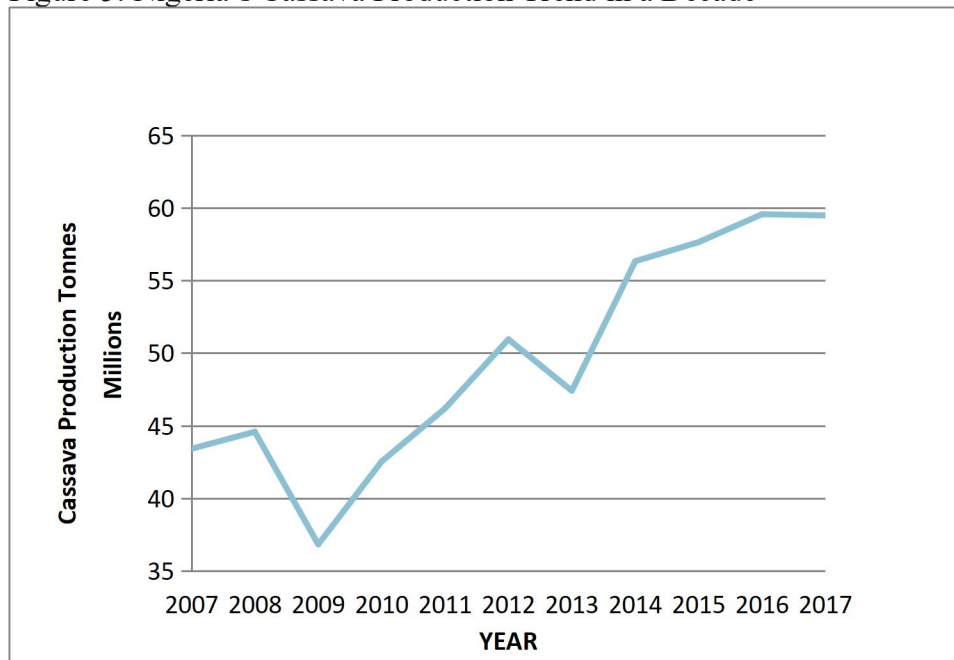
Although Cassava production in Nigeria is still primarily on a subsistence level, over time, the crop has started to evolve from being a peasant's crop to becoming a cash crop with industrial applications. Currently, about 90% of cassava tubers are used as food, and the rest (10%) are used to meet some industrial demands (Onyenwoke & Simonyan, 2014). Cassava transformation and conversion into industrial products in Nigeria is the most advanced in Africa, even with this, the cassava revolution in Nigeria can be said to still be in its infancy (Phillips et al., 2004). Traditional methods which include peeling, boiling, soaking, slicing, grating, fermenting, roasting, drying and milling are still being majorly used for its processing.

The industrial revolution of cassava saw light in the year 2004 through the introduction of several initiatives inaugurated by the then President and Commander-in-Chief of the Armed Forces of the Federal Republic of Nigeria, Chief Olusegun Obasanjo, GCFR. One of these initiatives is the Cassava Export Promotion. Before the introduction of these initiatives, Nigeria was unable to utilize up to 1% of its commercial value. The goal of the Cassava Export Promotion was to transform cassava into the nation's "white gold" just as crude oil is currently Nigeria's "black gold" (Sanni et al., 2006). The initiatives also put forth a target of \$5 US Billion by 2007, and for this to be possible, the production value must reach 150 million tonnes. Figure 5 gives the trend in cassava production for a 10-year period after the projection

Table 5: Nigeria's Cassava Production Trend in a Decade

YEAR	PRODUCTI ON (Tonnes)
2007	43,410,000
2008	44,582,000
2009	36,822,248
2010	42,533,180
2011	46,190,248
2012	50,950,292
2013	47,406,770
2014	56,328,480
2015	57,643,271
2016	59,565,916
2017	59,485,947

Figure 5: Nigeria's Cassava Production Trend in a Decade



Source: Author's compilation based on FAOSTAT (2019) data

Africa produces over 60% of the world's 291,993 produced cassava (Based on 2017 data, FAOSTAT 2019), with Nigeria leading in the production, accounting for over 20% of production in the world (Otekunrin & Sawicka, 2019). Sadly, these figures do not measure up to the economic share that cassava generates for other countries such as Thailand through export. African countries barely 5% of the world's global market share, with Egypt amassing the highest share of 0.94% as of 2017 (1P: 9). **Nigeria's total land harvest for cassava production at 6, 792,349 Ha was over 5 times of Thailand's total land harvest, and almost twice its percentage production, yet, Thailand is the leading exporter of cassava in the world, exporting up 12.2 million tonnes of the world's total 22 million tonnes of cassava flour and starch in 2017 alone, whereas, Nigeria does not export more than 0.21% of its total produced cassava. This is such an infinitesimal percentage of its 60 million tonnes produced** (Based on 2017 data, FAOSTAT 2019).

For several consecutive years, Nigeria has steadily maintained its place as the world's leading producer of cassava, yet, its export capacity doesn't make a significant increase. Thailand specializes more in the export of cassava chips and pellets for animal feeds and the production of flour and starch (Onyenwoke & Simonyan, 2014).

Table 6: Global Production of Cassava

Country	Cassava Production (Tonnes)- 2017
Nigeria	59485947
Congo, DR	31596046
Indonesia	19046000
Brazil	18876470
Ghana	18470762
Angola	11747938
Cambodia	10577812
Vietnam	10267568
Thailand	30973292
Others	80950811

Source: Author's Chart and Table based on data provided in Olutosin & Sawicka (2021)

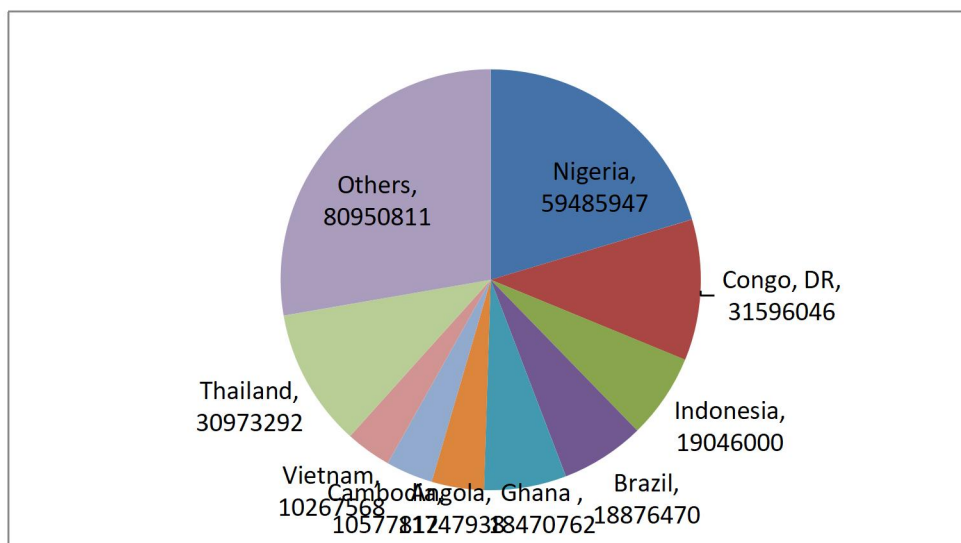
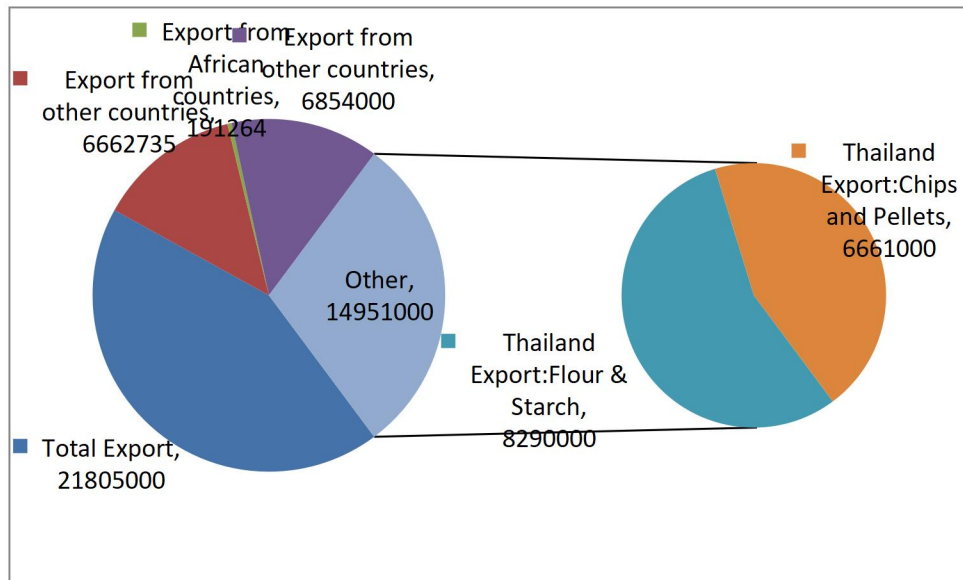


Table 6: Total Global Export

Total Global Export	21805000
Export from other countries	6662735
Export from African countries	191264
Export from other countries	6854000
Thailand's Total Export	149951000
Thailand Export: Flour & Starch	8290000
Thailand Export: Chips and Pellets	6661000



Source: Author's Chart and Table based on data provided in Olutosin & Sawicka (2021), (Onyenwoke & Simonyan, 2014)

It can be easily noticed that despite the fact that Africa accounts for up to 60% of Cassava production in the world, it is hardly visible in the pie chart shown (fig.), accounting for less than 5% of the total export market. Nigeria particularly lags behind in the cassava global market because the country is focused on domestic level production due to inadequate / lack of innovation in the Nigerian cassava production.

Nigeria's incapability to meet up with industrial demands of cassava is also a factor hampering its inability to participate effectively in the cassava global trade market. The subsistent-level approach (using traditional methods) employed in cassava production is also responsible for the country's inability unable to meet up with industrial demands (FAO, 2013),

Challenges with Cassava Production

Meeting the subsistence food demand:

There is no doubt that cassava is one of the most viable candidates for food security, yet, there are many challenges associated with its production. In Nigeria, there is a need to meet the food demand of the increasing population. Therefore, meeting the need through locally and subsistence-grown prolific crops such as cassava is much more paramount than its conversion, little wonder as much as 90% of cassava is consumed as food, and a little margin left for industrial purposes.

Short Shelf-life

For its utilization for industrial purposes, one of the major limitations of the crop is its short shelf life which is due to its rapid deterioration known to occur within 24 to 48 hours after harvest (Onyenwoke & Simonyan, 2014). This process is known as Postharvest Physiological Deterioration and its occurrence in the tubers leaves the tubers unpalatable, with signs of

vascular streaking which is represented by blue-black discoloration on the roots (Blagbrough et al., 2010). This is compounded by the inadequate storage systems available for cassava, especially as a short-lived crop.

Seasonal Availability:

Another limitation of its industrial expansion is its seasonal availability. Cassava is often planted once a year at the beginning of the rainy season and left to grow till it is 8-9 months old (Rozi, et al., 2021). This cultivation pattern affects the availability of the crop at certain times of the year.

Low Nutritional Value:

Cassava's low nutritional value is a challenge as the bulk of the crop is water and starch. Cassava constitutes mainly of starch and carbohydrates with trace amounts of protein, vitamins, and minerals (Ozoegwu et al., 2017).

Consumer perception:

Cassava has a reputation as a "low-class" crop. In the market behavior, Cassava demand is inelastic and its price level is inversely proportional to the demand quantity. Its cross elasticity showed that rice is the strongest substitute for cassava. Also, cassava has negative income elasticity. It means that the increase in income will be followed by a decrease in cassava consumption (Rozi et al., 2021).

Inequality in key producers:

Most cassava farmers are elderly males without proper exposure to education (Onyenwoke and Simonyan, 2014). Educating and empowering more people to participate in cassava production will be necessary.

Lack of diversification:

Challenges such as lack of diversification in the Nigerian economy, and concentrating only on a single source of export trade commodity have hampered progress in cassava production and industrialization.

Lack of policies and continuity:

Lack of policies or lack of its continuity is also responsible for the low turnout rate of cassava's industrialization and export trade market. Other challenges include its low protein content and high cyanide content (Onyenwoke & Simonyan, 2014)

Way forward & Possible Solutions to Highlighted Challenges

Better Storage Systems:

Innovations to improve cassava storage through mechanization, and the introduction of standard storage systems may be considered as a secondary approach to limiting cassava loss.

Although the roots can be stored in the soil for up to 3 years, some are left unharvested till when needed, this may in turn affect the root quality and processing capability when stored for a longer time due to the conversion of the fresh root tubers into woody, fibrous constituents. (Onyenwoke & Simonyan, 2014)

Crop Improvement:

Several strategies have been introduced for the cassava crop improvement, which include bioengineering of the crop and the creation of rot-resistant species such as vitamin A cassava, which extends the shelf-life of cassava by a few more days.

Different strategies have also been harnessed to reduce the cyanide content of the crop through research and biotechnology. Processing cassava is also an effective way to eliminate cyanide for the crop.

Quick Processing:

The quick deterioration of cassava demands quick processing and conversion strategies, therefore, the proximity of processing technologies to cassava farms must be well planned out to reduce the problem of transportation.

Improved Technologies:

Improved technologies must be put in place for cassava production, emulating Countries like Thailand, Brazil, and Indonesia which produce cassava to meet the global market demand while Africa is still lagging behind, with its use of primitive methods for processing

Enhancement of Nutritional Value:

The nutritional value of cassava can be increased by the fortification during processing. This would also in turn give rise to several varieties of cassava products as witnessed by wheat-based products observed in the stores analyzed. The introduction of different components in the IITA "household food security " handbook also gave more the cassava snacks more nutritional values.

Making Cassava Production Profession Attractive:

More young people, including women, and educated ones should be supported and encouraged to take up a profession in cassava production. This will also increase and improve the production of cassava in Africa to meet the global demand.

Other Possible solutions:

Other possible solutions besides improved technologies for storage, processing, crop improvement, and proper sensitization include diversification of cassava products to meet food demand, the introduction of enabling policies, and continuous education and enlightenment of the populace to eliminate the stigma of cassava products as inferior goods in society (Rozi et al., 2021).

Future Targets and Strategies for Innovation

Initiatives:

To ensure innovation in cassava processing, new initiatives must be encouraged and supported as the growth of innovative initiatives can serve to increase the productivity and marketability of cassava tubers and processed goods (Phillips et al., 2004). The Initiative by a past Government, President Olusegun Obasanjo drove reasonable progress through the cassava initiative which had a projection of generating US\$5 billion in export by 2007. This projection was immediately

complemented with efforts and commitments by IITA and NNPC to ensure the development and provision of better quality cassava tubers to be supplied to the local communities accompanied by proper marketing support. An example of an indigenous initiative to support cassava innovation is the Cassava Growers Association domiciled in Nigeria. This initiative scout's for suitable lands in each Local Government Area for cassava cultivation. Clusters of farmers are also organized to achieve improved mechanization, farm practices, improved yields, and varieties with the target of producing very massive tonnes per Ha (Phillips et al., 2004)

Policies:

Policies must be introduced and backed up to invest in the production of cassava starch and other products from cassava to meet the global export demand. This is the reason for the tremendous growth in cassava production in countries such as Thailand and Indonesia.

Enactment of policies such as the “E-10” policy which adopts the blending of 10% ethanol with gasoline will raise the demand for 2.3million tonnes of cassava root tubers to produce 1 billion litres of fuel ethanol in a year (Otekunrin & Sawicka, 2019)

Diversification

With a properly diversified economy, more employment can be created and the citizens will be more financially buoyant as this will in turn expand industrial productivity and position the economy for a major hike in export earnings (Phillips et al., 2004). In China, cassava has been harnessed as the official energy crop to meet their biofuel targets, while Brazil's major use for cassava is its conversion into flour (Ozoegwu et al., 2017).

Innovations and Interventions

The innovations of other competitive crops such as wheat, maize, and rice should be studied to improve the cassava value chain and make it more appealing to consumers. Reinstating Interventions such as The Cassava Multiplication Project which was a control measure to forestall food security threats is also important to attain future targets for cassava production (Ozoegwu et al., 2017) . Extension agents should be empowered and encouraged to disseminate budding innovation to cassava farmers (Onyenwoke & Simonyan, 2014).

Transformational Strategies

Different strategies must be applied to raise the bar for cassava production to meet global targets. An example is the transformational program of President Goodluck Jonathan which was a build-up to the existing framework created to ensure growth in the cassava sector by training and supporting cassava farmers on strategies to increase the productivity and marketability of their cassava crop (Uzochukwu et al., 2021)

Another market growth strategy called the "4P strategy "which covers: Product (product), Price (price), Promotion (promotion), and Place (distribution strategy) must also be properly applied to heighten interest in cassava as a crop that can be a good substitute for many foods and industrial raw materials (Rozi et al., 2021).

Conclusion and Recommendation

The Russia-Ukraine war has provided an opportunity for African countries to harness their agricultural capabilities and resuscitate innovations in food systems, especially in cassava crop cultivation, which can serve as a substitute/partial substitute for the world's traded wheat.

The demand to close the gap that this war has created should inspire and motivate cassava agropreneurs in Africa to rise up to the challenge, and bolster the cassava value chain. More females should also be encouraged and supported to participate in cassava production and innovation.

For cassava innovation to thrive in Africa, countries must take a cue from Thailand's cassava production, processing, and marketing systems.

Lastly, policymakers also need to pay attention to global trends in order to introduce policies that take advantage of global market situations to create more development for the African society. With Cassava innovation strategies enacted within this period, millions of people all over the world can be saved from severe hunger.

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Women Entrepreneurship and Microfinance: Implications on Mental Wellbeing of Informal Traders in Lagos, Nigeria

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Abstract

This study seeks to understand the psychological effects of loan repayment strategies on the mental wellbeing of women entrepreneurs in Lagos, Nigeria. This study employs a mixed-method research design to investigate the implications of microfinance loans on the mental wellbeing of women entrepreneurs in Lagos. The cross-sectional study adapts existing and validated instruments on mental well-being to carefully design close-ended questionnaire items which capture the psychological effects of microfinance repayment procedure. One hundred women entrepreneurs were randomly selected within the five divisions in Lagos State. The study strategically identifies clusters of market women in each division's markets due to difficulties in ascertaining the population size of informal women entrepreneurs. More so, focus group discussions are done for at least 8 women entrepreneurs in each cluster. The close-ended responses were analyzed using descriptive and OLS regression techniques, while the qualitative responses obtained from the focus group discussions are interpreted using the narrative analytic procedure. The study finds that microfinance loans have positive and significant implications on women's entrepreneurship development. The study further reveals that the gains accrued through microfinance loans are short-lived because the repayment plans, and recovery procedure pose a significant threat to the mental well-being of informal women entrepreneurs in Lagos State. Arising from these findings, this study suggests that mental health advocates should be involved in designing the repayment and recovery policies for microfinance institutions. The microfinance implications on the mental well-being of women entrepreneurs are vital in designing operational policies for women's entrepreneurship development.

Keywords: Women Entrepreneurship, Microfinance Loans, Mental Health

Introduction

The last three decades have marked the emergence of microfinancing as one of the key developmental tools for financial independence, poverty reduction, and entrepreneurship development (Imai et al., 2012; Banerjee et al., 2015; Engel & Pedersen, 2019). It evolved as a financial inclusion procedure for women entrepreneurs who cannot access traditional financial services due to their level of informality, gender, and insufficient collateral (Banerjee et al., 2015). Specifically, microfinance programs are designed to economically empower and proffer avenues for financial liberation to actively poor women (Abosede & Azeez, 2019; Satybaldieva, 2021). (Abosede & Azeez, 2019; Satybaldieva, 2021). Thus, providing a departure from the conventional borrowing from formal financial institutions at a high-interest rate to lending from informal financial institutions at a low-interest rate (Yunus & Jolis, 1999).

This procedure stimulated a new means of providing financial services at relatively lower interest rates to the financially excluded people. Thus, fostering poverty reduction and more

involvement of women in business (Okesina, 2021). Moreover, the Microfinance Institutions (MFIs), offer less stringent lending conditions which entail the coming together of women with similar businesses or within the same communities to form a cooperative group that meets weekly to discuss business growth and finance. The group solidarity stands in place of collateral for the loans disbursed to them. They make their repayment contributions at their meeting centers and transfer it to their credit officers (Abosede & Azeez, 2019).

Prominent scholars pointed out that microfinancing had increased women's financial independence, educational attainment, access to health healthcare services and improved quality of life (Adnan & Kumar, 2021; Okesina, 2021). They further assumed that the programs are geared toward women's empowerment because they are perceived as more credit-worthy and concerned about their family's welfare (Aggarwal et al., 2015; Engel & Pedersen, 2019). Some other scholars posit that access to microfinance by women has improved their land ownership rights, liberty and political participation.

In developing economies with weak identification management and loosened cultural ties to the communities, group members may witness difficulties tracking down defaulting members. MFIs have used various stringent strategies to ensure prompt loan repayment or recovery. Some of these strategies are shameful and cause tension for borrowers. Women traders in some parts of South-Western Nigeria aptly described the loan as "*owo komulelanta*", meaning "*resting the breasts on a hot kerosene lantern*." Figuratively, this statement means harsh loan repayment conditions, borrowers' desperation to pay back, and the dreadful consequences of not paying back (Olajide et al., 2016). One of such strategies is the peer group pressure system. With this strategy, when a group member defaults in paying back loans, the other group members risk borrowing from the microfinance bank (Engel & Pedersen, 2019).

Public shaming strategy is another method used in recent times for loan recovery. This is done through public disclosure of debtors' names, selling off defaulters' possessions for repayments, placing placards on defaulters' necks, and illegal detentions, among others (Engel & Pedersen, 2019; Bu & Liao, 2021; Olayiwola, 2021). Unfortunately, these shameful strategies strained relationships between defaulters, their relatives, friends, and community members (Bu & Liao, 2021).

Although these tactics have proved effective, as evidenced by the high repayment of debts, they could have a lasting impact on loan defaulters and, by extension, their relatives. Many become psychologically imbalanced, experiences low self-esteem, slide into depression, contemplate suicide, or encounter other mental health issues (Olayiwola, 2016; Satybaldieva, 2021). For instance, some traders in rural Bangladesh resorted to selling their kidneys and liver to repay microcredit loans. This may lead to their physical incapability for continued business (Cousins, 2013). These concerns may affect the mental well-being of entrepreneurs, and in the long run, this may have a negative trickling down effect on the business they borrowed funds to sustain.

Despite this argument on the application of peer pressures to the entire group and its accompanying members, the resulting implications on the mental well-being of these women entrepreneurs are lacking in the literature. Given this background, this study seeks to re-examine evaluate the psychological effects of loan repayment strategies on the mental well-being of women entrepreneurs in Lagos State, Nigeria. Lagos State is chosen as the focus of this study because it is one of Nigeria's most economically viable states, with more female-led businesses, and the highest number of MFIs (Olateju et al., 2017).

This study contributes to the literature by providing fresh pieces of evidence on the implications of microfinancing on women's entrepreneurship development from two distinctive standpoints. First, the study answers the empirical gaps in the literature on the psychological implications of loan repayment strategies on the mental well-being of women entrepreneurs in Lagos State. Second, it adopts a triangulation research approach to adopt mixed-method research techniques in validating the questionnaire responses with the focus group discussions.

The rest of the paper is organised as follows: Section two covers some practical conceptualisation and development of microfinance in Nigeria. Section three documents the review of the theoretical and empirical literature, while section four justifies the methodological considerations of the study. Section five discusses the empirical results, while the last section presents some concluding remarks, policy implications and further research directions on the subject under study.

Microfinancing and Women Entrepreneurial Development in Nigeria

Entrepreneurship is as old as humankind in Nigeria and has constantly been noted as the escape route from unemployment, financial independence, and the poverty trap. However, financing creative entrepreneurship and skill development have been a daunting challenge for the economically active persons in the country (Kevane & Wydick, 2001; Adeosun et al., 2021; Okesina, 2021). Access to credit facilities, insurance and other financial services has been particularly troubling for women entrepreneurs due to the perceived gaps in land ownership, religiosity, and gender discrimination. Thereby, denying them access to conventional financial services.

Considering this, the federal and state authorities have embarked on programs and policy initiatives to encourage women entrepreneurs. Some of these initiatives are the deliberate attempt to offer specialised packages for women farmers and producers in the Nigerian Enterprises Promotions Decree (NEPAD), Small and Medium Enterprises Development Agency of Nigeria (SMEDAN), Bank of Industry (BOI) and the bank of Agriculture (BOA). Despite these developmental initiatives, the informal traders have had uneasy access to credit facilities (Dornan & Portela, 2014). The financial exclusion of those in the informal sector brought about the development of microfinance institutions in providing financial access to entrepreneurs. It is also introduced to promote best financial practices amongst small and medium-scale enterprises.

Theoretical Framework

This study takes on a theoretical perspective from the shame theory, Brown (2007) provided a grounded theory to explain shame as a silent epidemic strongly associated with fear, grief, violence, anxiety, and depression. The theory linked the experiences of shame in extreme poverty conditions to increasing debt and poor mental health. For instance, Wiklander et al. (2012) found that shame is an influential causal factor of panic attacks, anxiety disorder, self-harm, and suicidal ideation. In addition, Dornan & Portela (2014) opined that the feeling of shame is expressed as a sense of social pain derived from societal expectations or actions from other community members.

Relating this to the subject of microfinance repayment strategies, some of the remedial and loan recovery processes may inflict some personal and psychological pressure to conform to the

repayment terms (Cousins, 2013; Hojman et al., 2016). Hence, the collectivist approach to the microfinance repayment model may lead to loss of confidence, fear, anxiety disorder and suicidal ideation (Engel & Pedersen, 2019).

Accordingly, Walker et al. (2013) posit that "members of the social group may correspondingly feel that it is appropriate to shame fellow members who transgress social norms to achieve the collective goal of bringing them into line...." Therefore, the Walkers' propositions suggest that poverty and financial incapability are potentially linked to shame, which could trigger psychological distress such as anxiety disorder. Since microfinance programs are supposedly targeted female entrepreneurs who are poor but economically active, this theoretical proposition presents a vital standpoint for understanding the impacts of their loan repayment strategies on mental well-being.

Review of Literature

The role of women entrepreneurs in contributing to the achievement of sustainable development goals cannot be overemphasised. Women entrepreneurship serves as a strategy for survival for the economically active poor. They also contribute to financial literacy and inclusion, thus increasing gender-based rights and equity (Subramaniam et al., 2021). In terms of improving economic outcomes, financially capable women could afford out-of-pocket expenditure, thereby increasing access to quality healthcare (O'Malley & Burke, 2017). In the same vein, investing in female-led businesses has been found to increase child's educational outcomes and physical development (Maldonado & González-Vega, 2008).

Despite the immeasurable contributions of women's entrepreneurship to sustainable development, access to finance in advancing their entrepreneurship intention has constantly reoccurred as a significant inhibiting factor (Kusi et al., 2019). As a result, several studies have established the potency of microfinance services as an antidote to the financial exclusion of women entrepreneurs. For instance, Drori et al. (2018) observed that providing financial access through microfinance institutions increases the economic and financial empowerment of women. They further noted that access to microfinance loans and savings products improves business growth and opportunities (Imai et al., 2012; Banerjee et al., 2015). Besides from the financial capabilities of women entrepreneurs, empirical studies have shown that microfinancing influences the recognition and acceptance of women's voices within the household and communities where they operate or reside (Kusi et al., 2019). Scholars further affirmed that microfinance institutions created platforms to challenge gender roles, thereby creating legitimate pathways for women entrepreneurs to acquire personal properties (Kusi et al., 2019).

Contrarily, some scholars have questioned the extent to which microfinance services benefit women entrepreneurs (Mayoux, 2000; Ashta et al., 2015). These scholars argued that microfinance loans might not exert long-term benefits to businesspeople. It could have a disastrous effect on their physical, emotional, and mental health outcomes. For example, Ashta et al. (2015) concluded that there exists a linear relationship between microfinance growth and female suicide cases in India. Some others noted that financial debt is a critical daily stressor for women in developing countries (Ashta et al., 2015).

The repayments strategies and shaming procedures employed in the recovery process of microfinance loans may explain the correlations between microfinance growth and the well-

being of women entrepreneurs. However, there appears to be a missing link on the transmission link between the exact impact of microfinance repayment strategies on the well-being of women entrepreneurs. This study, therefore, focuses on the women entrepreneurs in Nigeria. This is attributed to its identity as one of the leading countries, with over twenty-three million women entrepreneurs. Lagos State as its unit of analysis. Lagos city is selected as the unit of analysis based on its prominence as one of the large, economically driven cities in Nigeria. It has also witnessed the rapid growth of microfinance institutions and women entrepreneurs in Nigeria.

Research Design, Methods, and Ethical Considerations

- ***Study areas and sampling technique***

The study is a cross-sectional research work that investigates the implications of microfinancing on the mental well-being of informal traders across the five administrative divisions in Lagos State. The study's population consist of all women entrepreneurs in Lagos who have accessed microfinance group or individual loans. The study delimited the scope of women entrepreneur to mean women who own and run small-scale businesses with less than three employees. This delimitation to necessary to capture the actual users of microfinance institutions in Lagos state. Based on the difficulty in ascertaining the exact population of the study's unit of analysis, this study shall use purposive sampling techniques to select one hundred women entrepreneurs in Lagos State. This sampling technique allows better insights and robust results within the limited research timeframe (Saunders et al., 2016; Creswell & Creswell, 2017; Viergever, 2019). However, its' non-probability sampling nature may subject the findings of the study to issues of sample selection bias (Saunders et al., 2016; Viergever, 2019). To mitigate this, a multistage sampling approach would be used to distribute the questionnaires within the five divisions in Lagos. This implied that twenty women entrepreneurs in the Lagos divisions such as Ikeja, Badagry, Ikorodu, Lagos Island and Epe were randomly sampled.

Further, the study employed the multi-method research approach to investigate the implications of its repayments strategies on the mental well-being of Lagos women entrepreneurs. This approach combines both quantitative and qualitative data collection methods for a more robust and in-depth analysis of the study's concerns. It increases the validity of the research findings by improving data quality and gives an intensive understanding and interpretation of the quantitative responses qualitatively (Creswell & Creswell, 2017). The quantitative responses are obtained through the administration of carefully developed questionnaire items on the critical concepts of the study.

Sequentially, an interview guide containing interview questions is also developed to directly obtain the perception of the respondents on the implications of the shaming strategies on the mental well-being of women entrepreneurs in Lagos State. Ethical consent was sought from the participants, and their approval for participation was obtained from the interested participants.

- ***Questionnaire development, administration, and data collection***

The instrument items were developed based on the modification of an existing questionnaire on a short, generalised health questionnaire developed by Goldberg (1970). The questionnaire consists of 12 questions related to mental health, and a weighted score was allocated to each of

the questions. Following the works of Haque et al. (2022), this study categorised mental well-being into four categories, namely confidence loss, social dysfunction, anxiety and depression and overall psychological distress. Secondly, the other sections harvested responses on women's entrepreneurial development and the perception of respondents on the challenges of loan repayment strategies adopted by the microfinance institutions. Finally, some demographic characteristics of the respondents were also obtained. The reliability of the instrument or questionnaire items was obtained from the Cronbach Alpha test. The test revealed an alpha of 0.966 for six items measuring the mental well-being of the respondents, while 0.78 was obtained for the questionnaire items on the loan repayment strategies (See Appendix for the results).

On the qualitative aspect, the interview was conducted using a well-structured guide. The guide was a mirrored view of the questionnaire administered to the respondents. The interview was a face-to-face engagement and interview with female loans, which also double as the leaders of group loans in the market. In total, the researcher had five focus group discussion sessions representing each divisional administrative zones in Lagos State. Each session of the focus group contains 6-10 people consisting of loan group heads and other randomly selected females who have been previously engaged in microfinance loans. The discussions lasted for a minimum of 45 minutes each to allow for mutual participation of the respondents. More so, the interview was conducted in Pidgin and Yoruba languages.

- ***Estimation Techniques***

The study employs both quantitative and qualitative estimation techniques to achieve the objectives of the study. To analyse the demographic characteristics of the respondents, descriptive statistics (frequency and mean distribution) was used. The distribution of responses across the cogent questions asked was also analysed using descriptive statistics. To analyse the impact of credit repayment and recovery strategies on the mental well-being of the informal traders, the Ordinary Least Squares (OLS) technique was utilized. The OLS technique has been adopted because it is a major regression technique that forms the foundation of other numerous techniques (Mahaboob et al., 2018). It is also adequate for testing the relationship between a dependent variable and its independent variables. Each quantitative analysis was buttressed by the qualitative technique. This was done by carrying out content analysis through a narrative analytic procedure. Thereafter, triangulation was done to ensure the credibility and validity of the findings (Noble & Haele, 2019).

Data Analysis and Presentation of Results

- ***Demographic characteristics of the respondents in the study areas***

Table 1 presents the demographic characteristics of the study's participants drawn from the five administrative divisions in Lagos state.

Table 1: Demographic characteristics of respondents

Description	Frequency	Percent
Age of respondent		

	19-24 years	6	6.0
	25- 40 years	41	41.0
	41-60 years	33	33.0
	61- above years	20	20.0
Education			
	No education	19	19.0
	Primary Education	32	32.0
	Secondary Education	28	28.0
	National Diploma	11	11.0
	First Degree and Above	10	10.0
Marital Status			
	Single	11	11.0
	Married	67	67.0
	Divorced/Separated	7	7.0
	Widowed	15	15.0
Household head			
	Yes	63	63.0
	No	37	37.0
Years of Experience			
	0-4 years	22	22.0
	5-10 years	42	42.0
	10 year and above	36	36.0
Number of Dependents			
	0	7	7.0
	1-3	59	59.0
	4-6	32	32.0
	7 and above	2	2.0

Source: Authors computation from SPSS Output, 2022

The statistics show that majority of the informal traders are between young adults and full adulthood. About 41% of the sample fell between 25 to 40 years, while 33% of the participants were in the range of 41 years to 60 years. This indicated that most of the sampled audience is within the working population, active and contributing to the growth of the economy.

In terms of the level of education of the informal traders, the findings revealed that 51% of the traders have either no education or primary education as their highest qualification. 28% possess secondary education, and about 21% of them have a national diploma or first degree.

It was further established in the focus group discussion that the majority of the discussants have lower educational levels because their trade is being handed over to them by their parents, and as a result, they were not allowed to school for a long time before that started business. During the focus group discussion with the market women, one of the discussants explained her opinion about schooling as follows:

"I had the first school leaving certificate as my highest educational qualification because my mother stoped me to focus on selling charcoal in the market. The business is in our family because my mother inherited it from my grandmother,

*and my mother transferred it to me. Being the first female child of my mother, I was only allowed to finish primary school before she introduced me to the charcoal business, and since then, I have been in the business. It has been about 45 years now that I began the business." **Woman leader/55 years/ Epe/FGD005***

The table further revealed the marital distribution of the study's participants, and it was opined that most of the women in informal trading are married as they accounted for 67% of the total sampled participants. The findings also revealed that 15% are widowed, 7% are separated, and 11% of the participants are not yet married. Of the sampled group, 63% of the women assume the role of the breadwinner of their household, while 37% are not. These statistics may infer that majority of the women in informal trading are burdened by family expenditures. The explanation of one of the study's participants during the focus group discussion corroborated this assertion. Her opinion is as expressed below:

"I have been taking care of the schooling and other financial expenses of my children since their father decided to leave the house some years ago. He just left unannounced, leaving me to cater for the four children we had for each other. It has been a great burden to me because I had to go the extra mile to find food and shelter for the children".

Pepper seller/40 years/Ojo Market/01/FDG002

In a similar tone, another discussant in a different administrative division shared her experience on the prevalence of females assuming the household headship role. Her discussion was recounted as follows:

"I became the one fending for my family since my husband lost his job before the lockdown. My children have been withdrawn from private schools, and I have since enrolled them into the public primary school in my area. I have three of them in primary 6, 4 and 1, respectively".

Snacks seller/38 years/Iyana Ipaja/04/FGD001

Following the position and role of these women in their homes, the next questionnaire item enquired about the number of dependents that exist in each family. The findings suggest that about 59% of women had between one and three dependents in their household. Also, roughly one-third of the participants have between four and six dependents, while 7% have no dependent and 2% have above seven persons depending on them. Invariably, informal traders have between medium to a large number of dependents, and this may be directly linked to their head of household statuses.

Another demographic item on the number of years of experience in trading was also enquired about. The collation of the responses suggests that 78% of the traders have spent more than five years in the business, while about a quarter of the respondents has no experience or less than five years experience in their businesses. When a similar question was thrown at the group discussants, it was affirmed that many of the traders are experienced on the job. Some excerpts from the discussions are presented as follows:

“Laugh! It's been a long time since I have been in this business. I got married in the business and have used it to train my kids through secondary school. At least I should have spent nothing less than fifteen years in this business. I was trained by my aunty”. Provisions/52 years/Ikorodu main market/06/FGD004

- ***Analysis of the Mental Wellbeing of the Respondents***

The mental well-being of the respondents was accessed using a 4-Likert scale measurement to measure the perceived level of psychological distress amongst the study participants. The responses to each item range from never to always but have boundary points between sometimes and often. Table 2 presents the analysis of the extent to which the traders are mentally unwell. It was revealed that, on the average mental well-being tilted towards having anxiety disorder rather than being normal or depressed. For instance, the first question emphasises whether the participants had adequate concentration on their daily activities. It was seen that their average responses fell beyond sometimes tilting to the often and always categories. The question was also raised during the focus group discussion with the informal traders. The discussant noted that they are prone to different sorts of distractions in the market, and they do not always have maximum concentration on their daily exercises. In her words, it was narrated that:

“Different issues usually arise in this market that makes it impossible for me to have full concentration on my daily activities. Sometimes, you will just see people carrying their markets and running heather skelter. Most times, I just feel moody and fed up with the escalating costs of goods, yet my customers will be angry if I want to add additional charges for my business”.

POS dealer/36 years/Ikorodu main market/05/FGD004

Another discussant noted that there is turmoil in the market, which makes traders and customers apprehensive in the market. Her narration was recounted as thus:

“Wahala no dey finish for here oh. We usually encounter market women fighting based on issues such as debt and competition while dragging customers amongst themselves. In fact, they call themselves a variety of names to make jest of each other”. Cloth seller/31 years/Ojo/03/FGD002

- ***Analysis of the informal traders' perception on microfinance loan repayment strategies***

The perception of the Lagos informal traders was taken using nine items on a 5-point Likert scale. The scale, which ranges from strongly agree, agree, neutral, disagree and strongly disagree, is assumed to be between point 1-5 points. Table 3 presents the average cumulative perception on the extent of the loan repayment strategies based on the opinions of the respondents. The findings show a cumulative average of 1.889 for the indicators measuring the perception of the respondents. The analysis suggests that the method and approach used in collecting repayments by the loan officers are stressful, hectic and at times embarrassing.

In the focus group discussion, one of the participants reacted to the question by giving vivid examples of how hectic and embarrassing loan repayment strategies and loan recoveries are. The excerpt from the conversation is as follows:

Table 2: Perception of respondents on mental wellbeing

Indicators of Mental Wellbeing	Frequency	Percent	Mean
Concentration on daily activities			2.49
Never	6	6.0	
Sometimes	57	57.0	
Often	19	19.0	
Always	18	18.0	
Recently feeling unimportant			2.59
Sometimes	59	59.0	
Often	23	23.0	
Always	18	18.0	
Recently feeling unhappy			2.39
Never	13	13.0	
Sometimes	52	52.0	
Often	18	18.0	
Always	17	17.0	
Feeling incapable of making decisions			2.57
Never	2	2.0	
Sometimes	58	58.0	
Often	21	21.0	
Always	19	19.0	
Unable to enjoy daily activities			2.46
Never	10	10.0	
Sometimes	51	51.0	
Often	22	22.0	
Always	17	17.0	
Facing challenges			2.54
Never	10	10.0	
Sometimes	44	44.0	
Often	28	28.0	
Always	18	18.0	
Consistently under tension			2.37
Never	8	8.0	
Sometimes	57	57.0	
Often	25	25.0	
Always	10	10.0	
Unable to overcome difficulties			2.18
Never	10	10.0	
Sometimes	71	71.0	
Often	10	10.0	
Always	9	9.0	
Thinking of being nobody			1.14
Never	90	90.0	
Sometimes	8	8.0	

Always

2

2.0

Source: Authors computation from SPSS Output, 2022

“Although the loan from microfinance banks assists me in restocking my goods. It is always worrisome for me anytime I don't have complete funds for repayment. The loan officers will visit me enmass and start to create a scene in front of my shop. This usually happens during the rainy season when I experience low sales. Their approach gives me goose pimples anytime I remember I must pay my repayment”.

Fruitseller/58 years/Ketu/03/FGD003

Another respondent shared her experience on how she encountered their trouble during the period.

*“I have had an unpleasant experience with ***** microfinance bank in the past. I borrowed the money to make supplies to my customers last year and they could not pay me on time due to the demise of the owner of the company. The bank initially gave me an extension of an additional month because I collected loans with monthly repayment. After the expiration of the extension, their officials are always visiting me on a daily basis and even got to the extent of coming to my church during service to solicit help from other members of the church. It was really an embarrassing moment for me”.*

Palm oil seller/41 years/Oyingbo Market/06/FGD004.

In effect, the majority of the traders in the study area agreed that microfinance loans are helpful and improve their sales, but it becomes a challenge when they cannot repay their loan repayments as at the agreed period. The qualitative responses corroborated the frequency of strongly agree and agree on positions of the full sample size on the measure of loan repayment challenges faced by informal traders in Lagos State.

Table 3: Analysis of the perception of respondents on loan repayment strategies

Item description	Frequency	Percent	Mean
I take loans to boost my business			2.72
Strongly Agree	39	39.00	
Agree	43	43.00	
Disagree	13	13.00	
Strongly Disagree	5	5.00	
I experience some challenges in repayment			2.145
Strongly Agree	23	23.00	
Agree	36	36.00	
Neutral	4	4.00	
Disagree	32	32.00	
Strongly Disagree	5	5.00	
During low sales, I find it difficult to pay my repayments			1.96

	Strongly Agree	28	28.00	
	Agree	30	30.00	
	Neutral	15	15.00	
	Disagree	22	22.00	
	Strongly Disagree	5	5.00	
Loan officers use force to recover their loans				1.84
	Strongly Agree	45	45.00	
	Agree	31	31.00	
	Neutral	19	19.00	
	Disagree	5	5.00	
I have seen where customers are embarrassed because of default				1.76
	Strongly Agree	45	45.00	
	Agree	39	39.00	
	Neutral	11	11.00	
	Disagree	5	5.00	
Loan officers make unpleasant noises when they don't get their repayments on time				1.79
	Strongly Agree	45	45.00	
	Agree	36	36.00	
	Neutral	14	14.00	
	Disagree	5	5.00	
I was once a victim of their unpleasant behaviour				1.69
	Strongly Agree	19	19.00	
	Agree	13	13.00	
	Neutral	14	14.00	
	Disagree	38	38.00	
	Strongly Disagree	16	16.00	
Sometimes our savings are used to cover a defaulting members repayment				1.19
	Strongly Agree	19	19.00	
	Agree	59	59.00	
	Neutral	9	9.00	
	Disagree	12	12.00	
	Strongly Disagree	2	2.00	

Source: Authors computation from SPSS Output, 2022

Association between mental well-being and microfinance loan repayment strategies

Table 4 presents the empirical analysis of the impact of credit repayment and recovery strategies on the mental well-being of the informal traders in the five divisional zones in Lagos state. The findings show that loan repayment and recovery strategies as a positive and significant impact on mental well-being as measured by psychological distress. This indicated that the shaming strategies used during the loan recovery exercise have positive implications on mental torture and psychological distress amongst the sampled respondents. The qualitative focus group discussion supported the empirical analysis with the verbal opinions of the market women. One of the discussants noted that the process of obtaining a loan is not as hectic as the process of recovery.

Table 3: Association between Mental Wellbeing and Credit repayment strategies

Model	Unstandardised Coefficients		Sig.
	B	Std. Error	
Constant	1.707	.664	.012
Credit Repayment Strategies	0.633	.150	.000
Education	-0.064	.063	.307
Years of Experience	-0.453	.131	.001
Number of Dependents	0.343	.161	.036
Household Head	0.209	.085	.016

Source: Authors computation from SPSS Output, 2022

In her recount of an experience of a close friend, she narrated the story as follows:

“My friend of blessed memory obtained a sum of N100,000.00 from a microfinance bank at Abule Egba without her husband's knowledge. She could not repay the loan as when due and the officers began to mount pressure on her. Unfortunately, she even used her husband as a guarantor. This trauma led to a very tough fight between her and her husband, and she left home to scoot with some relatives. Not long after, we learnt that she attempted murder and was rescued. Later, she was found dead in her sleep, and the circumstances surrounding her death were not clear”.

Local herb seller/60 years/Iyana Ipaja Market/06/FGD001.

A direct experience was shared by one of the discussants on the impact of microfinance loan strategies on their well-being. The woman narrated that her experience with microfinance was not pleasant, and they are mainly known for using aggressive strategies to collect loans, even to the extent of bullying their customers.

“I never thought I could collect loans again after my experience with a microfinance bank. I borrowed money, and my daughter fell ill at that period, so I could not repay the loan as when due. The savings of the other members in my group were initially used to offset part of the outstanding before they began to chase me all about. I became anxious and unhappy and nursed thoughts of being unwanted in society. They also locked me in their toilet for more than 6 hours anytime they set their eyes on me. This approach really caused me to lose confidence in myself as somebody”.

Provisions seller/52 years/Yaba/06/FGD004

The triangulation of the empirical quantitative analysis and the qualitative analysis of the impact of loan repayment and recovery on the mental well-being of the respondents suggests that the strategies adopted by the microfinance institutions in recouping their loan outstanding have a positive and significant impact on the respondents' psychological distress. The findings of this analysis conform with the submissions of Engel & Pedersen (2019), who concluded that the shame of debt, although it facilitates high loan repayment, has a harmful effect on the psychosocial well-being of the defaulters and their family members in Bangladesh. The findings further align with the position of Hojman et al. (2016), who found a positive link between depressive symptoms and consumer credit in Chile.

Other factors that could influence the mental state of the informal traders in Lagos were also enquired on. The findings revealed that the years of experience in the business have a negative impact on psychological distress amongst the sampled respondents. The question was also framed during the focus group discussion, and some discussants aired their opinion on how their years of experience allowed them to understand their business terrain. The words of one of the discussants are recounted as follows:

"I have, over time, learnt the dynamics of my business and understudied the period of the year that is my peak period. Therefore, based on experience, I have rest of mind and don't put myself under unnecessary pressure during the period of low sales. I only collect to restock once I know we are entering the sales period of my goods. This will allow me to have good plans for my loan repayment to avoid their troubles".

Yam Seller/52 years/Ikorodu main market/01/FGD004

Also, the findings revealed that the number of dependents and woman household heads has a positive implication on the psychological distress of the respondents. This indicated that the higher the number of dependents in the family and the prominence of the women assuming family headship has a harmful effect on their mental well-being. In the focus group discussion, some of the excerpts on this question are related as follows:

"I usually have deep thoughts on how to cater for my children since the demise of their father. Most things their expenses are heavy on my business, and this really makes me unhappy. I most times stress myself by engaging in other activities and businesses like cooking for parties. I know I will bring food home for my children anytime I go for such an outing. It is really frustrating, to say the least. I hardly have time to rest just because I want a good life for my children".

Stationeries Seller/48 years/Iyana Ipaja/01/FGD001

This analysis corroborates the findings of Kwon & Kim (2020), who concluded that the psychological well-being of women could be hampered by their roles as the household head because it is a complex phenomenon. The study concluded that one-third of the female household heads are psychological unhealthy.

Conclusion, Policy Implications and Future Research

In the context of a mega city like Lagos, this study investigated the implications of microfinance loan repayment and recovery strategies on the mental well-being of women informal traders. The study measured mental well-being using an established health questionnaire item to determine the level of psychological distress amongst women in informal trading. The mixed-method design was employed to proffer a detailed triangulated analysis of the empirical insights and qualitative interpretation of the opinions of the women informal traders in Lagos. The study indicated that the majority of the sampled audience is within the working population, active and contributing to the growth of the economy. It also revealed that a larger percentage of the respondents are either uneducated or had primary education, while two-fifth of them possess secondary education, national diploma or first degree. Sequentially, about two-thirds of the participants are married, while others are single, widowed or separated. Following this position, 63% of the respondents are the household head and may be burdened by family expenditures. The respondent further fell into the medium and high category of the number of dependents, with an average of about 4-7 dependents per household.

In terms of the analysis of the mental well-being of the respondents, the study found that the majority of the respondents most times could not concentrate on their daily activities. They sometimes felt unimportant and incapable of making decisions. The analysis summary suggests that their responses tilted towards having mental and psychological distress but not to the extent of depression. More so, the majority of the respondents agreed to the unpleasant loan repayment or recovery strategies of microfinance institutions. However, their personal opinions could not directly attribute their experiences to the state of psychological distress.

The empirical analysis of the link or association between psychological distress and loan repayment and recovery strategies adopted by the microfinance institution is positive and significant. This indicated that their approach to recovering their credit outstanding poses a danger and potential threat to the mental well-being of the women in informal trading in Lagos State. Other factors that significantly contributed to their psychological distress are the number of dependents and the women household heads. Educational attainment was not seen as a significant factor that could aggravate mental and psychological distress. However, their years of business experience can reduce psychological distress and improve the mental well-being of the informal women traders in Lagos State.

Owing to the findings of this study, several policy recommendations are drawn. First, it was established that microfinance loans are the engine of the growth of entrepreneurship development and the society at large. Therefore, efforts should be intensified to build the institution to deliver its promises of poverty eradication, financial inclusion, and overall sustainable development goals. Second, it was established that the activities of the microfinance institutions in recovering their credit balances are harmful to the mental well-being of the informal traders. Therefore, mental health advocates should be involved in designing microfinance institutions' repayment and recovery policies. Addressing mental health issues in the shaming and labelling attitudes of microfinance institutions would have a long-term implication in promoting women entrepreneurship in Lagos state and the world.

This research work makes original contributions to the ongoing discussions on the implications of mental health on entrepreneurship development by focusing on the often-neglected population group in society. The informal sector is vital to entrepreneurial and economic development because they contribute to employment generation, poverty reduction and nation-building. They produce excellent opportunities for new business development and industrialisation, thus

providing a safe platform for demographic transition into the green economy through entrepreneurship development.

The study is limited to the women in the informal sector of Lagos state; therefore, the findings may be generalised with caution. This limitation thereby provides opportunities for the advancement of the research on mental well-being in other sectors of the economy. More importantly, the dynamics of mental well-being may be further decomposed into the different forms of mental illness to be able to understand the extent to which the microfinance recovery pattern impacts other mental health conditions.

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Innovative Solutions To The Challenges Of Family Business In Scaling Over 2nd Generation In Nigeria

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Abstract

Family business has attracted more attention in recent times, as a result of its immense contribution to entrepreneurship and national development. Several Nigerian businesses have grown from single ownership (sole proprietor) into fully fleshed family-owned businesses with more personnel, better decision making, management style and resources to effectively carry out business activities. Most family businesses adopt innovation as a competitive strategy in the marketplace. Convenient sampling method was used for this research work. The researchers employed a multi-case study using a semi-structured interview, observation. An in-depth study of five family businesses was randomly selected in five of the six Geopolitical Zones in Nigeria. The qualitative data collection method was used (semi-structured interviews and observations). The CEO's and management team of the five businesses were interviewed. The semi structured guide consists of 30 questions. Secondary data such as trade journals, past records, articles and textbooks were collected. The data analysis was based on the title of the study (Innovative Solutions to the Challenges of Family Business in Scaling Over 2nd Generation in Nigeria). The interviews were tape recorded and transcribed. Role of innovation in family business, factors preventing growth of family business were discussed to arrive at the study objective of this study. Today's business environment is highly dynamic, complex and fiercely competitive, it is therefore of great importance for family businesses to be innovative, willing to adapt to change, creative and ready to employ strategies that will position the business at a competitive advantage in the marketplace. The focus of this paper was to examine the concept of family business and innovation, the role of innovation in building a successful family business, factors inhibiting the growth of family business and the prospect of a family-owned business. It was concluded that despite awakening of Nigerian towards family business, innovation is important to the growth and development of family-owned business, a successful performance of family-owned businesses is as a direct product of firms' innovativeness. Therefore, in order to ensure family-owned business scale over to 2nd generation all efforts of the founders should be comprehensive and trans-generational in nature. The following recommendations were suggested as follow: government should provide infrastructural facilities so as to enable family businesses thrive in the complex and competitive global market; financial management is the main pivotal to every organisational success. It is therefore of great necessity for family business owners to employ the services of a financial manager/accountant or auditor to regularly check the financial status of the business and also manage the accounting department and government and financial institutions should also provide start-up capital, loans, grants as well as other financial assistance needed to successfully operate a family business.

Keywords: Family Business, Innovation, Marketplace, Problem, Prospect.

Introduction

The concept of family business in Nigeria has become significantly attractive, its root in sole proprietorship form of business; however, the realisation of the full potential of the prevailing opportunities associated with family business depends on a variety of factors. Family business in most instances grows from a one man business into a business controlled, managed and operated by two or more family members. Active participation of more than one member of a family which result in controlling above 50% of the total assets of the company/business is what makes the business a family owned business. Family business is predominately grounded on the idea of ensuring the business ownership remains within the close control of family members over a successive generations (Chua, Chrisman, & Sharma 1999). The acceptability of family business as a culture across the globe is the outcome of dominating role of family members play in the daily running and operations of various businesses, thereby leading to a leadership system proposed by family members.

Innovation is catalyst for business survival, growth and development. Micro, Small and medium scale as well as large scale businesses leverage on innovation to remain competitive in the marketplace. Family businesses recognise the necessity for innovation in their product development, service offering and marketing (Katila, 2002; Nerkar, 2003). Innovation makes it possible for family businesses to flourish despite fierce competition from large businesses, dynamic business environment and complexity. Family business and innovation has a close relationship, however, there is a debate concerning family business and innovation (Mori, 2014) and without innovation most family businesses would not outperform expectation; without innovation, family business cannot be sustained over time (Zahra, 2005; Carnes & Ireland, 2013).

Concept of Family Business

A family is referred to as a permanent body consisting of individuals who are bound together by “obligation” rather than by contract as it exist in corporate organisations (Lumpkin, Cogliser, & Schneider, 2008). Historically, the family was traditionally made up of father, mother and children. In some rural and typical ethnic societies, extended family members made up of brothers, sisters, cousins, uncles, aunties, grandparents are important when defining family. Membership of the family unit is mainly by biology/blood and marriage. However, modern science and the legal system have introduced other means through which individuals are admitted into the family unit.

A family business is defined as a firm that is dominantly owned, managed, governed/controlled by a family, with the intention to retain the ownership and control of the business within the family across generations (NOUN, 2017). Also, Posa and Daugherty (2014) defined a family business as an enterprise in which two or more family members own fifteen percent or more of the shares, family members are employed in the business, and the family intends to retain control of the firm in the future.

The distinctiveness of a family business from other forms of businesses is defined by the following characteristics: the presence of a family in the firm; the overlap of family roles in ownership, management and governance which may prompt its decision to transfer the firm to the next generation; tacit knowledge transferred from one generation to the other; long-term orientation; and strong family values (NOUN, 2017).

Owners and managers have diverse and mixed motives economic and otherwise that fuel decision-making processes in their family business. These motives may promote or hinder trans-

generational business stability. Statistics presented by Coleman (2011), Stalk and Foley (2012) found 30% of North America's family-owned businesses make a successful transition to the second generation, 10% to the third generation, and a meager 3% continue through the fourth or subsequent generations. Family-owned businesses are reported to constitute up to 60% of GDP in the United States, constitute 35% of Fortune 500 businesses, generate an estimated two-thirds of employment in the United States, and create about three-quarters of new jobs. However, a staggering two-thirds lack a viable succession plan and/or process (Coleman, 2011; Eddy, 1996). Family businesses (FBs) may display some fragility during transgenerational transfer. Bocatto et al. (2010), claimed that the paucity of an efficient succession planning process is the leading determinant of transgenerational family business failure and suggested that family business transitions tend to be more challenging and have broader impacts on business continuity. The general assumption among family business proprietors is that their children and wards would succeed them as organizational leaders regardless of the individual's knowledge, skills, abilities, interest, or passion. Stalk and Foley (2012) found that certain family business founders are susceptible to handing over the reins of business operation to their children or wards, regardless of the successors' interest, skills, experience, or training. They claimed that this sense of entitlement, belonging, or ownership often creates a fallback option of returning to the family business if their other interest areas fail. Onuoha (2013a), along with Musa and Semasinghe (2014), further attributed the failure of transgenerational succession to factors such as managerial capabilities, technical skills, business knowledge, inheritance rights, the absence of contingency plans, founders' feeling of infallible health, and founders' fear of losing control.

Family Business in Nigeria

According to Ogundele et al. (2012), family business succession in Africa is an evolving area for researchers. Countries such as Nigeria, Kenya, and Tanzania are understood to have a high number of small to medium family businesses with prominent Nigerian-based family businesses such as the Dangote group of companies, Globacom, the Okada Group, the Folawiyo group, the Dantata Organization, the Eleganza group, and Ibru Organization, each of which are located in Nigeria; the Mohammed Enterprise Limited (METL) in Tanzania; the Bidco Oil Refineries in Kenya; the Madhvani Group in Uganda; and the Kenyatta Family. More often than not, there is a paucity of effective succession plans among family business proprietors in Nigeria. Ogundele et al. (2012), along with Onuoha (2013b), noted that 94.2% of family business owners in Nigeria lacked an effective succession plan or process. They also found that family business proprietors in Nigeria either pass away in active service or are compelled to give up work on medical grounds, and this happens without there being an effective succession planning system or process.

This research indicates that promising family firms in Nigeria may be susceptible to business failure when their proprietors resign either voluntarily or under duress or suddenly pass away; one prime example is the late business leader Moshood Abiola, who was once believed to be the wealthiest man in Africa and ran a conglomerate of businesses, which included real estate, retail, a chain of newspapers, an airline, and fish farming. After his death, the business empire collapsed completely and has no functional business today (Chima, 2018). On the other hand, family businesses such as Danatata, Dangote, Diamond Bank, and First City Merchant Bank have had successful transitions and are still in existence and vibrant in their respective industries (Nsehe, 2014). Ogundele et al. (2012) found succession laws in Nigeria are entwined with a

heterogeneous culture and conversely native laws and customs thereby limiting successful family business transgenerational succession.

Major Challenges of Family Business in Nigeria

Family business in Nigeria face several challenges that limits their growth and steady development, Adedeji in Ayodele et al (2018) asserts that the challenges inhibiting family business are both internal and external. Among several challenges Ayodele et al (2018) highlighted some as follow:

(a) Lack of infrastructural facilities

Infrastructural facilities have over the years played a huge role in preventing the growth of family business in Nigeria. A significant number of family businesses have collapsed as a result of lack/poor infrastructural facilities which has impacted there business activities negatively. Oraka, (2013) suggest that deficiency in infrastructural facilities obstruct the growth of innovation in family business. This factor makes large percentage of family businesses to focus less on innovation in their business pursuit. The state of power supply, road network, water supply etc hamper family businesses generally in Nigeria.

Infrastructural facilities can break or make a family business irrespective of the size, structure or location of the business. Family businesses require facilities which in most cases can only be provided by government as a result of the capital intensity of the facilities.

(b) Poor Financial management

Financial management is very common in Nigeria, despite this, family businesses in some instances fail to keep proper financial records. Family business can only focus on innovation when such business is keeps proper financial record and as such it reflects in the growth and progress of the business. Most family businesses do not make financial management a priority especially when the family business is at a micro level or it's a small scale business. Ejemobi (2013) argued that family business owners need to properly manage the financial record of their businesses if they want to be innovative while carrying out business activities.

(c) Funding

Despite the increase in number of family businesses in Nigeria, funding still remains a key setback facing family businesses generally. Several family businesses have gone into extinction as a result of lack of funds to ensure their continuity. The business of Nigeria has recorded underperformance in its contribution to economic growth and development as a result of lack of funds available to family businesses across the country (Adisa, Abdulraheem, & Mordi, (2014). Government and her parastatals over the years have failed to make available fund in form of grants, loans with very single digits to family businesses. Kliein (2014) in his findings explained that most family businesses are started with personal saving or loans from friends.

(d) Competition

Family business in most cases faces fierce competition from foreign companies. Nigeria family businesses are thrown into unhealthy competition with foreign product which in most cases the goods are produced in countries where they have low cost of production advantage (Onuoha, 2013). Unhealthy Competition inhibits the growth and development of family business in Nigeria by resulting into decline in sales of domestic products.

(e) Inadequate Preparation and Development of the Next Generation

Family business proprietors who fail to effectively prepare the next generation set the stage for business failure at some point in the future. Foster (1995) argued that next generation successors may experience when they have not thoroughly internalized all aspects of the family business. Besides, family business proprietors do not stand down or prepare a successor in a timely manner. Regrettably, this has the potential to lead to successors who lack business sense, are uninterested, inexperienced, and unskilled to successfully run the business. According to Kets de Vries (1996), some successors have a strong sense of fear of failure that incapacitates them and prevents them from taking calculated and business-savvy risks to facilitate business continuity and growth. One such example is M.K.O. Abiola, the democratically elected presidential winner of the famous June 12, 1993, election who was incarcerated by the then military government and later died in prison. Abiola's successful group of companies declined steadily until it completely fizzled out after his demise. Again, it may be said that Abiola did not adequately prepare any of his many children to take over the reins of power and foster business continuity.

Innovative Solutions to the Challenges of Family Business in Scaling over 2nd Generation in Nigeria

a. Succession Plan

Innovation has made it possible for several family businesses to embark on long term planning. Succession planning is a major concern for most family businesses, as such, these businesses employ innovation in planning the organisational hierarchy and who takes over from member/s of top management in case of death or incapability. In a study of 10 Zimbabwean family businesses, it shows that 6 out of ten businesses do not have a succession plan, while only 3 of the ten business owners engaged their successor in activities that would prepare them for the forthcoming responsibilities (Maphosa, 1996).

Innovation within family business, enables the business owner and other members of management prepare effectively for unforeseen events and also train successor in line with the demands of the business.

b. Build Competitive Advantage

Innovation is a vital instrument in developing competitive advantage over other businesses within the same industry and outside industries. Innovation is a catalyst that drives business to achieve long-term objectives. Innovation makes businesses more attractive, drives organizational change as well as builds competitive advantage of the business. Innovation affects the culture of the business which in turns puts the business at a competitive position.

c. Promotes Product Innovation

Family businesses sometimes use product innovation as competitive strategy to gain an advantage. Businesses which fail to innovate their individual products will in no time discover those products have become obsolete. Family businesses make use of new products with different technologies, methods and offer greater customer benefits than existing products (Khaled, Aboulnasr, Om, Edward & Rajesh 2008). Product innovation includes tangible produced goods or intangible services that have an impact on the quality of people live. The

perspective of product innovation is that the uniqueness of the new product will persuade prospective customers to purchase it, and this will in turn achieve organisational goals.

Product innovation occurs regularly in environment characterised by high level of uncertainty and competition. The dynamism of the business environment is reducing the life cycle of products gradually; managers now need to respond through product innovation in order to sustain such product in the market.

Incremental product innovation focus is improving the features of an existing product, while radical product innovation is aimed at creating an entirely new product.

Methodology

As a result of lack of inclusive list of family business in the Nigeria Bureau of statistics or other related government agencies, it is difficult to carry out a study on family business, however the researchers employed the use of convenient sampling method for this research work. The researchers employed a multi-case study using a semi-structured interview, observation. An in-depth study of five family businesses was randomly selected in five of the six Geopolitical Zones in Nigeria. The names of the firms were not disclosed as a result of the agreement between the researchers and the businesses. Jukka, Chetty, and Arto (2014) stated that case study can be selected in instances where the phenomenon under study is clearly noticeable.

The qualitative data collection method was used (semi structured interviews and observations). The CEO's and management team of the five businesses were interviewed. The semi structured guide consists of 30 questions. Secondary data such as trade journals, past records, articles and textbooks were collected.

The data analysis was based on the title of the study (Innovative Solutions to the Challenges of Family Business in Scaling Over 2nd Generation in Nigeria). The interviews were tape recorded and transcribed. Role of innovation in family business, factors preventing growth of family business were discussed to arrive at the study objective of this study.

Results

The research was analysed using a qualitative data analysis. The following were responses from the five founders on the question major factors inhibiting family business.

'Government policy is a major setback for family business in Nigeria' one of the interviewees expressed her concern for family business, she made the researchers understand that government policies do not favour family business rather these policies are in favour of foreign products that flood the Nigerian market. 'Innovation is important for family business, but in most cases, we do not have the resources to be innovative as such' 'Innovation cost huge money which we don't have'. Two family business founders made emphasis to lack of finance to carry out most indigenous innovative ideas that can change a lot in the business sector. They both expressed the importance of finance to the growth of any venture.

'Competition from foreign products prevent the growth of family business' one of the founders stressed that competition from foreign products is a major setback confronting family business in Nigeria, He went further to state that this competition is made possible as a result of lack of government interest in growing the Nigeria family business.

Discussions

Evidence from this study revealed that innovate solutions will make it possible for family businesses to engage in succession planning, innovation leads to competitive advantage as well as it promotes product innovation in manufacturing industries. Although most family businesses in Nigeria do not take full advantage of the accrued benefits innovation brings to family owned businesses, this is as a result of combination of factors which impedes family business success story within the country. Government policy do not fully support the existence of family business, empirical evidence shows that government rather support importation of foreign products via their policies that favours foreign products as against locally made products. Funding, poor financial management and infrastructural facilities stands as forces preventing the growth of family business in Nigeria. Ejemobi (2013) stressed the importance of up to-date record keeping in family business and how it has a way of elongating the lifespan of the business, also the findings in this work resonates with Oraka (2013) argument that insufficient infrastructural facilities curtail the success of Nigeria businesses. The authors of this study identified: Succession plan, building a competitive advantage, and it promotes product innovation as role innovation in building successful family business and on the other hand, identified lack of infrastructural facilities, funding, competition and financial management as factors that inhibits family business in Nigeria.

Conclusion

Despite awakening of Nigerian towards family business, innovation is important to the growth and development of family business, in support, Olaore, Oyeleke, & Oluwafemi, (2014) used 5 family firms as a case-study, they came to a conclusion that successful performance of family businesses is as a direct product of firms' innovativeness. It was also concluded that in order to ensure family business scale over 2nd generation all efforts of the founders should be comprehensive and trans-generational in nature.

Recommendations

The following recommendations were suggested as follow:

1. Government should provide infrastructural facilities so as to enable family businesses thrive in the complex and competitive global market.
2. Financial management is the main pivotal to every organisational success. It is therefore of great necessity for family business owners to employ the services of a financial manager/accountant or auditor to regularly check the financial status of the business and also manage the accounting department.
3. Government and financial institutions should also provide start-up capital, loans, grants as well as other financial assistance needed to successfully operate a family business.

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Assessing Skills and Profitability ratio of Entrepreneurs among Small and Medium Scale Enterprise in Mainland Local Government Area of Lagos State

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Abstract

Small and medium scale enterprises (SMEs) are generally regarded as the engine of economic growth and equitable development in developing economies. This is not far-fetched as they create 85% of employment opportunities and contributed over 70% to the gross domestic product (GDP) of the developing nations. However, the existence of these SMEs has been threatened by their inability to remain viable and sustainable in the competitive market as six out of every ten fold up after one year. The study, therefore, aims at assessing the skills and profitability ratio of entrepreneurs among small and medium scale enterprises in the Mainland Local Government Area of Lagos State. Three research questions and two hypotheses were raised and tested to guide this study. A descriptive survey research design was employed for this study. The population of the study comprised 1200 small and medium-scale enterprise owners in Mainland L.G.A of Lagos State. A simple random sampling technique was used to select 103 SME owners. A structured questionnaire titled: Small and Medium Enterprise Assessment Skills Scale was used to collect data for the study. The data collected were analyzed and presented using simple percentages, mean and standard deviation. The hypotheses were analyzed using Pearson Product Moment Correlation Coefficient @ 0.05 significant level. Findings obtained from the study revealed that; a significant relationship exists between technical skills and the profitability ratio of SMEs; there is a significant relationship between business management skills and the profitability ratio of SMEs among others. The study concludes that entrepreneurial skills are essentially required if SMEs are to thrive and become viable in Nigeria as this will enhance profitability ratio. Based on the findings and conclusion reached, it was recommended that SME owners should prioritize personal development to acquire entrepreneurial skills through higher education institutions and other training institutes to build their business capacities for viability, sustainability, and ultimately, profitability among others.

Keywords: Assessing skills, Business management, Entrepreneur, Profitability.

Introduction

Generally, Small and Medium Enterprises (SMEs) play very important role in the development of nations, especially in an emerging economy such as Nigeria. They play a significant role in national economy by providing various goods and services, creating job opportunities, developing regional economies and communities, helping the competition in the market and offering innovation. SMEs are generally regarded as the engine of economic growth and equitable development in developing economies. SMEs are labour intensive, capital saving and

capable of helping create most of the one billion new jobs the world will need by the end of the century. Small and medium scale enterprises are largely viewed as an indispensable tool to any nation's economic growth and they are regarded as justifiable means that propel development globally. SMEs are labour intensive; as much as they are capital saving business ventures. They are capable of making people self-reliant and generating billions of new jobs globally (Abeh, 2017). They are also observed as the key drivers to economic growth and poverty reduction (Agwu & Emeti, 2014).

SMEs are significant parts that links, strengthen and enhances the development of the countries. Enterprises vary in sizes, structure and complexities, but are generally characterized by the utilization of resources towards the attainment of predetermined ends. Broadly, enterprises are categorized into micro, small, medium and large organizations. Micro enterprises typically include street vendors, petty/artisanal business etc. Micro enterprises are not expected to fulfill stringent regulatory requirements and largely operate in the informal sector of the economy especially in developing economies. In contrast, small and medium sized enterprises (SMEs) are larger in size, demands relative formal structure, are impacted substantially by business environmental factors and accounts for a considerable percentage of all businesses in the "formal sector" of an economy.

Brain levy (1993) explained that the study of entrepreneurship has relevant today not only because it helps small businesses or entrepreneurs better to fulfill their personal needs but also because of the economic contribution of the new ventures. Levy therefore, sees SMEs as a positive force in Economic growth and development. He stresses further by summarizing the importance of SMEs to include ensuring rapid development, increased utilization of local resources, provision of training ground for indigenous managers and semi-skilled-workers, indigenous technology and raising the living standard of rural dwellers and so on.

The campaign against dependent on governmental work or better put, white-collar job is ongoing everywhere and this had led many youths and aged to become an unexpected Entrepreneur and SMEs owner. There are many Small and medium Scale Enterprise in Mainland Local Government Area of Lagos State, this includes but not limited to the following, D'fitted Apparel, Dough Delight Bread, Food Village, FCE(T) Bottled Water, Unilag Bottled Water, Balinga Communications and AT & T Printing Service. D'fitted Apparel is fabric store that specialized in selling different clothing materials such as senator wears, Kampala, cashmere, lace etc. and as well sewing of any unisex styles, He is known for quality service, he has about ten apprentices and employ five stylist who help the owner in case there is more work on ground needed to be collected by customers. D'fitted Apparel is located at Afolabi Brown street, Chemist Bus stop in Mainland Local Government of Lagos State.

Dough Delight Bread is a popular Bakery that has been in existence for over twenty years known for sumptuous well baked bread with a good branding and packaging, it has about eighteen casual staffs who specializes in each unit of production stages it is located at Makoko in Mainland L.G.A of Lagos State. Food Village is a cafeteria enterprise venture into selling of raw foodstuff. Cooked food and snacks and also engage in delivering packaged food and snacks

within and outside the school and also covers feeding at wedding, birthday and other events with good packaging idea and marketing strategy with over 15 casual staff. It is located inside Yaba, school of technology which is also in Mainland L.G.A of Lagos State.

FCE (T) Water is a sachet water and bottled water producing industry with vast turnover, it has six departments with different Heads, it is located close to the old library in Federal College of Education (Technical), Akoka in Mainland Local Government. UNILAG Bottled Water is also a table water producing industry, it is the most currently consumed water in University of Lagos with staff strength of 35 who run shift duty, located at New Hall close to Access Bank in the university .It is a small scale enterprise segmented for the university to make and maximize profit.

Balinga Communications is a business tycoon who is into sales of recharge cards/VTU vending, cable subscriptions, online and electricity bill payment, bank account opening and other transactions with over 40 staff, it is a medium scale enterprise located at Gbagada, and has other annexes within Mainland Local Government and Ogun state. AT & T Printing service is a well-known printing press that specializes in all kind of printing works, typesetting, photocopy, monogram, passport photograph and souvenir located in Abule-Ijesha of Mainland LGA of Lagos State with staff strength of 18 workers and has other branches in Somolu, Yaba Tech and Iwaya of Lagos State.

There are skills required of these aforementioned SMEs to excel in the world of competition, this includes Managerial skills, Creativity skills, Communication skills, Accounting skills, Marketing skills, Soft skills and Technical skills to mention but a few. Marketing skills enables SMEs owners to be acquainted with knowledge of how to increase their market shares. Communicational skill is one of the skills required to be a successful entrepreneur and this involves listening to customers adequately to understand their yearning and needs and putting it into consideration for the satisfaction of customers. Accounting skills will enhance and promote managerial stability of SME's owners as they will become well informed in keeping the fundamentals accounting records for daily activities of business venture. Creativity skill helped many of these SMEs owners in bringing new ideas there by bringing new incomes. Schiuardi (2001) study in European industries show a larger average firm size is associated with faster innovative rates.

Profitability increase is a soul of every business including the large scale Enterprise. All these skills have helped the various SMEs owner highlighted in improving their profitability ratio, marketing strategies employed by the Entrepreneurs had helped in maximizing profit for small medium Scale Enterprise through various marketing tools such as exhibition, marketing segmentation, branding, packaging etc. Advertising skills, creating awareness of the product to existing customers and new customers will increase the sales turnover and there by improve the profit margin; media advertising is the main platform for most SMEs nowadays. Apart from skills, educational background of entrepreneur shows a great influence on their performance and profit.

Statement of Problem

Small and medium scale enterprises (SMEs) are generally regarded as the engine of economic growth and equitable development in developing economies. This is not far-fetched as they create 85% of employment opportunities and contributed over 70% to the gross domestic product (GDP) of the developing nations. However, the existence of these SMEs has been threatened by their inability to remain viable and sustainable in the competitive market as six out of every ten fold up after one year. If this trend continues, the contribution of SMEs to the Gross Domestic Product (GDP) will continue to reduce drastically and subsequently exacerbating youth unemployment, crimes and violence in the society. It seems that most of these SMEs owners lack the required entrepreneurship skills and competencies that can make them operate a sustainable and successful businesses. It is against this backdrop that the study assesses the skills and profitability ratio of entrepreneurs among small and medium scale enterprises in Lagos State.

Purpose of Study

The purpose of the study is to assess the skills and profitability ratio of entrepreneurs among small and medium scale enterprises. Specifically, the study aims to:

- i. To examine the extent to which business management skills affect the profitability ratio of SMEs owners in Lagos State;
- ii. To determine to what level do technical skills of SMEs owners affect their profitability ratio in Lagos State;
- iii. To examine how entrepreneurial skills affect profitability ratio of SMEs in of Lagos State.

Research Questions

The following research questions will guide the study;

- i. To what extent do business management skills affect profitability of SMEs owners in Lagos State?
- ii. To what level do technical skills of SMEs owners affect their profitability ratio?
- iii. How do entrepreneurial skills affect profitability ratio of SME's owners in Lagos State?

Research Hypotheses

H₀₁: There is no significant relationship between business management skills and profitability of SMEs owners.

H₀₂: There is no significant relationship between entrepreneurial skills and profitability ratio of SME's owners.

Literature Review

Concept of Small and Medium Scale Enterprise (SME)

Small and medium enterprise is an instrument for the growth of any Nation. According to Ayyagari (2007) and World Bank (2001), small and medium scale enterprises have been long

recognized as an instrument of economic growth and development. Buckley (2004), contend that the definition of small and medium scale enterprises varies according to context, author and countries". In countries, such as USA, Britain and Canada small scale business is defined in terms of annual turnover and the number of paid employees. Ekpeyong and Nyang, (2002), in Britain for example small scale business is conceived as that industry with annual turnover of 2 million pounds or less with fewer than 200 paid employees. In the case of Japan, it is conceptualized as type of industry, paid up capital and number of employees. Consequently, small and medium scale enterprises (SMEs) are defined as those manufacturing with 100 million yen paid up capital with 300 employees. Those in wholesale trade with 300 million paid up capital with 100 employees while those in retail trade with ¥100 million paid up capital with 50 employees. In the case of Nigeria, hardly do you see a clear-cut definition that distinguishes between small and medium scale enterprises.

The National Directorate for Employment (NDE) (2016) concept of a small scale industry has been fixed to a maximum of N35,000. In other words a business unit of not less than \$240 dollar is characterized as a small scale business in Nigeria, that may not be the same in other countries, but that classification may be useful in developing countries, because of the low capacity of its small scale industry. That is why Kozak (2007) argues that we cannot explain small and medium scale enterprises (SMEs) other than to say they are companies with metric (usually number of employees or annual turnover that fall below certain threshold). It is these indicators, number of employees and or rate of turnover that tend to define the context within which different countries and economics situate their understanding of small and medium scale enterprises. This is to say that, even though small and medium scale enterprises (SMEs), is definable with much or less the same indicator (No. of employees, rate of turnover etc.) the indicators are not the same in all countries all the time. In other words, while number of employees and rate of turnover are the indicator, the number of employee and total amount of turnover for defining small and medium scale enterprises (SMEs) in different countries are certainly not the same. For instance, the employee requirement Britain is 200, with 2million pound turnover, the same cannot be said of Japan with 100 million Japanese yen as paid up capital and 300 paid employees. While in Nigeria, the paid employees are usually not considered important, but more importantly is the turnover of 500,000 especially for the purpose of commercial and mortgage bank loans.

Managerial Skills of SMEs Owner

There are skills involves in managing the affairs of any economy activities and since Small and Medium Scale Enterprise is an economy activity therefore it requires skills just like an entrepreneur. According to Do Paco & Luminar, (2011) entrepreneurship education can develop skills for entrepreneurship success, and that entrepreneurs will need it in the future. Some entrepreneurs prefer to rely on themselves believing that they have the skill need it to be successful, but once they discover training programs new horizons emerged to their business success and they find teachable skills (Wu and Jung, 2008).

The reason behind the business failure mainly comes from the lack of skills (Dowling, 2003; Zimmerer and Scarborough, 2003). According to Lazear (2004) that individuals who have work experience and educational background, they got a set of various skills become more likely entrepreneurs and make better business progress than others. Regarding the skills behind successful entrepreneurs, each researcher has stated different set of skills. Martin (2015) stated that according to the OECD (2014) annual report, three sets of skills were identified technical skills, business management skills and personal entrepreneurial skills. The technical management includes written and oral communication, technical implementation skills and organizing skills (Henry, Anthony and Olalekan2005). Beside that it includes environment monitoring, problem solving and interpersonal skills (Martin, 2015). Interpersonal skills were defined by Rungapadiachy (1999) are skills which one needs in order to communicate effectively with another person or a group of people. Regarding environment monitoring, Aguilar (1967) define it as the way which management of the business gather important information about events occurring outside the company to help in assessing the future course of the business.

The business management skills include decision-making, setting goals, human resources management, finance, accounting, marketing, customer relations, negotiating, growth management and compliance with regulations (Martin, 2015) stated that management skills are human resources managing skills, financial management skills and general planning skills and (Henry et al., 2005) stated that managerial skills are marketing, accounting and decision-making. Moreover, these skills can be grouped into four namely, Business management skills, Technical skills, personal entrepreneurial skills and creative skills.

Business Management Skills : decision making skills, goal setting skills, HRM skills, finance and accounting skills, marketing skills, customers relation skills, negotiating skills, compliance and regulation skills.

Technical Skills: written/oral communication skills, organizing skills, technical implementation skills, environment monitory skills, problem solving skills, and interpersonal skills.

Entrepreneurial Skills: risk taking skills, personal emotions skills, personal health skills, family relation skills, general planning skills, and time management skills.

Creative skills: making connections skills, asking questions skills, making observation skills, networking skills, and experimenting skills.

In assessing the importance of business management skills, Thornhill and Amit (2003) they found that the failure of younger entrepreneurs is linked with deficiencies in business management skills. In related study, Landwehr (2005) stated that business management skills are important in the later stages of the business to keep it running.

Frese and Gielnik (2014), since business situations are very complicated, unpredicted and changing requirements during the business procedure, entrepreneurs must build a specific personality features to be capable of facing this situation, the entrepreneur must act as a leader, investor, and inventor, accountant, marketing specialist and top sellers.

Thomas and Mueller (2000) stated that the main difference between entrepreneurs and regular employees is the risk-taking attitude, also the big difference between being and entrepreneurs

and being a professional manager in business is that entrepreneurs personally take the risk of loss or profit. However, as stated by Erdem (2001) and Littunen (2000) being an entrepreneur is not only about facing the risk of loss, but by facing the risk of career opportunities, emotional condition, health and family relations, therefore the common sense that when a person decides to be an entrepreneur, he/she must accept all the risk with it. Bolton and lane (2012) stated that innovation and risk taking are strongly related to that intent to become SMEs owner.

Entrepreneurial Skills on Small and Medium Scale Enterprises (SME's)

Entrepreneurial skill is the ability to combine both the innate characteristics and other resources, which depends on the individual's entrepreneurial skills (Moska, 2013). Entrepreneurship is a characteristic embodied in entrepreneurs' mind that help establish businesses, generate employment, create new products and services, stimulate innovation and improve welfare (Souksavanh, 2014). Entrepreneurial skills are the skills, which complement the entrepreneur to analyse situations, opportunities and environments, and assist the entrepreneur/manager to organize/manage and assume the risk and reward of a business or enterprise (Gakure, Ngugi, Waititi, & Keraro, 2013). According to Afolabi and Macheke (2012), skills essential for the success of SMEs include motivation, ability to gather resources, financial management, human resource management, marketing and technical skills. A weakness in a particular skill is associated with a decrease in the overall performance of the venture.

Skilled entrepreneurs have all it takes to go after their dreams and reach their main goals. They have a way of surviving the tough situation unlike those who have totally no experience or lack important skills such as managerial, accounting, negotiation and customer relationship skills (Wamoto, Ayuma, & Kimani, 2016). The owner of a business is a key factor in business performance. The relationship between the owner of a business and its performance indicated that entrepreneurial minded owner grow their business to maturity due to their administrative competencies (Sarwoko, Surachman, & Hadiwidjojo, 2013).

Small and Medium Enterprise and Profitability

Considerable number of studies approach the issue of profitability of the SMEs both at microeconomic and macroeconomic level and proves the importance of managerial skills in terms of improved results and competitiveness of companies. This was also the main concern of managers and entrepreneurs because the company's profitability is directly correlated with the SMEs chance of survival. Company's performance reflects the effectiveness and efficiency of resource utilization and ultimately contributes to the economic development of the country. Recent studies use regression analysis to shape the company's performance using as functional dependency the economic and financial indicators. Modelling of the economic performance aims to increase the efficiency by improving the efficiency by improving the interventions and adaptability of SMEs in different economic cycles (Campbell & mosset., 2001). Recent literature examines the profitability of companies in different countries and sectors of the economy through indicators such as return on total assets (Deloof, 2003), financial return (Padachi, 2006),

invested capital return on assets (Narware, 2010). In these cases, the elements considered in the analysis of profitability are return on investment, year of operation and break even analysis.

Methodology

A descriptive survey research design was employed for this study. This design enables the researcher to obtain information regarding the skills and profitability ratio of entrepreneurs among small and medium scale enterprise owners. The population of the study comprised 1200 small and medium-scale enterprise owners in Mainland L.G.A of Lagos State. A simple random sampling technique was used to select 103 SME owners. A structured questionnaire titled: Small and Medium Enterprise Assessment Skills Scale (SMEASC) questionnaire was used to collect data for the study. The questionnaire was divided into two sections; where section A was the demographic data of the respondents, while section B was elicited information on assessing the skills ratio of enterprise owners. The data collected were analyzed and presented using simple percentages, mean and standard deviation. For the research questions, any item with a mean rating of 2.50 and above was said to be agreed upon and any item with a mean rating below 2.50 was said to be disagreed upon. The hypotheses were analyzed using Pearson Product Moment Correlation Coefficient (PPMC) at 5% level of significance. The Statistical Package for Social Sciences (SPSS) version 24 was used to aid the analysis.

Analyses

Answers to Research Questions

Research Question 1: To what extent do business management skills affect profitability of SMEs owners in Lagos State?

Table 1: Business management skills and profitability of SMEs

ITEM	VLE	LE	HE	VHE	Mean	St. Dev.
Taking decisions without interference from third party improve SMEs profitability.	5 (4.90%)	15 (14.6%)	54 (52.4%)	29 (28.2%)	3.04	0.791
Goals setting skills of SMEs owner can increase its profitability ratio.	0 (0.00%)	6 (5.8%)	32 (31.1%)	65 (63.1%)	3.57	0.604
Ability to market the product very well by SMEs owner increase the SMEs profitability ratio	6 (5.8%)	6 (5.8%)	34 (33.0%)	57 (55.3%)	3.38	0.842
Financial and marketing	3 (2.9%)	5 (4.9)	34 (33.0)	61 (59.2)	3.49	0.726

skills possessed by SMEs owners will improve the ratio of profit of small medium enterprise

Management of human resources available will have an effect on the profitability ratio of SMEs.	5 (4.90%)	16 (15.5%)	47 (45.6%)	35 (34.0%)	3.09	0.830
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Table 1 showed the extent to which business management skills can affect the profitability of SMEs. More than half of the respondents accept the fact that business management skills can affect the profitability of SMEs owners to a high extent. Those that signified that the extent of the effect is either to a high extent or to a very low extent in each of the five (5) items are above 50%. The mean ratings of each of the five (5) items are each above the 2.50 benchmark for the acceptance of a statement in a four point Likert scale. This is a confirmation of the result found from the frequency and percentages analyses.

Research Question 2: To what level do technical skills of SMEs owners affect their profitability ratio?

Table 2: Extent to which technical skills of SMEs owners affect their profitability ratio

ITEM	VLE	LE	HE	VHE	Mean	St. Dev.
Your communication skills with your customers really affect your protectability ratio.	3 (2.9%)	12 (11.7%)	38 (36.9%)	50 (48.5%)	3.31	0.792
Problem solving skills possessed by SMEs owners will improve profitability ratio of SME's	2 (1.9%)	10 (9.7%)	26 (25.2%)	65 (63.1%)	3.50	0.752
Giving deferred and installment payment for the goods bought increases profitability ratio.	7 (6.8%)	33 (32.0%)	37 (35.9%)	26 (25.2%)	2.80	0.901
Organizing skills required of SMEs owners increase profitability ratio	0 (0.00%)	12 (11.7%)	49 (47.6%)	42 (40.8%)	3.29	0.666
Understanding of one's	1 (1.0%)	10	48	44	3.31	0.686

environment result to high profitability ratio of SME's	(9.7%)	(46.6%)	(42.7%)
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Table 2 above showed the extent to which technical skills possessed by SMEs owners affect the profitability ratio of SMEs. More than half of the respondents accepted that all the five (5) items raised on technical skills possessed by SMEs owners affect the profitability ratio of SMEs at least to a great extent. Those that expressed that the influence is both to a great extent and to a very great extent in each of the five (5) items are above 50%. The mean ratings of each of the five (5) items are each above the 2.50 benchmark for the acceptance of a statement in a four point Likert scale.

Research Question 3: How do entrepreneurial skills affect profitability ratio of SME's owners in Lagos State?

Table 3: Extent to which entrepreneurial skills affect profitability of SMEs

ITEM	VLE	LE	HE	VHE	Mean	St. Dev.
Planning is a skill that is not necessarily required of SME's owners to increase his or her profitability.	27 (26.2)	18 (17.5)	23 (22.3)	35 (34.0)	2.64	1.203
Family relation skills possessed by an entrepreneur will improve the profitability of an enterprise.	7 (6.8)	11 (10.7)	38 (36.9)	47 (45.6)	3.21	0.893
Management of one's emotion is one of the skills required to improve profitability ratio in SME's	8 (7.8)	16 (15.5)	24 (23.3)	55 (53.4)	3.22	0.980
Ability to manage risk by SME's owners affect profitability of small and medium enterprise.	1 (1.0)	5 (4.9)	46 (44.7)	51 (49.5)	3.43	0.636
Personal health skills possessed by SME's owners will affect the profitability ratio.	5 (4.9)	18 (17.5)	31 (30.1)	49 (47.6)	3.20	0.901

Table 3 above showed the extent to which entrepreneurial skills affect profitability ratio of SMEs' owners. More than half of the respondents accepted all the five (5) items affect entrepreneurial skills on profitability of SMEs at least to a high extent. Those that expressed that the effect is either to a high extent or to a very great extent in each of the five (5) items are above 50%. The mean ratings of each of the five (5) items are each above the 2.50 benchmark for the acceptance of a statement in a four point Likert scale. This is a confirmation of the result found from the frequency and percentages analyses.

Hypothesis Testing

H₀₁ - There is no significant relationship between business management skills and profitability of SMEs owners.

Table 4: Relationship between business management skills and profitability of SMEs owners

Variable	Mean	SD	N	Df	r*	P	Remark	Decision
Business management skills	4.26	1.02	103	101	.515**	0.00	Sig.	Accept Ho ₂
Profitability	4.69	1.15						

p<0.05

In table 4.21, the correlation coefficient is .515**. This implies that there is a positive relationship between business management skills and profitability of SMEs owners. Since the p-value .000 is less than the level of significance of 0.05, the null hypothesis is rejected. This implies that there is a significant relationship between business management skills and profitability of SMEs owners.

H₀₂: There is no significant relationship between entrepreneurial skills and profitability ratio of SME's owners.

Table 5: Relationship between entrepreneurial skills and profitability ratio of SME's owners

Variable	Mean	SD	N	Df	r*	P	Remark	Decision
Entrepreneurial skills	46.70	12.9	103	101	.552**	0.00	Sig.	Accept Ho ₁
Profitability ratio	47.45	10.9						

p<0.05

In table 4.20, the correlation coefficient is .552**. This implies that there is a strong positive relationship between entrepreneurial skills and profitability ratio of SME's owners. Since the p-value .000 is less than the level of significance of 0.05 ($p<0.05$), the null hypothesis is rejected. This implies that there is a significant relationship between entrepreneurial skills and profitability ratio of SME's owners.

Discussion of Findings

Every business owners' goal is to keep sustaining the business and subsequently increase the profitability of the business. However, SMEs owners whose businesses face a lot of struggle and rough experience within the first five years of existence found it often difficult to increase the profitability of the business. Findings revealed that to sustain a business, it requires that every business owner possesses skills and competences.

Finding from research hypothesis one revealed that a significant relationship exists between business management skills and profitability of SMEs owners. The corresponding research question one revealed that business management skills affect the profitability of SMEs owners to a large extent. To corroborate the finding of the study, Lawal (2011) opined that SMEs owners who possessed business management skills scale and sustain their businesses compared to those without these skills. Business management skills such as decision making skills, goal setting skills, HRM skills, finance and accounting skills, marketing skills, customers relation skills, negotiating skills, compliance and regulation skills propelled the manager for greater success in the business. Furthermore, Okpetu (2002) argued that for small and medium enterprise irrespective of the nature of their business ideology, one of the key success factors is business management skills of the owner.

Results of hypothesis two revealed that a significant relationship exists between entrepreneurial skills and profitability ratio of SME's owners. The corresponding research question three revealed that entrepreneurial skills affect the profitability of SMEs owners to a large extent. This finding is consistent with the study of Moska (2013) who averred that business management skills are essential for every business owners as it helps in proper management and sustainability of the enterprise. The researcher further stated that these skills assist the entrepreneur to organise, manage and mitigate risk and increase the profit margin of the organisation. In the same vein, Afolabi and Macheke (2012) study support the finding of the study stating that entrepreneurial skills such as resilience, creativity, people management, innovation, interpersonal skills and marketing skills are pivotal in managing the business and improving the overall performance of the organisation thereby, increasing organisational profitability.

The finding shows that SMEs no doubt is an indispensable factor to ensure sustainable growth and development of an economy and therefore, efforts must be put in place to ensure that this aspect of job sector must be encourage to thrive.

1. Conclusion

The study has been able to establish that business management skills, technical skills and most importantly entrepreneurial skills are key success factors for every business owner to acquire in order to grow and sustain the business. This will surely enhance the enterprise to have competitive advantage as well as increasing the profitability of the business. With these skills in place, it will reduce the rate at which SMEs collapses after few years of being in existence. Hence, the role of skills and competencies must not be undermined by any business creators.

Recommendations

Based on the findings and conclusion reached, it was recommended that;

- SME owners should prioritize personal development to acquire entrepreneurial skills through higher education institutions and other training institutes to build their business capacities for viability, sustainability, and ultimately, profitability.
- SMEs owners can engage in mentorship capacity building programmes to boost their entrepreneurial skills for optimum day-to-day running of the business to become viable and stand the test of time.

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Social Entrepreneurship As Catalyst For Solving Socio - Economic Problems Created By Covid-19 Pandemic Lockdown In Lagos State, Nigeria.

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Abstract

In Nigeria, like any modern society, many contemporary social problems have emerged due to the economic situation which is contrary to the norms, morals, ethics and culture of the society. These situations in turn make life unbearable, insecure and uncomfortable for her citizens. It is a fact that high rate of unemployment has created social tensions among the youths in Nigeria. This socio-economic scenario has drastically deteriorated amid the twin shocks of the Covid-19 pandemic and global oil price crash in year 2020. The lockdown measure imposed by the federal government as a result of Covid-19 created a lot of socio-economic problems notably among the youths in Lagos and Ogun states of Nigeria. Hence, social entrepreneurs are found to becoming crucial in responding to government failure in solving complex problems and in promoting economic development initiatives at all levels in Nigeria. If this is true, it then becomes imperative to find out whether social entrepreneurship has any cogent relationship in solving social and economic problems created by COVID-19 pandemic among the youths in Nigeria and mostly in Lagos state and Ogun state respectively. The study examined social entrepreneurship as a catalyst for solving social and economic problems created by Covid-19 pandemic lockdown in Lagos State, Nigeria. Three specific purposes, each with corresponding research questions and hypotheses guided the study. The study adopted descriptive survey research design. The population of the study comprised all the social entrepreneurs and the Non- Governmental Organizations directors in Lagos state. A sample of 400 entrepreneurs and 80 directors were purposively drawn for the study. The instrument for data was a structured questionnaire tagged 'Social Entrepreneurship and Economic Problems questionnaire (SEASERQ) modelled on a modified four point Likert rating scale. The instrument was validated by four experts, two from measurement and evaluation in the department of Educational Foundations and two from the department of Adult Education in the Faculty of Education University of Lagos. The reliability co-efficient of 0.72 was obtained. Data collected were analysed using mean, standard derivation while Pearson moment of correlation statistics was used to test the hypotheses at 5% level of significance. The findings show among others that the respondents strongly agreed that entrepreneurship education, literacy education, training, seminars and workshop can empower and liberate the youths from the menace of idleness and poverty. The findings also revealed significant relationship between social entrepreneurship in curbing social economic problems created by Covid-19 pandemic lockdown in Lagos State, Nigeria. The study concluded by recommending among others the formulation of various policies to support the operation and activities of social entrepreneurs in Nigeria.

Keywords: Social-Entrepreneurship, Entrepreneur, Social and economic, Covid-19, Youth and lockdown.

Introduction

The Nigerian economy is the biggest economy in the West African sub region. The country is endowed with abundant natural resources ranging from solid minerals, to fertile arable land with varieties of agricultural produce and human resources. Presently, Nigeria is the largest oil producer in Sub Saharan Africa and since 1971 a member of Organization of Petroleum Exporting Countries (OPEC) at the same time has the third highest number of people in the

world. Despite the abundant blessings of human and natural resources, Nigeria still remains rated among the poorest nations of the world. A blessing now seems to be a curse to the country over time.

In Nigeria, like any modern society, many contemporary social problems have emerged due to the economic situation which is contrary to the norms, morals, ethics and culture of the society and of course these make life unbearable, insecure and uncomfortable for her citizens. Some of the contemporary social problems in Nigeria include; poverty, corruption, insecurity and insurgencies, high level of unemployment, poor standard of education, illiteracy, domestic violence, high morbidity and mortality rate, inequality and national identity.

These problems have reduced the standard of living beyond an acceptable level and at the same time affected the daily lives of most Nigerians. The question to be asked is why a country such as Nigeria which is naturally and highly endowed with one of the most valuable resources (crude oil) in the world has fare disproportionately badly in economic and social terms? Adams (2019) identified the cause of economic and social challenges of Nigeria as: ineffective leadership and corruption, over reliance on oil, foreign exchange policy, unemployment, inflation, insecurity, inadequate power supply, poor infrastructural development and inadequate health facilities. At the moment, Nigeria's economy is in recession, and this portends an ugly horizon for the peace and stability of the nation.

The report of African Development Bank Group (2019), the poverty rate, according to them, in over half Nigeria's 36 states is above the national average of 69%. High poverty reflects rising unemployment, estimated at 23.1% in 2018, up from 14.2% in 2016. The report further emphasized low skills limit opportunities for youth employment in the formal sector despite government social program and youth empowerment schemes to address unemployment in the country. The impact of joblessness and unemployment is often closely related to the youth population of any country when discussed. In Nigeria, the youths are often the focus when unemployment, economic recession and social problems are discussed. What this implies is that the levels of unemployment and socio economic problems of a country are twin brothers which directly affects and determines the level of crimes.

The federal government in 2008 acknowledged that about 80% of Nigeria's youths are unemployed. Similarly, the NBS (2019) noted that 40.1% of Nigeria total population are poor and that the youth population of Nigeria falls within this percentage. This implies that as at 2008, majority of Nigeria youths were unemployed. There is no arguing the fact that the youths of any nation are its future and if these youths do not have the opportunities to utilize their potentials and energies in productive activities, they will use it on another thing, this means the country is at the risk of losing these energies and potentials to criminal activities. The interplay between unemployment, youth related crimes and the magnitude of the danger which it poses to the society is indeed alarming and shocking. The rate of unemployed within the youth age group of 15 and 35 years has been a major factor contributing to social economic problems and criminal tendencies among the youths and this is threatening the economic development of Nigeria. It is a fact that high unemployment created social tensions among the youths in Nigeria.

The socio-economic scenario has drastically deteriorated amid the twin shocks of the Covid-19 pandemic and global oil price crash in year 2020. The lockdown measure imposed by the federal government as a result of Covid-19 created a lot of socio-economic problems notably among the youths in Lagos and Ogun states of Nigeria. The corona virus induced disruption to activity

further darkens the economy outlook and gingered the notorious marauders bandits in Lagos State and Ogun State into actions. While Nigerians were worried about corona virus pandemic (COVID-19), most residents of Lagos State and their neighbouring State (Ogun) were more concerned about their security following attacks and intentions of attack by criminals. These attacks started barley hours after President Muhammadu Buhari announced the total lockdown of Lagos, Ogun states and Federal Capital Territory to fight COVID-19 pandemic. Tension, however escalated for residents in the boundaries of the two states.

A cause of concern is the bulk of unemployed Lagosian youths turning into undesirable elements, as the average of them got involved in almost every crime imaginable. There appears an increase in youth related crimes during the COVID-19 pandemic lockdown in the south west Nigeria. However, of more concern is the criminalities activities of the notorious famous youth group marauders called “Awawa boys”, “No case boys”, “No salary boys”, “Omo kesari boys” and “One million boys” who had ravaged the borders of Lagos and Ogun states respectively during COVID-19 pandemic lockdown. These boys were notorious, they moved in pretty large numbers of between 50 and 100 wielding small but deadly arms such as razor blades and stitching awl, small axes, hand guns and machete used for their operations. They were also known for their abuse of drugs, as an average of these groups took a cocktail of drugs ranging from skunk to Indian hemp, codeine, rohypnol and tramadol. The groups which many consider a male cult sect also have female members. Their activities brought fear and tension among the residents who in order to protect themselves had to be on alert, lock up their gates and avoid uninvited guest. When accosted, the groups blamed their predicaments on unemployment, corruption and bad leadership, poverty and illiteracy, hunger having been off their daily source of livelihood as a result of the economic recession and COVID-19 pandemic lockdown.

Generally, youth restiveness occurs for a number of reasons such as loss of moral value, obnoxious government policies, neglect of corporate social responsibility, inequality in development and unequal distribution of national wealth and resources. In a nutshell, the COVID-19 pandemic lockdown had caused panic and unrest in the suburb of Lagos and Ogun states. Must Nigerians watch these boys kill, maim, steal and destroy their property? The answer is NO.

To achieve social and economic development, Nigerian youths must be properly equipped, invested, trained and empowered to sustain all aspects of programmes and initiatives that will solve the youths’ immediate social and economic problems in enhancing national development as well. This goes to show that, to tackle socio-economic problems among the youths require empowering them economically because economic power is what gives one the confidence to contribute meaningfully to the community and the society at large. As a Yoruba proverb says “Ailowo lowo baba ijaya” meaning ‘lack of money is the father of fear’.

Social entrepreneurs are increasingly playing a pivotal role in empowering and in promoting inter-sector initiatives to address economic and social problems in states, local, individual and in the communities. The social entrepreneurship are found to becoming crucial in responding to government failure in solving complex problems and in promoting economic development initiative at all levels in Nigeria. If this is true, it then becomes imperative to find out whether social entrepreneurship has any cogent relationship in solving social and economic problems created by COVID-19 pandemic among the youths in Nigeria and mostly in Lagos State and

Ogun State respectively. Before delving into the topic at hand, I deemed it expedient to make clear some key impression guiding this paper.

Concept of Social Entrepreneurship (SE)

Social entrepreneurship as a concept can imply different meaning to different people. Some people attribute it to non-profit or earned income ventures, others mention it as a business owners who incorporates social responsibility into their operations. Kelvin (2010) expressed that there are ample definition of SE which also reflects different regional differences. For example, in the US, social entrepreneurship addresses the market based approaches to income generating and social change, whereas in Europe, SE is located in the cooperative tradition of collective social action. The UK derives from both background implying that SE is chiefly a business strategy with social objectives whose profits can be reinvested for that purpose in the business or in the community, rather than being driven by the need to maximize profit for shareholders and owners. There has been an increase in the number of countries and companies that have started to think about corporate social responsibility (CSR) due to increase in social problems and emerging new challenges in the world. Dees (1998) reiterated that social entrepreneurs must integrate social responsibility into their business operations. In the light of this, Dees (1998) gave the simplest definition of SE as the process of pursuing innovative solutions to social problems.

In this vein, Gandhi & Raina (2018) defined social entrepreneurship from the point of the modern society and agreed that SE consists of improving systems, devising new approaches, grasping opportunities others miss and generating solutions to change society for better. Gandhi & Raina (2018) identified financing market, governance, market failure, mission, resource mobilization and performance measurement as the parameters differentiating SE from traditional business ventures.

Alter (2006) gave a more modern definition of SE by incorporating the enterprise orientation with social objectives and social ownership, which means that the social enterprise is typically accountable to community stakeholders rather than financial investment shareholders. This view is contrary to Gandhi & Raina (2018). They observed that the dominant factor for the rise of SE is the societal pressure that is forcing humans to do something for the society and its present day affairs at large but at the same time having a monetary gain factor to it that can make them survive in this world as well. While Dacin, Dacin & Matear (2010) argued that SE is unique in that it involves a hierarchical ordering of social and economic value whereby social value takes precedence over generation of economic rents.

From the above discourse, it can be deduced that SE is gradually becoming a vital and a very crucial element in the worldwide discussion on volunteerism and civic commitment in solving social and economic problems at the same time reducing the level of crimes. Thus, any definition of social entrepreneurship should characterize the need for an alternative market programmes that works for business entrepreneurs. Societies depend on entrepreneurs to drive job growth, innovate solutions to economic challenges and proffer solution to pressing problems and pioneer technologies. Hence, SE should not be seen as a panacea because it works within the overall social and economic framework that deserves more attention from academic discourse as well as policy makers in developing economies. Focusing on aid and palliative from government alone

will not solve the socio-economic problems created by COVID-19 neither will relying on government effort also solve it.

The applicability of social entrepreneurship in solving social and economic problems is perhaps the most reliable approach to creating jobs and wealth that will benefit the targeted groups (youths) and the society at large. Hence, SE as an approach in solving social and economic problems should be embraced and government policies to support it should be designed in developing economies like Nigeria. In the light of the above, this study intends to look at social entrepreneurship programmes found in adult education as a means of empowering the famous notorious group of boys and solving social and economic problems created by Covid-19 lockdown and economic recession in Nigeria.

Nexus Between Adult Education And Social Entrepreneurship Programmes

Education be it formal, informal and non-formal remains the most effective means of solving social and economic problems in the modern day society. The purpose of adult education as spelt out and affirmed by UNESCO (1977) is to liberate adults and youths from ignorance, poverty, idleness and make them to be aware of their responsibilities to themselves, their community and the nation at large. In the same vein, Fajonyomi (2015) reiterated that the definition of adult education clearly shows that individual could gain technical and professional competence, acquire new or additional skills and knowledge, have a change of attitude and behaviour, all of which could translate to improvement in livelihoods and significant transformation of the community. Hence, the role of adult education in individual development to be economically viable is germane and it then becomes an escape route in solving social economic problems among the youths.

Examples of adult education and its programmes prescribed in this study in reducing socio-economic problems and empowering the notorious youths disturbing the peace of the states are; entrepreneurship education, empowerment programmes such as vocational skills acquisition, conscientization education, community education and fundamental adult education. There can also be training, seminars and workshop for the unemployed and the notorious youths to create awareness and dissemination of information on job and wealth creation to the youths.

These are the types of education programmes that can empower the youths, solve socio-economic problems and reduce crimes in the society. It can equally bring the youths to the knowledge of changes in the technological and technical world. They are programmes that can equip the youths with skills, knowledge and change in behaviours needed to be able to identify resources around them, and creatively and innovatively transform them to be useful to self and the community that hosts them at large. Similarly, the goal of SE is to proffer solutions to socio-economic problems of the society. This can only be attained through the nexus of adult education and social entrepreneurship programmes that can take different forms such as training, seminars, workshops, simulations and development programmes such as vocational, trade engagements, apprenticeship and internship. These programmes are educational in nature and they are good in:

- Training the youths in the skills needed to set up a business and manage it to grow and stabilize.

- Raising awareness and motivating the unemployed and the notorious youths to start a business.
- Introducing and creating basic values of the businesses to individuals.
- Developing and management of business successfully.
- Providing viable business ideas to people.

In a nutshell, these are the programmes that can impact the relevant skills, knowledge, attitudes and values to the youths in reducing crimes and solving socio-economic problems of any given society.

Providing the youths with these educational programmes may prevent them from becoming involved with gangs (such as identified earlier), drugs and violence as well as boosting the living standards of households by expanding opportunities, raising productivity and increasing the youth earning power. To this extent, Nigeria youths cannot but equip themselves with educational opportunities found in adult education that can give them relevant skills in order to have a means of income and to reduce their poverty level which was one of the causes identified as a reason for joining the notorious groups and their involvement in crimes.

Statement of Problem

It is crystal clear that Nigeria is in a deteriorating social and economic conditions. The socio-economic conditions in Nigeria in the past few years seems to have been going through some challenges of youth unemployment, insecurity, crimes and corruption at high places and ineffective leadership. The COVID-19 pandemic seems to worsen the socio-economic and nearly bring the country to a halt or total collapse as some sects of notorious youths called “one million boys”, “awawa”, “omo kesari”, “no salary” and “no case” took over the city of Lagos and the neighbouring State (Ogun). The notorious boys usually in large numbers of 50 to 100 complained bitterly when apprehended by police of being marginalized, of having no means of income and being economically poor by all standard. Many of these boys migrated to urban without any jobs, they have no relation to stay with or accommodation and no infrastructure to take care of them. Thus, these unemployed youths turned to become criminals in order to survive. These youths and their desperation seems to have funnelled their innate inventiveness into violent crimes, an energy that could have been used to drop-forged into kinetic economic asset. The question to be asked are; why has so little been done in terms of jobs and wealth creation by government and private individuals? Why are these youths not empowered despite all the government programmes to alleviate poverty among the youths? The crux of this study is to look at how social entrepreneurship programmes found in adult education and its programmes can be used to reduce the menace of youth crimes, reduce poverty and solve socio-economic problems in Nigeria.

Purpose of The Study

- Ascertain the relevance of social entrepreneurship in jobs and wealth creation for the unemployed and the notorious youths in Lagos State, Nigeria.
- Find out if social entrepreneurship programmes are the best solution in solving social and economic problems created by COVID-19 pandemic in Lagos State, Nigeria.
- Examine the roles of social entrepreneurship activities in reducing the level of crimes among the notorious youths in Lagos State, Nigeria.

Research Questions

- Of what relevance is the social entrepreneurship in creating jobs and wealth for the unemployed and the notorious youths in Lagos state, Nigeria?
- How will social entrepreneurship programmes solve the social and economic problems created by COVID-19 pandemic lockdown in Lagos state, Nigeria?
- What significant roles will SE activities play in reducing the level of crimes among the youths in Lagos state, Nigeria?

Hypotheses

- Social entrepreneurship will not be significantly relevant in creating jobs and wealth for the unemployed youths in Lagos state, Nigeria.
- There is no significant relationship between SE programmes in solving social and economic problems created by COVID-19 Pandemic lockdown in Lagos state, Nigeria.
- Social entrepreneurship activities will not play a significant roles in reducing the level of crimes among the youths in Lagos state, Nigeria.

Methodology

The study was a survey research designed to assess the role of social entrepreneurship in solving social and economic problems created as a result of COVID-19 pandemic lockdown in Nigeria. The population of the study comprises all the social entrepreneurs and all the registered NGOs in Lagos State, Nigeria.

Simple random sampling technique was used to select twenty (20) entrepreneurs each in a ward and four (4) registered NGOs directors from the ten (10) out of eleven (11) wards that made up Alimosho local government and twenty (20) entrepreneurs each in a ward and four (4) NGOs directors from ten (10) out of eleven (11) wards in Oshodi-Isolo local government of Lagos State, giving a total of four hundred (400) entrepreneurs and eighty (80) NGOs Directors as the sample size. Purposive random sampling technique was used in selecting the 400 entrepreneurs and 80 NGOs directors from the wards.

Research-structured questionnaires was used for data collection. The instrument has two parts (1 and 2). Part one contained the personal data of the respondents while part two contained a twenty five item questionnaire structured on a 4 point rating scale to elicit responses from respondents. The response options are rated thus: Strongly Agree (SA) - 4 points, Agree (A) – 3 points, Disagree (D) – 2 points and Strongly Disagree (SD) – 1 point. Decision rule was achieved using the mean of the point thus; $4+3+2+1 \div 4 = 2.5$, which therefore was the criterion reference point at which to accept or reject an item as agrees or disagrees.

The instrument was validated by four experts. Two from measurement and evaluation in the department of educational foundations and two from the department of adult , and all from Faculty of Education, University of Lagos. The internal consistency of the instrument was determined through split-half method. The reliability estimate of 0.72 was obtained with SPSS software. The score was high enough to consider the instrument suitable for the study. The copies of the questionnaire were administered to the respondents with the help of two research assistants and collected same after completion. All four hundred and eighty (480) questionnaire

administered, representing 100% were retrieved back and this served as the sample size. The data collected were all good for analysis. The data were analysed using mean scores and Pearson Correlation.

RESULTS

Research Question One: Of what relevance is the social entrepreneurship in creating jobs and wealth for the unemployed youths in Lagos state, Nigeria?

Table 1: Descriptive Statistics of relevance of Social Entrepreneurship in creating jobs and wealth

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
SOCIAL ENTREPRENEURSHIP AND JOBS AND WEALTH CREATION	480	6.00	24.00	18.1354	.24899	5.45511
Valid N (listwise)	480					

Table 1 shows that the estimated mean $(6.00+24.00)/2 = 15.00$ and the calculated mean is 18.1354. The calculated mean is greater than the estimated mean. This implies the extent of relevance at which social entrepreneurship will create jobs and wealth for the unemployed youths in Nigeria will be high. Hence, the respondents agreed that social entrepreneurship can create jobs and wealth, social entrepreneurship is a means of earning income, social entrepreneurship can be used in empowering the youths, social entrepreneurship can change the economy for better and is a solution to joblessness

Research Question 2: How will social entrepreneurship programmes solve the socio-economic problems created by COVID-19 pandemic lockdown in Lagos and Ogun State of Nigeria?

Table 2: Descriptive Statistics on Social Entrepreneurship Programmes and Socio-economic Problems Created by COVID-19 Pandemic Lockdown

	N	Minimum	Maximum	Mean	Std. Deviation
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	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
SOCIAL ENTREPRENEURSHIP PROGRAMMES AND SOCIO-ECONOMIC PROBLEMS	480	7.00	28.00	21.1062	.25600	5.60859
Valid N (listwise)	480					

Table 2 shows that the estimated mean is $(7.00+28.00)/2 = 17.50$ and the calculated mean is 21.1062. The calculated mean is greater than the estimated mean. This implies that the extent at social entrepreneurship programmes will solve the socio-economic problems created by COVID-19 pandemic lockdown in Lagos and Ogun State of Nigeria is high. Thus, the respondents agreed that entrepreneurship education can enlighten the youths on their area of interest, the youths need entrepreneurship education for their empowerment, seminars and workshops can improve their self-efficacy on the right skills needed, literacy education is needed to become a social entrepreneur, right empowerment training can liberate youths from poverty and idleness, social entrepreneur programmes is needed to be socially and economically viable, and workshops on investment can help them in proper use of factors of production.

Research Question Three: Discuss the roles of social entrepreneurship activities in reducing the level of crimes among the youths in Nigeria?

Table 3: Descriptive Statistics on Social Entrepreneurship Activities and Crimes

	N	Minimum	Maximum	Mean		Std. Deviation
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic
SOCIAL ENTREPRENEURSHIP ACTIVITIES AND CRIMES	480	6.00	24.00	18.5229	.21110	4.62492
Valid N (listwise)	480					

Table 3 shows that the estimated mean $(6.00+24.00)/2 = 15.00$ and the calculated mean is 18.5229. The calculated mean is greater than the estimated mean. This implies the high extent social entrepreneurship activities will play in reducing the level of crimes among the youths in Nigeria. Hence, the respondents agreed that meeting the needs of the youths in the society can reduce crime, providing civic volunteerism and commitments to the unemployed youths will reduce the level of crime, involving in corporate social responsibility at grass root level will reduce the level of crime, bringing radical economic empowerment programmes to the youth at

community level will reduce crime, and creating jobs for the unemployed youths will reduce crime in Nigeria.

Testing of Research Hypotheses

The following research hypotheses were tested at 0.05 level of significance.

Ho1: Social entrepreneurship will not be significantly relevant in creating jobs and wealth for the unemployed youths in Lagos state, Nigeria.

Table 4: Correlation Statistics on Social Entrepreneurship and Creation of Jobs and Wealth

	CREATION OF JOBS AND WEALTH	SOCIAL ENTREPRENEURSHIP
Pearson Correlation	1	.972**
Sig. (2-tailed)		.000
N	480	480
Pearson Correlation	.972**	1
Sig. (2-tailed)	.000	
N	480	480

** . Correlation is significant at the 0.05 level (2-tailed).

Table 4 shows that correlation value (r) = 0.972 which is significant at 0.05 significance level. This implies that there is a positive and significant relationship between social entrepreneurship and creation of jobs and wealth for the unemployed youths in Nigeria. Thus, reject Ho1.

Ho2: There will be no significant relationship between social entrepreneurship programmes in solving social-economic problems created by COVID-19 Pandemic lockdown in Nigeria.

Table 5: Correlation Statistics on Social Entrepreneurship Programmes in solving Social-economic Problems

		SOCIAL ENTREPRENEURSHIP	SOCIO-ECONOMIC PROBLEMS
SOCIAL ENTREPRENEURSHIP	Pearson Correlation	1	-.988**
	Sig. (2-tailed)		.000
	N	480	480
SOCIO-ECONOMIC PROBLEMS	Pearson Correlation	-.988**	1
	Sig. (2-tailed)	.000	
	N	480	480

** . Correlation is significant at the 0.05 level (2-tailed).

Table 5 shows that correlation value (r) = -0.988 which is significant at 0.05 significance level. This implies that there is a positive and significant relationship between social entrepreneurship programmes in solving social-economic problems in Nigeria. Thus, reject H_02 .

H_03 : Social entrepreneurship activities will not play a significant roles in reducing the level of crimes among the youths in Nigeria.

Table 6: Correlation Statistics on Social Entrepreneurship activities and Reduction of Level of Crimes

		SOCIAL ENTREPRENEURS	REDUCTION OF LEVEL OF CRIMES
SOCIAL ENTREPRENEURSHIP	Pearson Correlation	1	-.974**
	Sig. (2-tailed)		.000
	N	480	480
REDUCTION OF LEVEL OF CRIMES	Pearson Correlation	-.974**	1
	Sig. (2-tailed)	.000	
	N	480	480

** . Correlation is significant at the 0.05 level (2-tailed).

Table 6 shows that correlation value (r) = -0.974 which is significant at 0.05 significance level. This implies that there is a positive and significant relationship between social entrepreneurship programmes and reduction of level of crimes among the youths in Nigeria. Thus, reject H_03 .

Discussion of Findings

From the findings of the study it was evident that social entrepreneurship is a catalyst in solving socio-economic problems created by COVID-19 pandemic lockdown in Lagos State, Nigeria. The result emanating from the study revealed there is positive and significant relationship between the two variables examined in the study. The result from the research question one and hypothesis one showed that the respondents strongly agreed to all the items pertaining to relevance of social entrepreneurship in creating jobs and wealth for the unemployed youths in Lagos state, Nigeria. This is in line with Gandi & Raina (2018) that SE is a means of improving systems that is generating solutions to change society for better condition. The finding is also in consonance with Dacin, Dacin & Matear (2010). They reiterated that with social entrepreneurship social value will take precedence over generation of economic rents. This in real sense will create jobs and employment opportunity for those who are searching for jobs.

Research question two and hypothesis two showed that the respondents strongly agreed that entrepreneurship education, literacy education, training, seminars and workshop can empower and liberate the youths from the menace of idleness and poverty. This is in agreement with Fajonyomi (2015) who pointed out individuals can be empowered, gain competencies, acquire new skills and knowledge through adult education and its programmes such as training, seminars, and workshop. These findings were supported by Kevin (2010) who found out that SE addresses the best approaches in generating income and bringing about change in behaviour among the youths in any given society.

The opinions of respondents regarding the impact of social entrepreneurship in reducing the level of crime posit that providing civic volunteerism, commitment and meeting the needs of the youths will reduce the level of crimes among the youths in Lagos state, Nigeria. This finding was in line with the report of African Development Bank Group (2019) that youth empowerment schemes will address unemployment problem in Nigeria. In the same vein Dees (1998) also admitted that social entrepreneurs must integrate social responsibility into their business operations to reduce the level of crimes and empower the youths. Summarily, the findings of the study showed that SE programmes and social entrepreneurs' activities play a pivotal role in reducing socio-economic problems in Lagos state, Nigeria.

Conclusion

The paper explores social entrepreneurship as a means of solving social and economic problems created by COVID-19 pandemic lockdown in Nigeria. The paper examined the socio-economic situation before and during COVID-19 lockdown and the incessant operations of famous youth groups disturbing Lagos and Ogun States during the lockdown. The lockdown has caused panic and unrest in the suburb of the two States, hence, causing social problems.

Conclusively, this study has shown the importance of social entrepreneurship programmes found in adult education in empowering, sensitizing and informing and modifying the behaviours of the youth in concordance to the norms, value and culture of the society.

In addition, the findings of the study revealed that the aforementioned programmes were the best solutions in solving social and economic problems created as a result of the pandemic and the economic recession. Hence, the contribution of SE in individual, community and national development cannot be over-emphasized.

Recommendations

Based on the findings, the following recommendations were made;

- Government at various level in Nigeria (Local, State and Federal) should embrace social entrepreneurship by formulating various policies to support the operation and activities of social entrepreneurs. In doing so, government can assist in giving soft loans, purchase of equipment, providing advisory services and other incentives which can aid and boost the morale of social entrepreneurs.
- There should be frequent, at least quarterly empowerment programmes and assessment needs of the unemployed youths. The empowerment programmes should be creative and innovative to stir and spur the youths into actions.
- The NGOs and private individuals should as part of their functions and services to humanity should sensitize the youths through seminars, trainings, campaigns and capacity building. Through this, the unemployed youths can develop entrepreneurial competences as a means of earning income and reducing poverty since idle hands are known to be the devil's workshop.

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Graduate Entrepreneurs' Knowledge and Integration of Succession Plan into Business Operation

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Abstract

The survival of business entities for many generations would be a plus to the owners, considering the amount of investment in the business ventures. Integration of a succession plan into business operations can contribute to its sustainability. The study examined graduate entrepreneurs' integration of succession plans into their business development, how family-related factors affect succession planning, and the role that continuing education plays in business sustenance. These have become pertinent based on the possibility of some of these business entities attracting funding and becoming large enterprises. Business sustainability is required in order not to jeopardise investors' funds. The study was based on succession planning models. The study adopted a mixed research method that used an explanatory sequential design, a quantitative survey followed by a structured interview. The study population was 160, and a purposive sampling procedure was adopted to select 111 entrepreneurs who completed the questionnaire, and ten participants participated in the in-depth interview. The purposive sampling method was adopted so that only those business entities that have been in operation for a minimum of one year were selected for the study. Data of graduate entrepreneurs were obtained from the Lagos Chamber of Commerce & Industry (LCCI) and organised graduate entrepreneurs forums. The platforms of LCCI and some other organisations were used to reach out to graduate entrepreneurs. A structured questionnaire and interview guide were used for data collection. The data collected were analysed with frequency, percentages, and mean, and the hypothesis was statistically tested at a 5% level of significance with the chi-square analysis. Qualitative data were analysed using thematic analyses. The study's results showed that most business owners are familiar with succession planning but have not integrated them into their businesses; most participants do not have any succession plan in place in their businesses. The study found that continuing education plays a role in succession planning to a large extent.

Keywords: Business operations; Continuity of Businesses; Entrepreneur; Knowledge; Continuing Education; Succession.

Introduction

Business operations require much energy, time, and money to make the business viable and solid and do well in the long run. The business sector includes the micro, small, and medium enterprises (MSMEs) and the other business segments. The MSMEs are determined by the number of employees ranging from one to two hundred and fifty and other factors like the shareholder's capacity and the sales generated in the business. In Nigeria and worldwide, the

MSMEs are the pillar supporting the economy. They help in providing jobs and keeping the economy vibrant. They help in the employment of citizens. This sector also supports driving the competitiveness of the economy and beyond (Waseem et al., 2016).

Continuity of business will help guarantee generational wealth. Whether individually run businesses or family-owned businesses, there is the need for the business to be able to transcend many generations. Securing a future for the efforts put into the business is more germane than ever before, considering the need to have more businesses transcend many generations. Incorporating a succession plan into business operations can help promote sustainability (Mba et al., 2012). Nigeria's business terrain has recently witnessed an influx of graduate entrepreneurs. The way businesses are conducted will help promote their sustainability. These graduate entrepreneurs are supposed to have the intellectual endowments they can apply to the growth of the business and have some strides. The assumption is that having gone through a degree programme, these entrepreneurs ought to have developed an appreciable level of competence, capability and endowment that can promote business success and sustainability.

Succession planning helps a business entity prepare for future leaders that will occupy strategic positions in the business to ensure leadership and business continuity. They are the leaders responsible for the critical decisions in the business. The process of succession planning will involve the identification of one or more successors for important positions in the business. Preferably for each position, two potential successors are groomed for the post. The individuals marked for these posts must be trained and involved in developmental activities. Usually, the successors are groomed in ways that best fit their strengths. Channelling resources toward talent development gives the business a better return on its investment (Onuoha, 2013).

Furthermore, succession planning primarily identifies that some tasks/posts are vital to the business; thus, the individuals to fill such positions should be the best-qualified personnel. If properly carried out, succession planning will help the business recognise, develop and retain quality top leadership that will foster the achievement of its mission and lead to sustainability.

Recently, there has been an influx of graduate entrepreneurs into the business world. This has been necessitated by the reduced number of ready-made jobs and improved entrepreneurship education received at the various tertiary institutions across the nation. Many efforts and resources are injected into business ventures, which is expected to bring about a good yield for return on investment. Most times, the pioneering entrepreneur cannot pass on the wealth of experience and the businesses they have spent a lifetime building to the upcoming generation. Thus, it may pose a risk to new startups. It can be recalled that many businesses that were prominent in times past have gone to oblivion (Nye, 2020; Nieman, 2017; Mandah, 2012; Grassi & Giarmarco, 2008; Nworah, 2011).

The study, therefore, tried to examine the extent to which the graduate entrepreneurs were integrating succession planning into their businesses. The study wanted to see if the graduate entrepreneurs' educational background would positively impact their integration of succession planning in their businesses. The study, therefore, sought to determine if the graduate

entrepreneurs had the basic knowledge of succession planning. Also, the study tried to determine the extent to which graduate entrepreneurs integrate succession planning into their business. These questions become pertinent based on the possibility of some of these businesses attracting funding and becoming large enterprises.

Several researchers have studied various reasons for success in business succession, and there have been varied views and reasons why some businesses succeed and others do not (Waseem et al., 2018; Osita et al., 2020; Lawan & Gachunga, 2013; Blumentritt, Mathews & Marchisio, 2012). According to Waseem et al. (2018), there is a significant relationship between the policy or strategy adopted and small family business succession, and trans-generational businesses fail due to a lack of long-term planning and policies of the business. Succession planning would seem to have a greater possibility of success if integrated early in the business's life through adequate policy and/or strategy.

Osita et al. (2020) posit that the inability of small businesses to survive beyond the first generation could be linked to succession issues. They further state that mentoring gives a boost to the sustainability and ultimately the survival of the business. For a successful mentorship process, the mentee should have been integrated into the business for a reasonable length of time and have a long relationship with the mentor. This is especially important in a family business. The supposed successor ought to be familiar with the intricacies of the business and develop the confidence and the assurance over time that he is being prepared for the eventual take-over of the business.

For Mutunga and Gachunga (2013), critical factors to succession failure in small businesses include lack of motivation by prospective successors, lack of formal/informal training and lack of self-confidence in having the required managerial skills for the post. Virtually, these qualities require adequate time for preparation and tutelage. It posits, therefore, that succession planning should be made part and parcel of business development to have quality time for preparation.

Lawan and Chisoro (2016), as well as Monyyei et al. (2021), summarised their finding with the assertion that the lack of succession planning policies and management is the bane of small family businesses and that the primary requirement is for the founding directors to integrate succession planning strategies into the business at the development stages.

Based on these observations mentioned by the various researchers, the study attempted to determine if graduate entrepreneurs will approach their business development differently based on their educational background. Would they integrate succession planning into their businesses right from the beginning? Did they even have the basic knowledge of succession planning? These were the pertinent questions the study tried to examine.

Models of Succession Management

According to Monyei et al. (2021), the succession management model is a structure, outline or framework that shows the essential parts of a feasible, free of bias and effective identification, development, and retaining of high performers in a business. Monyei et al. (2021) further posited that there are three main succession planning models, namely:

1. Short-term planning or Emergency substitutions: This is the characteristic succession plan that most organisations or businesses use. The focus of this approach is immediate use and is in place for staff that leave the organisation.
2. Long-term talent planning or management: The focus of this type is the strategic plan for the organisation's futuristic objectives, areas that require development and the right personnel for jobs available. In this model, businesses seek to have their leadership replacement from within the organisation, and it is a crucial part of the human resources management; all employees are required to participate in the evaluation process, and it assists in selecting the best candidate that will be trained for the organisations' future needs.
3. A mixture of Short-term Planning and Long-term Talent Management: This is a mix of the first and second plans. It allows the higher-level management to plan for the organisation's long-term strategic plans, including the workforce. The business activities are not disturbed by unplanned staff substitutions, and the organisation always has qualified staff.

Research Questions

The following research questions guided the study:

1. To what extent are graduate entrepreneurs aware of succession planning in business?
2. To what extent do graduate entrepreneurs integrate succession plans into the development of their businesses?
3. What relationship do age, gender, and education level have with business succession planning?
4. To what extent do staff and family-related factors such as involvement and communication affect succession planning?
5. What role can continuing education play in family business sustenance?

Research Hypothesis

The following hypothesis was posited for testing:

There is no significant relationship between age, gender, education level and integration of succession planning into business development.

Research Methodology

The study adopted a mixed research method that used an explanatory sequential design, a quantitative survey followed by a structured interview. The study population comprised all graduates of higher institutions who are entrepreneurs with LCCI and organised graduate entrepreneurs forums totalling 160 members. A purposive sampling procedure was adopted to select 111 entrepreneurs who completed the questionnaire, and ten participants participated in the in-depth interview. To be eligible for participation, the business should have been in existence for at least one year. Data of graduates from higher institutions who are entrepreneurs were obtained from the Lagos Chamber of Commerce & Industry (LCCI) and organised graduate entrepreneurs forums. LCCI platforms and organised graduate entrepreneurs forums were used to reach out to higher education graduate entrepreneurs. Structured questionnaire and interview guide were used for data collection. The questionnaire was a self-developed 33-item Likert scale

with a response scale of To a Large Extent (TLE), To Some Extent (TSE), To a Little Extent (TLLE), To a Very Little Extent (TVLE) and Not at All (NAA) as options were used for the questionnaire. The data collected were analysed with frequency, percentages, and mean, and the hypotheses were statistically tested at a 5% level of significance with the chi-square analysis.

Respondents were required to tick [✓] the appropriate column corresponding to the degree to which they agree or disagree with statements made in the questionnaire. To administer the questionnaire to the entrepreneurs, a google form was created. The link was sent to the selected respondents on their WhatsApp social page. Responses were also received electronically from the google form. Each questionnaire had an introductory letter stating the purpose of the study and sought the cooperation of the respondents. An in-depth interview was used for the qualitative data collection. The data collected were analysed using descriptive statistics, thematic content analysis was used to analyse the interview data, themes were established and analysed. The research questions were analysed using simple percentages, frequency distribution and mean. Chi-square was used to analyse the hypothesis, and the hypothesis was tested at a 5% significance level. Informed consent was obtained from all participants, and there was no risk of harm to any participants.

Results

Demographic Characteristics

Table 1: Gender of Participants

Gender	Per cent
Male	47.7
Female	52.3
Total	100.0

Table 1 above indicates that out of the 111 total respondents to the questionnaire, 47.7% were male, while 52.3% were female.

Table 2: Age of Participants

Age group	Per cent
20-24 years	5.4
25-29 years	17.1
30-34 years	22.5
35-39 years	12.6
40+ years	42.3
Total	100.0

Table 2 above presents the age groups of the participants sampled in the study. It shows that 5.4% were 20-24 years age group, 17.1% were 25-29 years, 22.5% were 30-34 years, 12.6% were 35-39 years and 40 years and above had the highest percentage of 42.3%.

Table 3: Nature of Participants' Business

Business Types	Per cent
Service	49.5
Commercial	14.4
Construction	7.2
Manufacturing	5.4
Others	23.4
Total	100.0

Table 3 above indicates that 49.5% of respondents were in the Service line of business, such as logistics etc., 14.4% in the Commercial line of business, 7.2% in Construction, 5.4% in Manufacturing and 23.4% in the Others category.

Table 4: Business Age

Business Age Group	Per cent
1-5 years	49.5
6-10 years	23.4
11-15 years	12.6
16-20 years	9.0
21+ years	5.4
Total	100.0

Table 4 above indicates that 49.5% of respondents were 1-5 years in business, 23.4% have been 6-10 years in business, 12.6% have been 11-15 years, 9% have been 16-20 years, while 5.4% were 21 years and above in business.

Table 5 below indicates that the businesses are small and medium scale enterprises, with 78.4% having 1-9 employees, 13.5% having 10-49 employees, 1.8% having 50-100 employees, and 6.3% having 101-250 employees.

Table 5: Number of Employees

Business Age Group	Per cent
1-9	78.4
10-49	13.5
50-100	1.8
101-250	6.3
Total	100.0

Table 6: Levels of Succession Planning

Business Types	Per cent
No Plan	68
Unwritten	32
Succession Plan	
Written Succession Plan	0
Total	100.0

Table 6 above indicates that 68% of respondents have no plan for succession planning, 32% have an unwritten succession plan and none had any written succession plan for their business.

Research Question One: To what extent are graduate entrepreneurs aware of succession planning in business?

Table 7: Awareness of Succession Planning in Business

Questionnaire Item	TLE (%)	TSE (%)	ALE (%)	VLE (%)	NAA (%)	Weighted Mean
I am aware of succession planning in business	44.1	38.7	9.9	5.4	1.8	4.2

The excerpts from the participants that participated in the interview sessions showed that they were all aware of succession planning in business operations.

Table 7 above is data from the questionnaire on awareness of succession planning in business. It showed that 44.1% of respondents are aware of succession planning to a large extent, 38.7% are aware to some extent, 9.9% to a little extent, 5.4% to a very little extent and 1.8% not at all. With a weighted mean of 4.2 greater than 4, it is concluded that graduate entrepreneurs are aware of succession planning in business to a large extent.

Research Question Two: To what extent do graduate entrepreneurs integrate succession plans into the development of their businesses?

Table 8: Succession Plan Integration into Business Development

S/N	Questionnaire Items	TLE (%)	TSE (%)	ALE (%)	VLE (%)	NAA (%)	Weighted Mean
1	I need to establish a timeline for the transition of my business.	42.3	39.6	10.8	5.4	1.8	4.2
2	I need to have shareholder/partnership agreements in place and be up to date in my business.	52.3	24.3	12.6	6.3	4.5	4.1
3	My children should be given the education to manage the inheritance I am building for them properly.	62.2	26.1	3.6	4.5	3.6	4.4
4	I do not need any professionals to guide me through succession planning in business.	14.4	38.7	27.0	11.7	8.1	3.4
5	My business will survive in the event of an untimely death or disability within the management/ownership group.	27.9	35.1	18.0	7.2	11.7	3.6
6	Staff formal assessment procedure is necessary immediately after a business is established	59.5	27.9	9.0	1.8	1.8	4.4
7	The assessment of staff, family members and the quality of persons that will succeed in	63.1	26.1	7.2	1.8	1.8	4.5

significant positions should be clearly stated.

Grand Mean	45.9	31.1	12.6	5.5	4.8	4.1
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The responses from the majority of the interview participants showed that graduate entrepreneurs have integrated succession plans into their businesses; most of the participants, on a scale of 1 to 10, picked 8, meaning that they have incorporated succession planning into their businesses. However, some businesses that are expertise oriented mostly would transfer the businesses to the most trusted employee or just sell off the business once they retire or die. Examples of such businesses are the service industry (Surveyors and computer graphics artists/printers).

Table 8 above is data from the questionnaire on graduate entrepreneurs' integration of succession plans into the development of their businesses. It shows that a grand mean of 45.9% of respondents indicates succession plan integration to a large extent, 31.1% to some extent, 12.6% to a little extent, 5.5% to a very little extent and 4.8% not at all. Therefore, with a weighted mean of 4.1 greater than 4, it is concluded that graduate entrepreneurs integrate succession plans into their businesses to a large extent.

Research Question Three: What relationship do age, gender, and educational level have with the integration of a succession plan into business development?

Table 9a: Gender relationship with Business Succession Planning

S/N	Questionnaire Items	Size	Female (%)	Male (%)	Mean (%)
1	I know what a succession plan is	13	8.6	15.1	11.9
2	There is an unwritten succession plan for my business	35	29.3	34.0	31.6
3	I do not have any written succession plan in place for my business	34	34.5	26.4	30.4
4	The business is still very young, so I do not need any succession plan for now	12	10.3	11.3	10.8
5	I have a plan to put a succession plan in place in the next five years	17	17.2	13.2	15.2
Total		111	100	100	100

Table 9a above is data from the questionnaire on gender responses to business succession planning. It shows that 8.6% of female respondents know what a succession plan is compared to 15.1% of male respondents, 29.3% of females and 34.0% of males have unwritten succession plans, 34.5% of females and 26.4% of males do not have any written succession plan, 10.3% female and 11.3% male have very young businesses, 17.2% female and 13.2% male plans to have a succession plan in the next five years while 0% female and male do not believe in having a succession plan.

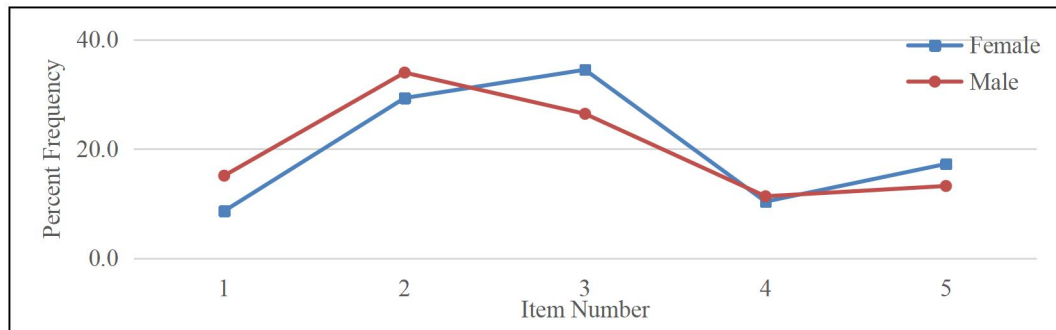


Figure 1: Plot of Gender relationship with Business Succession Planning Freq.

A review of figure 1, which is a plot of the percentage responses, shows that the response profile of the male and female gender groups is generally homogeneous or similar and is not changing much between gender groups. In other words, the business succession planning profile is unchanged irrespective of the gender group and is therefore not dependent on or is unrelated to gender.

Table 9b: Age relationship with Business Succession Planning

S/N	Questionnaire Items	Size	20-24 (%)	25-29 (%)	30-34 (%)	35-39 (%)	40+ (%)	Mean (%)
1	I know what a succession plan is	13	33.3	5.3	20.0	0.0	10.6	13.8
2	There is an unwritten succession plan for my business	35	33.3	26.3	28.0	35.7	34.0	31.5
3	I do not have any written succession plan in place for my business	34	0.0	36.8	28.0	42.9	29.8	27.5
4	The business is still very young, so I do not need any succession plan for now	12	16.7	15.8	16.0	0.0	8.5	11.4
5	I have a plan to put a succession plan in place in the next five years	17	16.7	15.8	8.0	21.4	17.0	15.8
Total		111	100	100	100	100	100	100

Table 9b above is data from the questionnaire on the age distribution of respondents to business succession planning responses. It shows that 95% of the respondents were 25 years and above; the 25-29 years age group were 17%, 30-34 years 23%, 35-39 years 13% and 40+ years 42%. The age group 20-24 years is sparse and constitutes only 5% of respondents.

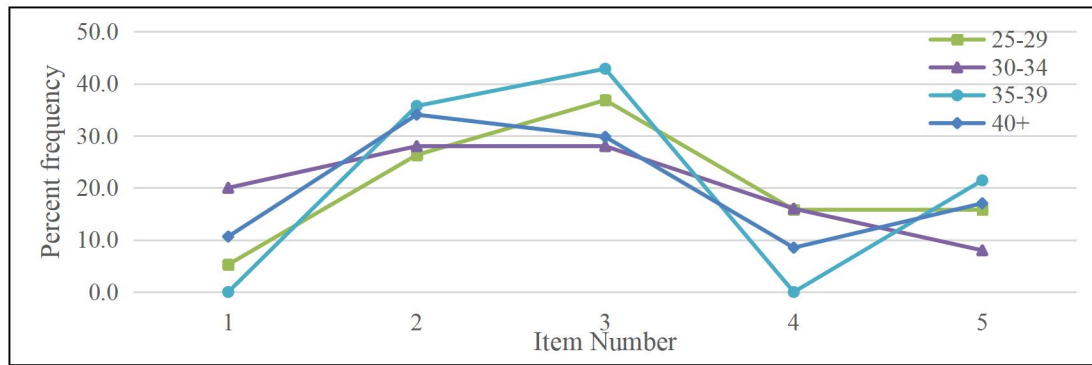


Figure 2: Plot of Age group relationship with Business Succession Planning Freq.

A review of figure 2 shows that the response profile of the age groups 25-29 years, 30-35 years, 35-39 years, and 40+ years is generally homogeneous or similar and is not changing much from age group to age group, while the 20-24 age group is affected by the sparsity of data. Combining the age groups to form 3 age groups of 20-29 years, 30-39 years and 40+ years further indicates the similarity of the profiles. In other words, the business succession planning profile is generally unchanged irrespective of the age group and is therefore not dependent on or is unrelated to the age group.

Table 9c: Education Level relationship with Business Succession Planning

SN	Questionnaire Items	Size	OND (%)	BSc/Eqv (%)	Mstrs (%)	PhD (%)	Others (%)	Mean
1	I know what a succession plan is	13	0.0	15.5	3.7	14.3	0.0	6.7
2	There is an unwritten succession plan for my business	35	50.0	35.2	33.3	0.0	0.0	23.7
3	I do not have any written succession plan in place for my business	34	50.0	29.6	33.3	0.0	75.0	37.6
4	The business is still very young, so I do not need any succession plan for now	12	0.0	8.5	11.1	28.6	25.0	14.6
5	I have a plan to put a succession plan in place in the next five years	17	0.0	11.3	18.5	57.1	0.0	17.4
Total		111	100.0	100.0	100.0	100.0	100.0	100.0

Table 9c above is data from the questionnaire on education level responses to business succession planning. It shows that the respondents were mostly those with BSc or equivalent (64% of respondents) and Master's degrees (24% of respondents), constituting 88% of the respondents. Other degrees (OND/Others) have sparse responses.

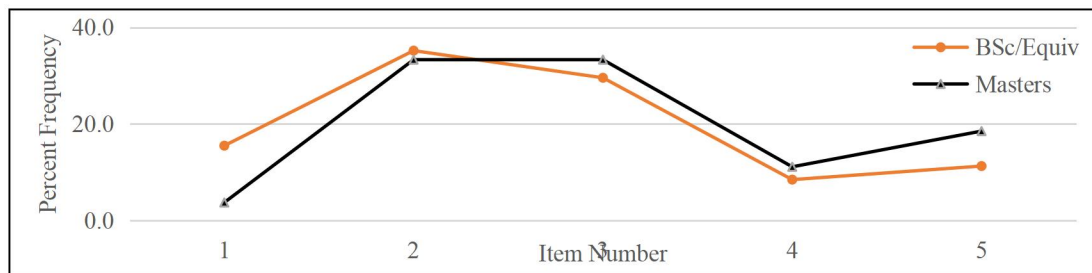


Figure 3: Plot of Education Level relationship with Business Succession Planning Freq.

A review of figure 3 above shows that the response profile of the BSc/Equivalent degree and Master's degree is generally homogeneous or similar and is not changing much from degree to degree. In other words, the business succession planning profile is unchanged irrespective of the educational level and is therefore not dependent on or is unrelated to educational level.

Based on the analyses of figures 1-3 and tables 8a-c, age, gender, and educational level have no relationship with business succession planning.

Research Question Four: To what extent do staff and family-related factors such as involvement and communication affect succession planning?

From the interview sessions, some participants (60%) believe that family members should be involved in the day-to-day running of the business, while some (40%) do not agree that family members should be involved in running the business.

Some of the participant's responses are as follows:

Yes, so that they will have first-hand information and can be able to take over the business (*Participant 5*).

Yes, so that the family members will know the rigour you go through in business, and it is necessary for handing over the business to them later in life (*Participant 7*).

No, family members should not be involved so they will not influence decisions in the business. Business and family are separate entities and should be kept at that. Family members will bring emotions to the business climate (*Participant 4*).

Not necessarily, and it depends on what capacity, though (*Participant 2*).

I am not buying that because the business will not run properly. There should not be business sentiments (*Participant 3*).

On the question as to what level that communication should be in the business to make it easy for staff and employees to run the business even when the owners are not available, Some of the participant's responses are as follows:

Transition goals in mind help succession planning in business. Communication should be part of employee engagement from one level to another (*Participant 2*).

Communication should be given, but to a limited extent, it requires trust but the staff I have now are a little trusted (*Participant 4*).

Yes, you cannot just be a one-person business all the time. It would help if you carried your subordinates along so that the day you are not available. The business can move on whether you are around or not (*Participant 6*).

Table 10 below is data from the questionnaire on the effect of family-related factors such as communication and involvement in succession planning. It shows that a grand mean of 52.7% of respondents indicate that communication affects succession planning to a large extent, 30.9% to some extent, 11.4% to a little extent, 2.9% to a very little extent and 2.1% not at all. With a weighted mean of 4.3, it is concluded that communication affects succession planning to a large extent.

Table 10: Effect of Communication & Involvement

SN	Questionnaire Items	TLE (%)	TSE (%)	ALE (%)	VLE (%)	NAA (%)	Weighted Mean
1	Open communication is essential to help build a good succession plan in a business.	77.5	19.8	1.8	0.0	0.9	4.7
2	There should be well written/documented plan for carrying out the day-to-day business and made open to my directors and management team.	79.3	17.1	3.6	0.0	0.0	4.8
3	The plan for running my business should be made open to all the business management members.	44.1	41.4	11.7	1.8	0.9	4.3
4	Communication of the process for succession should be made in the business.	55.0	33.3	8.1	2.7	0.9	4.4
5	Family members should be involved in the running of the business.	12.6	42.3	27.9	8.1	9.0	3.4
6	The level of communication in my business makes it easy for other employees to be able to run my business even when I am long gone.	47.7	31.5	15.3	4.5	0.9	4.2
Grand Mean		52.7	30.9	11.4	2.9	2.1	4.3

Research Question Five: To what extent does continuing education play a role in family business sustenance through succession planning?

Some of the participant's responses from the interview sessions are as follows:

In this part of the world, most especially the "Yoruba" tribe, What relationship does age, gender, and educational level have with the integration of a succession

plan into business development lot of people do not want to have a succession plan because they do not want to die now since they believe they can die once there is a succession plan in place. Also, Continuing Education can help mitigate all these challenges (*Participant 3*).

Continuing education is a tool for giving people the opportunity to know what succession planning is and how to incorporate it into the plans of the organisation (*Participant 4*).

It will help to itemise the goals and vision of the company and move the business to what I want it to become. It makes the business more focused and direct (*Participant 7*).

Continuing education would help inform on the processes necessary to create and implement succession plans. It would provide information from research data gathered and other experienced business owners who successfully implemented the plans and the best path to take regarding your area of expertise (*Participant 10*).

Table 11: Role of Continuing Education in Succession Planning

S/ N	Questionnaire Items	TLE (%)	TSE (%)	ALE (%)	VLE (%)	NA A (%)	Weighte d Mean
1	Graduate entrepreneurs need training that will help set more explicit expectations for succession planning.	80.2	15.3	1.8	2.7	0.0	4.7
2	Graduate entrepreneurs will need to identify high potential successors through performance reviews and multi-rater assessments.	67.6	27.0	3.6	1.8	0.0	4.6
3	I will need further training in career development activities to develop a good succession plan.	52.3	29.7	11.7	6.3	0.0	4.3
4	Key decision-makers in my business will need leadership training.	67.6	24.3	5.4	2.7	0.0	4.6
5	I will need the training to be able to create a custom development plan.	55.9	31.5	5.4	6.3	0.9	4.4
6	I do not need any education on preparing a succession plan.	10.8	18.9	29.7	18.0	22.5	2.8
7	There is a need for continuing education to improve the outcomes through training programmes that will equip business owners with skills to accomplish succession plans.	67.6	15.3	10.8	4.5	1.8	4.4
8	Continuing education can help overcome constraints to succession planning.	71.2	17.1	8.1	3.6	0.0	4.6
Grand Mean		59.1	22.4	9.6	5.7	3.2	4.3

Table 11 above is data from the questionnaire on the role of continuing education in succession planning. It shows that a grand mean of 59.1% of respondents indicate that continuing education plays a role in succession planning to a large extent, 22.4% to some extent, 9.6% to a little extent, 5.7% to a very little extent, and 3.2% not at all. With a weighted mean of 4.3 greater than 4, it is concluded that continuing education plays a role in succession planning to a large extent.

Research Hypothesis

There is no significant relationship between age, gender, education level and integration of succession plan in business development.

This was analysed with Chi-square, and the contingency tables are shown in Tables 12a, 12b and 12c below for age, gender and education level, respectively.

Table 12a: Chi-Square Contingency Table of Gender and Business Success Planning

Observed Frequency	Succession Planning (SP)					
Gender	Know what it is	Unwritten SP	No written SP	Young business	SP in next 5 yrs	Total
Female	5	17	20	6	10	58
Male	8	18	14	6	7	53
Total	13	35	34	12	17	111
Expected Frequency						
Female	7	18	18	6	9	58
Male	6	17	16	6	8	53
Total	13	35	34	12	17	111
<i>p-value</i>	0.72		X ² statistic	2.09		
<i>DF</i>	4		X ² crit	9.49		

Result: $X^2(4, N = 111) = 2.09, p > 0.05$

Conclusion: Do not reject the null hypothesis since X^2 is less than the critical value.

Table 12a above presents the contingency table of gender with business succession planning responses. Based on the result: $X^2(4, N=111) = 2.09, p > 0.05$, we fail to reject the null hypothesis, indicating that the gender profile with succession planning has no significant relationship with each other. In other words, business succession planning is not dependent on gender; it is more about the business and its sustainability, irrespective of gender.

Table 12b: Chi-Square Contingency Table of Age and Business Success Planning

Observed Frequency	Succession Planning (SP)					
Age	Know what it is	Unwritten SP	No written SP	Young business	SP in next 5 yrs	Total

20-29 years	3	7	7	4	4	25
30-39 years	5	12	13	4	5	39
40 years and above	5	16	14	4	8	47
Total	13	35	34	12	17	111
Expected Frequency						
25-29 years	3	8	8	3	4	25
30-34 years	5	12	12	4	6	39
40 years and above	6	15	14	5	7	47
Total	13	35	34	12	17	111
<i>p-value</i>	0.99		X2 statistic	1.57		
<i>DF</i>	8		X2crit	15.51		

Result: $X^2(8, N = 111) = 1.57, p > 0.05$

Conclusion: Do not reject the null hypothesis since X^2 is less than the critical value.

Table 12b above is the contingency table of age versus business succession planning responses. Based on the result: $X^2(8, N=111) = 1.57, p > 0.05$, we fail to reject the null hypothesis, indicating that the age profile with succession planning has no significant relationship between them. In other words, business succession planning responses are not dependent on or related to age; it is more about the business and its sustainability, irrespective of the age of respondents.

Table 12c: Chi-Square Contingency Table of Educational Level and Business Success Planning

Observed Frequency	Succession Planning (SP)					
	Know what it is	Unwritten SP	No written SP	Young businesses	SP next yrs	Total
UnderGrad Degrees / Others	11	26	25	7	8	77
PostGrad Degrees (Masters/PhD)	2	9	9	5	9	34
Total	13	35	34	12	17	111
Expected Frequency						
UnderGrad Degrees / Others	9	24	24	8	12	77
PostGrad Degrees (Masters/PhD)	4	11	10	4	5	34
Total	13	35	34	12	17	111
<i>p-value</i>	0.15		X2 statistic	6.77		
<i>DF</i>	4		X2crit	9.49		

Result: $X^2(4, N = 111) = 6.77, p > 0.05$

Conclusion: Do not reject the null hypothesis since X^2 is less than the critical value.

Table 12c above presents the contingency table of the educational level of respondents versus business succession planning responses. Based on the result: $X^2(4, N=111) = 6.77, p > 0.05$, we fail to reject the null hypothesis, indicating that the profile of respondents' educational level with succession planning has no significant relationship existing between them. In other words,

business succession planning is not dependent on or related to the level of education; it is more about the business and its sustainability, irrespective of the educational level.

Consequent to the results of tables 12a-c, we fail to reject the null hypothesis indicating no significant relationship between age, gender, education level and business succession planning.

Discussion of Findings

The result of the study shows that graduate entrepreneurs are aware of succession planning, but the majority have not incorporated it into their business. The awareness by the graduate entrepreneurs might be expected based on their educational background. Firstly, National Universities Commission (NUC) has made entrepreneurship a compulsory course in the universities; secondly, some universities have also established Entrepreneurship units through which they expose some of their students to entrepreneurship activities, and lastly, organisations such as LCCI, Lagos state government give opportunities to some to imbibe. This result indicates that modern-day business entrepreneurs have imbibed the need to have succession planning incorporated into their everyday business transactions but are still procrastinating the time to implement succession planning.

More importantly, the study results indicate no significant relationship between the integration of succession plans in business development and age, gender or educational level. This result contradicts Magasi (2016), especially in relation to education level, that business enterprises owned by entrepreneurs with a high level of education were consistently found to practice succession planning, and they had a low incidence of business closure. Perhaps, a more comprehensive study of this area will give a clearer picture.

The study indicates a relationship between family-related factors such as involvement, communication, and succession planning. This entails that having effective communication in the businesses and integrating proper family and staff communication in the business venture will affect the succession plan of a business. This is corroborated with the findings of Magasi (2016) that growth in communication between family members in SMEs had a positive effect on business succession planning. Also, Osita et al. (2020) stated that mentoring boosts sustainability and, ultimately, the business's survival. For a successful mentorship process, the mentee should have been integrated into the business for a reasonable length of time and have a long relationship with the mentor. Communication is crucial for a positive relationship between a mentor and the mentee. In essence, their submission is in line with the result of the study.

Lastly, from the study, many participants affirmed that continuing education would play a significant role in succession planning. This result agrees with Mutunga and Gachunga (2013), critical factors to succession failure in small businesses include lack of motivation by prospective successors, lack of formal/informal training and lack of self-confidence in having the required managerial skills for the post. Virtually, these qualities require adequate time for preparation and tutelage. Continuing education will be crucial for the exposure of would-be successors to obtain adequate knowledge to prepare them for the job. Even the entrepreneurs will require continuing education, whether graduates or not, to expose them to new developments in their area of operation and give them the base for adequate mentoring.

Conclusion

The study was carried out to determine the extent to which business owners know succession planning, and the findings showed that most business owners are aware of succession planning but have not incorporated it into their business. All the participants agreed that succession planning is suitable for businesses and that continuing education plays a significant role in getting to know more about how to go about succession planning in their businesses.

Recommendations

Based on these findings, the following recommendations were made:

1. Business enterprises should be encouraged to organise training for the managing partners that will help integrate succession planning into their business operations.
2. Opportunities should be given by business management to competent staff and family members that are being watched for succession.
3. Ensure that intending successors (employees and family members) are taken through a rigorous learning process that will enhance the sustainability of the business through smooth transitioning strategies.
4. The leaders of the businesses should focus on promoting a conducive learning environment and provide an array of training to intending successors, which will help to achieve the mission of the businesses and smooth take-over in the future.

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Socialization nexus in the achievement of Sustainability agenda and Kenya Vision 2030

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Abstract

The sustainable development goal (SDG) 16 advocates for peaceful and inclusive societies for sustainable development, access to justice for all, effective, accountable and inclusive institutions at all levels. SDG 16 is an enabler to the attainment of all other sustainable development goals as it does not only require legislation but a new form intergenerational inter-professional socialization which will instil individual discipline and transfer relevant values of sharing, equity and equality, transparency, accountability and elimination of greed, respect for public goods and appreciation of environment. Currently many existing systems in society and economies in Africa are characterised by inefficiencies and abuse of power in various sectors which inhibit economic growth, employment creation and investment, with low trust in law and the rule of law, education and quality of life and, thus, are incapable of creating conducive environment to meet the SDGs. In 2007, Kenya prepared the vision 2030 to transform the nation into newly industrializing and middle income country with high quality of life to all citizens in a clean and secure environment. The social pillar focuses on building a just and cohesive society that enjoys equitable social development in a clean and secure environment. The three Pillars: social, economic and political are interlinked. The principles on national values, goals and ideology in the political pillar resonates well with Article 20 of the Kenya Constitution 2010 on national values and principles of governance. All the values are required for the realization of sustainable development through favourable and new form of socialization, deliberately planned and integrated process, cutting across generations and professions with essential skills development and competency building to change the mind-set of all citizens. Socialization is currently missing as an important aspect of the national values nor is it systematically embedded in curriculum and work placement. It is only through such a process that Kenya can attain the three Pillars of vision 2030 and Article 10 of the constitution 2010 on national values and principles of good governance and create more business opportunities for the youth and restore trust on the existing systems nationally and internationally. This will be a review article aimed at answering the following questions: What are the existing challenges in attaining the Kenya vision 2030 and SDGs? What is the role of socialization in bridging the gaps and, what steps should Kenya take to ensure sustainability? A review of the current process, challenges, the role of socialization in addressing nexus issues and necessary steps towards the Agenda 2030 will be explored. Recommendations leverage on socialization for skills development, competency building and sustainability.

Keywords: *Socialization, SDGs, Kenya vision 2030, Values, Skills development, Sustainability*

Socialization nexus in the achievement of Sustainability agenda and Kenya Vision 2030

Introduction

It is only a few years to the year 2030 and Kenya is one of the countries that signed the post 2015 Agenda (the sustainable development Agenda 2030). The country also has vision 2030 which was launched in 2007. The sustainable development goal (SDG) 16, though advocates for peaceful and inclusive societies for sustainable development and access to justice for all, together with effective, inclusive institutions at all levels has greater role in enabling the attainment of all other goals (United Nations, 2015), such that without achieving SDG 16, none of the other SDGs would be attained. Kenya has aligned the implementation of SDG targets to vision 2030 and implemented through the mid-term plans. The voluntary national review (VNR) 2020 (Republic of Kenya, 2020) indicated that the targets for three pillars: economic, social, and political could not be met due to inadequate funds. Thus showing the urgent need to seal loopholes that could worsen the situation.

Some of the challenges noted for failing to attain SDG 16 include high levels of corruption which continue to undermine the strengths of institutions and compromise on delivery of services, cultural and religious beliefs that lead to under-reporting and follow up on sexual offences and gender based violence, and ethnic conflict and tensions together with inequitable distribution of resources. It is also clear that since the promulgation of the new constitution 2010, legislation has not kept pace with the fight against greed and other vices, showing that legislation alone is inadequate in attaining SDGs or vision 2030. The second VNR (Republic of Kenya, 2020) noted that the country still faces the challenges of inequalities, existence of illegal firearms, weak values, norms and societal desire for quick wealth that come with consequences. Conversely, SDG targets require values of sharing, equity and equality, transparency, accountability, making appropriate choices, appropriate work culture, elimination of greed, respect for public goods and appreciation of environment. Thus the need for a change in approach to put the country on the right track, build capacity and develop skills among the youth for sustainable development. It means that a new form of socialization is required to correct the negative behaviours and promote ethics and values.

Initially, the traditional family was self-sufficient and effectively facilitated the process of socialization by equipping members with necessary knowledge and life skills (Akuma, 2015a:6) and maintained social order (Akuma, 2015a:3), but today contemporary transformation of the family due to modernization, urbanization, expansion of education, demographic changes, greed, pursuit of wealth at the expense of morals and values as well as mass media has been put under pressure leading to changes in its fundamental cultural values (Akuma, 2015a:6), rendering it incapable of providing socialization. Further, some of the current parents are not well equipped with adequate information to guide their children while young people continue to interrogate what constitutes morally acceptable and good behaviour, an indication of confusion that would make the achievement of SDG targets and Vision 2030 difficult. The changes in family system manifested through marital conflicts, women empowerment for gainful employment,

deterioration of morals and gender-based violence as well as violence against children signify that family can no longer play its role as previously assumed, thus calling for an alternative system for societal harmony. It is suggested that schooling and non-schooling system can be used to re-orient the society through value-based instruction and mass media, focusing on moral health and basic skills for hard work and discipline with monitoring and mentoring (Reamen, 2017).

A number of gaps have been identified in this study: limited information on how to harmonize the 3 pillars of Vision 2030 to leverage on nexus issues; inadequate information on how SDG 16 and 17 would be used to enhance the achievement of the other SDG targets; limited research on parental moral socialization and moral health in general, omission of socialization as an important aspect in national values and its systematic exclusion in curriculum and work placements; inadequate information on how various professions are socialized to work interprofessionally, and scholarly research needs on corruption and its effects on economy and society. This article aims at answering the following questions: What are the existing barriers/challenges in the attainment of Kenya vision 2030 and sustainable development goals (SDGs)? what is the role of socialization in bridging the gaps and ensuring sustainability?. and; what steps should Kenya take to speed up the realization of the vision 2030 and SDG targets?.

This is a review paper using secondary data to address the above questions. The social interactionism theory is adopted and most of the literature used is obtained from University of Nairobi online search engine using AJOL website and Google search engine from journal articles, reports, book chapters and books among others. Discussions are based on the gaps filled by socialization and socialization process to be adopted in Kenya together with the steps necessary to hasten the achievement of vision 2030 and the SDGs by leveraging on the nexus issues within the SDG 16 to transform people's societal morals and values and align the mindset to the requirements of the visions. It is concluded that without prioritizing such transformation, it would be difficult for Kenya to overcome financial constraints required in the implementation of vision 2030 and sustainable development goals.

Socialization, skills development, SDGs and Kenya Vision 2030

Socialization and career choice

Parents influence the life of children in adulthood, and shape ideas about work ethics, values and money. Parents discipline the children, they define hierarchical structures and guide emotional development. For instance, those in legal and medical professions tend to have children in the same professions due to socialization.

The institution of family currently is characterised by confrontation between people of different ages and agendas having diverse personal ideologies and social affiliations (Akuma, 2015a:3). Initially, the family was regarded as being responsible for maintaining basic social order and a refuge of harmony, serenity and understanding. The contemporary challenges of modernization have altered the family structure of relationships, rendering it incapable of equipping the

members with necessary knowledge and life (Akuma, 2015a:6). The current parents also are not well equipped with adequate information to guide their children, while young people interrogate, what is moral and good behaviour'. Other challenges come with single parent families and mass media, thus the need to fill the gap by finding alternative approach that is compatible with modern development and livelihoods. Okoroafor & Njoku (2012: 2) noted that poor parenting and lack of proper socialization in Nigeria is to blame for the existing social problems such as lack of respect for elders and constituted authority, corruption, terrorism, kidnapping and gender based violence (rape) among others. This is because socialization enable people to acquire important social skills, norms and values, ethics and other cultural characteristics of the society. It is the vehicle that transports values from one generation to the next. It therefore means that the transport is broken and there is no transfer or transfer of irrelevant material.

According to Verma & Sunil (2018: 6), parenting goals have an impact on the moral development of a child through its effects on parenting practices and parenting styles as the moral goals of the parent lead to individual differences in moral behaviour of children. Verma et al recommends more research on moral socialization.

Socialization has been used to correct negative behaviours from actors by altering the curriculum to include course material on ethics and values and making the training inclusive (gender, age, ethnicity, and social class) (Wendland & Bandame, 2007: 1). Socialization could also be used to identify and nurture good leaders capable of serving communities in honesty, particularly, the political leaders (Eesuola, undated). Political socialization is based on keenness and interest in public policy and practices, family socialization (in terms of orientation, attitudes and perspectives), and social class.

It was also realised that in order to attain vision 2020 in Nigeria, the right crop of leaders were needed to re-orient the society in terms of values, norms and acceptable conduct through education (Erhagbe, 2012). The traditional norms and values included respect for elders, obedience to authority, greetings, sexuality and reproductive health, hard work, patience, love and caring for each other, and moral lessons, among others (Okoroafor & Njoku, 2012: 2).

Research has shown that 56 percent of careers chosen by women are due to socialization (seen as a force to direct them to choose courses termed as feminine). Other factors influencing career choices include poverty, gender stereotypes, predetermined life cycle for women and girls and secondary school choices (Gitaga, 2011). The above factors should be addressed in earlier stages of life for better socialization. The role of parents in perpetuating or discouraging gender disparities and influencing career choice by children (which limit the choices they made and also influence skills development, is clear

Socialization and skills development

Socialization is the process through which individuals acquire the knowledge, skills, attitudes, values, norms and appropriate actions of their community (Shahr, et al 2019: 2). Professional socialization as opposed to training combines knowledge with related skills and a changed sense of oneself and is essential for a successful academic graduation experience. On the other hand,

organizational socialization is where the newcomer starts working as new work force and may play a more important role in shaping the performance of the new comer (Shahr, et al 2019: 7).

Socialization enables people to handle relationships and manage social situations as one is able to share ideas with others, manage teams or relationships. The parent aid the acquisition of these skills at an early age and get perfected as children grow up. Careers require those with skills (whether formal or informal employment) and entrepreneurship require sound skills to share ideas and its benefits with people, essential for promoting women enterprises.

Socialization prepares people for social life through teachings on group's shared norms, beliefs, and behaviours. Socialization is important as it teaches impulse control and developing a conscience, prepare people to perform certain social roles, and cultivating shared sources of meaning and value (Lumen, 2022 & Cole 2020). The children begin the process at home with the family and continue at school where they are taught about expectations for a mature adult. Lumen (2022) defined socialization as a process of transferring norms, values, beliefs and behaviours to the members of the group. Social roles include occupational roles, gender roles, as well as roles of institutions (marriage and parenthood). Children learn about right and wrong from parental socialization (Verma & Sunil, 2018). Socialization is an important process of moral development (Fasoli, 2021). Mtenje, (2017) views socialization as a process by which values and norms (including gender issues) are taught and learned and it is critical means by which societies formulate and preserve their cultures and identities. Patriarchal societies had rigorous socialization process in which members of the community knew what is appropriate, duties, responsibilities and roles expected of them for the sustenance of the family and communal harmony (Mtenje, 2017). Patriarchal systems were dethroned without borrowing the strengths thereof and finding alternative ways of maintaining the benefits in modern gender neutral or female headed households.

Professional socialization is a process through which a person becomes a legitimate member of a professional society and has impact on professional conduct and morality. Professional socialization is said to be non-linear, continuous, interactive, transformative, personal, psychological and self-reinforcing process (Shahr, et al, 2019:1). It is formed through internalization of specific culture of a professional community and leads to professional identity and development. This type of socialization can be carried out at the university level, where students examine the conduct of market demands of various professions of their interest. Before launching professional socialization, the profession must be defined, and involvement in community of practice consisting of integrated educational programmes, good role models, supportive educational structures, opportunities for work experience and constructive feedback. The benefits include professional identity and development, adaptation to professional roles and job satisfaction, professional and organizational continuity and becoming an effective member of the professional community. The individuals internalize the specific culture of the professional community, expectations, values, beliefs, customs, traditions and unwritten rules of the profession as well as understanding the hierarchy and the power structure and responsibilities (Shahr, et al 2019: 8).

In Kenya, the family is the basic unit in which norms and values, beliefs and practical skills are first imparted to the young members of the society for their future survival as functional adults (Akuma, 2015b). Akuma reiterated that the moral and values are better inculcated in the family but due to the pursuit for education, these morals and values should be passed through schools, media and other institutions. Abandoning societies' cultural norms put the young members of the society at a disadvantage and this could be main cause of inadequate social skills among the youth.

Socialization prepares professionals by building professional identity through interprofessional familiarization (the goal is to introduce young professional to roles and functions of other professionals outside their own discipline) (Arndt et al 2009). There is inadequate research on how various professionals are socialized to work interprofessionally, including among the health professionals. Thus, the need for socialization at various levels: family, school, university and post degree levels. A curriculum that would address these needs of socialization at various levels to respond to the national values to produce a workforce with culture, national identity and values that would contribute to sustainability is essential. Currently, socialization is not considered as an important aspect of the national values nor is it systematically embedded in curriculum and work placements in Kenya.

Some of the issues that demand socialization on morals and values in Kenya include: greed for money, associated with desire for money and power, high level of market and political monopolization, low levels of democracy, weak civil participation and low political transparency, high levels of bureaucracy and inefficient administrative structures which contribute to higher costs for taxes and slow processes in governance. Additional factors include weak legal framework, large ethnic divisions, high levels of income inequality and poverty (Katana, 2022). It would be impossible to achieve the SDGs if these challenges are not addressed. They contribute to low performance of the economic sector and may create unconducive environment for business. Sumah (2018) noted that corruption occurs in all civilizations in both economy and society at large, mainly caused by economic and political environment, professional ethics and morality, habits, customs, tradition and demography. Corruption inhibits economic growth and affects business operations, employment and investments. It reduces tax revenue and the various financial assistance programmes. The society also loses trust on the law and the rule of law, education and the quality of life. There is still inadequate research on effects of corruption on economy and society (Sumah, 2018).

Socialization, SDGs and Progress in achieving SDGs

The SDG 16 is aimed at promoting peaceful and inclusive societies for sustainable development, providing access to justice for all and building effective, accountable and inclusive institutions at all levels (United Nations 2015). Other SDGs cannot be attained without achieving this SDG 16 as it requires values that may not be only acquired through legislation but targeted socialization. SDGs would not be attained without discipline which starts at individual level manifested through the values of sharing, equity and equality, transparency, accountability, making correct choices, appropriate work culture and ethics, elimination of greed. Respect for public goods and appreciation of environment. These attributes are good for business, promote good governance

characterised by equity and equality, promote human security, and produces working population essential for development.

Kenya uses the five-year Medium-Term plans to accelerate the achievement of the Kenya vision 2030, SDGs and African Agenda 2063. Multi-stakeholder inter-agency technical committee consisting of the government, private sector and civil society organizations (CSOs) is responsible for the stakeholder engagement, implementation, monitoring and awareness creation (United Nations (UN), 2022 & SDKN Kenya 2022). The third Mid-term plan (2018-2022) is aimed at achieving accelerated, high, inclusive, broad-based, sustainable economic growth, and socio-economic transformation. SDGs are mainstreamed in performance contracting, action plans and sub-county integrated development plans. Targeted awareness creation, sensitization for a, workshops, discussion panels and focus group discussions are used to disseminate SDG information to the public. SDG champions were trained to steer the process (SDKN Kenya, 2022). In 2016, there was knowledge gap regarding SDG awareness in the country according to the Voluntary National Review (VNR). In order to achieve the SDGs, there is need for culture change and responsibility, long-term vision and sustainability, which require inter-generational transfer of information and practices, and re-orientation of curriculum for socialization on predetermined values for sustainability.

2.4 Kenya vision 2030

The aims of Vision 2030 is to transform Kenya into a newly industrializing, middle-income country that provides high quality of life to all its citizens in a clean and secure environment (Republic of Kenya 2007). According to this report, there are three pillars in the Kenya vision 2030: the economic, social and political pillars. In the political pillar, the guiding principle 4 (National values, goals and ideology) specifies a core set of national values, goals and political ideology in support of vision 2030 such as: acknowledgement of significance of God and affirmation of the religious, cultural and ethnic diversity of Kenyans as well as commitment to democracy and rule of law.

The Kenya constitution 2010, article 10 on National values and principles of governance identifies the following:

- a) Participation, national unity, sharing devolution of power, the rule of law, democracy and participation of the people.
- b) Human dignity, equality, social justice, inclusiveness, human rights, non-discrimination and protection of marginalized
- c) Good governance, integrity, transparency and accountability, and;
- d) Sustainable development

All the values are required in sustainable development and the values require moral health to be fully realised. The values should be internalized as a way of life and the benefits enjoyed by all Kenyans to create good business environment. It is therefore possible to ask the following questions: How has socialization taken place in Kenya over the years? What values have they promoted? What are the impacts and gaps on business?

Kenya has attained a number of milestones in the achievement of SDGs as spelt out in the 2020 Voluntary National Review (Republic of Kenya, 2020). There has been improvements on poverty eradication, health, education, gender equality, provision of clean water and sanitation, electricity, combating climate change and ensuring sustainable cities and human settlements. The Big Four Agenda which was used to speed up the process had four pillars: provision of adequate and decent housing, increasing manufacturing, universal health coverage and attaining food security and nutrition. The country also aims at implementing the African Union 2063 Agenda.

A number of challenges were identified as hindering the achievement of the SDGs:

- i) Low level of awareness of SDGs and capacity
- ii) Inadequate timely and disaggregated data
- iii) Deficiency on funding for SDGs
- iv) Delays in setting up committees of high ranking officials for coordination as well as inadequate staff for coordination
- v) Reluctance to switch to more environmentally friendly energy services and vandalism of energy infrastructure
- vi) Existence of firearms, weak values, norms and societal desire for quick wealth
- vii) Inadequate incentives to spur private sector investment in low cost housing

The challenge in attaining the SDG 16 (Republic of Kenya, 2020: 79) include:

- a) High levels of corruption which continue to undermine the strength of institutions
- b) Cultural and religious beliefs that contribute to under reporting of sexual offenses and gender based violence
- c) Ethnic conflict and tensions
- d) Inequitable distribution of resources

2.5 Theoretical Framework Model

Symbolic interactionism has been adopted in this research. The theory assumes that human beings act in terms of what meaning they assign to objects in their environment. Object refers material things, events, symbols, actions and other people or groups. People's conduct or behaviour is primarily influenced by their definition of the situation. The interactionists maintain that people assign meanings to the stimulus before they act, represented as shown in Figure 2.1:

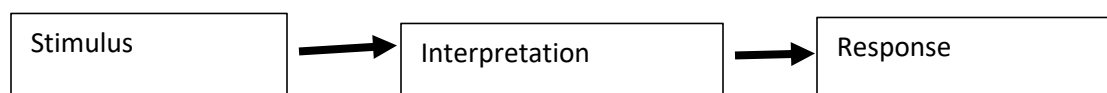


Figure 2.1 Symbolic interactionism (Source: Okoroafor & Njoku, 2012)

It is believed that established meaning of objects (including social values) are always subject to transformation. The emergence and diffusion of novel definitions of reality is a critical and important feature of social change (Okoroafor & Njoku, 2012:2).

Among the many methods of re-orienting the social system, reform of education system is important as schools are a major agent of socialization. Curriculum could be reformed to include studies on anti-corruption studies, moral and ethical instructions, parent, teacher, pupil interactions as well as social roles and responsibilities. The relationships are shown in

Figure 2.2.

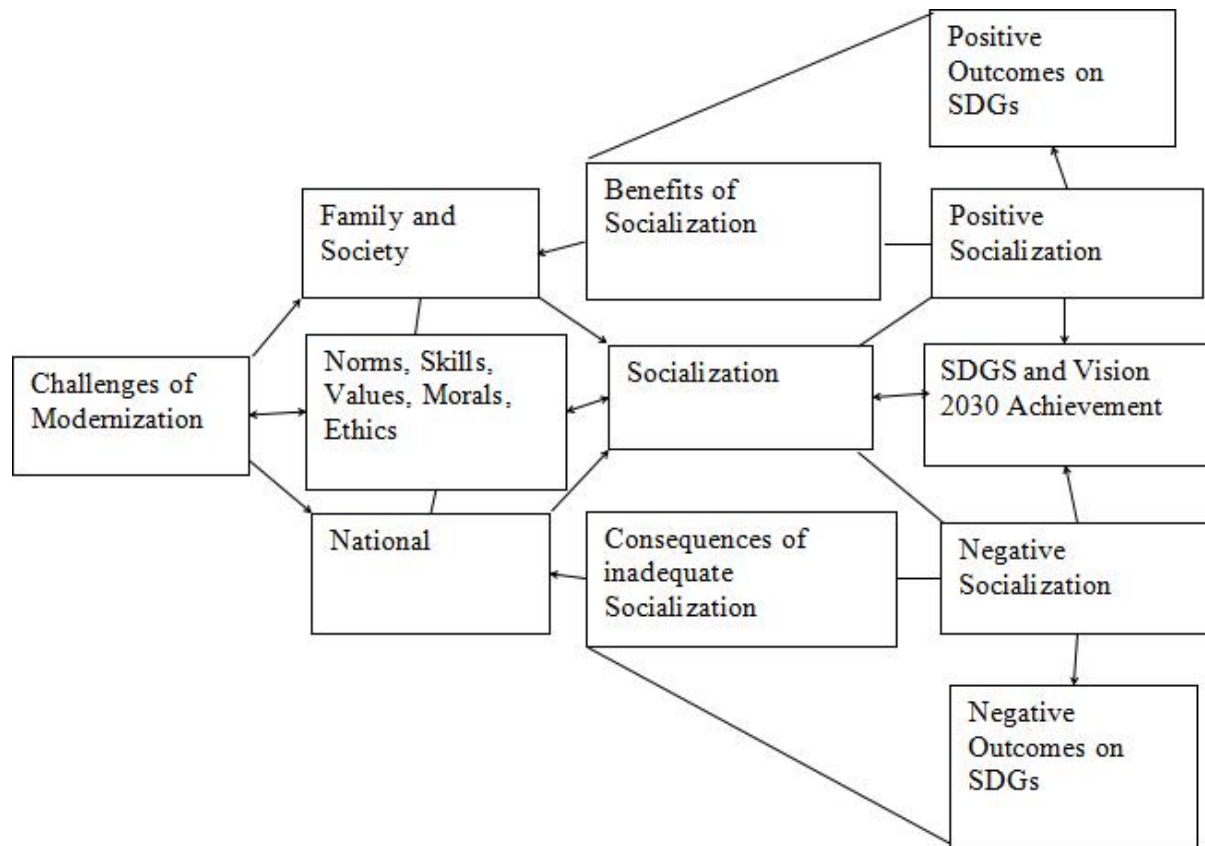


Figure 2.2 Relationship between modernisation, family and national values and norms, socialisation and sustainable development goals and vision 2030

Some of the challenges modern families face include modernization, inadequate information on how to guide children, confusions regarding what is morals and good behaviours, issues related to single parent families and mass media, among others. These challenges occur at both family and society level as well as national levels. Inadequate socialization or negative socialization leads to lack of respect for elders and those in authority, greed for quick wealth and power and different forms gender based violence. Such an environment is characterised by low skills development and is uncondusive for business with negative impacts on the attainment of SDGs and vision 2030. Conversely, when socialization is carried out, gains are made on social skills, norms and values, ethics as well as cultural characteristics of the society. Transfer of values influence career choice and development, people are able to handle relationships, there is impulse control with adequate preparation to take up social roles, thus contributing positively to sustainable development and attainment of vision 2030.

Methodology

A number of published documents (580) were obtained in the University of Nairobi search engine, AJOL online search, and Elsevier. A total of 559 were rejected at title which further reduced to 42 due to suitability of abstracts, failure to meet criteria for inclusion, repetition or absence of information required. After going through the titles, 11 articles, 6 reports, 1 book, 4 discussion papers and 1 thesis were finally selected and which formed the reference material for this work. Search strategy matrix is shown in Figure 3.1.

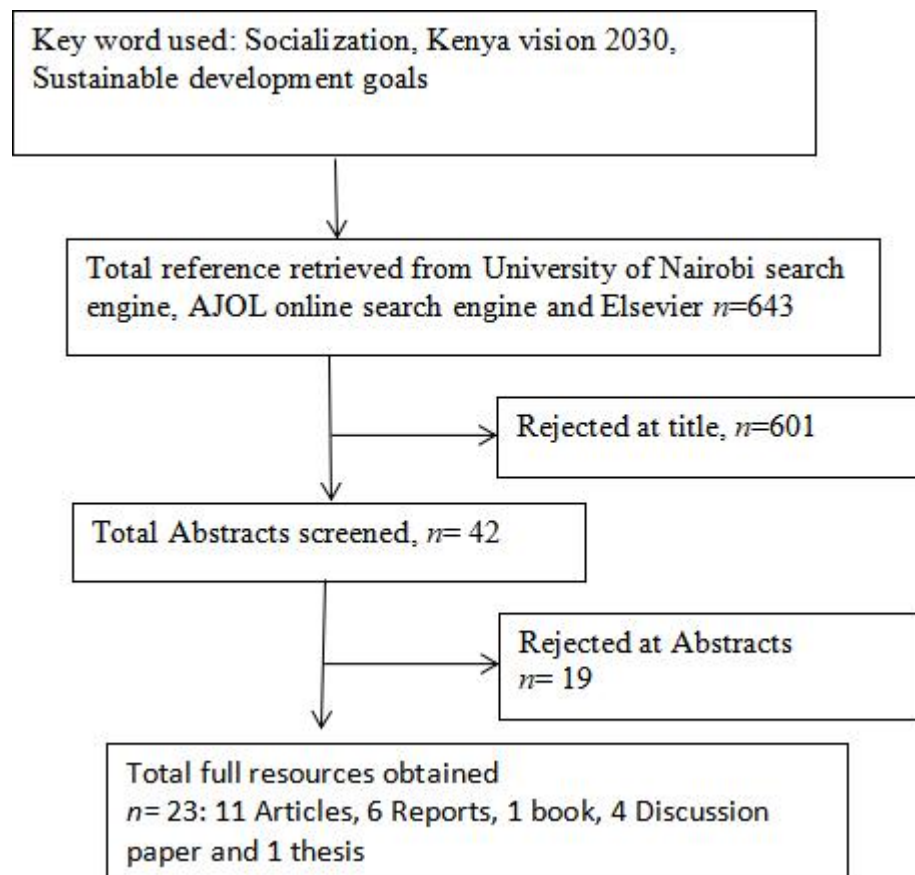


Figure 3.1 : Search Strategy Matrix

Results and Discussions

1. Socialization

Families can facilitate socialization of youths by enhancing or inhibiting it, yet due to many challenges facing families today: marital conflicts, women empowerment for gainful employment, deterioration of morals and gender based violence, many families are incapable of playing this important role (Reaman, 2017). It is therefore important to find an alternative

system for societal harmony. Reaman suggested the use of informal and formal schooling system to fill the gap focussing on value-based counselling and mass media to impart good morals and basic skills of hard work as well discipline with monitoring and mentoring of youth.

There is need to specify the type of socialization that one needs to qualify to be a proud citizen of Kenya. During the antenatal and post natal care mothers can be trained on how to socialize their young children, while within the early levels of schooling, there could be emphasis on the attributes for being a good citizen of Kenya. The curriculum should be developed in consultation with council of elders, religious organizations and other stakeholders to identify relevant information for intergenerational continuity. It will allow the acquisition of relevant information that were traditionally passed onto children in families. At higher levels of schooling, values, morals and community service should be reinforced, while at the tertiary levels, professional socialization with community service or industrial attachment should be emphasized. The major part of formal socialization takes place in basic education programmes and the part occurs incidentally and subconsciously in education and practical environments through unplanned observations and interactions with mentors. The formal parts transfer certain dimensions of a professional culture, like beliefs about the characteristics of a responsible professional, and committed to adherence of ethical codes (Shahr, et al 2019: 10).

Socialization should be considered as important in competency building. Interprofessional socialization in education require recognition. A deliberate, planned and integrated interprofessional socialization process that is consistent across various professions could eliminate barriers to interprofessional practice and prepare professionals for better interprofessional work, key in the attainment of SDGs.

The SDG 16 is aimed at promoting just, peaceful and inclusive societies with the following targets:

Table 1: Linking SDG 16 to the Kenya Vision 2030 Economic, Social and Political Pillars

Target	Description	Kenya Vision 2030 Pillar
16.1	Significantly reduce all forms of violence and related deaths everywhere	Political
16.2	End abuse, exploitation, trafficking and all forms of violence against and torture of children	Political
16.3	Promote the rule of law at the national and international levels and ensure equal access to justice for all	Political
16.4	Significantly reduce illicit financial flows and arms flows, strengthening the recovery and return of stolen assets and combat all forms of organized crime	Political
16.5	Sustainably reduce corruption and bribery in all their forms	Economic, Social and Political
16.6	Develop effective, accountable and transparent institutions at all levels	Economic and Political

16.7	Ensure responsive, inclusive, participatory and representative decision-making at all levels	Economic, Social and political
16.8	Broaden and strengthen the participation of developing countries in the institutions of global governance	Political
16.9	Provide legal identity for all, including birth certificate	Economic, Social and political
16.10	Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	Political
16.A	Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular developing countries to prevent violence and combat terrorism and crime	Economic, social and political
16.B	Promote and enforce non-discriminatory laws and policies for SDGs	Political

Source: Developed from UN (2015)

The table shows that SDG 16 is heavy on political pillar (targets 1, 2, 3, 4, 8, 10, and 16.B). The rest of the Targets cover all the three pillars: economic, social and political pillars.

The achievement of all SDG targets depend on the attainment of SDG 16 due to the following:

- i) Issues of financing and fight against corruption and bribery is covered in goal 16 (target 16.4 and 16.5)
- ii) All goals and targets require efficient, transparent and accountable institutions, rule of law and participation in decision-making (targets 16.6, 16.3 and 16.6).
- iii) Promotion of access to information and protection of fundamental freedoms, strengthening of national institutions and non-discriminatory laws and policies (targets 16.10, 16.A and 16.B).
- iv) Ending all forms of violence and related deaths, abuse and exploitation and torture of children (targets 16.1 and 16.2).

Thus, without attaining SDG 16, it would not be possible to realise all other SDGs. SDG 16 is an enabler to the attainment of the other goals and controls the acquisition, use and management of funds for realization of other SDGs.

SDG 16 is also essential in ensuring peace for all as no development can take place without peace and human security, as investors flee from violence, livelihoods are lost, with mass destruction of the environment, leading to poverty, food insecurity, ill health and mortality. Goal 16 should be the first SDG to be implemented and society needs to internalize the targets, transform them into a culture that is passed through systems and generations for more equitable and sustainable future. This is only possible through strategic socialization.

Sustainable Development Goal (SDG) 16 and Kenya Vision 2030

The Kenya vision 2030 is aimed at transforming the nation into a newly industrializing and middle-income country by 2030 (Kenya 2007). The vision is based on 3 pillars: economic.

Social and political, which are very closely inter-related. The economic pillar focuses on economic development through targeted programmes to achieve a predetermined growth rate (GDP) in different parts of the country. The social pillar seeks to build a just and cohesive society with social equity in clean and secure environment, while the political pillar targets the realization of a democratic political systems, built upon issue-based political system where the rule of law is respected and the rights and freedoms of every individual is protected.

The three pillars are core to SDG 16 as the goal would ensure that funds are secured to enable investment in economic programmes with better management to reach targeted communities. The SDG 16 would also enable peace and human security under social pillar to respect people's fundamental rights, enabling decisions to be made through participatory mechanisms with common values that support the vision (newly industrializing country, middle income, with high quality of life). The social pillar will also ensure that funds are not misappropriated but used according to the budget to improve the well-being of the people. Through SDG 16, and the social pillar, the political pillar would become effective as every citizen would observe the law and the rule of law, leading to harmonious and peaceful society today and in the future. Although some millennium development goals have been met, those on poverty eradication and food security still remain a challenge.

By examining the various elements of vision 2030: microeconomic stability, continuity in governance reforms, enhanced equity and wealth, energy, science, technology and innovation, land reform, human resource development, security and public service, it is clear that a transformative culture is essential that would translate into the following: appreciation and maintenance of the results, reduce costs on security and supervision but internalize the issues as a way of life in the country, provision of human resource pool that easily fits into the systems to produce the envisaged results, promotion of values of equity and equality which are strategic in eliminating poverty. The citizens also need to detest greed that interferes with the financing of the vision, with promotion of respect for public goods, efficiency in the use of resources, culture of respect of law and sanctity of life as well as peace.

The Three Pillars (Economic, Social and Political)

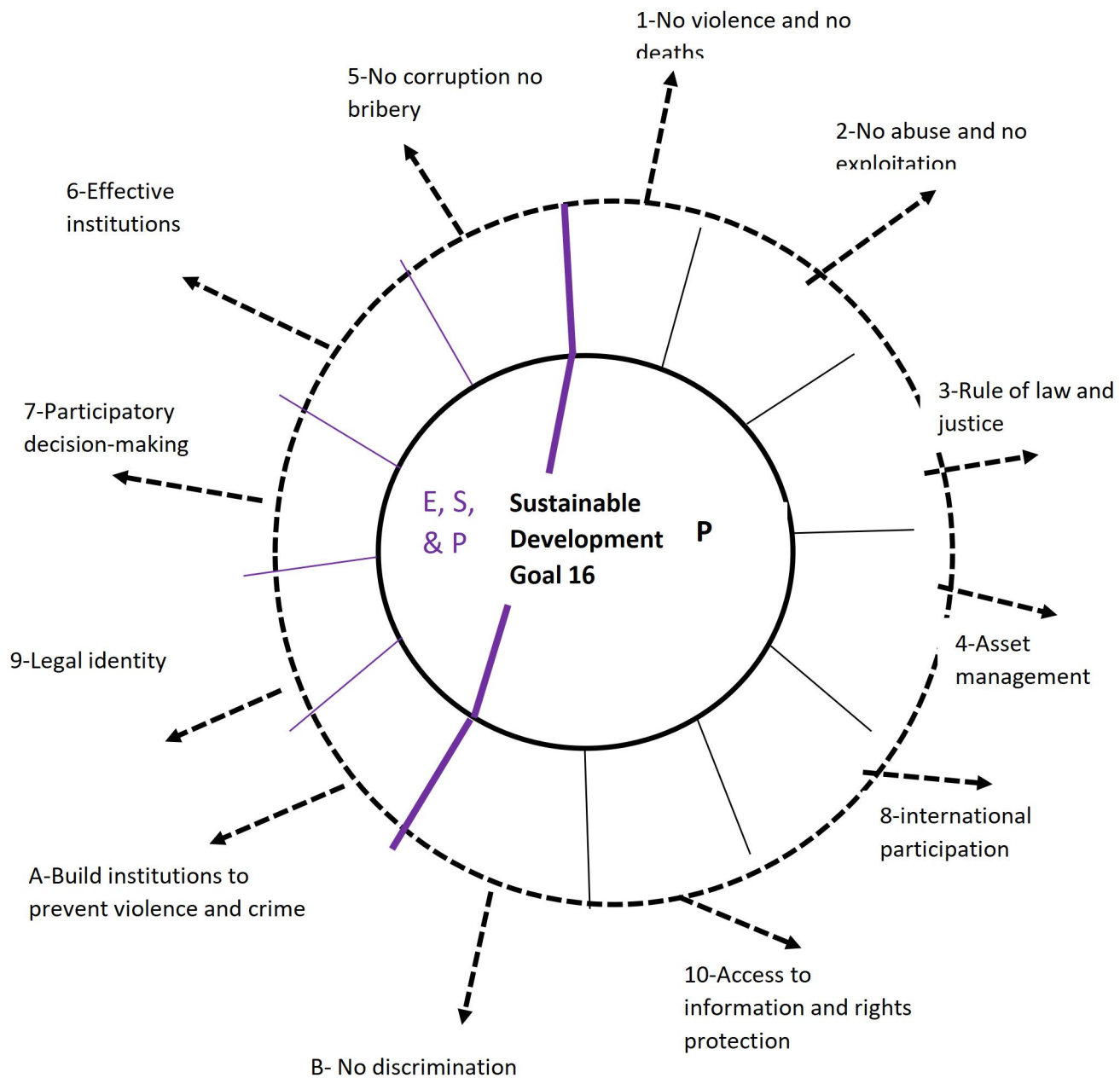
There are serious plans to attain the social pillar of vision 2030 but it is not possible to carry them out within the prevailing culture. In the political pillar, the guiding principle 4 (National values, goals and ideology) specifies a core set of national values, goals and political ideology in support of vision 2030 such as: acknowledgement of significance of God and affirmation of the religious, cultural and ethnic diversity of Kenyans as well as commitment to democracy and rule of law.

Initially, religious organization took charge of moral health issues but today many of them are characterised by greed, gender based violence and divisive ethnic intolerance and therefore are incapable of adequately promoting moral issues. Kenya should therefore identify the moral values that are essential in socialization of the future generations to produce better workforce, peace and security important for creating safe work environment or business. Civic education

should not be tied to electioneering process only, but be a continuous process. Socialization is the missing thread that links the three pillars and enable the realization, management and sustainability of the results of the vision 2030. Figure 4.1 shows the interrelationships.

Socialization is already provided for under political pillar and only requires implementation: Election and political process- civic education, formal and informal education, promotion of information flow and better engagement with the media. Under transparency and accountability, there is strengthening legal framework for anti-corruption ethics and integrity (which allows public access to information). Morals and values are inculcated and cannot be singly attained through legislation. Democracy and public service delivery and rule of law also require socialization. The social pillar is concerned with human resource that would drive the process and that requires a code of conduct.

There is currently inadequate information on harmonization of the there pillars with SDGs as well as leveraging on the intersections/nexus issues to speed up the process.



Key:

E, S, and P are the Economic, Social and Political pillars

Figure 4.1: Relationships between Economic, Social and Political pillars and SDG 16 targets

Responding to the challenges in meeting SDGs

Despite the fact that some attempts have been made to achieve the SDGs, the number of people living in poverty have continued to increase, coupled with youth unemployment and rising population growth which affect delivery of services. Classification of Kenya into a low middle-class country and Cultural and religious issues are also a problem in attempts toward SDGs (Republic of Kenya, 2020: 52). Such issues cannot be tackled by legislation alone but may require other strategies. Continuous and sporadic training and capacity building is expensive, noting that financial resources is a major hindrance to the attainment of SDGs. In such cases civil society organization / multiple stakeholders could be used to support the process of capacity building and skills development. Continuous training through socialization using the same resources would be more economically viable than one time training.

In the green economy strategy and implementation plan 2016-2030, information is lacking on how the SDG 16 and 17 would be used to enhance the achievement of the other SDGs as inadequate financial resources for implementation of SDGs is running across the SDGs as a barrier, thus weakening skills development, yet there is no attempt at the moment to address weak values, even with equalization funds, it would be difficult to get the required results.

The challenges noted in attaining SDG 16 call for a complete transformation of strategies or a change in mind-set. Legislation has been given a lot of emphasis and since the promulgation of the new constitution 2010, people have continued to ignore laws and rule of law, greed has escalated with weak morals and values. This shows that a multi-stakeholder approach is important where legislation could be used with ICT and Socialization to address various issues.

The following reasons make socialization an alternative approach:

- i) The use of legislation alone has not been fruitful in fighting corruption and related activities as people have learnt to circumvent the law
- ii) Existence of cultural and religious issues that cannot be solved through legislation
- iii) Financing SDGs is a problem across all the goals and little funding available should be put into proper use
- iv) Existing problems of values, morals and norms, where people continue to vandalise the existing public infrastructure require socialization to inculcate good values and morals
- v) Continuous training of champions and new officers is expensive, yet free education funding can perform the dual role of socialization and curriculum delivery, while professional socialization can be done through loans and grants by various organizations.

Steps Kenya should take to implement new form of Socialization

1. Intergenerational socialization

a) Birth to early childhood (Lower primary)

Mothers could be trained during antenatal and postnatal care on how to socialize their children. Caregivers could also be trained as many working mothers leave them with children for employment. The training should concentrate more on values and morals.

b) Upper primary and Junior secondary school

There should be a curriculum that has traditional values, religious values, national values put together. A section is made among the categories on what the society requires today/what is relevant. The students earn points for their good work, talent and general adherence to school rules and that could translate to fees or scholarship at the next level of education. Schools should not hire grounds people (like cleaners) but allocate the work to students to create/improve work ethics.

c) Upper secondary school

The curriculum should cover leadership and related values. There should be clubs where students work (like health club, agriculture, and environment, among others) and students participate in activities and serve their fellow students or community around them. The clubs should address SDG goals and create awareness among students. They should debate issues regarding solutions to vision 2030 and other SDGs. The students are evaluated based on their creativity, dedication and service to others. Schools should have talent shows and they earn points. Other training should focus on punctuality, respect, etiquette, ethics, and moral health, among others.

2) Secondary socialization/interprofessional socialization

During the early years at the university, the students should learn about the national frameworks on values and principles of governance, SDGs and expectations. They should also understand the application of ethics, morality and socialization on leadership, governance and national development. Students should learn about the various professions and codes of conduct and expectations. In later years they should take internship or community service that is examined through points and these contribute to job opportunities.

Other areas of concern should be government, governance, corruption and its consequences in creating poverty and food insecurity and how to correct it.

3) Organizational socialization

All organizations should have induction programmes pegged on the university socialization to enable the new recruits fit in their professions, code of conduct regarding greed, corruption and related vices should be clearly stated with consequences so that new recruits understand the implications. Professionals lose points when they engage in corruption and at some point could face disciplinary action.

Conclusions and Recommendations

The Sustainable Development Goal (SDG) 16 is essential for the country to attain other SDGs and Vision 2030. A number of challenges hinder the achievement of SDG 16 such as corruption,

cultural and religious beliefs which undermine the strength of institutions and compromise on service delivery. Legislation has also not kept pace with the fight against greed and other vices since the promulgation of the Kenya Constitution 2010. The country still faces weak values, norms and societal desire for quick wealth among other challenges indicating that a new form of socialization is required to correct the negative behaviours and promote ethics and values in line with the sustainable development goal requirements of sharing, equity, equality, transparency, and accountability, among others.

Initially parents were believed to take responsibility on socialization but currently, they are incapacitated by inadequate information, inability to direct the youth who question what moral and good behaviour is together with societal exposures from mass media. All these emphasise the need for an alternative form of socialization and learning institutions could provide a solution. Socialization enables people to acquire important social skills, norms and values, ethics and other cultural characteristics of the society. As a result, this article has examined the following issues:

- i. Definitions, types and relevance of socialisation in modern society
- ii. Role of parents in influencing career choice and development
- iii. The need for a curriculum that would integrate socialization throughout the learning process (primary, secondary, university and postgraduate levels),
- iv. Challenges Kenya is experiencing due to inadequate socialization
- v. The requirements for the attainment of the SDG 16 and relevance for business and governance, characterised by equity and equality, human security and production of working population, essential for development
- vi. The need for culture change and responsibility, long-term vision and sustainability through intergenerational transfer of information and practices and reorientation of curriculum for socialisation toward predetermined values for sustainability,
- vii. The relationship between Kenya vision 2030, the Kenya constitution 2010 and their relevance in creating good environment for business, and;
- viii. Factors that hinder the achievement of SDGs in Kenya with particular emphasis on SDG 16.

A number of suggestions have been provided on how socialization could be mainstreamed into the existing education curriculum without incurring extra costs for skills development and ensuring sustainability.

The paper concludes that:

Due to many challenges facing families today (marital conflicts, women empowerment for gainful employment, deterioration of morals and gender-based violence) which hinder families from socializing their children, it is imperative that formal and informal socialization systems be used as an alternative for socialization.

Secondly, the achievement of sustainable development goal targets depend on the attainment of SDG 16 due to its links with, financing and the fight against corruption and bribery, requirements for efficiency, transparency and accountable institutions, rule of law and participation in decision-making, promotion of access to information and protection of fundamental freedoms as well as ending all forms of violence and related deaths, abuse and exploitation. SDG 16 is an enabler to attaining all other systems and is essential in promoting peace, a major ingredient of development.

Thirdly, the country needs to identify a set of moral values that are essential in socialization of the future generations to produce a workforce, peace and security, needed for creating a safe work environment or business.

Fourth, civil society organisations/multi-stakeholder engagements could be used to spearhead processes of capacity building and skills development with in-built socialization for better resource use. This is because despite the fact that the country has many legal frameworks, people have continued to ignore laws and rule of law, greed has escalated, with weakening of morals and values. Thus the need to strengthen legislation with the use of socialization and other means, like information and Communication Technology (ICT).

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