

UNIVERSITY OF NIGERIA, NSUKKA



Theme:

A WHOLE NEW WORLD Research, Development and Innovation in the Pandemic Era



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5th - 7th July, 2021

Princess Alexandra Auditorium (PAA), University of Nigeria, Nsukka

UNIVERSITY OF NIGERIA, NSUKKA

1st ANNUAL MULTIDISCIPLINARY INTERNATIONAL CONFERENCE

(5th - 7th July 2021)

A Whole New World: Research,
Development and Innovation in the
Pandemic Era

**BOOK OF ABSTRACTS** 

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# OPENING REMARKS BY CHAIRMAN OF PLANNING COMMITTEE OF THE IST ANNUAL MULTIDISCIPLINARY INTERNATIONAL CONFERENCE OF THE UNIVERSITY OF NIGERIA, HELD FROM 5<sup>TH</sup> – 7<sup>TH</sup> JULY, 2021.

### Protocols!

On behalf of the UNN Conference Planning Committee, I am greatly pleased to welcome the Vice-Chancellor of the University, Prof. Charles ArizechukwuIgwe, FAS, Principal Officers and Members of the University Management, Distinguished Keynote Speaker, Prof OyewaleTomori, FAS, Special Guests and Conference Participants to the University of Nigeria Nsukka (UNN) Multidisciplinary International Conference on the theme: **A Whole New World: Research, Development and Innovation in the Pandemic Era.** This event is particularly significant because it is the first in a series of annual conferences that have been planned to address issues of global concern.

The Covid-19 pandemic no doubt has reset the ways of work and life across the globe and in the process, inadvertently fostered innovations in research and development around the world. At the University of Nigeria, many researchers have sought to leverage on the opportunities inherent in the adversity of the pandemic to come up with research outputs with huge potential to improve lives and livelihoods and for overcoming or adapting to the challenges posed by the COVID-19.

The primary aim of this conference is to disseminate the results of some of the research, innovations and developments taking place in UNN and elsewhere to national, regional and global audiences and to inform policy for management of COVID-19. It is also expected that the conference will provide an avenue to identify areas where there is gap in knowledge and the priorities for further research on ways and means of fighting the present and future pandemics in Nigeria.

I would like to use this medium to appreciate the Vice Chancellor, University of Nigeria, Prof. Charles ArizechukwuIgwe, FAS, who is also the Chief Host, for graciously approving the hosting of this conference and for the confidence reposed in the Planning Committee. I thank in a special way the Keynote Speaker, Professor OyewaleTomori, FAS, and Chairman of the Ministerial Expert Advisory Committee on COVID-19 (MEACOC) for accepting to share his knowledge and wealth of experience with the conference participants.

I welcome our partners, *The Conversation Africa* (TC-Africa), to this conference. Their participation is particularly significant to global dissemination of results of

research from this conference. We thank them for previous collaborations with researchers from UNN, and commend their mission to mainstream the voices of universities and scientists in the media and to support science engagement and science communication activities in Africa.

May I also express my gratitude to the conference delegates for sharing the results of their research at this conference and without whom the conference would not take place. Finally, my overwhelming thanks go to members of the LOC for collectively offering their time, talent and in some cases treasure to ensure success of the conference despite challenges imposed by the COVID-19 Pandemic.

Distinguished Guests, Ladies and Gentlemen, I wish you all a productive time and fruitful deliberations!

### Professor Chidi Nzeadibe

Chair, UNN Conference Planning Committee

AN ADDRESS OF WELCOME DELIVERED BY THE VICE-CHANCELLOR OF THE UNIVERSITY OF NIGERIA, NSUKKA, PROF. CHARLES ARIZECHUKWU IGWE, FAS, AT THE IST ANNUAL MULTIDISCIPLINARY INTERNATIONAL CONFERENCE OF THE UNIVERSITY OF NIGERIA, HELD FROM 5<sup>TH</sup> – 7<sup>TH</sup> JULY, 2021.

Deputy Vice-Chancellors and Principal Officers of the University
Deans of Faculty and Directors of Centres/Institutes
Erudite Professors and Members of the University of Nigeria Senate
Distinguished Keynote Speaker, Prof OyewaleTomori, FAS
Special Guests and Conference Participants
Distinguished Academic and Administrative Staff of the University of Nigeria,
Gentlemen of the Press
Great Lions and Lionesses
Ladies and Gentlemen

On behalf of the Management of the University, I warmly welcome you all to the University of Nigeria Nsukka (UNN) Multidisciplinary International Conference on the theme: A Whole New World: Research, Development and Innovation in the Pandemic Era. This is the first in a series of annual conferences that are aimed at addressing issues that affect the global community. The choice of this theme reflects our recognition of the huge impact that COVID-19 continues to have on public health systems, society, food systems, education, and economies which have led to massive transformations in the way we live and work. The pandemic has also given rise to significant research, development and innovation possibilities across different fields of human endeavour aimed at overcoming or adapting to the challenges posed by the COVID-19.

This event is coming at an auspicious time when Nigeria and the global community are battling with the challenges of Covid-19 pandemic, arguably the most serious global challenge since World War II. I am also aware of the recent strides made by Nigerian Government in these directions among which is the implementation of post-COVID Economic Sustainability Plan of the Federal Government.

Our aim is to use the conference to disseminate the results of some of the research, innovations and developments taking place in UNN and elsewhere to national, regional and global audiences and to inform policy for management of COVID-19. The conference will also be used to identify areas where there is gap in knowledge and the priorities for further research on ways and means of fighting the present and future pandemics in Nigeria. The conference brings together researchers, policy makers, development partners, NGOs and research funders both in Nigeria and outside the country to explore research, development and innovations in various

disciplines within the context of COVID-19. In line with the realities of the pandemic and to utilize innovations in ICT and remote learning and working, presentations at this conference will be fully virtual and I commend the ICT Unit of the university for providing and maintaining the infrastructure and backbone for implementation of this virtual conference.

I warmly welcome the Chairman of the Ministerial Expert Advisory Committee on COVID-19 (MEACOC), Professor OyewaleTomori, FAS, who has graciously accepted to present the keynote paper of this conference to our University. As a globally acknowledged Expert in the fields of Virology and Infectious Diseases, I am aware that the participants in the conference will benefit immensely from sharing some of your perspectives on research and development as well as policy advisory on the COVID-19 pandemic and pandemics in general.

I am happy that papers at this conference have been proposed from multidisciplinary perspectives with a view to contributing to solution to the challenges of the pandemic. Thus, the conference and its outcomes promise to contribute immeasurably to global effort at dealing with the pandemic. Consequently, I believe that the products of this conference will help to chart a new course in the management of the COVID-19 pandemic at sub-national, national, regional and global levels. I urge all participants to take advantage of the opportunities presented by this adversity, the pandemic, to advance research, development and innovations for the wellbeing of the global community. I also urge research funders both in Nigeria and outside the country to key into the research, development and innovations possibilities at this conference and collaborate with our university to support uptake of the outputs of this conference and other related research projects. It is my earnest hope that this conference will generate a quantum of ideas, methodologies and actionable recommendations for policy makers in different fields of human endeavour to advance the fight against the COVID-19 pandemic.

### **APPRECIATION**

I would like to congratulate the UNN Conference Planning Committee for going to great lengths to ensure that the maiden Multidisciplinary International Conference of the university is a huge success. I thank you all for your contributions and I wish you great success in this conference.

Distinguished Guests, Ladies and Gentlemen, I hereby declare the First Annual Multidisciplinary Conference of the University of Nigeria open.

Professor Charles ArizechukwuIgwe, FAS *Vice-Chancellor* 

# BOOK

# OF

# ABSTRACTS

### INNOVATION IN SCIENCE AND TECHNOLOGY

### AUTOMATED REFUSE BIN MANAGEMENT USING ARDUINO

#### SHEYI JONATHAN AYODELE

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### **Abstract**

The era of Corona Virus(Covid-19) pandemic has brought about several adjustments and innovations to the economic and social activities of people and nations. It has justified the need to take proactive measures to contain the spread of the deadly virus. This study presents an innovation in refuse management. The paper focuses on the automation of refuse management using an Arduino board to program an Atmega-328 microcontroller, ultrasonic sensor and dc motor to carry out refuse level detection, as well as the opening and closing of the bin's cover. The DC motor is triggered to open the bin's cover whenever there's human presence 15cm towards the bin, then closes itself once the person moves a bit more than 15cm away from the container. The system would further send a notification on the level of the refuse in the bin at specified thresholds to a registered/authorized person using SMS (Short Message Service) of a GSM (Global System for Mobile Communication) Module, as well as to a connected LCD (Liquid Crystal Display). The proposed system would help humans avoid any form of physical contact with the bin when disposing of waste, thereby mitigating the spread of Covid-19 at both private and public spaces. Keywords: Ultrasonic Sensor, DC Motor, Arduino Board, GSM Module, Refuse Bin

# SOME ANTIOXIDANT RESPONSES OF HYDROPONICALLY GROWN SOLANUM LYCOPERSICUM L. TO PENDIMETHALIN (PDM) INDUCED OXIDATIVE STRESS

### <sup>1</sup>EGEDIGWE, U.O., <sup>1</sup>EZENWAFOR, C.C., <sup>1</sup>UDENGWU, O.S., <sup>1</sup>EGONU, S.N. AND <sup>2</sup>EKELEME, C.A.

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#### **Abstract**

Pendimethalin (PDM) is a herbicide known to protect crops and control annual grasses and broadleaf weeds. Herbicides can trigger the production of Reactive Oxygen Species (ROS) that cause oxidative stress, which in turn, activates both enzymatic and non-enzymatic defense systems in plants. Solanum lycopersicum seedlings were hydroponically grown in three PDM (Stomp 455) concentrations (7.5 ml, 12.5 ml and 17 ml), made up with full-strength Hoagland Nutrient Solution (HNS) to support growth of plants. Independent HNS served as control stands. Three plants per treatment, replicated thrice and arranged in a Completely Randomized Design (CRD) in the screen house of Department of Plant Science and Biotechnology, UNN, were exposed to PDM for 14 days. Oxidative stress induced in plants were measured in terms of Malondialdehyde (MDA) content using TBARS test for Lipid peroxidation (LPO). Results showed that plants in higher PDM concentration (17 ml) (T3) synthesized a significant ( $P \le 0.05$ ) lower MDA when compared to non-stressed plants. For all antioxidant responses monitored, plants in T3 exhibited significant ( $P \le 0.05$ ) higher activities while the least antioxidant activities were exhibited in non-stressed plants. In like manner, increases in

antioxidants activities for all treatments corresponded to increases in PDM concentrations. In conclusion, results have shown that PDM significantly induced stress in S. lycopersicumcv. BSS 770. Biological, mechanical and cultural methods of weed control should be embraced by farmers. A more dynamic method is the use of PDM-herbicide resistant crops.

**Keywords:** Antioxidant Activity, Hydroponics, Oxidative stress, Pendimethalin, Reactive Oxygen Species, Solanum lycopersicum

# INNOVATION TECHNOLOGY INVESTMENT IN AGRICULTURE, INSTITUTIONAL QUALITY AND SUSTAINABLE AGRICULTURAL OUTPUT IN WEST AFRICA

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#### Abstract

The role of investment in agriculture in accentuating long-term economic growth is well documented in literature. However, substantial concern for the attainment of Sustainable Development Goals has created a paradigm shift for innovation in agricultural technologies investment. Moreover, in some developing countries, the institutional and regulatory regimes that affect agriculture are also undergoing rapid change to provide enhanced incentives for applications of technology in agriculture. But the nature of impact of these developments in enhancing agricultural output is uncertain. With Africa countries grappling with the desire to improve food security through innovation technology in agriculture and improved institutions, this study, therefore, examined the effect of innovation technological investment in Agriculture and institutional quality on sustainable agricultural output in West. Africa countries using panel autoregressive distributed lag method. This estimation framework captures the short run and long run relationship among the variables of interest. Panel data from 2000 to 2019 were employed for the study. Innovation technology investment in agriculture and institutional quality has positive and significant effect on agricultural output.

**Keywords:** Innovation technology investment, agriculture, institutional quality, agricultural output.

# REVITALIZATION OF THE PUBLIC SECTOR THROUGH INFORMATION COMMUNICATION TECHNOLOGY (ICT) FOR SUSTAINABILITY AND HIGHER PRODUCTIVITY IN COVID-19 ERA

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### Abstract

In the wake of the Covid-19 pandemic, most organizations struggled to cope with the restrictive measure of lockdown. For this reason, most organizations instituted the work from home policy, but the enabling infrastructure (ICT) was not readily available for employees to undertake their

responsibilities from home, which plunged most organizations and their employees into financial crisis. The cardinal objective of this paper therefore, is to critically examine the policy and infrastructural gaps of modern organizations with the aim to recommend the integration of Information Communication Technology for organizational sustainability and higher productivity in Covid-19 era. To achieve its objective, the paper adopted secondary method of data collection by relying mainly on documentary research method. From the available records, it was gathered amongst others that organizations within education, health and the ICT sector were mostly affected due to the dearth of ICT supporting infrastructure, unskilled personnel, digital divide, etc.Based on the findings, it was recommended that states, policy makers as well as organizations (both private and public) should consider the option of investing in ICT as well as providing the workforce with adequate ICT skills through ICT related training programmes.

**Keywords:** Revitalization, lockdown, organization, ICT, Covid-19.

## INNOVATION IN HEALTH SYSTEMS & MANAGEMENTS (NATIONAL, REGIONAL AND GLOBAL)

### HEALTH STATUS AND INDUSTRIAL PRODUCTIVITY NEXUS IN NIGERIA: THE ROLE OF GOVERNMENT

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#### Abstract

The utmost touchstone of a country's economic success is in its capacity to industrialize and produce high level of goods and services for growth and development. This desire is borne out of need to improve the sources of income, employment and economic diversification for highly primary product dependent developing countries including Nigeria. Good health increases the output of an individual through improvement in physical energy and mental activity while yearly output through reduced illness and career output through decreased morbidity or increased longevity. This study investigates the impact of health status on industrial productivity in Nigeria using the co-integration techniques and vector error correction mechanism in the time series data and incorporating the health adjusted life expectancy and quality adjusted life year to explore their relationship. In this study, we expect health status as state of complete physical, mental, social and economic well-being and not merely the absence of diseases or infirmity to have significant impact on industrial productivity. Given the above expected result, we also anticipate the outcome of policy recommendation to have wide applicability in Nigeria.

**Keywords:** Health, Industrial, Productivity

# AWARENESS, PERCEIVED EFFICACY AND UTILIZATION OF ASSISTED REPRODUCTIVE TECHNOLOGIES (ARTS) AMONG WOMEN ATTENDING INFERTILITY CLINIC IN A NIGERIAN TERTIARY HEALTH INSTITUTION: A CROSS-SECTIONAL STUDY

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### **Abstract**

Infertility is a source of distress for couples considering the high accolade placed on having children in family settings in Nigeria. Assisted reproductive technologies (ARTs) offer a chance of parenthood to couples. However, studies on knowledge of ART abound in Nigeria but no previous studies exist on the extent of utilization of assisted reproductive technologies. This study thus explored the level of awareness, perceived efficacy and utilization of ARTs among women attending infertility Clinic in a Nigerian Tertiary Health Institution. A cross-sectional study using a self-administered pretested questionnaire administered to 107 consenting clients seen at their visit to the infertility clinic from June, 2019 to March, 2020. Descriptive analysis was done using SPSS software version 24. One hundred and seven women with infertility problems, aged between 26-35 years with a mean age of 31.46± 5.72 participated in the study. Above average 62(57.9%) were aware of ARTs. Majority 83(77.5%) identified In-vitro Fertilization (IVF) as the major ART and ovulation stimulation 8(7.4%) the least. Majority 97 (90.7%) believed that ART cannot address male infertility 88(82.2%). Utilization was profoundly poor, only 27(25.2%) admitted have used ART procedures before and the mostly used ARTs were IVF 17(62.9%). Cost of obtaining ART services 82(76.6%) was the major hindrance to use. Awareness of ARTs is average; perceived efficacy is low and utilization abysmally low. Costs were the major hindrances to use of ART. Sustained health education, awareness campaign must be instituted and cost of obtaining ARTs subsidized and made affordable by government.

Key words: Assisted Reproductive Technology, Conception, Offspring, Infertility clinic,

### COVID-19 PANDEMIC: THE SOCIO-ECONOMIC AND HEALTH CHALLENGES TO WEST AFRICA

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#### Abstract

Covid-19 is characterized as pandemic based on the vastness of areas to which it has spread within its course. The human to human spreading of the virus occurs due to close contact with an infected person, exposure to coughing, sneezing, respiratory droplets or aerosols. These aerosols can penetrate the human body (lungs) via inhalation through the nose or mouth. Within a short time, this virus caused an upheaval and unrest across the globe. This study employs the discursive hermeneutic method to evaluate the social, economic and health challenges the pandemic has posed on West Africa generally. The findings reveal that West African countries, such as, Nigeria, Ghana and Senegal, etc have been affected in different ways by the coronavirus pandemic with unimaginable effects. The pandemic affects socio-cultural interactions and economic, intellectual and religious activities through the imposed social distancing policies that have different levels of strictness in several West African countries. The implication of the findings is that social policies can affect the social and economic well-being of citizens. An outstanding

social consequence of the covid-19 pandemic for West African citizens is the creation of social anxiety among families and communities in the region. The phenomenon has also shown how vulnerable West African societies are facing health hazards. This study recommends that policymakers should enforce social policies that unite communities in bad times, to reduce social anxiety. West African countries "must strike a fine balance between protecting health, minimizing economic and social disruption, and respecting human rights."

**Keywords:** Covid-19, Coronavirus, Pandemic, West Africa, Health, Infection

# HEALTH BEHAVIOUR CHANGES DURING COVID-19 PANDEMIC IN RELATION WITH HEALTH STATUS AMONG OLDER ADULTS IN SOUTH EAST NIGERIA: A CROSS-SECTIONAL STUDY

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#### Abstract

**Background:** Corona virus disease (COVID-19) pandemic has ushered in a new world order with increasing demand for health care needs, provisions and supplies. Older adults and other vulnerable groups are the most susceptible to debilitating outcomes of the pandemic. The COVID-19 pandemic has also brought about marked changes to health behaviours. While calls to identify effects of COVID-19 pandemic in relation with health status of community dwelling older-adults should be heeded, there is also dire need to examine potential changes with respect to health behaviours.

Methods: The study adopted the cross-sectional research design. All older adults (60 years and above) living in South-East Nigeria, formed the population of the study. Sample of 1668 older adults (x age= 67.4) were selected using multi-stage sampling procedure. A two-section, 18-item modified Positive Health Behaviour Scale was validated and used as instrument for data collection. Data collected were analysed using multinomial logistic regressions and descriptive statistics.

**Results**: Health behaviours have improved due to COVID-19 in terms of wearing masks, avoiding crowded places, appropriate and regular washing of hands and use of hand sanitizers, stress reduction vis-à-vis utilizing virtual and online activities. COVID-19 also positively impacted health consciousness, regular checkups and high compliance to COVID-19 protocols and health seeking behaviours among the older adults. However, there were concerns on weight gains and reductions in physical activity participation due to impulsive dieting and lockdown restrictions respectively.

Conclusion: Older adults need special consideration and care as a vulnerable group in the wake of COVID -19 pandemic. Some efforts are underway to promote positive health behaviours and assure better health status and overall wellbeing of older adults in our communities. Policy makers should pay attention to older adults being a group with highest risk of COVID-19 complications, co-morbidities and fatality. Public health efforts should focus on curbing the potential long term consequences due to behaviour change during COVID-19.

**Keywords:** Health behaviour, older adults, COVID-19 pandemic, health status, South east Nigeria

## HEALTH BELIEFS, HEALTH CARE UTILIZATION IN THE COVID-19 ERA AND ASSOCIATED FACTORS IN A SAMPLE OF OLDER ADULTS IN SOUTH EAST NIGERIA

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#### **Abstract**

**Background**: Majority of life-threatening diseases around the globe is now chronic and linked to health beliefs and level of utilisation of health care services. More than 60 per cent of older people in low-income countries, Nigeria inclusive appear not to utilize health care services due to the cost of visit, transport fare, belief systems and COVID-19 pandemic challenges. In Nigeria, many older adults seem to give in to false or inappropriate beliefs on health matters and poorly utilize health care services, probably due to poverty, location of health facilities, inappropriate information on belief systems regarding health care or total absence of government support in the concerned areas. This study will assess health beliefs, health care utilization in the COVID-19 era and associated factors in a sample of older adults in South East Nigeria.

Methods: In a community-based cross sectional study, a total number of 1,250 older adults will participate. Following the participants' consent, a 20-item self reported interviewer-administered structured Health Beliefs and Health Care Services Utilisation Questionnaire (HBHSUQ) will be administered for data collection. The questionnaire will be developed based on a detailed literature review of previous studies that had assessed older adults health matters and challenges. The older adults will be contacted in the various households in South East Nigeria. The standard descriptive statistics of frequency count and percentage will be applied to describe data pattern. Chi-square test will be used to examine the significance of the association between categorical data. Logistic regressions will be used to identify the factors associated with health beliefs and health care utilization of older adults.

**Key words:** Health beliefs, Health care services, Health care utilization, Associated factors, COVID-19 era, Older adults, South East Nigeria

### ACCESS TO MATERNAL AND CHILD HEALTHCARE SERVICES DURING COVID-19 PANDEMIC IN MAKURDI LGA OF BENUE STATE, NIGERIA

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### **Abstract**

The study examined access to maternal and child healthcare services among women of reproductive age during corona virus pandemic (COVID-19) in Makurdi Local government of Benue state. The health belief model (HBM) and Diffusion of innovation theory (DOI) were adopted for the study. Cross-sectional survey design research design was used. 600 women of childbearing age were selected using Cochran (1963) equation with 95% level of confidence (confidence interval =±5%). Multistage-cluster sampling procedure was used to select the study population. Data were collected with the use of questionnaire instrument and in-depth interview.

Statistical Package for Social Sciences (SPSS 23.0) was used for data analysis of quantitative data. Analysis of qualitative data was done manually. Logistic regression analysis was used to predict the likelihood of access and availability of maternal and child healthcare services during COVID-19 pandemic. Result revealed that, women who were employed in the public sector have more access to maternal and child healthcare services than women in the private sector, also women in the rural areas have more access to MCHS than women in the urban areas. Involvement of women of childbearing age in campaigns directed at improving access to healthcare services may be useful in case of future outbreak of diseases.

Key words: access, women of childbearing age, COVID-19, Nigeria

### WORK TIME CONTROL AND JOB CRAFTING AS PREDICTORS OF WORK METHOD CONTROL AMONG NIGERIAN HEALTH WORKERS

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#### Abstract

The purpose of this study was to investigate the predictive roles of work-time control and job crafting on work method control among Nigerian health workers. Nigerian dilapidated health sector faces unprecedented work method control challenges caused by the ongoing COVID-19 pandemic crisis, which has changed the world of health and the attainment of wellbeing. These have necessitated the multifarious challenge witnessed in the work setting, especially the health care sector, due to the unprecedented work role demands, in their effort to mobilize required resources to accomplish desired work outcomes. This fact necessitated the researchers to focus on health workers work-time control and job crafting with the intent to identify their boundary conditions on employees' work method control paradigm. A cross-sectional design was employed in the survey of 220 health workers drawn from twelve hospitals in the six geographical zones in Nigeria through the convenient sampling method. We used Breaugh (1985) Work Autonomy Scale, Ala-Mursula et al. (2004) Work Time Control Scale, and Tims et al. (2012) Job Crafting Questionnaire for data collection and hierarchical multiple regression for data analysis. Results showed that both work-time control and job crafting are positively related to work method control of Nigerian health workers. The results show that work-time control and job crafting are sinequa-non in maintaining equilibrium between health workers job demands and their work method control, which facilitates wellbeing indicators in the work setting. Our research deepens the existing body of knowledge on work method control, and at the same time integrates the working time control paradigm and job crafting in the health sector amid unprecedented work-role demands like the COVID-19 pandemic. Second, the imperativeness of work-time control and job crafting is sacrosanct in striking a balance between work and family demand roles to have an apt work method control in the work setting. This is pertinent because health workers' work-time control, job crafting, and work method control aided in managing the health workers' work-role more, especially in the pandemic amid poor infrastructures, corruption, bigotry, and ethnocentrism, in the sector.

**Keywords:** Health workers; job crafting; psychology of work; work method control; work time control.

# THE EFFECT OF AEROBIC AND BREATHING EXERCISES ON THE CARDIOPULMONARY FUNCTION OF ADULTS LIVING WITH SICKLE CELL DISEASE: A RANDOMIZED CLINICAL TRIAL PROTOCOL.

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#### **Abstract**

**Background:** Cardiopulmonary complication is a hallmark of sickle cell disease (SCD) which include reduced pulmonary function (PF) and cardiorespiratory fitness (CRF). The effects of aerobic and breathing exercises on PF and CRF have been studied extensively in different populations. There is a dearth of literature on the effect of aerobic and breathing exercises on the PF and CRF of adults with SCD. This study will investigate the effect of aerobic and breathing exercises on the PF and CRF of adults with SCD.

Method: This study will compare the effect of structured aerobic and breathing exercises on the PF and CRF of adults with SCD. Eligible participants will be recruited from the sickle cell clinic of hospitals. A sample of 400 eligible adults living with SCD, in steady-state, will be randomized equally into 4 groups: aerobic group, breathing group, aerobic and breathing group, and control group. The intervention will last 8 weeks. PF and CRF will be measured through computerized spirometry and a 6-minute walk test at inclusion and at 8 weeks. Baseline characteristics will be assessed from the hospital database. Data collected will be analysed using ANOVA.

**Discussion:** The findings of this study will provide information on the effects of structured aerobic and/or breathing exercises on the pulmonary function and cardiorespiratory fitness of adults with SCD and also highlight the role of physiotherapists in the multi-disciplinary management of individuals with SCD.

**Keywords**: sickle cell disease, aerobic exercise, breathing exercise, pulmonary function, cardiorespiratory fitness, spirometry, 6-minute walk test, randomized controlled trial.

### FUNGI AND BACTERIA ISOLATION AND CHARACTERIZATION IN HOSPITAL WASTEWATER: A GROWING HEALTH CHALLENGE

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#### Abstract

**Background**: Bacterial and fungal infections and other health risks due to poor management of hospital wastewaters are issues of global concern.

Methods: The study was carried out in a tertiary health care centre in Anambra State, Nigeria. Wastewater samples were collected from effluents of different sampling points of the laboratory unit, male ward, female ward, accident, and emergency ward, maternity ward, paediatrics ward and theatre using a 100 ml sterile screw-capped bottle for a period of three months from October to December 2020. The presence of bacterial and fungal was determined and identified using standard microbiological methods.

Results: The one hundred and twenty-four bacteria isolated in decreasing order of occurrence were E.coli 24(19.35%), Staphylococcus aureus 22(17.74%), Pseudomonas aeruginosa 19(15.32%), Salmonella typhi 17(13.71%), Enterobacter faecalis 11(8.87%), Proteus mirabilis 8(6.45%), Klebsiella pneumoniae 7(5.64%), and Bacillus subtilis 4(3.22%), while the ninety-six fungi isolated included Aspergillus niger 20(20.83%), Aspergillus fumigatus 19(19.80%), Candida albicans 18(18.75%), Penicillium marneffei 12(12.5%), Aspergillus flavus 11(11.46%), Candida glabrata 9(9.38%), Candida tropicalis 3(3.13%), Candida krusei 1(1.04%), Fusarium solani 1(1.04%), Fusarium oxysporum 1(1.04%) and Cryptococcus neoformans 1(1.0%).

**Conclusion**: These analyses revealed that the hospital wastewater potentially harbours pathogenic organisms which are implicated in most hospital-acquired infections.

**Keywords:** Bacterial and fungal infections, hospital wastewater, pathogenic organisms, infection hotspots.

# INVENTORY MANAGEMENT PRACTICES AND THE PERCEIVED PERFORMANCE OF PUBLIC HOSPITALS IN CALABAR DURING THE COVID-19 PANDEMIC.

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### Abstract

The unexpected and almost ubiquitous emergence of the COVID-19 Virus resulted in massive disruptions to the global supply chains for essential goods and services. It fairly well-known that the Nigeria public health system has perpetually been in crisis in recent decades, mainly because of gross under-funding by successive governments; the recent emergence of COVID-19 has only further exposed how ill-prepared and ill-equipped the Nigeria public health system is in managing such crisis situations. Given the novelty of the situation, as well as the widely reported shortages in essential materials (bed spaces, medications, personal protective equipment, etc.), this paper sought to determine the material management practices adopted by Nigerian public hospital during the peak of the COVID-19 Pandemic, and the extent to which these practices influenced their performance as perceived by health workers in the sampled hospitals. A crosssectional research design was used in this study. Data were collected using well-structed selfadministered questionnaires which measured respondents' opinions on a five-point Likert scale. Hypothesized relationships were evaluated using multiple regression technique in the Statistical Packages for the Social Sciences (SPSS) software. This study identified the relative importance of the various material management practices in enhancing performance of hospitals during crisis situations. The study also recommended some salient systemic changes that may enhance effective inventory management during similar crisis situations with a view to meeting clients' expectations.

**Keywords:** Inventory management, materials management, public hospitals, COVID-19 Pandemic

### ASSESSING CLIMATIC AND HEALTH RISKS: A GEOSPATIAL APPROACH TO EXPLORING CASCADING IMPACTS OF MULTIPLE RISKS IN NIGERIA.

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### **Abstract**

Climatic and health risks have posed severe threats to lives, livelihoods and social systems. This is particularly critical in African countries where the healthcare system is unreliable and several disease outbreaks abound, thereby, posing severe challenges to achieving sustainable healthcare and communities. This paper investigates the multiple risks and cascading impacts emerging from the COVID19-flood nexus in Nigeria. This study employed various datasets that were analyzed using geospatial and statistical techniques. For the flood risk mapping (FRM), the UNEP's flood hazard extent (50 years return period), population raster, socioeconomic vulnerability, communication access, aged population raster and healthcare accessibility datasets were employed. For the COVID-19 risk mapping, the healthcare accessibility, aged population raster, socioeconomic vulnerability, comorbidities, communication access, literacy, COVID-19 exposure tendency and COVID-19 cases were employed. Results show that Lagos, Kebbi, Delta, Cross River, Jigawa, Yobe and Borno States are at a very high risk of flood, while Kwara, Lagos, Ondo, Edo, Rivers, Ebonyi and Kaduna States are at a very high risk of COVID-19. Aggregating both risks show that Lagos, Ebonyi, Kwara, Sokoto, Jigawa, Yobe and Borno States are at a very high tendency of multiple risks. The implications for the resulting cascading impacts are also discussed in the paper.

Keywords: COVID-19, flood, multiple risks, cascading impacts, Nigeria

### **COVID-19 AND MENTAL HEALTH**

### WORK-LIFE BALANCE OF REAL ESTATE TELE-BROKERS IN A PANDEMIC ERA: EVIDENCE FROM THE NIGERIAN REAL ESTATE INDUSTRY

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### Abstract

With pandemic-driven lockdown periods accentuating and tenancy contracts largely unaffected, real estate firms were confronted with inimitable challenges of maintaining their real estate agency going concerns. One evident outcome of this reality is the symmetric increase in the number of real estate tele-brokers, as brokers adopted a work-from-home strategy. However, there is inadequate evidence from extant literature on the ramifications of this new normal on work-life balance of tele-brokers in Nigeria, especially in light of the Segmentation Theory hypothesis which delineates work and life as separate entities. In view of addressing this paucity in extant research as its aim, the study adopts a retrospective approach in examining the extent of work-life conflict in the industry, the attendant mental effects, and adaptive behaviours adopted by brokers as a curative strategy. The methodology was a cross-sectional online ex-post facto investigation of all real estate brokers in Nigeria. Sample size of 384 was determined using Freund and Williams formula for infinite populations, while Snowball Sampling was employed as Sampling Technique. Data were analyzed using simple linear regression and Kolmogorov-

Smirnov Test. Findings showed self-reported work-life transitioning and adaptive behaviours of tele-brokers in Nigeria's real estate industry during the Covid-19 pandemic lockdown, corresponding conclusion and recommendations. The study has practical implications for the real estate industry through the presentation of work-conflict, mental health and adaptive conditioning evidence that will drive sustainable innovativeness in the industry.

**Keywords:** Adaptive conditioning, Covid-19 pandemic lockdown, Occupational health, Real estate telecommuting, Work-life conflict.

### EMERGING MENTAL HEALTH AND PSYCHOSOCIAL RISKS AMONG NIGERIA YOUTHS IN THE COVID-19 ERA

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#### Abstract

Globally, the corona virus (COVID-19) pandemic has brought a lot of challenges ranging from health to psychosocial issues, especially in developing countries like Nigeria. In Nigeria, there have been a lot of mental health issues, particularly among youths who are faced with high level of unemployment and insecurity. These issues have been aggravated by the COVID-19 pandemic and have pose severe risk to the mental health and psychosocial behaviour of the youths in Nigeria. This study seeks to highlight emerging mental health and psychosocial risks among Nigeria vouths in the COVID-19 era, by reviewing relevant literatures. This study defined *COVID-19* era as the period (2020 – date) when the virus was declared a pandemic to date. This study found out that the COVID-19 pandemic posed a stressful situation that has negatively impacted the mental state and wellbeing of youths, resulting in a considerable level of fear, worries, anger, anxiety, and depression. This has led to increased violence (killing and kidnapping) in the COVID-19 era. Also, the study found out that the COVID-19 lockdown which was use as one the precautionary measure to curb the spread of the virus affected the mental health and psychosocial behaviour of Nigeria youths. This was evident in the massive turn out of Nigeria youths in the ENDSARS protest to display their anger and frustrations in the state of the country. Also, in recent times, there have been continuous rise in insecurity and unrest in several parts of Nigeria, as a result of several attacks of "unknown Gunmen" who are mainly youths. Hence, this study recommends that government promote policies that address mental health and psychosocial issues, especially among Nigeria youths.

**Keywords:** Mental health, psychosocial, COVID-19, youths

# PSYCHOLOGICAL EXPERIENCES OF THE HEARING AND SPEECH IMPAIRED AMID COVID-19 PANDEMIC IN NSUKKA LGA, ENUGU STATE, NIGERIA: A QUALITATIVE STUDY

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### **Abstract**

Covid-19 pandemic has constituted a global threat; however, people with disabilities are more threatened due to the barriers created with the Covid-19 response. The deaf and dumb, though cannot hear and talk, feel and see and are affected in every way by the Covid-19 pandemic just as

those who can hear and talk. The aim of this study is to explore the experiences of the hearing and speech impaired (deaf and dumb) amid this Covid-19 pandemic in Nsukka LGA, Enugu State. Exploratory qualitative research design was employed using Colaizzi's phenomenological research approach to guide the data analysis of the interviews. 10 Participants were purposively selected for the study (6 males, 4 females). Data collection was done through face to face interview using an interview guide to direct the interviews. Due to the peculiarity of the respondents an interpreter was used for some while those who can read and write, read and responded in writing. The interviews took 30-40 minutes. The data were thematically analyzed and the emergent themes were supported by quotes from the respondents. Inclusion criteria; all accessible hearing and speech impaired from 20 to 60 years excluding those under a guardian. The results showed that the hearing and speech impaired were experiencing depression and anxiety, sleeplessness, discrimination and lack of basic needs amidst COVID-19. In conclusion, the hearing and speech impaired are marginalized in the society, this immensely affects them, resulting in the psychological experiences aforementioned. Recommendations were made for inclusion of this group in policy making

**Keywords:** Psychological Experiences, Hearing Impaired, Speech Impaired, Covid-19 Pandemic

### FEAR OF INFECTION BY HEALTHCARE WORKERS DURING COVID-19 PANDEMIC: ASSESSING THE EXPECTED ROLES OF SOCIAL WORKERS

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### **Abstract**

The rapid spread and contagious nature of the Corona virus disease (COVID-19) remains a big threat to the healthcare system all over the world. The overwhelming demand of services expected from the healthcare workers coupled with the fear of contacting the disease and infecting it to their loved ones, seriously affects the psychological and mental health of these workers. The need to assess the mental state of these healthcare workers becomes imperative for optimal service delivery. The study will be carried out in Nsukka Health Centre, Enugu State. Purposive sampling method will be adopted in the study. In-depth interview sessions (IDIs) will be used to get information from 30 participants. Thematic analysis will be employed in data analysis. This will be discussed based on the findings. Some recommendations as well as social roles in improving the mental state of healthcare workers during any pandemic will be discussed. Hence, this paper aims at examining how fear of contacting COVID-19 affects the mental health of healthcare workers.

Keywords: COVID-19; Fear; Healthcare workers; Mental health; Social work

### CHALLENGES OF COVID-19 PANDEMIC AMIDST INMATES OF UMUAHIA CORRECTIONAL CENTRE OF ABIA STATE

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#### Abstract

COVID-19 is a global pandemic that has devastating effects on individuals, groups, communities and the entire human society. It is a peculiar pandemic that has turned the world upside down. The best way to prevent and slow down transmission is to be well informed about the COVID-19 virus, the disease it causes and how it spreads. The inmates in correctional centres are not left out of the pandemic. There is however concerns with the inmates' confinement in the fight against the pandemic. The Focus Group Discussions (FGDs) was employed as the main source of data collection. 36 inmates of the correctional centre were purposively selected for the study. Findings revealed that the COVID-19 pandemic has created tension around the correctional centre. Inmates are denied routine visits by family members, friends, religious groups and charity organisations for fear of contracting COVID-19. The findings suggest the need for care-givers like social workers to help in creating awareness of the devastating effects of COVID-19 pandemic and help in counseling the inmates to cope with the pandemic.

**Keywords:** Challenges; Correctional centre; COVID-19; Inmates; Pandemic.

### WATER, SANITATION AND HYGIENE (WASH)

### SDG 6 AND THE TRIAD OF WATER, SANITATION AND HYGIENE: A HUMAN RIGHTS ANALYSIS

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### Abstract

Many of the diseases and illnesses ravaging poor countries such as diarrhea, cholera, hepatitis A, dysentery, typhoid, and polio are the result of either drinking unsafe water, poor sanitation or improper hygiene. Poor sanitation leads to contamination of water sources, further depleting availability of water for drinking, hand-washing and other hygiene-related purposes – a particularly grueling challenge given current realities, the dependence of COVID-19 preventive measures on water and hand-washing. The centrality of access to water, sanitation and hygiene – known collectively as WASH – to health and wellbeing explains their classification as underlying or social determinants of health. This importance is further reinforced by their inclusion amongst the subjects discussed at the 2015 conference of Heads of States and Governments which birthed the global Sustainable Development Goals (SDGs) and subsequent designation as SDG 6. The Targets and Indicators of SDG 6 represent the most comprehensive and pragmatic means of ensuring access to safe-drinking water and sanitation to all regardless of geography or socioeconomic status. SDG 6 is a commitment on the part of the global community to ensure availability and sustainable management of water and sanitation for everyone, with 2030 as the deadline for achieving the goal. Yet, as the 2030 deadline draws nigh, it is becoming increasingly

evident that many countries, most of them in the developing world, are unlikely to attain the targets of SDG 6. Investigating the underlying circumstances behind this worrisome situation, using a human rights-based approach, is the task of this paper.

# CLINICAL STUDENTS' KNOWLEDGE ON THE PREVENTIVE MEASURES OF NOSOCOMIAL INFECTION FOLLOWING THE COVID-19 PANDEMIC: A CROSS-SECTIONAL STUDY

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### **Abstract**

Nosocomial infection is one of the leading causes of death and increased morbidity for hospitalized patients. The risk of acquiring nosocomial infections is high among hospitalized patients in developing countries and even staff and students who attend clinical placements in hospitals. This study was aimed at assessing the clinical students' knowledge of the preventive measures of nosocomial infections and their relationship with selected socio-demographic variables. The study utilized a cross-sectional survey design. The Infection Control Standardized Questionnaire (ICSQ) adopted from a previous study consisting of a 25-item questionnaire on Nosocomial Infection, Standard Precautions, and Hand hygiene was used. A total of 270 clinical students, participated in the study. The findings revealed that the majority of the participants were females (56.3%), age range 15-34 years. The pre-study question (Have you previously been taught infection control) that focused on previous education on infection control showed that 82.6% had previous education on infection control while 47 (17.4%) participants had none. The mean score of knowledge of preventive measure score is 36.35±3.90. There was insignificant associations between level of knowledge of preventive measure and level of study X2 (63, N =(270) = 57.93, p = 0.657 and departments (270) = 1.03, p = 0.523. This study revealed that the respondents had a good knowledge of the preventive measures of nosocomial infection following the recent COVID-19 pandemic.

**Keyword:** Clinical students, knowledge, preventive measures, Nosocomial infection

### ADOPTION OF E-PROCUREMENT PROCESSES AND THE CHALLENGES OF IMPLEMENTING WATER, SANITATION AND HYGIENE (WASH) INTERVENTION PROGRAMS IN NIGERIA DURING COVID-19 LOCKDOWN

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### **Abstract**

The outbreak of Covid-19 and the subsequent imposition of public health safety measures by the Nigerian government in compliance with the World Health Organisation's regulation halted the conventional manual-based process of acquiring goods, works and services in the WASH sector, involving physical submission of bids and face-to-face meetings of key stakeholders. Availability

of adequate and safe water, sanitation and waste management and hygienic conditions in strategic places such as homes, schools, marketplaces, healthcare facilities and worship centres is key to controlling the spread and transmission of covid-19. During the lockdown, online submissions of bids and virtual evaluation meetings were adopted to limit physical engagement and expedite the process of providing WASH facilities in the affected, fragile, at-risk and low capacity areas. This study, therefore, analyses the utility of e-procurement in the implementation of WASH programs in Nigeria during COVID-19 lockdown. Relying on the fecundity of cybernetics model of communication theory as well as data generated from field observations, official documents and relevant literature, this study observes that the adoption of digital technologies in the submission and evaluation of bids supported WASH intervention programs in Nigeria during COVID-19 lockdown. Despite this feat, digital procurement processes violate the extant procurement laws and guidelines. Consequently, the Public Procurement Act of 2007 and the harmonised procurement guidelines should be reviewed to accommodate hybrid procurement processes.

**Keywords:** E-procurement, WASH, COVID-19 lockdown, Nigeria, procurement laws and guidelines.

### WATER RESOURCE MANAGEMENT AND PUBLIC HEALTH SECURITY IN ENUGU STATE

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#### Abstract

Public health insecurities associated with poor sanitation as a result of poor water resource management is a challenge in Nigeria. Water and sanitation coverage rates in Nigeria are amongst the lowest in the world. An estimated 100 million Nigerians still lack basic sanitation facilities and 63 million do not have access to improved source of drinking-water. Approximately 121,800 Nigerians including 87,100 children below the age of five die each year from diseases associated with unsafe water, with 80% of the deaths attributed to poor sanitation. Enugu State, in South East of Nigeria has also been challenged by the problem of access to potable water and poor water safety. Enugu North has the highest occurrence of water borne diseases (88.9%) in the state, followed by Enugu South (62.6%) and Enugu East (44.4%). Enugu North also records the highest occurrence of typhoid fever and dysentery while Enugu East has the highest incidence of diarrhea in the state. To examine the dynamics of water resource management and public health security in Enugu State, the study examinedhow poor water supply undermine sanitation and hygiene and how the management of water resources undermine the development and distribution of water in Enugu State. Adopting the human security theory, the study relied on documentary data from secondary sources. We found that poor water resource management undermines public health securityin Enugu State.

**Keywords:** Water Resource Management; Public Health Security; Sanitation; Water Borne Diseases; Human Security; Enugu State

### REIMAGINING HANDWASHING HYGIENE IN NIGERIAN MAJOR SLUMS: BOTTOM-UP APPROACH TOWARDS PREVENTING COVID-19 TRANSMISSION

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#### Abstract

Hand hygiene attitude and practice towards COVID-19 play an integral role in keeping safe. Lack of access to WASH resources is still a challenge in sub-Sahara Africa. Informal urban and rural communities are the most vulnerable. This is because they are mainly cut off from basic amenities and services. The goal of this study is reimagining handwashing hygiene lifestyle in Nigerian slums. The study examines handwashing perception and challenges among urban informal settlement in the context of COVID-19 pandemic. It employed deductive analytical approach. The result showed complete awareness, low compliance as a result of distrust in the government. It also x-rayed handwashing challenges such as lack of water supply, lack of power supply, lack of handwashing facility, no enforcement and no inclusive enlightenment. It suggests an approach to create a nudge through enforcement as well as informative campaign and social marketing promotion that reflects the background of various communities. It also recommends government effort in providing water supply for total development.

Keywords: Handwashing; Reimagining; WASH; Challenges; Perception; COVID-19

## SUSTAINABLE EDUCATION, REMOTE LEARNING AND DIGITAL INNOVATION

### IMPACT OF COVID-19 ON STUDENTS' ACADEMIC PERFORMANCE: PERSPECTIVES AND LESSON FOR NIGERIA IN POST-PANDEMIC ERA

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### Abstract

The Nigerian government shut down educational institutions on March 26, 2020 as a result of the outbreak and spread of the novel Corona virus (COVID-19) in order to control the spread of the virus. The Nigerian government through the Ministry of Education developed a Learn-at-Home Programme to ensure students in both public primary and secondary schools continue to learn remotely during the pandemic. Unfortunately, a vast majority of the learners have no access to virtual and online resources and are being left behind while the teachers' capacity for remote teaching is limited. These scenarios call for serious concern regarding the academic performance of students in public schools vis-à-vis their counterparts in private schools. This is a review paper in which the authors used the documentary approach to synthesize information from grey literature, journal articles and renowned public health websites. To gather relevant materials for the review, the authors used search terms like COVID-19 in Nigeria, students' learning amidst COVID-19 pandemic, students' performance in post pandemic era etc. It was concluded that academic performance of students especially those in examination classes in

public schools might decline in the post-pandemic era if measures are not taken to implement continuous virtual learning during the pandemic.

**Keywords:** COVID-19, Education, Students' Academic Performance.

### COLLABORATIVE LEARNING IN BUSINESS EDUCATION: PANACEA FOR BRIDGING DIGITAL GAP IN POST COVID-19 ERA

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### Abstract

This study centered on Collaborative Learning in Business Education: Panacea for Bridging Digital Gap in post covid-19 era in Public universities in Enugu State, Nigeria. The study used survey research design and was carried out in Enugu state, Nigeria. Two research questions guided the study. The population for the study was 25 business educators and 207 final year Business education students 2018/2019 set drawn from the public universities in Enugu State totaling 232 respondents. Questionnaire was used for the data collection. The instrument was validated by three experts. Cronbach Alpha reliability method was used and an overall reliability coefficient of .87 was obtained. Data was analyzed using mean and standard deviation. Generally, the study found out that the collaborative learning in business education aids in the acquisition of digital knowledge and emerging trends in public universities, thereby bridging digital gap in post-19 era. The paper recommended among others that Digital gap and exclusion in the use of the new media technologies and resources can be bridged through collaboration among stakeholders, Enhanced quality in teaching and learning can be achieved by appropriating software aimed at providing information, tools and interactive learning which gives students the privilege of thinking out of the box in collaborative learning environment. Collaborative learning strengthens education management system by connecting digital synergy among stakeholders thereby bridging digital gap in post covid-

**Keywords:** Collaborative, Collaborative learning, Business education, Digital gap, Covid-19

# EXPLORING BIOLOGY AND CHEMISTRY TEACHERS PERCEPTION ON THEIR MASTERY LEVEL IN USE OF E-LEARNING SKILLS FOR POST COVID-19 ERA INSTRUCTIONAL DELIVERY IN ENUGU STATE

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### **Abstract**

This study investigated the perception of Biology and Chemistry teachers on their mastery level in use of e-learning skills for post covid-19 instructional delivery. Two research questions and two null hypothesis guided the study. Descriptive survey research got adopted for the study. The population of the study was 141 Biology and Chemistry teachers in Enugu Education Zone of Enugu State. Thirty-four (34) Biology and twenty-six (26) Chemistry teachers were randomly selected from ten schools in the zone which participated as sample. An instrument titled "Personal E-Learning Skills Instructional Delivery Questionnaire (PELSIDQ)" was used for data collection. The instrument was validated by three experts in the Department of Science Education, University of Nigeria Nsukka while the

reliability indices of clusters A and B were estimated to be 0.86 and 0.80 using Cronbach Alpha methods. The data collected were analyzed using mean and standard deviation to answer the research questions and t-test of independent samples. The findings of the study revealed that personal e-learning skills used by Biology and Chemistry teachers includes; Prepare lessons using digital application; Upload curriculum materials for students to use among others. while communicating with e-mail was mastered at a high level among others. Chemistry teachers' mastery level of e-learning skills is higher than Biology teachers. It was equally revealed that male and female teachers differ significantly in their mastery level in use of e-learning skills for instructional delivery. It was recommended among others that state government should train Biology and Chemistry teachers to mastery level to equip them for post covid-19 instructional delivery challenges.

**Keywords:** E-Learning, Covid-19 pandemic, Skills, Mastery level, Instruction, Biology, Chemistry

### LECTURERS' LEVEL OF AWARENESS OF E-LEARNING CLASSROOM STRATEGIES IN POST COVID-19 PANDEMIC NIGERIA

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#### Abstract

The study investigated lecturers' level of awareness of e-learning classroom strategies in post COVID-19 pandemic Nigeria. Descriptive survey design was adopted for the study. The sample comprised 149 lecturers teaching integrated science courses. Instrument used for data collection was a questionnaire titled Lecturers' Awareness Level of E-learning Strategies (LALES). LALES was validated and the reliability index of the items was estimated at 0.89 using Cronbach's Alpha method. The data collected were analyzed using mean and standard deviation to answer the research questions while the hypotheses were tested using t-test statistic. Findings revealed among others, that the lecturers were partially aware of strategies to facilitate e-learning. Based on the findings, it was recommended among others that e-learning facilities should be provided in schools and made accessible for the lecturers. School administrators should ensure that lecturers are aware of the availability of these facilities and enforce their adequate utilization.

Keywords: Awareness, COVID-19, E-Learning, Integrated Science, Lecturers, Nigeria

# ASSESSMENT OF THE PREPAREDNESS OF NIGERIAN UNIVERSITIES FOR THE USE OF ONLINE TEACHING MODE IN THE ERA OF COVID-19 PANDEMIC: A CASE STUDY OF UNIVERSITY OF NIGERIA NSUKKA AND ABIA STATE UNIVERSITY, UTURU

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#### **Abstract**

The paper assessed the preparedness of Nigerian Universities for the use of online teaching mode in the era of Covid 19 pandemic. Specifically, the study aimed to examine the level of availability of online teaching facilities in Nigerian universities, the extent of use of online teaching tools in

thee universities, the level of student accessibility these online teaching facilities and also to determine the level of preparedness of students towards utilizing online teaching platforms. A sample of 200 students undergraduate students were used for this study, drawn from the University of Nigeria Nsukka and Abia State University Uturu. Data on student responses were obtained via the use of structured questionnaire, which was distributed ad collected with the help of two research assistants. These responses were analyzed using mean and standard deviation. Findings showed that there is a significantly low level of availability of online teaching tools in these universities; there is also a low level of student utilization of these tools, low level of accessibility as well as a low level of student preparedness in the use of these tools for learning. The study thus suggested increased funding for the development of information and communication technology (ICT) based learning platforms in tertiary institutions via strategic partnerships with the private sector and also government bodies for increased availability of online teaching tools and also periodic training for students and lecturers on more optimal use of online teaching tools.

**Keywords:** Universities, Nigeria, Assessment, Covid-19 pandemic, online education

### TWITTER SUSPENSION: IMPLICATIONS FOR DEMOCRATIC CONSOLIDATION IN NIGERIA

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### **Abstract**

On Friday 4<sup>th</sup> June 2021, the Nigerian government announced the suspension of Twitter's operations in the country indefinitely over "the persistent use of the platform for activities that are capable of undermining Nigeria's corporate existence". This came two days after the microblogging and social networking service Twitter deleted a tweet from President Muhammadu Buhari's account for violating its rules. Authorities allege that the platform was being used to destabilize the country by spreading disinformation. The suspension of Twitter comes against the government's previous attempts to regulate social media. The government also ordered internet services including WhatsApp, Zoom, Netflix, and Skype, to obtain licenses from the National Broadcasting Commission before operating in the country. The ban on Twitter is not surprising to most because social media is the last place Nigerians have to express themselves freely and hold the government accountable. Nigeria's constitution and international human rights law, as set out in the Declaration of Principles on Freedom of Expression in Africa, protect the right to free expression and access to information and provide that any restriction to this right must be justifiable in a democratic society. Relaying on the Elite Theory of Democracy which maintains that the majority of political power and influence is held by a small number of individuals or groups and that government policies disproportionately favor the elite, this paper posits that the suspension of Twitter serve the elite interest by limiting democratic freedom around information and stifling of free speech, as well as freedom of expression. This paper made use of secondary source of data gathering and qualitative method of data analysis to make an informed inference.

Keywords: Twitter, Corporate Existence, Disinformation, Free Speech, Elite Interest

### EXAMINING THE LEGAL FRAMEWORK AND CHALLENGES FOR INFORMATION TECHNOLOGY ON THE EDUCATION SYSTEMS IN NIGERIA

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### Abstract

This study examines the legal framework and challenges for information technology on the educational systems in Nigeria. The vision to make Nigeria an ICT capable country in Africa and a key player in the information society by using ICT as an engine for sustainable development and global competitiveness is yet to be achieved; this is because ICT is at particularly a dynamic stage in Africa and Nigeria is not left out. The National Policy on Education (Federal Republic of *Nigeria) as revised in 1988 and 2004, re – emphasized the need for the integration of ICT in the* Nigerian educational system. Archival records and questionnaires were the sources of data utilized. Ten (10) questionnaires were purposively and randomly distributed to policymakers at the ministries of education. Findings revealed; three objectives emphasized in the Nigerian National Policy for Information Technology (FRN, 2001). These are to empower youths with ICT skills, integrate ICT into the mainstream of education and training, and establishment of multifaceted ICT institutions as centers of excellence of ICT. Challenges that impede its actualization include; poor IT infrastructure, inadequate ICT skilled personnel, epileptic power supply and high cost of ICT facilities, etc. It is therefore, recommended that there must be local manufacturing of ICT materials to reduce the cost of acquiring the software and hardware components, capacity development at all levels of our educational system, ICT training and retraining, education and usage to enhance the maximization of ICT use nationwide. Also, access to a stable power supply should be put in place by the government to promote universal access to ICT and collaboration with international organizations like African Virtual Open Initiatives and Resources (AVOIR) and among tertiary institutions in Nigeria.

**Keywords:** Legal Framework, Information Technology, Education Systems

### EVALUATION OF AGRICULTURAL EXTENSION STAFF'S SOCIO-CULTURAL PROFICIENCY THROUGH OPEN & DISTANCE STUDYING (ODL): A CASE STUDY OF NATIONAL OPEN UNIVERSITY OF NIGERIA (NOUN)

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#### Abstract

This paper discussed the height to which Open and Distance Studying (ODL) will be able to enhance the socio-cultural proficiency and related components, the controlling elements influencing socio-cultural proficiency, and approach for the establishment of socio-cultural proficiency of extension staff. The design adopted was explanatory research and the entire population of agricultural extension staff (n=120) that graduated from ODL in four different states (Kaduna, Bauchi, Ogun, and Delta States) were used as respondents. A survey research method was used among them and further intensive qualitative research was also carried out to

detail the investigations. Data was investigated by using descriptive and regression statistical analysis. The investigations revealed that agricultural extension staff had an average degree in their socio-cultural proficiency and their understanding of socio-cultural concept was good but implementation was a problem. Studying amenities, tutoring, and subject matter reportage were elements significantly influencing socio-cultural proficiency and Approaches that can be formulated to enhance socio-cultural proficiency were enhancing their degree of understanding and skills in terms of socio-cultural matters. These can be focused on enhancing the studying quality, mainly on subject matter development. From the investigations, it can be concluded that ODL as an academic environment can be hold forth by agricultural extension staff to enhance their socio-cultural proficiency.

### USE OF E-LEARNING FACILITIES AND ACADEMIC PERFORMANCE OF STUDENTS IN HIGHER INSTITUTIONS IN ENUGU STATE, NIGERIA

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### **Abstract**

This study examined the extent of the use of e-learning facilities and academic performance of English language students in higher institutions in Enugu State. Three research questions and three hypotheses guided the study. The hypotheses were tested at 0.05 level of significance. Descriptive survey design was adopted for the study. The population for the study was 350 (29) lecturers and 321 students). A 21 item questionnaire was used as the instrument for data collection. The researcher used Cronbach Alpha statistics to determine the internal consistency of the instrument which yielded 0.81 for section A, 0.77 for section B and 0.78 for section C. The overall reliability index was 0.81. This showed high reliability index and was used for the study. Mean and standard deviation were used to answer the research questions and t-test for the null hypotheses. The result of the study shows that availability of e-learning facilities and academic performance of English language students in higher institutions in Enugu State is to a low extent and the utilization of e-learning facilities and academic performance of English language students in higher institutions in Enugu State is to a low extent. Recommendations were made which includes: government should make sure adequate e-learning facilities are available for an effective academic performance of the English Language students and lecturers and staff should be encouraged to utilize the available e-learning facilities in the higher institutions.

# DIGITAL LEARNING IN POST COVID-19 ERA: POLICY OPTIONS AND PROSPECTS FOR SUSTAINABLE DISTANCE EDUCATION IN UNIVERSITY OF NIGERIA NSUKKA, ENUGU STATE

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#### **Abstract**

The trajectory of digital learning, an aspect of Information and communication technology across the globe has been very phenomenal and unprecedented especially in educational sector due to its efficient and effective nature in service delivery. However, this game-changer has

remained sedate and unproductive in Nigeria especially in UNN (South-East). The choice for University of Nigeria Nsukka is sequel to the surging Boko Haram insurgency and unabated kidnapping of students in Nigeria. The research adopted three research questions, the objectives include to find out the efforts of the university towards sustainable digital learning amidst covid-19 and the insecurity. The study adopted descriptive survey design. The research was conducted in Centre for distance learning (CDEL), Department of Information and Communication Technology (ICT) and the Management team of the University with population of study is 320 the sample size of 150. The mean and percentage were used for the analysis and the findings of the research show that University of Nigeria Nsukka seems unprepared for distance education. The findings of the study include inadequate funding and bureaucratic bottle neck as the major impediment to distant education development in the post covid-19 era. The research recommended that improved funding and adequate training staff will enhance the development of distance education. The research concluded that the post covid-19 era and the insecurity have provided a good opportunity for the development of sustainable Distance Education in University of Nigeria Nsukka

**Keywords:** digital-learning, sustainable distance education and, Covid-19.

### SUSTAINABLE EDUCATION IN COVID-19 PANDEMIC ERA: THE ROLE OF PRINCIPALS' TRANSFORMATIONAL LEADERSHIP

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### Abstract

Covid-19 has profound consequences on different aspect of human existence; economy, social living political, educational among others. Education has a fair share of challenges, due to the pandemic. These challenges could be seen as pivotal moment of opportunities for re-shaping programmes, policies, procedures among others in education. Transformational leadership is considered a type of leadership that is proactive and innovative that can turn the challenges of the pandemic in educational sector into opportunities for sustainable development in education. The school principal who determines the culture, climate, tone of the school can make ultimate use of the opportunities in teaching methods, innovative leadership, and new interaction channel by going digital.

**Keywords:** Covid- 19, Leadership, Principal, Challenges, Opportunities, Innovation, teaching methods.

### SUSTAINABLE EDUCATION, HUMAN CAPITAL AND NATIONAL DEVELOPMENT IN A PANDEMIC ERA IN NIGERIA

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### Abstract

The centrality of sustainable and qualitative education to the production of human capital needed for national development has been recognized globally. Despite this obvious fact, some African

countries are yet to consciously implement policies and programmes that could make education play the expected role in the process of national development. The Nigerian situation has been noted to be exceptionally deplorable especially in the era of COVID-19 pandemic. It is against this background that this paper examined the essentiality of sustainable education for the production of qualitative human capital which is critical for national development in Nigeria. To achieve this objective, content analytical method was adopted as relevant data were generated from secondary sources. An analysis of the reviewed literature revealed that poor attention given to issues relating to education by successive administrations in Nigeria led to the rot in the system which cumulatively affected its capacity and contributed to the nation's low development profile. Sequel to the findings, the paper recommended among others that the government should make adequate budgetary provisions for education and periodically review the curriculum to reflect contemporary development needs of the country.

Key words: Sustainable Education, Human Capital and National Development. COVID-19

# EXTENT OF PRIMARY SCHOOL TEACHERS' USE OF LESSON NOTES FOR TEACHING AND LESSON DELIVERY IN NSUKKA EAST LOCAL EDUCATION AUTHORITY

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#### Abstract

The study assesses the extent of primary school teachers' use of lesson notes for teaching and lesson delivery in Nsukka East Local Education Authority. Teachers' Registration Council of Nigeria (TCRN) Act promulgated in 1993 recognizes teaching as a profession. Accordingly, with the emergence of "Teachers' Code of Conduct", guide lines emerged, among others, on principles of teaching and lesson delivery at all levels of education. One of such principles which make for professionalism especially among primary school teachers is the obligation to deliver their lessons using well prepared lesson notes. Many teachers regrettably do not observe this allimportant principle. Two research questions and two null hypotheses in line with the specific purposes guided the study. Descriptive research design was adopted for the study. A questionnaire on "Extent of Primary School Teachers' use of Lesson Notes for Teaching" (EPSTLNT) in Nsukka East Local Education Authority, was developed. Two experts from Measurement and Evaluation and Childhood Education units validated the instrument. Data were collected from 150 primary school teachers in the area and were analyzed using mean and standard deviation for research questions while t-test was used to test the hypotheses. Findings revealed that many primary school teachers deliver their lessons without writing lesson notes while some others teach without making the necessary preparations. On the basis of the findings, recommendations were made. Among others, it was recommended that primary school teacher's lesson notes and lesson deliveries should be regularly supervised by the Local Education Authority through the Head teachers.

**Key words:** Primary school teachers, lesson notes, teaching and lesson delivery

# SENIOR SECONDARY SCHOOL CHEMISTRY CURRICULUM OVERLOAD: A ROADBLOCK TO QUALITY TEACHING AND LEARNING OF CHEMISTRY FOR SUSTAINABLE EDUCATION IN NIGERIA

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#### **Abstract**

Chemistry contributes greatly to national development that no nation will afford to relegate its teaching and learning in schools to the background. In the Nigerian school system, the study of chemistry as a subject begins in senior secondary school, the duration of which is three years. Within these three years, the students are expected to cover the curriculum contents which will equip them with the appropriate scientific knowledge and skills that will enable them undertake further studies in science and science based disciplines in tertiary institutions. Evidence from researches however shows that the chemistry curriculum content in senior secondary schools is overloaded. This paper took a look at the issues that arise from curriculum overload which includes poor coverage of the curriculum contents, neglect of the practical aspects of the curriculum, examination malpractice, and use of inappropriate teaching methods. All these basically stem from lack of sufficient time to cover the curriculum contents as supposed. How these issues hinder the objectives of the senior secondary school chemistry curriculum and consequently sustainable education were also highlighted. As a way forward, the authors recommended among other things that the senior secondary school education in Nigeria should be upgraded to a four-year programme or that some contents in the Chemistry curriculum which are not too relevant should be removed.

Keywords: Chemistry, Curriculum Overload, Teaching and Learning, Sustainable Education

### EFFECT OF PEER TUTORING ON STUDENTS' ACHIEVEMENT IN SENIOR SECONDARY SCHOOL CHEMISTRY IN MINNA, NIGER STATE

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#### Abstract

The study investigated the effect of peer tutoring on students' achievement in senior secondary school Chemistry in Minna Educational Zone of Niger State. The study adopted quasi experimental design. The population of the study consisted of all the 1,820 senior secondary school two (SS II) students who offer Chemistry in the all co-educational public secondary schools in Minna Education Zone. Four (4) co-educational schools were drawn out of all the schools. A sample size of 160 SS II Chemistry students was drawn out of the four (4) co-educational schools through simple random sampling technique. The instrument used for data collection was Chemistry Achievement Test (CAT). The instrument was validated by three experts. The reliability index of the CAT instrument was established using Kudder-Richardson (K-R20) method of internal estimate which gave an overall reliability index of 0.66. Mean and standard deviation were used in answering the research questions while the null hypotheses were tested at 0.05 level of significance using analysis of covariance (ANCOVA). Findings from the study revealed that students taught Chemistry with peer tutoring achieved better than those taught with the conventional teaching method. The results also showed that there was no significant difference between the mean achievement scores of male and female students taught

Chemistry using peer tutoring. The study found out that school location either in rural or urban area does not in any way affect the mean achievement scores of students in Chemistry. It was therefore recommended that the Chemistry curriculum planners should carry out a review of the senior secondary school Chemistry curriculum with a view to incorporating peer tutoring in order to ensure effective teaching and learning of Chemistry. That Government should organize periodic workshops, conferences and seminars with a view to training and retraining Chemistry teachers on the use of peer tutoring for effective teaching and learning of Chemistry through the curriculum.

**Keywords:** Peer tutoring, chemistry, achievement, students.

### VIRTUAL LEARNING AND ITS SUSTENANCE IN NIGERIAN SYSTEM IN POST COVID-19 ERA

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### Abstract

Following the outbreak and spread of Covid-19 disease in Nigeria in March 2020, a new rule emerged for Nigerian citizens to maintain a minimum distance in public places (social distancing). The aim of this widely enforced protocol and the sit at home order was to reduce the rate of infectious of the disease. With the emergence of these rules, people were forced to work from home, study from home and even attend conferences virtually. All these activities require role of ICT to be actualized. While the rates of infections from the Covid-19 disease have drastically gone down in Nigeria, most of these virtual activities seem to have become a new normal for Nigerian citizens. This paper reviews the state of virtual learning in Nigeria during the Covid-19 pandemic and argues for its sustenance. The paper x-rays the role of Nigerian government in making some required facilities affordable to the aid of the users. The study recommends that Nigerian government should make available a free and strong wireless network to its citizens and also ensure proper network coverage in every part of the country to enable both the teachers and the students work online without network impedance and failure.

**Keywords:** Virtual Learning, Post Covid19, Sustenance, Government.

### SUSTAINABLE EDUCATION, HUMAN CAPITAL AND NATIONAL DEVELOPMENT IN NIGERIA

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### **Abstract**

The centrality of sustainable and qualitative education for the production of human capital needed for national development has been recognized globally. Despite this obvious fact, some African countries are yet to consciously implement policies and programmes that could make education play the expected role in the process of national development. The Nigerian situation has been noted to be exceptionally deplorable. It is against this background that this paper

examined the essentiality of sustainable education for the production of qualitative human capital which is critical for national development in Nigeria. To achieve this objective, content analytical method was adopted as relevant data were generated from secondary sources. An analysis of the reviewed literature revealed that poor attention given to issues relating to education by successive administrations in Nigeria led to the rot in the system which cumulatively affected its capacity and contributed to the nation's low development profile. Sequel to the findings, the paper recommended among others that the government should make adequate budgetary provisions for education and periodically review the curriculum to reflect contemporary development needs of the country.

Key words: Sustainable Education, Human Capital and National Development

# UNDERSTANDING THE ACTORS AND PRACTICES THAT AID SSCE-RELATED EXAMINATION MALPRACTICES IN "MIRACLE EXAMINATION CENTRES" IN NIGERIA

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#### **Abstract**

Achievement of sustainable education hinges to a large extent on maintenance of examination ethics and integrity. Examinations organised by the West Africa Examination Council (WAEC) and the National Examination Council (NECO) are foremost requirements in Nigeria that attest to the completion of secondary school, admission into tertiary institutions, and contest for political offices. Expectedly, such examinations should be marked with high-level integrity, but this has not been the case. Activities of Miracle Examination Centres (MECs) or Special Centres have given rise to unmerited successes during these examinations, and they have gained intense popularity across the country. As a result, public confidence and the integrity value of WAEC and NECO seem to be on the decline. To address this issue and initiate effective intervention, a first step is to understand the operations of MECs, as well as their network of actors. The study was conducted following the easing of COVID-19 lockdown during which the strict enforcement of pandemic control measures, restrictions and protocols prevailed in Nigeria. A qualitative approach through in-depth interviews of 100 key informants across Abuja, Anambra, Edo and Kogi was adopted. Questions were structured to reflect the nature and drivers of MECs, and data were analysed in themes. A network of actors facilitates the establishment and continued existence of MECs via multi-level rent-seeking activities. Actors include school owners, teachers, examination officials, students, parents, community residents, tutorial centres, examination mercenaries, and rogue officials in the Ministries of Education. The complex synergy amongst perverted network of actors compromise interventions aimed at stopping MECs. MECs have proven to be dynamic, deploying several modes of operations to secure rents while compromising examination integrity and the quality of education. Their activities pose serious concerns for the credibility of WAEC and NECO. A disaggregated understanding of the syndicate that drives MECs is an important step to evolving interventions to promote examination integrity and sustainable education.

Keywords: Anticorruption, Examination malpractice, Miracle Examination Centres,

Examination integrity, Sustainable Education

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### EFFECT OF SPACED LEARNING ON PRIMARY SCHOOL PUPILS' INTEREST AND RETENTION IN MATHEMATICS

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### Abstract

The study investigated the effect of spaced learning on primary school pupils' interest and retention in mathematics. Two research questions and two hypotheses guided the study. The study adopted a pretest posttest quasi experimental research design. The sampled consisted of 65 primary six pupils in two intact classroom drawn using two stage sampling technique. Data were collected using 'pupils' interest inventory" (PII) and 'pupils' mathematics achievement test' (PMAT) which were designed by the researchers. Data were analyzed using Mean and standard deviation to answer the research questions and ANCOVA to test the hypotheses at .05 level of significance. Results indicated that the spaced learning had a significant positive effect on pupils' interest and retention in mathematics. It was recommended that spaced learning approach should be used in schools to teach concepts that require retention as it could improve pupils' interest and retention ability.

**Keywords:** Spaced Learning, Massed Learning, Interest, Retention, Mathematics.

### INNOVATIVE PEDGOGIES AND TVET

### INFLUENCE OF REMOTE LEARNING ON STUDENT PERFORMANCE IN SECONDARY SCHOOLS IN ENUGU STATE, NIGERIA

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### Abstract

The Coronavirus (Covid-19) pandemic exerted a huge impact on society, education and national economies. Its far reaching impact has led to massive transformations on the way people, live, study and work. The adoption of remote learning is one of the adjustment mechanisms in order to cope with the effects of the pandemic. This study therefore aims to explore the influence of the use of remote learning on the academic performance of students in selected secondary schools in Enugu State. Experimental research design was used for this study. Data was collected using structured questionnaire and was analyzed with statistical package for social science (SPSS) version 18. Pre-test and post-test design was used and findings showed that performance of students improved significantly in some schools, but largely remained the same in others. In addition, findings also showed that inadequate facilities, as well as limited skill-set on the part of students and teachers on the use of computers significantly hamper effective online learning. The study thus recommended that in embracing online learning to cope with the challenges of the

pandemic, schools should encourage online learning by allocating funds towards. **Keywords:** Pedagogy, innovation, online learning, remote learning, student performance.

### TVET TEACHERS PREPAREDNESS FOR INNOVATIVE PEDAGOGY INTEGRATION IN THE COVID-19 ERA

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#### Abstract

Sustainable Development Goal number 4 (SDG-4) aims at ensuring inclusive and equitable quality education and lifelong learning opportunities for all by 2030 with greater emphasis on acquisition of skills which is the thrust of Technical, Vocational Education, Training and Research (TVET). The attainment of this goal is marred by the disruption in schooling caused by COVID-19 pandemic aside other educational problems. Today, innovative pedagogy driven by technology typical of online learning has become the growing trend due to the requirement of social distancing. However, with 42 percent internet penetration in Nigeria, proliferation of computers and laptops, mobile phones, among other technology-based learning resources, it is imperative to examine TVET teachers' preparedness for integrating innovative teaching practices across learning institutions with a view to overcoming the disruptions in learning necessitated this study. To address this objective, 60 teachers drawn from TVET institutions in Nigeria formed the study participants. Data for the study was collected using an instrument titled questionnaire for assessing preparedness and reliability of TVET education for advanced learning technology integration and analyzed descriptively using mean and percentage. Findings showed, among others, that teachers are confident in the use of ICT in teaching as majority of them are willing to explore ICT use but need direction and support from the school administration.

**Keywords:** TVET, innovative pedagogy, ICT-based teaching, Covid-19, educational access

### UNIVERSITY TEACHERS' COMPETENCE IN THE USE OF NEW TECHNOLOGIES IN CURRICULUM DELIVERY

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#### Abstract

This study is a descriptive survey that investigated University Teachers' Competence in the use of new Technologies in Curriculum Delivery. Three research questions guided the study. The population comprised all lecturers and students in public universities in Nigeria. The multi-stage, cluster and simple random sampling techniques were used to select a sample of one hundred and sixty (160) teachers from four public universities in Imo and Abia states from South-East, Nigeria. A two-section rating scale titled University Teachers' Competence in Use of New Technologies in Curriculum Delivery (UTCUNTCD) was used for data collection. The instrument was validated by three specialists in Educational Measurement and Evaluation, Educational Technology and Curriculum Studies. The reliability of the instrument was determined using Pearson Product

Moment Correlation Coefficient (r) test re-tests method and a coefficient index of 0.75 was obtained. The research questions were answered using the mean and standard deviation. Findings of the study revealed that personal computers, routers, Bluetooth, ear pieces, wireless accessories, internet network, projectors, Microsoft software like power point, on-line learning platforms like webinars, google classroom are types of new technologies that university teachers can use for curriculum delivery. Also, findings of the study revealed that lack of adequate training, conservatism towards the use of new technologies, continuous use of the conventional teaching methods indicated university teachers' low competence to the use of new technologies for curriculum delivery. The study recommended that provision of funds, personal computers and trainings for teachers, free data and power supply are ways of enhancing university teachers' competence in the use of technologies for curriculum delivery.

Keywords: Curriculum Delivery, New Technologies, University Teachers

# EFFECT OF FLIPPED DEMONSTRATION ON ACADEMIC ACHIEVEMENT AND RETENTION OF SENIOR SECONDARYSCHOOL STUDENTS IN CHEMISTRY

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### **Abstract**

Effective application of teaching methods is very vital in any teaching learning situation, even in this post COVID -19 classroom. The method adopted by the teacher may promote or hinder learning. This study focused on the effects of flipped demonstration on academic achievement and retention of senior secondary school students in chemistry in a post COVID -19 classroom. Quasi-experimental design, using pre-test and post-test was adopted for the study. The sample consisted of eighty (80) senior secondary one (SS1) students from two secondary schools in Nsukka Education Zone of Enugu State selected through purposive random sampling. Four research questions and six null hypotheses tested at 0.05 level of significance guided the study. A twenty (20) item chemistry achievement test (CAT) and chemistry retention test (CRT) in the form of multiple-choice objective questions were used as instruments for data collection. Data collected were analyzed using mean and standard deviation for the research questions. Analysis of Covariance (ANCOVA) was used to test the null hypotheses at P < 0.05 level of significance. The findings of the study were; there is a significant difference in the mean achievement scores of students taught chemistry using flipped demonstration method and those taught using lecture method in favour of those taught using flipped demonstration method. The findings also indicated that flipped demonstration method is superior to the lecture method in promoting cognitive achievement in chemistry amongst students. Based on the findings, the following recommendation was made; chemistry teachers, science educators and curriculum planners should employ and incorporate the use of innovative methods and strategies such as flipped demonstration method in the classroom and into the various teacher education programmes.

**Keywords:** Flipped demonstration method, lecture method, academic achievement, retention, COVID-19 classroom.

### CHARACTER DEVELOPMENT THROUGH VALUES EDUCATION AND TRIPARTITE PEDAGOGICAL ASSESSMENT

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#### Abstract

The paper highlights character development through values education and tripartite pedagogical assessment. The paper recognizes value-based education that entrenches ethical principles or moral etiquette likely to create in the learners' indelible attitude that culminates to character. The paper discusses Tripartite assessment as the one that apportions 20% of the test to continuous assessment, 30% of the test (multiple choice) to computer-based test and 50% of the test to essay (to be conference scored). It is here recommended that government and school authorities should provide adequate necessary ICT facilities to enable teachers and learners practise and engage in online activities

### URBAN PLANNING AND INFORMAL SETTLEMENTS

### SUSTAINABILITY ASSESSMENT OF COVID-19 PROTOCOLS IN INFRASTRUCTURALDEFICIENT SOCIETIES OF AFRICA

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### Abstract

Africa recorded her first confirmed COVID-19 case in Egypt on February 14th,, 2020. Thus far, the number of confirmed cases and deaths has increased despite the World Health Organization (WHO) protocols. The study aims at determining if the conceived and adopted protocols against COVID-19 in an infrastructural deficiency continent of Africa and indeed Nigeria are sustainable. Empirical research design was adopted based on the data randomly drawn from a population who are residents of States in Nigeria most vulnerable to infection, namely Anambra, Lagos, Kano, Rivers States and the Federal Capital Territory Abuja. The sampling unit was based on pilot study using four hundred randomly selected adult residents who are literate in the sampled States using online structured questionnaire, supplemented by oral interviews and other literatures. The primary data for the study were obtained through administration of questionnaires via online, and were analyzed using both descriptive and inferential statistics. The results were presented in tables, graphs and charts. The Mean Weighted Value statistical analysis was carried out with the Gross Mean Weight Value (cut-off point) at 2.60. The study found that Unplanned, Uncoordinated and Unregulated Transport System, Epileptic Power Supply, Dominant Primary Economic Production, Unplanned Settlement, Corruption, Congested Settlement, Congested Market Places, Small Traders and Artisans sustenance on daily basis, Nigeria's Mono-economy, Import Dependency and Shortage of Food militate against the COVID 19 control protocols. It therefore recommends massive infrastructural development in Africa for sustainability.

Keywords: Infrastructure, Protocols, COVID-19, Nigeria, Sustainability, Assessment

### AN ANALYSIS OF SOCIAL EFFECTS OF INDUSTRIAL AGGLOMERATION ON RESIDENTS' IN ENUGU STATE NIGERIA

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#### Abstract

This work aims at analyzing the social effects of industrial agglomeration in Enugu State, Nigeria. To achieve the aim of this study, data were collect was collected from primary sources with the aid of a structured questionnaire, Field observation and focus group discussion. Data collected was on the social variables concerned with industrial development such as education, health, crime, recreational activities etc. Data collected was analyzed using mean, standard Result show that residents' perceived industrial deviation and Kruskall Wallis test. agglomeration to have considerable effects on their social well being with a grand mean of 3.47 which is higher than the accepted mean value of 3.0. Also we found that social effects were both positive and negative in nature. The negative social effects includes increase in crime, inadequate provision of recreational centers, deteriorating public security, increase in accidents, increase in waste generation, changes in family values and increase in late night activities. Furthermore the Kruskall Wallis test, which test for spatial variation in the social effects among the area, revealed that there is no variation in the social effects across the study location. Appropriate recommendations based on our findings were made namely that industries should in partnership with local government, provide more social services through their corporate social responsibility program to cushion the negative social cost and effects associated with industries in the area.

# ASSESSMENT OF URBAN ENCROACHMENT ON PUBLIC SECONDARY SCHOOLS IN BOSSO LGA OF NIGER STATE, NIGERIA

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### Abstract

Nigeria experiences an urbanization rate above 50% which has led to urban land use competition encroaching among residential, industrial, commercial, agricultural and educational lands. This has necessitated the need for assessment of urban encroachment on public secondary schools in Bosso L.G.A. of Niger State over a period of 20 years from the year 2000 to 2020. Coordinates of the schools, their boundaries, the satellite images of the school for the years 2000, 2005, 2010, 2015 and 2020 and past works that related to the study were used. The distribution pattern of the schools was determined using their coordinates, the original boundaries of the schools were overlaid on the satellite images to know the state and extent of encroachment. The study revealed that there are 12 public secondary schools within the urban area, a clustered distribution pattern was observed among the schools. Five of the twelve schools were observed to be experiencing urban encroachment which includes Bosso Secondary School, Abdullahi Dada Day Secondary School, Day Secondary School Chanchaga Minna 'B', Government Science College Chanchaga Minna and Day Secondary School Maitumbi with an encroachment of 15.47ha, 0.08ha, 2.14ha, 8.27ha and 10.33ha respectively. The trend analysis reveals that urban encroachment on public schools has been in existence for over 20 years and there is a constant addition to the encroachment yearly. It is recommended that schools should get their boundaries surveyed and documented by the appropriate ministries and also construct a perimeter fence to ward off encroachers.

**Keywords:** Development Control, Encroachment, Overlay, Public Secondary School, Urbanization

# COMPARATIVE ANALYSIS OF HOUSING AFFORDABILITY AND LIVABILITY IN PUBLIC AND PRIVATE HOUSING ESTATES IN ILORIN, NIGERIA

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### **Abstract**

Housing affordability and livability are identified as key tools to the wellbeing of the individuals in both public and private estates, both in developed and developing countries. This study examined housing affordability and livability in selected public and private housing estates in Ilorin,Kwara State. The data were obtained from houses within 4 different estates namely; Mandate Housing Estate (phase 1), Harmony Estate (phase III), Royal Valley Estate, Evergreen Housing Estate. The study adopted both descriptive and quantitative research approaches. A total of 400 households were sampled in the four housing estates. The findings show affordability was influenced by factors such as number of bedrooms and location of houses. The public estates, which were built and operated on partnership basis were more affordable than the privately owned estates. However, the private estates were more livable than public estates in terms of social amenities and security. The study recommended supply of more houses for low income earnersrelative to demand. The government should undertake policy measures to make private estates more affordable and improve on the livability of public estates through the provision of social services and infrastructure.

Keywords: Analysis, Housing, affordability, Livability and the Urban Planning

### ASSESSMENT OF THE FACTORS RESPONSIBLE FOR HOUSING VACANCY IN GWAGWALADA - ABUJA

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### Abstract

Housing vacancy is rapidly increasing in many towns and cities of developed and developing nations of the world, and Nigeria is not an exception. In recent years, housing vacancy has become a major attribute of the housing market in Abuja, the capital seat of Nigeria, and other satellite towns like Gwagwalada. However, little is known about the drivers of housing vacancy in Abuja, Nigeria, and Gwagwalada to be specific. Based on this premise, this study seeks to examine the factors responsible for housing vacancyin four residential neighbourhoods in Gwagwalada, Abuja. Descriptive research design approach was adopted for the study. Quantitative data required for the study were gathered through field survey using questionnaire, observation schedule and checklist. 282 questionnaires were administered to residents in the study area after which the data collected was cleaned and analysed using descriptive (frequency, mean, and standard deviation), and inferential (T-test) statistical method. The study established that rental value (4.76), lack of prepaid meter (4.46), distance from shopping facilities (4.44) were among the primary drivers of housing vacancy in the study area. The study also showed that there is a statistically significant variation in the rental values of vacant and occupied houses in the study area. The study concluded that, the high rental value of residential properties and lack of adequate infrastructure is the primary driver of housing vacancy in Gwagwalada, Abuja. The study therefore recommends that housing tax should be legislated and implemented to discourage the inflation of rent by developers and estate agent.

Keywords: Housing vacancy, House, Neighbourhood and Rental value

# CLIMATE CHANGE AND ENVIRONMENTAL SUSTAINABILITY

# ECOLINGUISTICS AS A NEW PARADIGM: AN ECOLOGICAL PERSPECTIVE TO STORIES WE LIVE

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### **Abstract**

The issue of the environment and its cultivation as well as preservation is as old as man itself. Environmental concerns have been expressed from different disciplines and from different regions of the world. Researchers have carried out studies on the subject of environment from diverse perspectives. This paper draws inspiration from Ecolinguistics which explores the role of language in life sustaining interactions of humans, other species and the physical environment. It is a new paradigm of linguistic research, widening sociolinguistics to take into account not only the social context in which language is embedded, but also the ecological context. Using an emerging research design, the paper observes that the 'stories we live by' are cognitive structures in the minds of individuals or across a society which invariably influence how people treat each other, other animals, plants, forests, rivers and the physical environment. It therefore means that destructive stories lead to ecological destructive consequences, therefore the search for new stories to live by is evident for environmental sustainability. The paper advocates for the practice of reflectivity in respective individual disciplines and the need to find a common ground for interdisciplinary researches.

Key Words: Ecolinguistics, Paradigm, Ecology & Collaboration

# ANALYSIS OF RAINFALL CHARACTERISTICS OF ONITSHA URBAN AREA IN ANAMBRA STATE, NIGERIA

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### **Abstract**

Variations of monthly and annual rainfall over Onitsha urban Anambra state for a 40 years period (1977-2017) was studied for future planning and flood preparations. Descriptive statistics was used to analyse the climatic data from Nigerian Metrological Agency (NIMET) from 1974-2017; while the Microsoft excel package was used to analyse the frequency, variations and durations of rainfall events in Onitsha urban. The study shows that the month of September has the highest rainfall distribution in Onitsha and the durations of rainfall increased in recent years (2008-2017) which sends signal for flood preparedness for individuals, government agencies and environmental engineers. The implications of these fluctuations from 1977-2017 will be used for planning purposes, and suggestions for further lines of inquiry.

Key Words: Rainfall characteristics, Trends, variations, Onitsha urban.

### THE COVID-19 CRISIS AND CLIMATE EXTREMES AND DISASTERS: A REVIEW

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### **Abstract**

Climate change and the associated extreme events are a major threat to human existence as it affects health, economy, food security and environmental sustainability. Climate change induced-disasters are on the increase as the global temperature keeps rising. Sub-Saharan Africa is noted to be one of the most vulnerable regions to climate change. The problem of climate change and the extreme events has been compounded by the novel Covid-19 pandemic which has affected the global economy due to the imposed lockdown aimed at curtailing its spread. The Covid-19 has killed over 3 million persons with the USA, Brazil and India being the worst affected nations. Thus, the multi-hazard scenario presented by extreme events like droughts, floods, heat waves, cold spells and cyclones this period of the pandemic worsened its spread as it affected social distancing and personal hygiene as many people are crammed in camps and water become scarce for hand washing and other needs. It is suggested for countries and regions to strengthen their emergency department by boosting the staff strength, provide adequate technical support and develop detailed plans for multi-hazard preparedness such as simultaneous extreme events and Covid-19 crises.

Keywords: Climate change, Extreme Climate Events, Covid-19 Crises, Disaster

### EFFECTS OF COVID 19 PANDEMIC ON ENVIRONMENTAL DEVELOPMENT AND HOW IT CAN ASSIST FUTURE EFFORTS ON ENVIRONMENTAL SUSTAINABILITY

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### Abstract

COVID 19 has had a major impact in our lives, healthcare systems and mental health of people around the world. COVID enforced lockdown had an interesting effect on the environment and has instigated few lessons on environmental sustainability. The pandemic slowed down the movement of people, vehicles and economic activities. This study aimed at reviewing available research works on the effects of COVID 19 pandemic on environmental development and how it can assist future efforts in environmental sustainability. The increase in population, movement of people, production process and other economic activities have impaired environmental development, hence, introduced the world to climate change. This study indicates that the pandemic has had both positive and negative effects on the environment. The pandemic situation lead to improvement of air quality, reduction in GHG's emission and reduction of threat to wildlife. This study also recognizes negative consequences such as increase in medical wastes,

haphazard use and disposal of masks, disinfectants and gloves which continues to endanger the environment. Ease in movement of people facilitated the spread of COVID 19 in record time. This is also the driver of economic development. This review significantly proposes this lesson from the pandemic situation. Since, working from home and ZOOM virtual meetings are possible, they can be utilized to minimize the movements of people by the use of automobiles which in turn have enormous impact in reducing climate, air and land pollutants, and helps in ensuring environmental sustainability in the long term.

### ENVIRONMENTAL SCANNING AND COVID-19 RESPONSE IN NIGERIA

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### Abstract

The new COVID-19 illness is found in a novel coronavirus strain which has not been seen in human before now. Researchers have discovered that human body has no immunity against it and that there is no vaccine yet for cure. The only treatment for COVID-19 presently is observing preventive measures handed out by World Health Organization (WHO). In responding to a pandemic of this magnitude, it is expected that Nigeria government would conduct extensive environmental scanning involving key stakeholders inside and outside the health sector for consultation. Environmental scanning is the process of analysing an organization's business environment to find out what gives strength or weakness, or what provides opportunities or poses threat to the organization for the purpose of strategic decision-making. This position paper is therefore, sought to examine environmental scanning and COVID-19 response in Nigeria. The paper looked at the meaning of COVID-19, origin, and how it transmits from animal to human among others. The paper found that little or no environmental scanning was conducted, hence, Nigeria experiences numerous challenges in responding to COVID-19. The paper recommends among others, that, environmental scanning be done involving critical stakeholders. The paper therefore concludes that environmental scanning is critical in responding to a pandemic of this nature.

**Keywords**: Environmental scanning, Response, COVID-19, Severe acute respiratory syndrome, Coronavirus, Stakeholders

## ASSESSMENT OF THE IMPACT OF URBAN GREEN SPACES IN CLIMATE CHANGE MITIGATION IN KUBWA, ABUJA

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### **Abstract**

Global Climate change is a resonating problem that has come to stay owing to rapid urbanization. This has resulted to a global threat which put both man and natural ecosystems at risk, especially within the urban areas as seen in rapid temperature rise and alteration of weather seasons. So far there are two global policy statements for tackling this issue which are Climate change adaptation and Climate change mitigation. This research assesses the potential of urban green spaces in climate change mitigation having Kubwa as its case study. In achieving this, Land use land cover analysis was carried out and compared with the data acquired from Nigerian

Meteorological Agency in order to determine a correlation. Pearson's Partial correlation was carried out between vegetal cover percentage and maximum atmospheric temperature which gave a very strong negative correlation of -0.811 using built up area percentage as a controlled variable. Furthermore, a perception study was carried out to determine the level of climate change awareness and affiliations to urban green spaces using structured questionnaire. It was uncovered that there was a high level of climate change awareness (71.8%) because of the high literacy level as 82.25% of the respondents have attained tertiary education. Finally, interviews were conducted with relevant agencies in in which laws guiding the regulation of green spaces within the urban were revealed and discussed. Based on the research findings, Biophilism was recommended, so as to increase intimacy with natural features and also the promotion of environmentally friendly technologies.

**Keywords:**Biophilism, Climate Change, Landscaping, Temperature, Urban Agriculture, Urban green spaces

### IMPACT OF CLIMATE CHANGE ON ENVIRONMENTAL SUSTAINABILITY AND THEIR IMPLICATIONS TO SOCIAL WORK PROFESSION IN NIGERIA

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### **Abstract**

Climate change is one of the biggest threats confronting environmental sustainability world over.Climate change, caused by global increase in temperatures, triggers different negative impacts on the environment. These impacts interrelate and put at risk the species that inhabit the Earth. In view of the foregoing, the present study, therefore, examines the impacts of climate change on environmental sustainability and itsdirect and indirect implication to socialwork professionin Nigeria. The study was anchored on ecological perspective as theoretical framework. The research relies on secondary sources for data collection such as journals, textbooks, newspapers and online publications. Results revealed that the impacts of climate change are economic impact such as destruction of sources of livelihood like businesses and agricultural products (crops and livestock). It was also found that climate change impacted on the area of health such as psychological trauma, cholera and typhoid. In physical system, the impact of climate change was seen on melting of pole, warming, droughts, flooding and coastal erosion. *In response to the findings of this study, social workers were seen intervening through advocacy,* cancelling, broker services, distribution of relief materials and other forms of disaster management. It was concluded that climate change exerts negative impacts on environmental sustainability and it was recommended that proactive measure be taken to mitigate these impacts of climate change so as to enhance environmental sustainability. Full incorporation of social workers in disaster management and strong environmental management policies as well as stringent punishment to offenders was recommended.

**Key Words:** climate change, global warming, social work, sustainable development, environmental degradation.

### WASTE MANAGEMENT AND POLLUTION

### MUNICIPAL SOLID WASTE MANAGEMENT IN UNIVERSITY OF NIGERIA, NSUKKA DURING COVID-19 PANDEMIC

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### Abstract

University campuses are "small cities" in their own right because of their large and diverse population, and the various complex activities taking place on campuses, which have direct and indirect impacts on the urban culture. Of recent, generation and indiscriminate disposal of solid waste in the Nsukka campus of the University of Nigeria has reached an alarming rate. The problem of solid waste management in the University is worsened by the ever-increasing population in the institution and intense socio-economic and cultural activities of students, residents and visitors to the campus. While previous studies have focused on technical, social and cultural aspects of municipal solid wastes, very little research exists on the management of municipal solid waste in a university campus during COVID-19 pandemic. The objective of this study is to examine MSWM in UNN during the COVID-19 lockdown period. The primary data will be obtained through questionnaire survey, direct observation, and oral interview of key informants, including Directors of Environment, Works and the UNN Medical Centre as well as officials of Enugu State Waste Management Authority (ESWAMA). Residents' attitudes and MSWM practices during the pandemic will be investigated with a view to implementing effective COVID-19 waste management in the campus. Public health implications of MSWM practices during COVID-19 will also be highlighted.

Keywords: Municipal Solid Waste, Management, University of Nigeria, COVID-19, Lockdown

### PROPER MUNICIPAL SOLID WASTE MANAGEMENT IN AFRICA AS A WAY TO REDUCE THE SPREAD OF COVID 19 VIRUS

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### **Abstract**

In African countries, the challenge of waste management and poor sanitation level is aggravated by the current deluge of solid wastes generated as result of COVID 19 pandemic. The enormous quantity of municipal solid wastes has been generated since the pandemic. Therefore, this study is centered on the review of available literatures on how proper municipal solid waste management in Africa can reduce the spread of COVID 19 virus. The stay- at- home initiative evoked panic buying of items which increased the production process and in turn led to a proportional increase in the generation of both domestic and industrial wastes. Also, the hyper-hygienic practice to

curtail the contracting and transmission of COVID 19 virus stimulated the quest for use of nose masks, hand gloves, hand sanitizers and other Personal protective equipment (PPE). These medical, industrial and domestic wastes may create unhealthy environment which cannot only act as a source of transmission of SARs-COV-2 virus but can also lead to the outbreaks of several diseases. Unfortunately, adequate attention has not been given to the management of wastes associated with the pandemic. Hitherto, there are inadequate standard technologies in African to forestall the environmental effects of solid wastes. The most popular ways of disposing solid wastes in Africa is by burning. However, the proper waste management, by recycling of waste materials instead of disposing them by burning or sending them to landfill may reduce the spread of COVID 19 virus and curb another possible wave of COVID 19 pandemic.

### VISUAL POLLUTION IN THE ENVIRONMENT

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#### **Abstract**

Visual pollution is a serious issue in our environment just as other aspects of pollution and can be prevented through b proper application of architectural graphics design resource. This paper addresses the sources and prevention of visual pollution in our environment. Sign and architectural graphics are a new axiological (it's value and it's perception on the people), on the other hand, and one of its most obvious effects, it's source and prevention on visual pollution, which already to be in the attention of those who can counter it, on the other hand. Visual communication design plays a fundamental role in all aspects of educating and information dissemination. This research paper on sign and architectural graphics if properly implemented for advertising purposes can help reduce and prevent visual pollution.

### SOLID WASTE DISPOSAL, MANAGEMENT AND CLIMATE CHANGE IN AFRICA

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#### Abstract

Annually, the world generation of municipal waste account for 2.01 billion tonnesof solid wastes and 33% of these wastes are not environmentally friendly. In developing countries, especially in Africa, indiscriminate waste disposal and improper management of solid waste is rampant and common practice. Waste is one of the numerous issues at the crossroad of climate actions. It is argued to be one of the drivers of climate change. For instant, food waste alone is responsible for roughly 8% of annual global emission. These wastes (either at landfills or exposed dumpsites) decompose and generates harmful emissions, which is trapped into the atmosphere thus raising the temperature and sea level that contribute to climate changechallenges. This study examines indiscriminate waste disposal practice, management and interrelation to climate change. This study will be accomplished by employing GIS to visualise the areas of indiscriminate waste disposal, examine the waste disposal management and landfill sites, perform a stability test to determine the greenhouse gases (GHGs) potential and design a techniqueto mitigate the impact on climate.

Keywords: Waste, indiscriminate disposal, management, climate change, mitigation, Africa

### COVID-19 AND MANAGEMENT OF INFECTIOUS MEDICAL WASTE IN NIGERIA

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#### Abstract

Corona virus (COVID-19) is a novel disease pandemic that emerged in late 2019 in China, and later spread to other parts of the world, including Nigeria. The outbreak and spread of covid-19 pandemic has generated awareness in people about how crucial hospital waste management process in every single country can be. The increasing number of covid-19 cases in Nigeria is already putting pressure on the healthcare system in the country. The high rate of infection from the corona virus would require a complex and special process of handling and managing the infectious medical wastes generated such as confinement (bins, bags etc.) and availability of proper storage and disposal facilities. This study examined effective management strategies for covid-19 associated medical wastes and the challenges of managing such medical wastes in Nigeria using Imo State as a case study. The study made use of primary and secondary data. The data generated were analyzed using content analysis. Findings reveal that medical waste is spread out beyond hospitals, and healthcare facilities in the State have no proper safe disposal facilities of infectious medical wastes at the moment. Other challenges include the various myths surrounding the reality of the covid-19 pandemic, poor enforcement of infectious medical wastes guidelines and lack of political will on the part of the government. Based on the findings, the study recommends effective enforcement of the guidelines on the safe disposal of infectious wastes, and creation of environmental department in every hospital to handle infectious medical wastes.

**Keywords:** Covid-19; Pandemic, Infectious medical waste; Waste Management; Challenges

### INFORMAL ECONOMY AND LIVELIHOODS

'DYING FROM THE VIRUS OR HUNGER'? STATE ACTORS, HUMAN RIGHTS VIOLATIONS AND INFORMAL LIVELIHOODS DURING COVID-19 PANDEMIC IN NIGERIA

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### **Abstract**

Covid-19 pandemic has over-stretched global public health systems and has also devastated the underlying bases of society including food systems, education, and economies. While the effect of the pandemic was initially seen as a big public health problem, it has since evolved into a huge human rights concern. With the enforcement of Covid-19 control measures such as lockdown and stay at home orders in Nigeria, human rights came under severe threat of abuse and violations by Nigerian state actors, especially the security agencies. While Nigerian cities possess a dynamic and bourgeoning informal sector, very little is known about the human rights infringements of enforcement of Covid-19 protocols on the informal livelihoods. This paper analyzes how operations of state actors impinged on the human rights of the informal sector workers during the

pandemic. The study utilized documentary methods including critical desk review of literature and policy documents on Covid-19 control measures in Nigeria. The paper argues that the enforcement of Covid-19 containment measures in Nigeria neglect social structures and local economic changes and invariably undermines the human rights of informal workers who depend on daily social businesses for their livelihood. It concludes that sustained rights advocacy and retraining of the security agents is relevant for effective implementation of COVID-19 lockdown and coordination and administration of the pandemic in Nigeria.

Key words: State Actors; Informal Livelihoods; Covid-19 Pandemic; Lockdown; Human Rights

### INFORMAL ECONOMY AND LIVELIHOODS

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### **Abstract**

The COVID-19 pandemic has had a massive, negative impact on economies across the world due to shutdowns and social distancing measures. Information on the extent of economic losses, livelihood changes, and how the effects vary by occupation can contribute to our understanding of the processes needed for response, recovery. Such evidence can help in building resilience against devastating and widespread shock among vulnerable groups. With a population of over 200 million people in Nigeria of which many are self-employed, informal-sector workers and daily-wage earners lack access to social security measures, It is also becoming increasingly apparent that significant loss of livelihoods concerns is arising in the face of the pandemic era and the lockdown, both due to the economic uncertainty as well as social distancing measures put in place to control the spread of the disease. The emerging picture is disturbing and underlines the need for a large injection of public spending and transfers – both in cash as well as in-kind – to address this social and economic crisis as the country goes into recovery mode. This study made use of quantitative response from stakeholders as well as the use of secondary materials. It addresses the question of immediate and near-term impact of the pandemic on the livelihoods of informal sector workers in Nigeria and how the different (pre-COVID) occupation groups were affected. The impact of the pandemic resulted on low patronage, poor incomes, and outright loss of businesses. Against the backdrop of falling incomes, lost jobs, and rising socio-economic vulnerability of household's livelihoods, recommendations to support lives and livelihoods include provision of emergency financial support to households whose incomes have been

**Keywords:** Informal Economy, Livelihoods, low incomes, Job loss

# INNOVATIONS IN BUSINESS MANAGEMENT AND MARKETING

SMALL AND MEDIUM SCALE ENTERPRISES AND THE UTILIZATION OF STRATEGIC ALLIANCE: THE EFFECT OF SPATIALITY IN THE EMERGING MARKET ECONOMIES

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#### **Abstract**

The spatial distribution of industries is an important geographic factor that contributes to the growth and development of regions. It not only influences the interaction and cooperation among industries, it attracts and propels the growth of industries in an area. Given the relative unknown application of this method in the small and medium scale enterprises (SMEs) sector, this study examined the effects of spatiality in the utilization of strategic alliance by SMEs in an emerging market economies such as Nigeria. Primary data using questionnaire survey of 233 SMEs were adopted for the study. Data for this study were analysed using descriptive statistics and nearest neighbour analysis while maps and tables were used to illustrate the results. The result of the study showed that SMEs had three distribution patterns in cluster, regular and random distribution in the study area. SMEs in these distribution patterns had a total mean score of 3.93, 3.58 and 3.05 as well as an average mean score of 2.00 in cost reduction, risk reduction, resource and knowledge accessibility in the use of strategic alliance. This signifies that engaging in strategic alliance is not determined by the spatial distribution of SMEs but the need to achieve cost reduction, risk reduction and resource accessibility. Given the failures of successive industrial policies in Nigeria, this study recommends that small and medium scale enterprises in the Nigeria industrial sector engage in the use strategic alliance in order to sustain their operations.

Key words: Spatiality, SMEs, Strategic alliance, emerging market economy, Nigeria

### IMPACT OF TELEVISION ADVERTISING ON CONSUMERS' BRAND PREFERENCE FOR HOUSEHOLD PRODUCTS

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### **Abstract**

This research examined the impact of television advertising on consumers' brand preference for household products in Calabar, Nigeria: A study of ValuemartSupermarket. The study was conducted to determine how television advertising influenced consumers' brand preference for household products in Calabar. The paper examines the impact of movies-based advertising, programmes-based advertising and news time advertising on consumers' brand preference for household products in Calabar; Nigeria. Exploratory research design was adopted and primary data was randomly collected from 156 customers of Valuemart Supermarket in Calabar using

structured questionnaire. The data were analyzed using simple linear regression in the Statistical Package for the Social Sciences (SPSS 23). The findings revealed that movies-based advertising, programmes-based advertising and news time advertising had a significant impact on consumers' brand preference for household products in Calabar, Nigeria. Hence, the study concluded that television advertising had a significant effect on consumers' brand preference for household products in Calabar, Nigeria. Therefore, the following were recommended: Manufacturers and dealers of household products in Calabar should adopt movies-based television advertising to promote their products in order to enhance customers' preference and patronage; to improve customer patronage, manufacturers and dealers of household products in Calabar should adopt programmes-based television advertising to promote their products to customers; and manufacturers and dealers of household products in Calabar should adopt news-time advertising to promote their products to customers in order to enhance patronage.

### EFFECT OF SALES PROMOTION ON THE MARKETING OF ACCOMMODATION SERVICES

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### Abstract

This study examined the effect of sales promotion on the marketing of accommodation services in Calabar: A case study of Monty Suites and Axari Hotels. It was conducted in order to determine how sales promotion influenced the marketing of Accommodation services in Calabar with particular reference to Monty Suites and Axari Hotels. The study had the specific objective of determining the effect of price-off, premium, and bonus pack on the marketing of accommodation services in Monty Miites and Axari Hotels, Structured questionnaire was used to collect primary data from personnel (managers, supervisors, attendants, and receptionists) of Monty Suites and Axari Hotels, Calabar. Descriptive and simple regression statistics were employed and Statistical Package for the Social Sciences (SPSS version 20.0) were used to analyze and the data collected. The results obtained from the study revealed that price-off, premium, and bonus pack had significant positive effects on the marketing of accommodation services in Monty Suites and Axari Hotels, Calabar. Therefore, it was recommended that hotels in Calabar should continue to offer short-term price reductions for accommodation services on special occasions like Christmas, Anniversaries, and National Holidays in order to encourage guests' patronage; hotels in Calabar and they should continue to use customized items like T-shirts, face caps, wallets, pens, and jotters to induce guests to patronize; and they should continue to offer bonus packages *like free extra days of stay to frequent guests in order to encourage more patronage and loyalty.* 

### ANALYSIS OF SMOKE-PROCESSED CATFISH MARKETING IN ENUGU STATE, NIGERIA

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#### Abstract

The study analyzed the marketing of smoke-processed catfish in Enugu state, Nigeria. Specifically, the study, described the technique of smoked catfish processing, described the individuals (wholesalers and retailers) involved in the marketingchannel(s)ofsmoke-processed

catfish; determined them arket efficiency of smoke-processed catfish; analyze the determinants of profitability and identified the constraints to smoke-processed catfish marketing. Multistage sampling techniquewasemployedinselectingfouragricultural zones. Primary data were collected from 287 respondents withtheaidofquestionnaire. Datawere analyzed using descriptive statistics, net market income, marketing margin and multiple regression model. Fourmarketing channels of smoke-processed catfish were identified; producer-wholesaler-retailer-consumer. The result of net marketing income per month showed that the wholesalers theaveragereceived \$\dagger1,668,292.13\text{whiletheretailers received} \$\dagger528,701.87. The mean marketing margins for wholesalers and retailers were 45.49% and 31.5% respectively. The determinants of wholesaler's net-incomewere cost of catfish and transportation cost; whilecost of catfish, educational level, storage cost, packaging cost and market information significantly influenced retailer's net marketing income. High perishability, cost of catfish, high transportation cost, lack of credit facilities, price fluctuation and lack of preservation facilities were identified as the major constraints militating against the efficient marketing of smoked-processed catfish. It is recommended that credit and modern storage facilities should be made available to enhance the capital base of the marketers as well as reduce losses due to product deterioration.

**Key words:** smoke-processed catfish, catfish marketing

### GENDER, PEACEBUILDING AND DEVELOPMENT: INFLUENCE OF COVID 19 ON THE ROLE OF WOMEN'S 'AUGUST MEETING' IN SOUTH-EASTERN NIGERIA

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#### **Abstract**

The study is an assessment of the influence of the COVID 19 pandemic on the peacebuilding and rural development efforts of women's "August Meeting" in Igboland, Southeastern Nigeria. The term "August Meeting" refers to the convergence of women married into Igboland, usually in the month of August every year, for about five or six days, in order to discuss their welfare needs, resolve conflicts, and agree on rural developmental projects to embark on. It is known for the ability to galvanize the effort of the women, especially under the umbrella of the various Christian churches or denominations in each of the towns in Igboland, towards the sustenance of peace and development within their localities. There exist varying views concerning the actual effect of the COVID 19 pandemic and its fallouts on women's "August Meetings" in Igboland. While some sources and informants believe that the pandemic greatly retarded the peace and development potentials of the annual ritual, others contend that the effect was minimal, especially with regard to the ability of the women to contribute their financial dues. Using the historical descriptive and analytical approach, and data drawn from archival sources, interviews, focus group discussions and observations involving members of the "August Meeting" groups in Igboland, the study assessed how the pandemic affected the peacebuilding and development roles of women's "August Meeting" during the period. It further investigated whether COVID 19 engendered innovations in the groups' modes of operation. Policy implications of the findings of this study are highlighted.

**Keywords:** COVID 19 Women, 'August Meeting', Peacebuilding, Rural development, Igboland.

# CYBERSPACE, BLACK-HAT HACKING, AND ECONOMIC SUSTAINABILITY OF CORPORATE VICTIMS AMIDST COVID-19 PANDEMIC: THE NIGERIAN EXPERIENCE

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### Abstract

Globally, e-commerce offers unlimited opportunities for corporate organisations to flourish as its customers reside in all parts of the universe. However, given the fluid nature of the cyberspace and uncertainty created by COVID-19 pandemic, black-hat hackers have enormously taken undue advantage of such situation to perpetrate numerous financial frauds against individuals and corporate organisations. Therefore, this study examined the role cyberspace and COVID-19 uncertainty play in aiding the criminal activities of black-hat hackers and the impact of such malicious attacks on the economic sustainability of corporate organisations in Cross River State, Nigeria. An exploratory cross-sectional survey research design that permits the triangulation of quantitative and qualitative methods was adopted. Standardized and structured questionnaires were distributed to 1,074 respondents purposively selected from 18 financial institutions, 4 telecommunication network providers and 2 manufacturing companies, while, in-depth interview was conducted on 13 willing participants across the selected corporate organisations. The presentation of data was done via frequency distribution tables, charts and relevant narratives. The test of hypotheses was carried out using multiple linear regressions and the qualitative data were analysed with content analysis. The study found that the cyberspace provided a viable platform exploited by black-hat hackers during the COVID-19 pandemic to attack corporate entities. The study further found that cyberspace victimization predicted economic sustainability to the extent that the more cyberspace victimization reported by the workers, the less economic output of corporate organizations. In line with the findings, the study therefore, recommends that corporate organisations should strengthen their firewalls and educate their staff on the dangers of visiting unsafe websites, and downloading unverified attachments or clicking on links in unfamiliar emails especially in times of national crisis such as COVID-19 pandemic.

**Keywords:** COVID-19 pandemic, Cyber-victimization, Black-hat hacking, Cyberspace, Economic sustainability, Corporate victims

# BANK CUSTOMERS' OPTIMISATION OF AUTOMATED TELLER MACHINES (ATMS) IN NIGERIA: THE COVID-19 CHALLENGE

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### Abstract

This study addresses a significant problem confronting individuals in this technological advancement era vis-à-vis the challenges posed by the recent upsurge of the covid-19 pandemic. Generally, the study focused on evaluating demographic influences on customers' optimisation of

Automated Teller Machine in South-East, Nigeria. Specifically, the study aimed at investigating the ways in which the level of utilization of the ATM differs among various age and educational categories. The descriptive research design specifically the survey method was used to elicit responses from respondents. Out of a sample size of 384 conveniently drawn from an infinite population, a total of 247 usable copies of the questionnaire were analysed. The Logit model was used to test hypotheses. Content and construct validity tests were carried out using face validity, discriminant and convergent validity methods. Cronbach's Alpha was used to test for reliability of research instrument and yielded a value of 0.85. The results show that the extent to which the level of optimization of ATM varies among the various age and educational categories of customers depends on the extent to which there exists other alternative channels for certain transactions that may also be performed using ATM Banking; and other situational over-riding factors. The study contributed significantly to knowledge by refuting the prevailing view point of age and level of education as mutually exclusive determinants of customers' optimization of ATM Banking in South-East, Nigeria, and emphasizing the widespread of the covid-19 pandemic as one of such strongest situational factors refuting this stance.

Key words: ATM banking, Optimization, Demographic influences, Situational factors

# COVID-19 PANDEMIC AND LABOUR- CONTRACT DISRUPTION IN THE SELECTED BANKS IN ENUGU STATE, NIGERIA

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### **Abstract**

At its inception in Wuhan City in China, Corona virus which was later coded Covid-19 was regarded as a regional health challenge whose global potential risk was underestimates until it turned to a global scale with lethal consequences. Covid-19 pandemic brought about restriction on global and local mobility, including closure of businesses with implications on employment and labour disruption as employers were forced to lay off their staff. The pandemic has resulted in an unpresedended global loss of 255 million full time jobs in 2020. Reduction in business activities in other sectors caused dwindling cash generation by customers and has culminated into liquidity challenges for individuals and banks. Despite the numbers of studies that have been conducted on Covid-19, none of these studies have focused on covid-19 pandemic and labour contact disruption in the banking sector. Therefore, the study is geared towards determining the impact and implications of covid-19 pandemic on labour contract disruption in banking industry in Enugu State, Nigeria. Study adopted cross-sectional survey research design. Questionnaire was the major instrument for data collection, which was distributed to five hundred (500) participants. Date was analyzed using the descriptive statistics and chi-square. Findings reveals that banking industry and informal sector are the worst hit by the Covid-19 pandemic as movement of people were restricted. It was further revealed that the pandemic further contributed to unemployment crisis in Nigeria and created an opportunity for employers of labour to compromise Labour-contract relations Acts.

**Key Words:** Covid-19 Pandemic, Labour-contract Disruption, Corona virus, Bank industry, Employment and contract

# EFFECTS OF LOWER CALL RATES ON CUSTOMER LOYALTY OF GLOBAL SYSTEM OF MOBILE COMMUNICATION IN THE SOUTH EASTERN STATES NIGERIA

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### Abstract

The objective of the study was to investigate the effects of lower call rate on customer loyalty of the Global system of mobile communication of the south East Nigeria. The study adopted the survey design. The population of the study consisted of the subscribers of both MTN and GLO of the South-East Nigeria and the sample size was 400. The questionnaire was designed in 5 likert scale and was administered to the respondents through face to face contact. Out of the 400 questionnaires, 351 of these questionnaires were properly filled and returned. The hypotheses were tested using the Spearman Product Moment Correlation Coefficient (SPMCC) statistical tool. This was facilitated through the use of statistical package for social sciences (SPSS) version 20. Findings of the study revealed that high level significant relationship existed between lower call rates and customer loyalty. This implied that subscribers will stay with their network providers as long as the network providers are able to satisfy the subscribers' various needs and meet customer requirements within their expectations. The study recommended that the network providers should make their services affordable through differential pricing to attract subscribers who uses price to make choice in service usage. They should make their pricing strategies known to the subscribers for repeat purchase. The management of the service providers should regularly carry out research to identify the different pricing strategies of other competitors for pricing management to remain competitive.

**Keywords:** Lower call rates, Customer Loyalty, Service Provider, Subscribers Satisfaction, Mobile Communication.

# EXPLORING THE ROLE OF CASHLESS BANKING ON SERVICE DELIVERY IN COVID-19 ERA

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### Abstract

The objective of this paper is to assess the usage of cashless banking channels in service delivery by banks in times of Covid-19. Today's banking environment is competitive and had experienced rapid changes as a result of technological improvement and increased awareness and demands banks to serve their customers electronically. With the outbreak of covid-19, cashless and contactless payment grew as a means of service delivery. Quality service delivery is a winning strategy which results in more new customers, more business with existing customers and high customer retention. While cashless banking is seen as the available channel through which banks deliver their services in Covid-19 era, whether customers got the desired service remain an ongoing debate. The study collected annul data of cashless banking channels comprising of the volume and value of ATM, POS, internet and mobile banking from Central Bank of Nigeria Statistical Bulletin covering 2015-2020 to assess the usage of cashless banking in covid-19 era.

The outcome revealed substantial increase in the volumes and values of these channels in times of covid-19 when compared with that of pre-Covid-19 era.

Keywords: Cashless banking, Covid-19, Service delivery, Covid-19 era

## UNETHICL PROMOTIONAL PRACTICES ON SALES OF PHARMACEUTICAL PRODUCTS IN THE FACE OF COVID 19 PANDEMIC

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### Abstract

Nigeria has never had a more disruptive year than 2020, when COVID-19 wreaked havoc on internal business operations. Since the inception of this pandemic, individuals, businesses, and organizations have struggled to live and thrive by employing various promotional tactics to raise awareness for their goods and services, some of which have purposefully engaged in unethical marketing activities. In order to progress in these dynamic and chaotic times, the pharmaceutical sector urgently needs strategic and acceptable promotional ethical standards that will address unsuitable, unethical or illegal promotional methods for long-term viability. Based on the literature review, it appears that no study has attempted to explore unethical promotional practices of the pharmaceutical sector in the face of the COVID 19 pandemic in Nigeria. This study sought to investigate this lacuna thereby bridging a knowledge gap. To achieve the main objective of this study, the researchers made use of descriptive survey research design. The data were collected from pharmaceutical firms in Nigeria, analyzed using multiple regressions with the aid of statistical package for social science (SPSS) to test the formulated hypotheses which revealed that, unethical promotional practices on pharmaceutical products in the Face of COVID - 19 pandemic have significant effect on sales of pharmaceutical products, in Nigeria. In the light of the above, the study recommended that unethical promotional practices should be avoided by pharmaceutical companies in Nigeria to ensure effective marketing of their products.

**key words**: Unethical promotional practices, pharmaceutical products, sales promotion, personal selling, advertising, public relation

### ENTREPRENEURSHIP AND INNOVATION

# RISING SME COLLAPSE AND ENTREPRENEURSHIPS: WHAT WORKS FOR SME SURVIVAL IN UNSUPPORTIVE BUSINESS ENVIRONMENT

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### Abstract

Survival and growth of SMEs is not just crucial for poverty reduction but also for national development. However, the activities of SMEs in many developing countries like Nigeria are affected by several unsupportive factors in their operating environment leading to collapse of

these enterprises within 10 years of their startup. Empirical evidence reveals that Nigeria recorded a whopping 61.05% start-up failure rate in 9 years. Other evidences highlight that 80% and 96% of SMEs in Nigeria collapse within their first 5 and 10 years of existence respectively. Sadly, these scenarios discourage would be entrepreneurs in the country even with their innovations. This study is motivated by this and it broadly seeks to unravel the actual cause(s) of the SME failure in Nigeria and the way out of such anomaly even in an unsupportive business environment. The mixed method of questionnaire and in-depth interview will be used to achieve the study objectives. Descriptive statistics and logistic regression will be used to analyse the quantitative section of the study. It is expected that the result from the study will usher in the right steps for would be entrepreneurs to follow to survive in an unsupportive business environment.

# ENTREPRENEURSHIP EDUCATION AS AN EFFECTIVE STRATEGY FOR YOUTH EMPLOYMENT IN ENUGU STATE, NIGERIA

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#### Abstract

This study was designed to carry out an inquiry on "Entrepreneurship Education as a Strategy for Youth Employment in Enugu State, Nigeria". The design of the study is a descriptive survey design. The of the was 8000 entrepreneurs. The sample of the study is made up of 400 entrepreneurs from Enugu State of Nigeria. The sample tor the study was 400 respondents (5% of the population), using a Multistage sampling procedure. The instrument used for the collection of data for the study was Entrepreneurship Education as a Strategy for Youth Employment *Questionnaire (EESYEQ). The data collected were analyzed, using mean and standard deviation.* The study was guided by the following research questions: To what extent has information and communication technology (ICT) programmes contributed to youth employment in Enugu State?, to what extent has textile programmes contributed to youth employment in Enugu State?, to what extent has agricultural programmes contributed to youth employment in Enugu State?, and to what extent has event management programmes contributed to youth employment in Enugu State? The major findings of the study indicated that information and communication technology (ICT) programmes; textile programmes; agricultural productions and event management programmes have the unassailable potentials in generating massive gainful employment opportunities for the teeming population of the youth in Nigeria, particularly Enugu State. Conversely, unemployment has the potentiality of negatively impacting on the standard of living of the population of Nigeria, low life expectancy of the people, frustration, indulgence in criminal behaviours, and lack of development of the society and so on and so forth. There is no doubt that lack of youth employment opportunities has been adduced to be partly responsible for the instability and violent-related conflicts in several societies. For instance, in Nigeria, the increasing rate of armed banditry, kidnapping, ritual killing, human trafficking, illegal exploitation of the nation's mineral resources are representations of state instability occasioned by high rate of unemployment in the country. This however is notwithstanding the indisputable fact that Nigeria is abundantly favoured by nature with both human ingenuity and material resources. Arising from the findings of the study, recommendations were proffered among which include functional entrepreneurship education training and re-training of the youth in entrepreneurial and vocational spheres, supporting the youth to start their own businesses after graduation from educational institutions; as well as creating enabling environments for functional entrepreneurial activities.

# DETERMINANTS OF USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN ACCESSING CREDIT INFORMATION BY SMALL SCALE FARMERS IN ENUGU STATE, NIGERIA

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### Abstract

Information and Communication Technology (ICT) has revolutionized modern agriculture. However, it is still unclear what factors determine the final adoption and usage of ICT by small scale farmers. In this study, we analyzed the determinants of the use of ICT in accessing credit information by small scale farmers in Enugu State, Nigeria. A multistage random sampling technique was adopted in the selection of 60 small scale farmers. Quantitative data were collected with the aid of a structured questionnaire. Data were analyzed using descriptive statistics and Poisson regression model. Results show that marital status (p<0.1) and cooperative group membership (p<0.05) had a negative and significant effect on the use of ICT in accessing credit information, while education (p<0.1) and secondary occupation (p<0.05) had a positive and significant influence on the use of ICT in accessing credit information. Lack of ICT knowledge (X=4.20), inadequate digital service centres and facilities (X=4), difficulty in obtaining funding/finance to support ICT (X=3.90), user-friendliness of ICT (X=3.70), expensive cost of ICT usage (X=3.65), apathy towards new technology (X=3.52), lack of training (X=3.25), etc. were among the key challenges faced by farmers in the use of ICT to access credit information. To enhance the uptake and usage of ICT to access credit information by farmers, it is recommended that education, ICT training, and digital service centres and facilities should be provided in the rural areas.

**Keywords**: ICT adoption, agricultural credit, agricultural innovation, smallholder farmers.

# OVERCOMING ECONOMIC CRISIS IN POST COVID-19 ERA THROUGH SUSTAINABLE ENTREPRENEURSHIP IN SCIENCE EDUCATION

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### **Abstract**

Pandemic outbreak has shown significant effects on various sector of the society especially in the economy. Economic crisis arising as a result of pandemic outbreak is more devastating as the economy seems to be the blue print on which all other sectors including education operate. With the urgent need to resuscitate the economy without violating pandemic protocol, there is a call to bring up strategies to this effect. This article therefore discusses the effects of COVID-19 on economy and outlined several assumptions that have changed in the economy during and post pandemic era. It also identified sustainable entrepreneurship in science education (Biology, Chemistry and Physics) as a veritable tool for overcoming economic crisis at this post pandemic era. Entrepreneurship in science education is a complex avenue to educate people on a range of relevant topics geared at fostering entrepreneurial skills. Science education emphasizes on training of learners on the acquisition and development of appropriate knowledge and skills required for innovation. This training could enable individuals to unleash their potentials to maximize available resources around them and set up income generating ventures. Suggestions

were made regarding how sustainable entrepreneurship in science education can help to promote education and the nation's economy.

**Keywords:** Economic crisis, Post COVID-19, Sustainable entrepreneurship and Science education

## A WHOLE NEW WORLD: RESEARCH, DEVELOPMENT AND INNOVATION IN THE PANDEMIC ERA

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#### Abstract

In reality, engineering, innovation and entrepreneurship are related in the sense that entrepreneurship based innovation is the process of harnessing the different opportunities in the field of engineering. Engineering requires comprehensive planning, entrepreneurship will offer better management of the engineering resources so that they can be properly utilized for wealth creation, there are six major branches of engineering namely; mechanical, chemical, civil, electrical, management and geotechnical, and hundreds of different subcategories of engineering under each branch. Entrepreneurship will provide the needed marketing expertise, proper accounting practices, solid business operations, and administrative knowledge that will nurture a technological idea into wealth but without innovation, there isn't anything new, and without anything new, there will be no progress. if an organization isn't making any progress, it simply cannot stay relevant in the competitive market. The most productive engineering businesses or startup are those that embrace creativity and inspire innovation. Incentivizing creative product and entrepreneur strategy development can help propel a business, with engineeractively seeking opportunities for further growth and innovation. Engineering the branch of science and technology concerned with the design, building, and use of engines, machines, structures etc, hence creativeengineers should welcome engineering entrepreneurs ideasby exploring various entrepreneurial opportunities in machines, tools, workshop, laboratory, construction equipment sale, rental, leasing businessetc and by innovating on what can be produce and sell using locally source materials through making time for cohesive creative thinking.

**Keywords:** Engineering; Innovation; Entrepreneurship; Equipment Rental Business; Engineering Businesses

### GENDER EQUALITY AND HUMAN RIGHTS UNDER COVID-19

### IMPACT OFCOVID -19 ON HUMAN RIGHTS IN NIGERIA

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### Abstract

This paper investigated the impact of Covd-19 pandemic on human rights in Nigeria. Two research questions guided the study. The study adopted a descriptive survey design. The population of the study was all human rights organizations (NGOs) in South-East Nigeria. Purposive sampling technique was used to draw 250 members of Human Rights organizations in

South-East Nigeria for the study. Sixteen (16) item questionnaire was designed by the researchers and was used to collect data from the respondents. The instrument was validated by experts. The instrument yielded reliability co-efficient of 0.85 using Cronbach Alpha method. The results were analyzed using mean scores and standard deviation. The findings showed that, the areas of human rights abuse during Covid-19 in Nigeria comprises; restrictions of movement, association or free movement, worship, education, media and easy access to security, among others. Moreover, the findings showed that, the effect of Covid-19 on human rights in Nigeria include; total shut down of schools, restrictions to movement, worship, association, right to adequate feeding, poor access to media, among others. The study recommended among others that protection of human rights in Nigeria based on international best practices should be encouraged.

Keywords: Covid-19, Human Rights. Nigeria

### COVID-19 LOCKDOWN, STATE REPRESSION AND HUMAN RIGHTS ABUSES IN NIGERIA

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#### Abstract

The outbreak and spread of Coronavirus Disease (COVID-19) since November 2019 remain one of the most existential threats to lives and livelihoods across the globe. In Nigeria and, indeed, other parts of the world, the pandemic has elicited several unprecedented far-reaching responses from different stakeholders, especially the state, in order to curb its spread. Among others, physical distancing, movement restrictions and lockdown policies have been adopted as containment strategies. Sequel to Nigeria's COVID-19 index case on 27 February 2020, one of the default responses of the Nigerian government to the pandemic was to lock down major parts of the country. Although this was aimed at enforcing adherence to movement restrictions, security forces deployed to enforce the lockdown were implicated in heightened human rights violations such as extortion, extra judicial killings, torture, and illegal arrest and detention. While the ravaging effects of the pandemic on livelihoods have continued to elicit growing attention in academic, policy and security circles, specific manifestations of human rights violations by security forces in Nigeria have not been central to existing academic discourse. Thus, this article investigates the specific nature and pattern of rights violations by security forces enforcing the lockdown in Nigeria. Using the Marxist theory of the state, this study argues that the colonial history of policing in Africa predisposes security forces to widespread human rights violations. This study adopts qualitative approach involving primary data from veteran journalists (security and health correspondents) in Abuja, Enugu, Lagos and Port-Harcourt, dataset from CLEEN Foundation's COVID-19 Nigeria Security Support Group, and desk review of relevant literature. The study found that the repressive disposition of the Nigerian security forces deepened extortion, extra judicial killings, torture, illegal arrest and detention of citizens during the lockdown.

## GENDER, POVERTY AND WOMEN'S REPRODUCTIVE RIGHTS IN NIGERIA: IMPLICATIONS FOR ACHIEVEMENT OF SDGS

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### Abstract

Women in Nigeria have long suffered in all spheres of life because of ingrained pervasive discrimination, patriarchal attitudes, social and cultural norms that perpetuates and reinforces gender disparities, especially in relation to access, opportunities and the enjoyment of social, economic and legal rights. Poverty and violence against women and girls (VAWG)have been identified by global and national women's rights movements and feminists' scholars as critical areas of concern for realization of women's human rights. The Beijing Declaration and the Platform of Action adopted at the Women's World Conference held in 1995 in Beijing China declared that poverty and VAWG are the most surreptitious forms of violation of women's rights that require urgent action to tackle. Poverty is a cause and consequence of women's low status, illhealth and powerlessness, including the lack of capacity for reproductive self-determination. This paper examined the impact of SDGs in reducing women's poverty, inequalities and access to health care, in particular, safe motherhood and enjoyment of broader sexual and reproductive health rights. The findings reveal that it's not yet euphoria for women and girls despite a plethora of rights recognized in national, regional and international human rights frameworks. The spike in VAWG during the Coronavirus pandemic is evident and has prompted observers to call it a pandemic within a pandemic. The paper submits that for there to be any significant improvement in women's statuses, the Government must be committed to implementation of SDGs and advancing gender equality and the empowerment of all women and girls. Innovatively designed gender mainstreaming packages, gender budgeting, and sensitive gender policies and programmes, including law reforms, capacity building, advocacy and awareness creation are suggested actions going forward.

Keywords: Poverty, Gender, Reproductive and Human Rights

## THE ROLE OF SOCIAL MEDIA IN REDEFINING THE CONCEPT OF WOMANHOOD IN 21ST CENTURY AFRICA

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### Abstract

The concept of 'woman' or 'womanhood' in a typical traditional African setting is the adult female gender, whose ability to actively fulfill her cultural and natural roles, elevate her to the status of a woman. Some of these roles include; her ability to marry and sustain her marriage by bearing children for her husband, especially male children, obeying him unopposed, and comporting herself at all times. The woman has no cultural right to set a goal for herself, let alone setting the same goal that culture views as belonging to men. The effect of these culturally prescribed roles made many African women to feel that their fulfilments as human beings depend on their ability to achieve them, thereby making women view, especially, marriage, as an achievement and

something that should be desperately pursued. It is good to note that this paper is not against these culturally laid down roles for the adult female gender but against the negative effects they have in undermining the potentials of women as bona fide human beings in all arears of life, including that of decision making. The study aims at examining how social media platforms are changing the narratives by engaging every stakeholder in interactions that are fast changing the status quo. Social media refers to the means of interactions among people through different network platforms in which people create, share, and exchange information and ideas virtually. The 21st Century Africa has been technologically impacted, especially on the areas of social interactions and networking both for individual and group developments.

Key words: Social Media, Concept, Womanhood, Africa, 21st Century

### EFFECTS OF COVID-19 ON CULTURAL EVENTS IN ENUGU STATE, NIGERIA

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### Abstract

The outbreak of Covid-19 has threatened socio-economic and recreational activities across the world. This study focuses on the effect of Covid-19 pandemic on cultural events in Enugu State, Nigeria. The study utilized both primary and secondary sources of data collection. The primary source involved the use of structured questionnaire and telephone survey to elicit information on level of involvement, patronage and other observed changes in organization of cultural activities within the study locations while the secondary source involved the use of documented information on the internet, journals, textbooks and bulletins. Six local government area within Enugu State (Ezeagu, Udi, Nkanu West, Nkanu East, Nsukka, Igbo Etiti) were purposively selected for the study based on their viability in terms of cultural events/activities. The study observed that there was a rapid reduction in the number of cultural events and the level of patronage or attendance to cultural events in the State. The study advocates that there should be a gradual commencement of economic and cultural events/activities and that government should organize periodic and frequent sensitization programs for the residents on the need and relevance of adhering to the precautions of Covid-19 to ensure that the virus/pandemic does not spread in the State to avoid another lockdown.

**Keywords:** Culture, Events, Covid-19, Activities, Residents.

## NIGERIA'S RESPONSE TO COVID-19: LOCKDOWN POLICY AND HUMAN RIGHTS VIOLATIONS

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### Abstract

The rapid escalation of the Coronavirus disease (COVID-19) elicited varying degrees of responses from governments. The escalation and community spread of the COVID-19 pandemic despite initial responses resulted in lockdown policy in some countries. Nigeria embraced a lockdown strategy, albeit with some socioeconomic stimulus measures to cushion the resultant

economic hardship. The inadequacy of the stimulus measures led to lockdown violations and human rights abuses. This study examines the nexus between Nigeria's lockdown policy response to the COVID-19 pandemic and human rights violations in Nigeria. We also examined the role of civil society in mainstreaming civil rights protection during public emergencies. We relied on documentary evidence from secondary sources. We found that the character of lockdown policy enforcement in Nigeria led to the violation of the Quarantine Act, 2004 and constitutionally guaranteed human rights. We also found that civil society was fundamental in mainstreaming the protection of rights during the public emergency.

**Keywords:** Coronavirus; Pandemic; Human Rights; Government Response; Civil Society Vigilance

# GENDER DISPARITY IN STUDENTS' ENROLLMENT: A CASE STUDY OF PHYSICAL SCIENCES, UNIVERSITY OF NIGERIA, NSUKKA

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#### **Abstract**

Achieving gender parity is the bedrock of sustainable development. To this end, the study assesses gender disparity or otherwise in the admission of students in Physical Sciences between 2016 to 2019. Thus, a case study design was adopted for the study. The population of the study comprised 6750 students (4537 males and 2213 females). Two instruments were used for data collection namely Pro-forma and Interview Guide. Since the entire students in the faculty within the interval were included, there was no sampling. The instruments were validated but no reliability testing was carried out since the instruments were only pro-forma and interview guide. Research *questions were answered using frequency and percentages while chi-square (x2) was used to test* the null hypotheses at 0.05 level of significance. The results of the study showed significant disparity (difference) in the students'admission within the period under review in the faculty and the departments that make up the faculty. That is male students(67.2%) dominated the female students (32.8%) in the enrollments within the period under consideration among others. These differences in gender in students' enrolment were attributed to mathematically inclined nature of the courses in the faculty among others. Based on the findings, it was recommended among others that parents, teachers, International Organization like UNESCO, community and traditional leaders and mass media should play key roles in the sensitization, advocacy and policy formulation that will help encourage more female students to take career path in physical science for developmental strides of the nation.

Keywords: Gender, Gender Disparity, Equity, Equality, and Physical Science

# PERCEPTION AND PRACTICE OF FEMALE GENITAL MUTILATION AMONG RURAL WOMEN IN ENUGU, NIGERIA

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### Abstract

Female genital mutilation is a public health problem that was recognized internationally as a violation of the human rights of girls and women, constituting an extreme form of gender discrimination with documented health consequences. Despite the campaign against this

harmful practice, it is still flourishes in some states in Nigeria. The aim of study was to determine perception, practice of Female Genital Mutilation among rural women in communities Enugu. Descriptive and inferential statistics analysis were employed. Sample size of 162 was drawn from population of 280 married women using self-structured validated questionnaire and convenient sampling technique. The findings showed that all the women were aware of the practice of FGM. majority (58.1%) of the women perceived FGM to be good and their reasons were anchored to prevent promiscuity (97.2%), as part of culture (94.7%) and that it preserves virginity (91.5%). Half of the women (51.2%) were circumcised, still want FGM to continue and still practice and encourage others to do so. Significant relationship existed between perception and practice of *FGM* and between awareness and practice of *FGM*. The paper concludes that, practice of female genital mutilation (FGM) is persistent among the rural women and this is influenced by the opinion of the women. The women positively perceive the practice of FGM to be good, thus, leading to its continuation. Community wide campaign should be organized by the nurses in collaboration with the community leaders and the government against the practice of FGM. **Keywords:** Perception, Practice, female genital mutilation, Rural Women, Enugu.

### WHY WE STILL SHAKE HANDS: HOW BELIEFS INFORM YOUNG PEOPLE'S SOCIALIZING CHOICES AMIDST COVID-19 IN NIGERIA

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#### **Abstract**

The World Health Organization (WHO), in the wake of the spread of corona virus disease (COVID-19), advised against the act of handshake as one of the measures of controlling the spread of the virus. This is because handshake has long been established as a strong transmitter of disease between individuals. The Nigeria Centre for Disease Control (NCDC) also followed suit in discouraging the act of handshake as part of its physical distancing guide in Nigeria. However, many young people still shake hands. This study examined the reasons why a sample of twelve young people still engages in the act of handshake amidst the spread of the virus in the country. The data were analyzed using a descriptive analytical method. The findings show that the participants believe that they are not susceptible to COVID-19 due to self-administration of hydroxychloroquine and the claim on divine (God-given), geographic (hot temperature) and demographic (being young) immunity. The majority perceived the virus as malaria and as such, not severe. Implications of findings for research and policy are discussed.

Keywords: Handshake, COVID-19, Corona Virus Disease, Hydroxychloroquine, Young persons, Malaria, NCDC, Nigeria

### LACK OF MORALITY IN THE IMPLEMENTATION OF LOCKDOWN ORDER AND OTHER MEASURES TO COMBAT COVID-19 IN NIGERIA: A PHILOSOPHICAL ENQUIRY

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### Abstract

The corona virus disease (Covid-19), is a highly transmittable and pathogenic viral infection aused by severe acute respiratory syndrome corona virus 2 (SARS-COV-2), which emerged in

Wuhan, China and has spread around the world. Using qualitative research design and analysing same with evaluative method, this research discovers that there is wild and wide spread of this virus across the globe through person-to-person contact and contact with object touched by an infected person. As a measure to contain the spread of the disease, there have been measures world over including Nigeria which ranges from travel ban, lockdown, social distancing, regular washing of hands, the use of face mask, regular use of hand sanitizer etc. This study shows that Nigeria as a country has no moral value in place as regards the measures in tackling the spread of this virus, as the leaders rather see it as avenue to make money and exploit the innocent masses. This attitude has enabled the wide and wild spread of this disease to almost all the states of the federation. The paper points out that unless the moral value of Nigerians both the leaders and the lead is re-directed, this virus will have long lasting effect on Nigeria and her people. Materials used for this article are sourced from books, articles and Internet.

Keywords: Morality, Lockdown, Combat, Covid-19, Nigeria and Philosophical Enquiry.

# WARRING COVID-19 LOCKDOWN/SOCIAL(PHYSICAL) DISTANCE MEASURES AND AFRICAN COMMUNAL/SOCIAL EXISTENCE: THE PLACE OF NEW MOBILITIES

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### Abstract

The model of new mobilities has recently had significant and positive impacts within the Social Sciences. And report has it that Psychologists have been very slow to adopt the tenets and applicability of knowledge of mobility in furthering the knowledge of its discipline. In this special perspective, we did not only explain how the knowledge of mobility can help cushion the effects of the clash between Covid-19 lockdown measures and African communal/social existence, but also lend our voices in the wake-up call for Psychologists (including other experts) to begin to think of various ways new mobilities could advance their scope of studies. We specifically used three out of the five new themes of mobility to illustrate how we can be "mobile" under Covid-19 lockdown/sit-at-home measures. We conclude that it is apparently impossible that Covid-19 lockdown/sit-at-home measures which equally are in serious conflict with the age-long African communalism/socialism can forcefully and suddenly sever African communal/social existence rather the model of new mobilities has a major impact in soothing the effect of the clash between the two.

**Keywords:** Mobilities, psychology, covid-19 lockdown measurers, creativity, African communal/social existence.

### THE EFFECTS OF COVID 19 PANDEMIC ON YOUTH UNEMPLOYMENT AND NATIONAL SECURITY IN NIGERIA

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### Abstract

This study evaluates the effect of the Covid-19 pandemic on youth employment and it's consequent toll on the national security in Nigeria. The specific objectives were to ascertain the causes of youth unemployment in Nigeria and to identify the effects of Covid-19 pandemic on youth unemployment and national security in Nigeria respectively. To carry out this study, survey research design method was adopted, and as such, data were collected through primary and secondary sources such as structured questionnaire. Data gathered from the respondents were analysed and amongst the findings were: that the Covid-19 pandemic affected the youth employment in Nigeria and consequently poses a serious threat to the peace and security of the nation evident in bad governance, inequitable distribution of palliatives, high cost of governance and aggravated inequality. It was also revealed that the effects of the increased youth unemployment due to Covid-19 pandemic in Nigeria. It's implication is evident in internal aggression and civil unrest, weakened economy and economic insecurity and increase in cybercrimes. The study made a few recommended amongst others that here should be a massive reduction in the political corruption index of the country to enable youth development to thrive through youth employment, the government should embark upon massive youthentrepreneurial development programmes in all the states of the federation.

**Keywords:** Youth Unemployment, Covid-19 pandemic, national security.

### PEACE, CONFLICT AND SECURITY

# FUNDAMENTAL ISSUES OF OIL POLLUTION AND ENVIRONMENTAL CONFLICT IN NIGERIA: A FRAMEWORK FOR CONFLICT MANAGEMENT IN SOUTH-SOUTH REGION

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#### Abstract

The paper x-ray the conflict in the South-South region that has got to a boiling point as a result of years of quantum neglect of environmental safety measures by the oil multinationals such as Shell, Mobil, Chevron, Agip, Elf vis-à-vis the failure of the Nigeria government to use finances accrued from years of oil exploitation in the region to provide basic social amenities to the people. This neglect is one of the key reasons for the conflict in the region that has remained impoverished and undeveloped despite the region's huge contributions to the Nigerian economy for many decades. The study employed the resource curse theory and conflict management as the analytical framework. The method of data generation and analysis are both qualitative and observation of the situation in some oil producing communities and the trends of violent deaths in the region. This was derived from secondary sources which include existing documents on the subject matter. In terms of theoretical and practical significance, the study argues, based on the conflict management and curse theory that there is a significant correlation between oil

explorations, environmental degradation, neglects of corporate social responsibility by the oil magnate and conflict in the region, considering the disconnect between the community development projects and the actualization of human needs. The paper concluded that unless appropriate public policies measures are put in place to resolve the problem, the present conflicts in the region may remain unresolved.

Keywords: Oil Pollution, Environment, Conflict, Management

### TACKLING THE MENACE OF FARMERS AND HERDSMEN CRISES ON AGRICULTURAL PRODUCTION IN NIGERIA

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### Abstract

Competition for limited natural resources such as land, pastures and water has oftentimes led to violent conflicts between herdsmen and farmers in many parts of Nigeria. The conflict has in recent years taken more dangerous dimension as the herdsmen now carry sophisticated ammunitions with which they kill and maim perceived opponents at will. This study, therefore, discusses causes, effects and ways to tackle the menace of farmers and herdsmen crises on agricultural production in Nigeria and its effects on socio-economic development in Nigeria. The research adopts a qualitative approach to data analysis which relies on secondary sources like journals, textbooks, newspapers and online publications. This study concluded that the farmers and herdsmen crises have resulted in the loss of lives, displacement, distrust, destruction of properties and food insecurity in Nigeria. It is recommended that the Federal government of Nigeria should vigorously pursue a holistic campaign that will seek the support of all actors, including herdsmen, farmers, state and local governments, to accept the idea of modern ranching as an alternative to traditional migration of herdsmen which causes friction and other associated threats.

**Keywords:** Farmers, Herdsmen, Crises, Tackling, Food Insecurity

## MEANINGFUL YOUTH PARTICIPATION IN CONFLICT ERUPTION, PEACE BUILDING AND SECURITY MANAGEMENT IN NIGERIA

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### Abstract

The youths are a significant part of the world populace. Their place in the society has strongly proved that the society cannot do without them. They are by default the pivot upon which any meaningful society rotates. In any case, the expression, "youths are leaders of tomorrow" has been modified to be, "youths are leaders of today." However, in Nigeria, the place of the youth is not recognized and their impact is not felt or wrongly felt. Due to the problem of unemployment and zero participation in politics of the country, a handful of the youths have become anarchic, constituting mayhem to the entire nation. The occasions of conflict eruption which threaten the peace and security of the nation are instances in which the youth exercise their 'civic responsibilities.' Since the youths are not harnessed properly, they become a viable means

through which conflicts—political, social and religious—erupt in the country. This paper is set to argue that the little to no participation of the youth in peace building and security management is a corollary of countless emergence of conflict situation in the country. Therefore, the authors maintain in the course of this paper that the position of the youth as potential peace builders should be accorded its pride of place. By arresting other problems that bedevil the youths, a provision should be made for them to participate in the negotiation, deliberation and arbitration when it comes to matters of conflict, peace and security management in the country.

Keywords: the youth, peace building, conflict, security, management, participation, Nigeria

### JUXTAPOSITION OF TWO UNUSUAL WARS: WAR ON COVID-19 GLOBAL PANDEMIC AND THE NIGERIA BIAFRAN WAR

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### Abstract

The Corona virus disease which began in Whuhan, China in December, 2019 was initially viewed as an isolated Chinese health issue. However, it later spread to become a global pandemic with far reaching impacts that made global leaders and international organizations to declare national and global emergencies on the disease. This is a theoretical paper that relied on desk reviews, documentary and secondary sources for data collection. Data was analyzed using thematic deductive technics to draw useful comparisms. This paper therefore analyzed the nature and impacts of the covid-19 pandemic with the veridical experience of the Nigeria Biafra war. The objective is to draw attention to the possible existence of other kinds of warfare that may even be more debilitating than the open armed conflict that the World is more familiar with and that people in professions other than the army could serve as frontline men and women to protect human life and the nation. The paper further highlighted the elixirs of wars, the similarities and differences in both life events to draw out cautions and lessons. The paper recommended (Please show the results on which the recommendations are based on) that adequate attention should be given to other professions and institutions in Nigeria because the defense of people and nation may not necessarily be in the hands of the conventional defense institutions and the army. **Keywords:** Juxtaposition; Wars; Covid-19, Nigeria; Biafra.

### RESTRUCTURING THE UNSTRUCTURED STRUCTURE IN NIGERIA FOR SUSTAINABLE NATIONAL PEACE

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### Abstract

The Nigeria we call for restructuring is a British colonial creation in 1914 through amalgamation principle. Nigeria has been suffering from serious threats of collapsing because of the absence of

national peace since the first military coup in 1966 till date. Obviously, because the colonial process did not bring people of the same level of development together, there has been a great deal of mutual suspicions and misgivings. Qualitative Descriptive analysis was adopted in this research. The method of data collection utilized by the Researchers is Secondary based data sourced from journal articles, magazines, newspapers, bulletins, official government documents. internet based information were also used by the to review the ongoing agitations for restructuring in Nigeria with a view on the reasons for restructuring. The imbalance in state and local government creation between the southeast and northwest which have formed the basic explanation for skewed revenue allocation, Religious beliefs, absence of consensus, internal conflicts as well as over centralization of power and resources as the Researchers found out are some of the threats confronting Nigeria's and why there is need for restructuring to sustain national paece. The paper concludes that we have reached a point in Nigeria where the diverse people needs to come together and stand as one to rescue Nigeria to sustain the peace of the nation.

Keywords: Restructuring, Nigeria, Sustainable, National Peace

### INSECURITY IN A PANDEMIC ERA: A LITERARY ANALYSIS OF NEXUS BETWEEN COVID-19 AND SECURITY CHALLENGES IN NIGERIA

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### **Abstract**

The state of security is the major determinant in the choice of where one would live, work or invest worldwide. Insecurity is a major reason why some countries experience serious decline in population and economic growth. In the recent past, Nigeria has been experiencing security challenges but COVID-19 pandemic and its associated lockdown measure have skyrocketed the rate of insecurity in the country. While Boko Haram insurgents and Bandits have turned the North upside down with violent killings and abduction for ransom; Middle Belt is soiled with the bloods of innocent people slaughtered by Fulani Herdsmen, resulting to food insecurity that has hit the nation so hard. On the other hand, the South is gripped with the fear of kidnappers, armed robbers and unknown gun men rampaging the society. Previous studies on the pandemic have paid little attention to literary analysis of its relation with security. Through Textual Analytical Criticism and Realism, this study explores post COVID-19 peace and security challenges in Nigeria. The Study suggests ways of combating insecurity in the post COVID-19 pandemic era

Keywords: COVID-19, Textual Analytic Criticism, Realism, insecurity, literary analysis

# FARMER-HERDER CONFLICTS IN NIGERIA AND THE SECURITY CONCERN: RETHINKING THE GRAZING ROUTES SAGA

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#### Abstract

The conflict between herders and farmers in Nigeria has been a recurrent decimal in the last two decades leading tokilling and maining of citizens, destruction of property, and displacement of peopleacross the country but more devastating in the Middle Belt (North Central) and southern region. The cause of this clashes remains an issue of debate among scholars. Some existing works have portrayed the drivers of the conflict as a continuation of ethno-religious tussles that precede the colonial era, deteriorating environmental conditions, desertification, disputes over land and population growth. This paper elucidates the Nigerian government's failure to reasonably address the spate of violence associated with herder-farmer conflicts. Whereas the issue of farmer-herder conflicts in Nigeria has focused on causes of the conflicts, the grazing route as a solution has received scanty attention. This paper therefore examines the implications of grazing routes and the security challenges in Nigeria. The study found that grazing routes will undermine agricultural production and hinder food security in Nigeria. Although, cattle dung adds nutrient to the soil, grazing routes for the cattle would not only lead to conflict but could increaseleaching. The paperargues that implementing Section 2 of the Land Use Act is a critical step towards endingfarmer-herder conflicts in Nigeria. This study employs descriptive narrative approach to situate the argument.

# FARMERS-HERDERS CONFLICT; ITS IMPLICATIONS ON FOOD SECURITY AND FAMILY SUSTAINABILITY IN COVID-19 ERA IN NIGERIA

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### **Abstract**

This paper is on farmers-herders conflict and its implications on food security and family sustainability in COVID-19 era in Nigeria. The study shows that the continuous conflict between the two parties has grievously affected the means of livelihood of the citizens especially the rural families which tends to be more vulnerable to this conflict, also loss of lives, properties, livestock, farm products and destruction of farmlands characterized the conflict which has affected food supplies especially at the face of present pandemic which had introduced hunger, inflation, poverty, joblessness etc, which only remedy would have been agriculture. It also pointed illiteracy, politics, ethnicity and tribalism, encroachment, killing of stray cattle, rape and sexual harassment and destruction of farm crops and products as the major causes of the conflict. Data for the study were gathered through secondary sources. It recommended among others for government to revisit 1964 grazing reserves and 1978 land tenure to give room to accommodate land owners usage and control for the competing parties and quick passage of 2016 FGN proposed grazing reserves bill by the national assembly, to control and regulates the activities of pastoralists in Nigeria.

**Keywords:** Farmers-herders, conflict, food security, family sustainability, COVID-19.

# TRADITIONAL COUNSELLING: A SERVICE FOR INCULCATING THE CONSCIOUSNESS OF PEACE AND NATIONAL SECURITY AMONG YOUTHS IN THE PANDEMIC ERA

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#### **Abstract**

Youths are the strengths of any society. The future of any nation depends on the youths. Nigeria has in recent times witnessed and is witnessing a social breakdown especially among the youths. Traditional counselling on the other hand is a life-enhancing service that helps to inculcate the consciousness of peace and National security among youths in this pandemic Erasince it isrooted in traditional system ofknowledge and sociocultural customs and practices. This will help youths to adjust properly to a well meaningful life. In this write up, the authors are of the view that traditional counselling which is rooted in traditional systems of knowledge and socio-cultural customs and practices, is one of the components of counselling that is properly administered in theschooland non-school setting which can help to reform the youths who are at the formative stage for National development. Traditional counselling is a collective approach to problem identification, resolution, and management. The paper highlighted the factors that require the necessity of traditional counselling to include, kidnapping, vandalism, cultism, moral degradation, drug abuse, religious, political unrests and others which are majority carried out by the youths in this pandemic Era. Useful strategies to be employed by the traditional counsellors for helping reform the youths are discussed. Recommendations such as setting up functional counselling centers, establishment of group/peer counselling systems, organization of workshops and seminars on challenges faced by the youths are found within.

**Key words:** Traditional counselling, youths, consciousness, peace, National security

# CULTURE, LIFESTYLE CHANGES AND ADAPTIVE BEHAVIOURS

CULTURE, LIFESTYLE CHANGES AND ADAPTIVE BEHAVIOURS

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### Abstract

The reason for this article is to explore culture, lifestyle changes and adaptive behaviours using Nsukka-Ideke Igbo of Enugu State, Nigeria as a focus. This study is borne out of the conviction that significant relationships exist between culture and lifestyle changes, especially as it concerns relating how people understand their relationship to the social world, how that relationship is constructed across time and space, and how people understand their possibilities for the future. The central question this study addresses is therefore, the extent to which culture contributes to lifestyle changes in the above said geographical area. Other objectives of the study include, to investigate the roles of culture in lifestyle changes, and also, to ascertain how culture helps people in understanding the socio-political lives of the people and their social world at large. The study adopts a descriptive survey method as its research design and analyses its data descriptively. The database for the study is from a number of related illustrative text, journal

sources and internet sources. Findings reveal that culture and lifestyle changes are intermingled, intertwined and dove-tailed, hence, they are interrelated. Again, it is observed that the people's culture shapes their attitudes towards life in all aspects. This is because, culture gives voice to feeling and artistic shape to experience, balancing passion and rationality and exploring issues of morality and values. Hence, culture stands to be a window on the world as it concerns lifestyle changes.

**Keywords:** Culture, Lifestyle changes, Adaptive behaviours.

### KNOWLEDGE OF RISK FACTORS FOR HYPERTENSION AMONG MIDDLE-AGED ADULTS OF SOUTH-EASTERN NIGERIA

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### Abstract

Recent records by the World Health Organization show that hypertension is more prevalent in Africa than other parts of the world. The disease remains the foremost common risk factor for cardiovascular-related diseases like stroke, renal diseases and death. However, little is known about the risk factors for hypertension, especially among middle-aged adults in South-East, Nigeria. The study assessed the knowledge of the risk factors for hypertension among middle-aged adults in the area. Focus group discussions were used to collect data from 60 middle-aged adults (thirty males and thirty females). The findings showed that the participants were aware of hypertension, but lack in-depth knowledge of the risk factors for the disease. Most of the participants, did not believe that intake of certain foods like starchy foods and excess alcohol could lead to the development of hypertension. The knowledge of the risk factors for hypertension was found to be low among middle-aged adults in Nsukka. There is the need for sensitization and enlightenment programme for middle-aged adults in the study area on the risk factors for the disease.

**Keywords:** Hypertension, knowledge, middle aged adults, social work, Nigeria

## COVID-19 PANDEMIC IN NIGERIA: IMPACT ON NORMAL TRADITIONAL BEHAVIOURAL PATTERNS OF THE POPULATIONS

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### Abstract

This study seeks to position the attitudes of strict adherence and adaptation to the 'new normal' recommended by the WHO and Nigeria's healthcare agencies as the appropriate precautionary measures which could stamp out the COVID-19 virus from the country, cut off its various lines of infection, and save the precious lives of fellow countrymen and women, whose former traditional behavioural patterns could aggravate the continued spread of the deadly virus among different communities in the land. Prior to the outbreak of this disease, Nigerians faced great risks exacerbated by poor, unhygienic, and unhealthy behavioural patterns which could hasten the

sporadic spread of this deadly virus among human communities in the country within the shortest time. It is, therefore, the target of this paper to discuss the huge healthcare benefits associated with strict adherence to the 'new normal' globally approved and adopted as plausible precautionary measures designed to reduce the activities of the virus. To that end, the handling of this paper shall be guided by the qualitative method of data analysis. At that, it shall deploy the relevant scientific terminologies required for the better articulation of the discussion. Without doubt, the whole world is dangerously ravaged by the marauding COVID-19 pandemic. Schools and educational institutions are closed. Normal human lives are terribly threatened, while world economies are terribly disrupted. Thus, it is a strict adherence to the various precautionary measures endorsed by the WHO, in collaboration with Nigeria's Federal Ministry of Health that can spare the country from the devastating crutches of the pandemic.

Key Words: Behaviours, COVID-19, Pandemic, Patterns, Traditional

# THE PERCEPTION OF PRIMARY SCHOOL TEACHERS ON THE IMPACT OF COVID-19 ON THE SOCIAL BEHAVIOUR OF CHILDREN IN ENUGU METROPOLIS

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### Abstract

The Coronavirus disease (COVID-19) pandemic has affected every aspect of human life, particularly the social behavior as a result of COVID-19 restrictions. The COVID-19 precautionary measures, such as social distancing and restrictions in social gathering, have tremendously affected emotional stability as well as mental health particularly among school children. Hence, this study analysed the perception of primary school teachers on the impact of COVID-19 on the social behaviour of school children in Enugu metropolis. Primary school teachers were sampled from 6 schools in Enugu metropolis. Data were collected from sixty three (63) primary school teachers using a well structured questionnaire. Cronbach Alpha reliability estimate was used to ascertain the internal consistency of the entire instrument. Descriptive statistics were used to analyse the data for the study. The results showed that 98% of the teachers perceived emotional disability among school children, which was evidenced in anxiety, stress and depression among these children as a result of the COVID-19 restrictions. Also, social distancing and financial constraint during the COVID-19 restriction was perceived by the teachers to have impacted on children's social behviour most. Therefore, the study recommends that primary school curriculum be reviewed to include courses that address psychosocial issues, to help children manage mental health as well as social behaviours in any situation they find themselves. Key Words: Covid-19 Pandemic, Socio-personal Behaviour, Children

INFLUENCE OF FEAR OF COVID-19 AND SOCIO-CULTURAL ATTITUDE TOWARDS APPEARANCE ON QUALITY OF LIFE AMONG NIGERIANS: EVIDENCE FROM THE HEALTHY LIFESTYLE OR PRO-HEALTH OBSESSION DURING THE PANDEMIC PROJECT

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#### Abstract

The Coronavirus pandemic (COVID-19) has resulted to fear and anxiety among the general population in most countries. People also have different ways of perceiving their physical appearance due to cultural factors. The present study examined whether COVID-19 fear and socio-cultural attitudes towards appearance contribute to health-related quality of life among Nigerians. Data was collected as part of the multinational Healthy Lifestyle or Pro-health Obsession during the Pandemic project. The following measures were completed by 138 participants (66.7% males) who took part in the study: Coronavirus Anxiety Scale (CAS), Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ), and the 12-item version of Short Form Health Survey (SF-12). Data was analysed using hierarchical linear regression in SPSS version 25. Results showed that even after controlling for relevant demographic factors (e.g., gender and occupational status), anxiety about COVID-19 was associated with low quality of life. Participants who reported more negative socio-cultural attitudes towards appearance also had less quality of life. It is suggested that policy makers and health practitioners should design appropriate interventions to ameliorate people's fear about COVID-19 and modify dysfunctional attitudes as part of programs to improve physical and mental health of Nigerians in an era of global pandemic.

**Keywords:** Attitude, COVID-19 anxiety, health policy, Nigeria, quality of life.

#### CULTURE, LIFESTYLE CHANGERS AND ADAPTIVE BEHAVIOURS

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#### Abstract

The COVID- 19 pandemic that continues to spread around the world is affecting almost every aspect of daily life, including the very human need to connect to culture. With concerts, theatre performances and community cultural practices interrupted or cancelled, our connection with each other has been weakened. Cancellation of the events offered by cultural institutions was caused by the restrictions introduced by the government and, at a critical moment, a national lockdown. The greatest challenge was the virtualisation of the existing activities. Infectious diseases have been responsible for the greatest human death tolls. The COVID-19 pandemic represents a massive global health crisis. The crisis requires large-scale behavioural change and places significant psychological burdens on individuals, family, and society. The study made use of qualitative response from stakeholders as well as the use of secondary materials. The insights from the burden of social and behavioural changes affect the culture, lifestyle changers and adaptive behaviours of the society. The study identified several insights for effective response to the pandemic situation and highlight important steps to be taken by individuals on the new

normal way of life. The paper discuss evidence from a selection of families including issues relating to navigation threats, social and cultural influences on human behaviour, communication, moral decision—making, daily living, socialisation, stress and coping during the crisis very difficult. To achieve these the paper employed the use of the qualitative research methods with focus on family as a target audience. The paper therefore recommends the use of community theatrical production in collaboration with health experts on ways of adapting to the new reality.

Key words: culture, lifestyle, life changer, adaptive

#### SPORTS, ENTERTAINMENT AND RECREATION

KNOWLEDGE AND PRACTICE OF KEGEL EXERCISE AMONG POSTNATAL WOMEN ATTENDING IMMUNIZATION CLINIC IN A SELECTED HOSPITAL IN ENUGU, NIGERIA

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#### Abstract

The aim of the research was to determine the knowledge and practice of Kegel exercise among postnatal women who attended immunization clinic at Uwani Cottage Hospital, Enugu, Nigeria and to identify factors that influenced their practice of kegel exercise. We explored their demographic characteristics which contributed significantly to the women's practice. The study employed a descriptive cross-sectional study. The sample included 223 postnatal women between the ages of 16-45 years who attended the immunization clinic. Valid and reliable questionnaire was used to collect data. Analysis was done using descriptive statistics and Chi-Square Test of Association. 71.3% of the postnatal women have not heard about Kegel exercise while17.5% practiced the exercise. Factors that influenced their practice include self-motivation (59%), motivation by health care personnel (35.9%) and lack of knowledge (70%). Age and occupation had significant association with practice of the exercise (p = .020 and p=.025, respectively). Nurses have a significant role in health education of postnatal women about Kegel exercise and in motivating them to practice it.

**Keywords:** knowledge, practice, kegel exercise, immunization clinic, postnatal women.

# PERCEIVED IMPACT OF COVID 19 ON RECREATIONAL SPORTS AMONG STAFF OF MEDICAL CENTRE, UNIVERSITY OF NIGERIA, NSUKKA: IMPLICATIONS FOR HEALTH EDUCATION

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#### **Abstract**

The COVID-19 pandemic has imposed a new lifestyle on individuals in most parts of the world including those in the medical profession. The containment measures of the pandemic have both negative and positive significant impacts on recreational sports participation of medical professionals who amidst the lockdown are at the forefront on the fight to contain the virus. This

study was undertaken among the staff of medical centre, University of Nigeria, Nsukka, to explore the perceived impacts of Covid-19 on recreational sports. The descriptive research design was adopted for the study. One hundred and eighty-five (185) staff of medical centre, University of Nigeria, Nsukka, was used for the study. The researchers' designed questionnaire was used to collect data. The questionnaire was validated by five experts and has reliability co-efficient of .78. The results of the study revealed that staff of medical centre in UNN had positive perception of the containment measures of the Covid-19 pandemic. However, majority of the staff reported that the containment measures of the Covid-19 pandemic had negative impact on recreational sports. Based on the findings the researchers discussed the implications of the findings for health education.

Key words: Covid-19, Recreational sports, Medical staff, Pandemic, Perceived impact

### LEISURE PURSUITS AMONG SECONDARY SCHOOL TEACHERS IN NSUKKA EDUCATION ZONE OF ENUGU STATE

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#### **Abstract**

This study was aimed at examining Leisure Pursuits among Secondary School Teachers in Nsukka Education Zone of Enugu State. Two specific objectives with their corresponding research question guided the study. To achieve the purpose of the study, the cross-sectional research design was adopted. A sample of 210 secondary school teachers was drawn from the Education Zone, this made up the sample for the study. Data was collected using a self-structured Leisure Pursuits Questionnaire (LPQ). Data collected by LPQ were analyzed with frequencies, simple percentages. Only data from 210 respondents who duly completed the LPQ were analyzed and reported in this study. The results of the analyzed data showed that: Secondary school teachers of Nsukka Education zone engaged in different types of leisure activities and leisure pursuits is influenced by age; level of education and gender of teachers. These findings led to formations of some recommendation; that school authorities, school board and the government should as a matter of conscious efforts improve the sporting facilities of the zone. This is because it will encourage more teachers' participation in leisure activities. Also, the school authorities should ensure that leisure and recreation activities are part of the schedule of activities to be operated in the schools.

Key Words: Leisure, Leisure Pursuit, Secondary School Teachers

# ASSOCIATED VARIABLES WITH THE UTILIZATION OF RECREATIONAL FACILITIES AMONG RESIDENTS OF ONITSHA NORTH L.G.A, ANAMBRA STATE

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#### Abstract

Engaging in recreational activities is pivotal to healthy living being that recreation avails one the opportunity to relax and refresh when not working. These underscores the provision of recreational facilities by the government and non-governmental agencies. However, the current

level of technological innovations and life automation have led to increased free time and regrettably less utilization of recreational facilities thus the study seeks to determine the following; available recreational facilities in the L.G.A; condition of existing facilities, agencies responsible for the provision of the facilities, reasons for and frequency of engaging recreational activities; and ways of improving the utilization and participation in recreational activities. Descriptive survey research design was adopted and 250 respondents randomly selected from the five recreational centers in the Onitsha North L.G.A formed the sample for the study. Data were collected using a researcher structured questionnaire and analyzed using frequencies and percentages. Findings show that the few existing recreational facilities were not in good working condition; and philanthropists provide more facilities and equipment than the local government council despite getting monthly allocations. Results also show that the resident engage in recreational activities two to three times weekly and for the reasons of weight control and reduction. Conclusively, poor maintenance of recreational facilities and equipment has contributed highly to the poor utilization of existing recreational facilities by the residents. Therefore, there is need for the local government council to ensure effective working existing facilities and also procure more facilities to cater for the diverse needs and interests of the residents.

#### **RELIGION AND SPIRITUALITY**

### RELIGION AND SPIRITUALITY IN A PANDEMIC ERA: AN EVALUATION OF THE ROLE OF THE CHURCH DURINGCOVID-19 PANDEMIC

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#### **Abstract**

The fact that the Covid-19 pandemic, since its outbreak, has brought about changes in lifestyle and ways of relating with others is no understatement. Every facet of life has been touched by the unrelenting onslaught of this horrifying pandemic. Religion and spirituality have been no exceptions to this problem. While religious institutions, like most institutions, were taken unawares by the pandemic, the lessons to take home from the ugly phenomenon cannot be overemphasized. Employing the discursive analysis method, this paper evaluates the role of religion and faith during the Covid-19 pandemic. The study reveals that the Covid-19 pandemic demonstrated unambiguously that the issue of physical health which, sometimes, is not considered central to the teaching of the Church, is not tangential to the mission of the Church. Today, the Church realizes that medical issues can determine and define its pastoral and liturgical life. Therefore, among the core doctrines of the Church should be its healing ministry, especially medical ministry. The Church can no longer afford a dualistic concept of health which prioritizes spiritual healing to the neglect of physical healing. It is in this holistic attention to the sick and the suffering that the Church will remain true to its mission. Arguably, policymakers should not relegate the ministers of the Church and the services of the Church in a pandemic era as not belonging to the category of essential workers and services respectively.

**Keywords:**Covid-19, pandemic, faith, religion, healing, lockdown.

#### RELIGIOUS APPROACH TOWARDS CONFLICT MANAGEMENT

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#### Abstract

Conflict is as old as man. It can be traced from the bible story down to the present society and it is inevitable. Conflict arises from disagreement and it is a natural phenomenon in human societies just as religion is the worship of super natural being which lives with man. Conflict is man-made and it has been a problem to mankind, if not well managed or resolved, escalates to destruction of lives and properties. It has not helped in the growth and development of any nation but rather it destroys the peaceful co-existence and makes live unbearable. However, dialogue, tolerance and reconciliation among others should serve as tools with which to douse the tension, emanating from conflict. The poor management and resolution of conflicts by Nigerian government has led to crisis in almost all parts of the states which has resulted in calling for restructuring, protest, criminality, agitation by Biafrans and Oduduwa for secession, etc. In Nigeria, we have three major religions, namely; Islamic, Christianity and African Traditional Religion. Though among the adherents of these three major religions, conflicts do exists among them but still they play vital role in settlement of disputes in the society. This is done through prayer, consultation, dialogue and fair hearing to both parties involved in the conflict. Without peace, oneness and fairness to all the members that make up the political zones, the country cannot progress positively. The paper examined the non existence of peace, fairness, equality and oneness in the country. Therefore, with the use of comparative phenomenological method of analysis, this paper proved government efforts not good enough and there was need for religious approach in order to significantly reduce the rate of conflicts in the country.

### CONSPIRACY THEORIES, COVID-19 INTERPRETATION AND VACCINE HESITANCY IN NIGERIA: A STUDY OF RELIGIOUS LEADERS IN NSUKKA

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#### **Abstract**

The novel Coronavirus disease first detected in Wuhan China in 2019 progressively became a pandemic, a global emergency of unprecedented proportions. Diverse conspiracy theories also sprang up in the wake of the fiasco and presumably affected people's perceptions and attitude in relation to the pandemic. The major concern in any epidemic or pandemic is effective curbing of the spread of the causative pathogen and as such, both individuals and government need to take action in this regard. Belief informs interpretation, interpretation in turn begets attitude and attitude though not at all times, dictates action. It is on this premise that this study carried out between May and June 2021 in Nsukka Local Government Area of Enugu state Nigeria, sought to discover the impact of conspiracy theories peddled in social media and other communication channels on religious leader's interpretation of the pandemic and their attitude towards vaccination. The study was qualitative and made use of in-depth interviews to elicit information from a selected sample. Content and comparative analyses were applied to data collected both from the field and literature to come up with results. The study discovered among other things that

while church leaders at the hierarchy in all the Christian denominations studied, make conscious efforts to disassociate themselves from conspiracy theories, many others at the grass roots in some denominations as well as traditional religious leaders, freely admit to subscribing to these conspiracies which also apparently affect their interpretation of the pandemic and attitude towards vaccination. Implication of the findings for the effective control of the covid-19 pandemic in Nigeria is also discussed in the paper.

**Key words**: Religious leaders, Covid-19 pandemic, Conspiracy theories, interpretation, vaccine hesitancy.

#### RELIGION AND SPIRITUALITY IN THE ERA OF COVID- 19

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#### Abstract

Religion and spirituality intertwines. Both addresses God as man bows in worship to Him. Religion reminds man that he lives to worship and serve God and will give answers to Him who created Him in his own image and likeness. Spirituality orders man's response to that worship and directs man on the modus operandi of service to God. Hence religion and spirituality create a wide new horizon for man's realization of whom he is and his relationship with God. Existential issues like pandemics put to test man's belief in that superior power and that power which is beyond him is able to offer all the answers and proffer solutions to those problems. Covid-19 which beset the globe like a Trojan in the early periods of 2020, threw the global man to rethinking his belief in the existence of this God or his ancestors. The pandemic in most cases provided opportunities for man to adopt new normal like social distancing, washing of hands regularly, more hygienic methods of health and so on. With all these measures in place, problems raised include the relevance of God, religion and spirituality in the life of the global humanity. Employing karl Marx theory of religion and spirituality, the authors discovered that religion being the opium of the masses still has the capability of inundating man's spiritual consciousness that leads him to that strong belief that religion is still relevant in his life. In all things, God is still supreme. The researchers made use of both primary and secondary sources for the methodology and recommended that spirituality which is the soul of religion should be the focus of worship even in the event of pandemics like Covid-19.

### REFORMING AND RESTRUCTURING THE CHURCH FROM EXPERIENCES OF COVID-19 PANDEMIC IN SOUTHEAST, NIGERIA

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#### Abstract

It is evident that the church in Nigeria was overwhelmed when COVID-19 broke out. Impact of the pandemic on the church and other institutions have engaged attention of scholars across the globe. Therefore, this study, explored the experiences of the church during COVID-19 lockdown in southeast, Nigeria. Data were gathered from leaders and members of Anglican and Catholic churches in Enugu state through Key informant interviews (KIIs) and participant observation. Twelve (12) church leaders and thirty (30) members, who were part of the experience, were

randomly selected for interview. Using a descriptive narrative approach, findings revealed that; (a) the church abandoned magnificent cathedrals and decorated altars and moved into homes without the "men of God", (b) dichotomy between the ordained and lay disappeared as parents became pastors of their households, (c) the word became more important than miracles, signs and wonders, (d) prosperity preaching was not heard but offerings and tithes were freely given. These experiences represent a paradigm shift in the church's attitude to God, worship, preaching, structure and giving. It was a rediscovery of the patterns of the apostolic church. This suggests that the experiences are relevant in addressing the much needed restoration in the church. **Keywords:** reforming, restructuring, the church, COVID-19, southeast Nigeria.

# RESILIENCE, RELIGIOUS COMMITMENT AND OPTIMISM AS FACTORS ASSOCIATED WITH WELL-BEING DURING THE COVID-19 PANDEMIC IN A NIGERIAN SAMPLE

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#### Abstract

The COVID-19 pandemic hit almost all countries around the globe thereby affecting the general well-being. Mental distress emanating from the pandemic is undeniable, but the way each community has been affected has differed. The present study is therefore geared towards examining some protective factors that may have helped people to remain mentally strong during the coronavirus outbreak. Our study examined the roles of resilience, religious commitment and optimism in the self-reported well-being of civil servants (N = 500; females = 206, Mage = 42; SD = 7.79 years). The workers completed the Resilience Scale, the Religious Commitment Inventory, the Life Orientation Test-Revised, and the Personal Wellbeing Index for Adults during the COVID-19 pandemic. Results of hierarchical multiple linear regression analysis showed a significant positive relationship between resilience and personal well-being ( $\beta = .35$ , t = 5.85, p < .001), religious commitment and personal well-being ( $\beta = .31$ , t = 5.14, p < .001), as well as optimism and personal well-being ( $\beta = .36$ , t = 6.03, p < .001), among civil servants during the COVID-19 pandemic. These findings imply that amidst the outbreak of the coronavirus, individuals who could effectively adapt to adversity, adhere to their religious values, beliefs, practices, etc. in daily living, and maintain positive emotions across time reported greater wellbeing. Thus, there is a need for psychological interventions designed to alleviate mental distress during a pandemic era to focus on inculcating these positive traits in individuals. **Keywords:** resilience, religious commitment, optimism, COVID-19.

#### THE PSYCHOLOGICAL HEALTH BENEFITS OF RELIGION AND SPIRITUALITY

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#### **Abstract**

With the rate of decline in the social, psychological, mental and emotional wellness of people, this study examined the health benefits of spirituality as it encompasses the practices of the tenets,

beliefs and teachings of a religion. The study employed a sociological historical descriptive approach with the utilization of both primary and secondary sources for data collection. The paper opined that spirituality involves commitment to value systems, tenets, principles of a religion, leading to rest, thereby overcoming stress, attaining peace of mind, contentment, power, wisdom, knowledge, forgiveness and above all happiness which are the key factors needed to improve psychological, emotional and mental health. Spirituality is therefore the awareness of the presence of a supernatural force saddled with the ability to discover ones purpose for existence. With such discovery, spirituality and religion tends to have positive benefits on the psychological and mental health of a person. The study in its findings also noted that religion is the belief in a supernatural being, ruling the world and holding moral relationship with mankind provides her followers with a structured base belief and faith, providing laid down principles which are meant to structure positively, the life of her followers. Though both terms are often taken to mean the same thing, Spirituality has its roots in religion but religion is not rooted in Spirituality. The research therefore concludes by advocating for a review of peoples understanding of religion and spirituality.

Keywords: Religion, Spirituality, Psychology, Health benefits, mental development,

### MID-LEVEL (ETHICAL) PRINCIPLES AND COVID-19 CONTAINMENT IN NIGERIA

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#### **Abstract**

Coronavirus, otherwise known as COVID-19, is a pandemic that like every other pandemic that has faced humanity in the past, calls for the deployment of containment measures that are, in most cases, extra-legal and extra-ethical in nature. COVID-19 is an infectious disease which was declared a Public Health Emergency of International Concern and a pandemic on 30 January and 11 March 2020, respectively, by the World Health Organization (WHO). In response to the realization that COVID-19 spreads primarily through contact with an infected persons, and in order to stem the tide with which it spreads, the Nigerian government devised containment measures, including, social distancing, mass-quarantine, partial and total lockdowns. In this article, I examine how the mid-level ethical principles such as beneficence, non-malefecence, respect for autonomy, justice, and proportionality, play out in the sundry containment measures deployed. The aim is to determine to what extent the extra-legal and extra-ethical measures deployed are balanced against individual rights and autonomy. Findings reveal that besides the abuse of individuals rights by state actors and security apparatus, some of the measures were deployed in violation of some international covenants guiding the handling of pandemics and emergency situations, including the Siracusa Principles and the WHO's Guidelines for Managing Ethical Issues in Infectious Disease Outbreaks,. The paper, therefore, calls for a balancing approach in subsequent measures to be adopted.

### INNOVATION IN GOVERNANCE AND PUBLIC ADMINISTRATION

### GOVERNANCE AND ADMINISTRATION IN NIGERIA: AN APPRAISAL OF INNOVATIONS IN GOVERNANCE INTHE POST COVID-19 ERA

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#### Abstract

The declaration of lockdown as well as other public health measures due to the COVID-19 pandemic ensured an abrupt halt in the business of governance. Consequently, many government institutions and agencies adopted innovative initiatives to enhance their operations and effective service delivery to the public. Although, the use of e-governance in the running of government affairs is not novel in Nigeria, however, its scope and dimension during the lockdown were expanded to include the use of virtual platforms such as Zoom, Microsoft Teams and Google Meet for the conduct of the business of governance. As a corollary, this study investigates whether the use of these innovative digital-based technologies has reduced the cost of governance in Nigeria during the post-covid-19 era. The study was anchored on the Technology-Organization-Environment (TOE) Framework. Data was generated through the secondary and primary sources like textbooks, journals, internets, periodicals, focus group discussion (FGDs) and key informant interviews (KIIs). Data analyses involved content analysis and verbatim quotes of qualitative data. In addition, descriptive statistics was used in the analysis of quantitative data. The results indicated that the adoption of innovations such as virtual platforms for remote working and learning during the Covid 19 lockdown such as Zoom, Microsoft Teams and Google Meet reduced the cost of running government business. It is therefore recommend that every government institutions should key into the virtual innovations in the post-COVID-19 era to help in reducing the cost of governance in Nigeria.

**Keywords**: E-Governance, innovations, virtual meetings, social media and corona virus.

### FUNDING FOR RESEARCH AND LOCAL COVID-19 VACCINE PRODUCTION IN NIGERIA: A THEMATIC EXPOSITION OF CHALLENGES

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#### **Abstract**

The aim of this descriptive study to be reported is to explore the factors that are inhibiting Nigeria's research institutes from producing local vaccines as Senegal, Egypt and Tunisia have done to help fight COVID 19 and identify measures that could facilitate in addressing them. But two recent events have dominated Nigeria's public space-the release of N10 billion (about US\$26 million) in support of the local production of COVID-19 vaccine and the Academic Staff Union of Research Institutes (ASURI) call for speedy assent to the National Research and Innovation Council Bill. Thus, research institutes in Nigeria improve and increase the knowledge available

about the specific research project as well as broaden the possibilities of how to utilize that knowledge to best advantage. Federal vaccine production laboratory for instance, started local production of vaccines against smallpox, rabies, Yellow fever for Nigerians and other Africa countries in 1940. Unfortunately, such positive impacts are not palpable in Nigeria now occasioned by factors as argued in this paper to include poor funding for research, lack of enabling environment, low technology and inadequate facilities. To address these challenges, the researchers suggest sustainable funding remains the main public policy intervention for revamping Nigeria's vaccine production capacity. Apart from funding, government should also work with universities by harnessing the knowledge and expertise of researchers working in relevant fields with the requisite expertise and experience in modern technologies for production of safer and more efficacious vaccines such as recombinant DNA technology. The paper concludes by positing that Nigeria cannot afford to pay lip service to local vaccine production, otherwise she will be caught napping, as we are experiencing with this COVID-19 outbreak.

**Keywords:** Corona virus, Research Institutes and researchers, Technology, Poor funding and Research productivity in Nigeria

### RESEARCH AND DEVELOPMENT FUNDING AND TRANSFORMATION OF PRODUCTIVE FORCES IN NIGERIA

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#### Abstract

In all hitherto history, the capacity of any socio-economic formation to sufficiently procure its material needs is linked to the degree of development and advancement of the productive forces. Hence, any society that trivializes the improvement of its technical capacity has inevitably rendered its existentiality vulnerable. The paper therefore examines the impact of Research and Development (R&D) funding on human capacity building in Nigeria. The study relies on the qualitative data collected through secondary sources such as scholarly works, government and official documents, media reports, etc.; and was analyzed descriptively. The study finds inter alia that due to poor funding, R&D has continued to have minimum impact on technology and innovation in Nigeria in the past decade; and recommend among others increased budgetary allocation to R&D and prompt implementation of government policy on new science, technology and innovation.

**Keywords:** Productive forces, Research and Development, technology, innovation, budgetary allocation.

### THE CONCEPT OF GLOBALIZATION AND ITS IMPLICATIONS FOR THE SOCIO-ECONOMIC CUM POLITICAL DEVELOPMENT IN NIGERIA

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#### Abstract

Universalism, otherwise known as Globalization can be referred to as the phenomenon of increasing integration of nation states through economic exchanges, political configurations, technological advancement and cultural influences. No doubt, globalization has brought about tremendous progress to Nations and world at large, but it has also brought about advance

implications especially to the third world countries. The adversities brought about by globalization are such that can be checked, evaluated and solved or possibly avoided, given the reality of having a good political scheme or government that may map out strategies and policies to sieve the good from the bad in such concept. Thus, this paper critically evaluates the concept of globalization and Nigerian leadership and in the end to see if we can identify the basic causes of underdevelopment in Nigeria in particular and in Africa at large.

**Keywords:** globalization, economic exchanges, political configuration, technological advancement, cultural influences, etc.

# MEDIA AND INFORMATION LITERACY COMPETENCE OF STUDENTS IN SELECTED UNIVERSITIES IN SOUTHERN NIGERIA AND THE IMPLICATIONS OF INFODEMICS

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#### **Abstract**

The media are sources for accessing and using information in the society. However, with the sophisticated developments of Internet applications especially social media, there is continuous flow and dissemination of information across the universe. The emergence of Covid19 led to unhindered spread of health-related fake news leading to infodemics. This necessitated the need for individuals' possession of media and information literacy (MIL) competence, which are set of knowledge and skills for creating, accessing, evaluating, communicating and using media and information sources in ethical ways. As significant users of social networks and online media, graduating students of selected federal, state and private universities were studied to ascertain their level of MIL competence. Survey research method was adopted with 20-item achievement test and questionnaire as instruments for data collection which were validated and pilot tested with average reliability score of r=0.87. Findings revealed that the MIL competence level of the graduating students were poor at just 30% and the test of hypothesis with ANOVA revealed no significant difference in the level of MIL competence of the students in federal, state and private universities in southern Nigeria. The finding has implications in this era of infodemics, fake news, misinformation, disinformation and mal-information. The paper concludes that MIL competence is a necessity for all in the digital era and recommends that educators should factor MIL competence in courses like "Use of Library, Study Skills and ICT" and "Citizenship Education", or possibly create another general studies course on MIL in Nigerian tertiary institutions.

**Keywords:** Media and Information Literacy, Infodemics, Fake News, Students, Universities, Southern Nigeria

### APPRAISAL OF GOOD GOVERNANCE IN WUSHISHI LOCAL GOVERNMENT AREA, NIGERIA

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#### Abstract

Local governments play a critical role in shaping and developing the socio-economic lives of their territories, bond communities together, and proffer local solutions to local problems. Ineffectiveness, unaccountableness, inequality, non-inclusion of the citizens in decision-making process and corrosion that characterize the local government system in Nigeria has rendered

governance in the local strata of government reductant. The study thus, appraise the degree of good governance based on citizens' perceptions on the performance(s) of five good governance dimensions in Wushishi Local Government area of Niger state, Nigeria. To achieve this, the study adapted a more recent and suitable framework to assess good governance. First, the study used a multistage sampling technique by stratifying the study area into eleven wards, which were clustered into three zones. From each zone, two wards were randomly selected and 372 sample size was drawn. Afterward, a systematic random sampling approach was employed to administered structured questionnaires and the data was analysed descriptively using Local Governance Barometer (LGB). The study reveals that, LGB overall consolidated score stood at 28/100 which translates to a fairly poor level of governance. It can therefore be inferred that the degree of good governance is bad. Hence, the study recommends holistic constitutional reform to ensure local government autonomy; strengthen and improve delivery of public goods and services; Increase civic awareness; support and strengthen anti-corruption initiatives and improve citizen-Local government relation to rebuild trust, hope and confidence of citizens.

Keywords:Good Governance, Local Government and Good Governance framework.

### CIVIL SOCIETY, COMMUNITY AND GOVERNANCE

#### VOTER TURNOUT AND COVID-19 PANDEMIC IN LAGOS, NIGERIA

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#### Abstract

Turnout during elections is feared to expand the spread and fatalities from COVID-19 because the disease quickly spreads in crowded places. Existing studies have focused on determining whether turnout during the pandemic increased the risk of more cases of or deaths from COVID-19. Others focused on the potential impact of the epidemic on voter turnout and absentee voting. The present study explores the powers of conventional variables to predict voter turnout while controlling for opinions on the safety measures for curtailing COVID-19. This study was conducted in Lagos State, the epicentre of COVID-19 in Nigeria. Three local government areas (LGA) were purposively selected as they are the hub of COVID-19 in Lagos State, namely Eti-Osa, Lagos Mainland, and Ikeja LGAs. Lagos is the commercial hub of West Africa and the largest city in Africa by population. The study engages a cross-sectional survey in the 31 wards in the three LGAs (Eti-Osa has 10 Wards, Lagos Mainland 11 wards, Ikeja has ten wards). A total of 450 copies of the questionnaire (150 in each LGA) was administered to residents aged 18 and above (i.e., those eligible to vote) in all the wards. However, 397 questionnaires were correctly filled and returned, representing 88.22%. Thus, the population of the study is 397. The study's instrument was tested for reliability and validity using the Cronbach's Alpha with a score of 0.79. The study employed classic models of political participation including the political efficacy model, socioeconomic model, demographic model and social connectedness model. Results indicate a general tendency to believe COVID-19 is not real in Nigeria, and most of the safety measures in fighting against the virus are not essential. COVID-19 sceptics are significantly more likely to vote during the pandemic. However, since most sceptics do not have trust in government and hence abstain, voter turnout during the pandemic is likely to be very low because people who would have voted (i.e., those having trust in government) prefer not to turnout rather than contract the virus. The paper indicates the essentials of the social connectedness and political efficacy models for exploring the relationship between COVID-19 and political participation.

The implication of the study is that epidemics akin to COVID-19 can impact electoral and democratic systems by reducing the legitimacy of elections—via diminishing voter turnout. Higher levels of electoral participation confer legitimacy on the elected officials to pilot the affairs of the people.

Keywords: COVID-19, pandemic, voter turnout, voting, political participation

### GRASSROOT CENSORSHIP PROGRAMME: AN ENVIRONMENTAL EXPEDIENCY IN RE-GREENING THE YELLOW AND SUSTAINING THE GREEN

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#### Abstract

A rapidly growing world population and mindless and careless ways of dealing with nature, impose ever new demands on the earth. Even unquestionable successes in ecological policies cannot conceal the fact that there remains much more to be done. In spite of successes in the area of agriculture, the groundwater keeps deteriorating, the number of species is being reduced, and the earth's resources continue to be recklessly exploited resulting to a more yellow landscape than the green. Unfortunately, while the yellow of the larger landscape suggests death, the green of the remaining landscape suggests life. The most unnerving of these experiences is that human beings are the agents of these destructions, given their wrongbehaviours towards nature. This work therefore is a move to controlling human excesses towards the destruction of the earth in order to sustain the green vegetation nay, to sustain Life as such. Using the qualitative research design, thereby applying the historical, descriptive and evaluative methodological approaches, this work tries to affirm that if developmental projects are to be censored from the grassroots to urban areas, destructions that lead to vellow landscapes would be ameliorated. To arrive at this, there is a recommendation, among others, that humans must develop a changed approach towards our Earth, our Atmosphere, our Oceans, our Nature, towards Life itself, as a panacea to avoiding an entire yellow landscape that may irredeemably lead to an extinction of the entire life on earth.

**Keywords:**Censorship, Developmental Projects, Green Landscape, Human Beings, Yellow Landscape

### THE IMPACT OF CIVIL SOCIETY ORGANIZATIONS ON SUSTAINABLE DEVELOPMENT IN NIGERIA

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#### Abstract

Civil society groups are agents of development in any nation. Civil society organizations play vital role in social, political and economic development activities. The transformation of any society or system, particularly the developing societies like Nigeria depend on the effectiveness and efficiency of its civil societies. This paper critically assessed the impact of civil society groups, and its contribution to sustainable development in Nigeria. The paper also examined factors that hinder the performance of civil society groups in relation to national development. The study made use of secondary data. The data obtained were analyzed using thematic

analytical interpretations including tables and models. The paper concludes that civil society groups in Nigeria are bedeviled with series of problems ranging from political instability, inadequate funding, disconnection from rural organizations, government patronage, lack of internal democracy, lack of unity, corruption and lack of state support and partnership. The paper recommends that civil society groups need to be sanitized and strengthened so as to ensure effective service delivery through the creation of an enabling environment for their operation and that they should maintain a high degree of independence from the government.

**Key words:** civil society, democratic sustenance, sustainable development, policy evaluation.

### POLITICAL ECONOMY OF FRAMING: UNDERSTANDING CHINA'S ROLE IN FRAMING COVID-19 NARRATIVE AND LESSONS FOR NIGERIA

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#### Abstract

With millions of people infected and millions declared dead as a result of complications, the novel Coronavirus (COVID-19) is one of the major devastating pandemics to have occurred in the 21<sup>st</sup> century. Although, there is an intellectual and health practitioner's consensus that COVID-19 originated from Wuhan in China, however, the Chinese government understanding the political economy implications of framing the dreaded virus as a "Chinese Virus" or "Wuhan Virus" applied its media and other resources to change and control the narrative on naming the virus. While plethora of existing studies has examined China's control of COVID-19 narrative, nevertheless, little or no intellectual attention have untangle the political economy perspectives vis-à-vis Chinese control of the narrative on COVID-19 and its implications for Nigeria. To this end, this paper while adopting documentary method of data collection and desk review argues within the theoretical framework of framing that the Chinese government understood the political economy implications of framing the COVID-19 virus as "Chinese Virus" or "Wuhan Virus" which therefore informed their reactions and counteractions to such names. Arising from this, this paper recommends among others that the Nigerian government and media houses should also emulate the Chinese government in their handling of COVID-19 framing when such scenario occur in Nigeria.

Keywords: COVID-19, China, Wuhan, Framing, Narrative, Nigeria

#### SOCIAL MEDIA AND COVID-19 PANDEMIC

### SOCIAL MEDIA AND THE COVID-19 PANDEMIC IN NIGERIA: IMPLICATION OF TWITTER BAN

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#### Abstract

Social media is a great tool for the dissemination of information to the public. Twitter, for

instance, has become an important medium through which Covid-19 related information is circulated both nationally and otherwise. Reliable and real time information on the pandemic is conveyed to the people through official handles of government agencies like the Nigeria Centre for Disease Control (NCDC). This agency's Twitter followership increased tremendously in the wake of Covid-19 pandemic in Nigeria. The Twitter ban however brought to a halt every information from the agency on the platform. This study evaluates the implication of Twitter ban in Nigeria on the dissemination of Covid-19 related information. This research is a critical review of published documents made up of largely newspaper reports. The results show that twitter ban in Nigeria has reduced the number of outlets in which reliable and real time information on Covid-19 is disseminated and implies that it may have affected when millions of Nigerians who are active on the platform receive such information. More so, reports from such official handles help to curtail the spread of fake information about the pandemic.

Keywords: Social media, Twitter ban, Covid-19, NCDC.

#### BLENDING MOBILE APP FOR TECHNOLOGY EDUCATION (TE) PROGRAMME: A STRATEGY FOR REPOSITIONING TEACHING AND LEARNING FOR EDUCATIONAL CRISIS IN COVID-19 ERA

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#### **Abstract**

The outbreak of Covid-19 pandemic in the year 2020 took Nigerian educational sector unawares to the extent that virtually all educational programmes were put to halt during the pandemic era. Unlike developed countries where the use of online resources, especially mobile applications, for pedagogical purposes has been efficiently utilized, educational programmes were less affected. Mobile Applications are regarded as packages that are available on handheld phones for online activities which can be integrated and holistically deployed for instructional delivery in TE during the Covid-19 era. Sequel to the foregoing view, this paper explored virtual mode of teaching TE courses and ascertained the effective role of intermodal features found in AZ-screen recorder and WhatsApp for teaching TE courses in distance learning needs. Data for the study were collected using interview and questionnaire. The study found that the use of AZ-screen recorder in blended mode with WhatsApp could be used to teach TE courses, help students in revision and enhance their understanding of concepts as well as improve their performance in distance learning needs. The paper concluded that blending AZ screen recorder and WhatsApp could be effective packages for delivering lectures in TE programmes during pandemic era. The paper therefore, recommends that government should in addition to providing the necessary logistics for proper implementation of mobile applications in learning processes, encourage the teachers and students to embrace them, in order to foster seamless and impactful learning during the pandemic period.

#### SOCIAL MEDIA AND MANAGEMENT OF COVID-19 PANDEMIC IN NIGERIA

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#### **Abstract**

The eruption of the dreaded Covid-19 pandemic alongside its stringent preventive measures demonstrate how the spread of misinformation on social media and other digital platforms could pose a threat to the global public health than the virus itself. Technology advancements and social media platforms create opportunities to keep people, informed and connected. However, the same tools also enable and amplify the current infodemic that undermine the global response on COVID-19. In this study, we evaluate the effects of social media containment outreach by the Nigerian Center for Disease Control (NCDC) on the mental well being of the people. The systems theory was adopted. This paper relied solely on documentary method of data collection; the expost facto research design was applied to provide plausible answers to the issue under study. This paper found that though the preventive measures popularly circulated on social media platforms by the NCDC had much impact in containing the virus, the circulation of false and misleading information alongside manipulation of figures of index positive cases by the NCDC in some of these media platforms pose a great danger to the wellbeing of the citizens.

**Keywords:** Social media, covid-19 pandemic, NCDC, infodemic, global public health

### THE PLACE OF THE SOCIAL MEDIA IN THE MANAGEMENT OF COVID-19 IN NIGERIA: A CRITICAL ANALYSIS

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#### Abstract

The social media remains a veritable tool for the provision and sharing of information across large number of individuals. They have been employed by different institutions and institution with the view of disseminating current information without the limitation of space and time. Howbeit, the place of the social media in the dissemination of information becoming significant as it can occupy the positive place by providing the individuals with timely information as well as occupying the negative place for the dissemination of unverified information resulting to fake news and hate speeches, hence, the need to understanding the place of these social media in the management of COVID-19 in Nigeria becoming imperative. This is the focus of this paper. The paper looked at the concept of social media, its features and types. It went further to discuss the management of COVID-19 in Nigeria and the different ways the social media were employed. The paper also revealed the benefits and the shortfalls of the application of social media in the management of COVID-19 in Nigeria. Though these media provided an avenue for the propagation of heresies and human doubt of the existence of COVID-19 in Nigeria, the paper concludes that social media remains a veritable too for information dissemination in the present age and recommended the need for strong policies to regulate the spread of fake news in the social media, among other issues.

Keywords: Social media, COVID-19, Nigeria, Information, Fake news, Management

# THE USE OF SOCIAL MEDIA AND ELECTRONIC LIBRARIES IN REPOSITIONING CLASSROOM MANAGEMENT IN THE COVID -19 PANDEMIC ERA IN ENUGU STATE, NIGERIA

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#### Abstract

The study investigated the use of social media and electronic library in repositioning classroom management in Covid-19 pandemic era in Enugu state, Nigeria. It became difficult for teachers to manage students in their classrooms because of the covid-19 pandemic hence the introduction of social media and E-Library in teaching and learning. The study was guided by 3 research questions and one hypothesis. The theory supporting the study is social cognitive study. The population of the study was four hundred and sixty-five students which comprises of SS.3 students in two secondary schools in Nsukka education-zone. The instrument adopted for data collection was a structured questionnaire. The data collected were analysed using Mean and standard deviation (SD), t-test was adopted in testing the hypothesis at 0.05 level of significance. The findings of the study revealed that poor time management allotted in the utilisation of social media among others was the major challenges that militate against the use of social media and electronic libraries in repositioning classroom management in the Covid- 19 pandemic era in Enugu state. Based on the findings, it was recommended among others that the government of Enugu state should encourage students to make use of social media and Electronic libraries by providing funds for internet connectivity in secondary schools. Furthermore, It was recommended that in-depth knowledge; practical and innovative skills should be imparted in teachers and students for effective online teaching and learning.

**Keywords:** Education, Covid-19, social media, electronic library, management and classroom management

### EFFECTIVENESS OF TRADITIONAL MAINSTREAM MEDIA IN RURAL DEVELOPMENT

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#### Abstract

Numerous studies have shown that the larger populations of developing countries dwell in rural areas making rural development synonymous with national development in these countries. However, the current Nigeria population statistics stands in favour of urban centers, not necessarily owed to a transformed society but a massive rural-urban drift with devastating consequences for the country, economic and security wise, thus, making rural development the fulcrum of national development. By virtue of their agenda-setting function, the mass media are considered key drivers of development and change. Unexpectedly, the efforts of the Nigerian mass media in disseminating development messages to rural communities have constantly hit brick walls questioning her relevance in the quest for rural development. This gave impetus to evaluating the "Effectiveness of Traditional Mainstream Media in Rural Development in Akoko Edo Local Government, Edo State, Nigeria". Using the survey research method, data were

collected from 184 respondents systematically selected from three communities in the local government using the stratified sampling technique. Findings revealed amongst others that mainstream media, particularly the radio medium found to be highly pervasive in the studied rural communities, have high potentials for rural development which sadly have not been fully exploited. The sophisticated and urban domination of their contents are attributed to their abysmal failure in rural development. In view of the findings, the study recommends that community radio stations should be established in rural communities. This will help localize the media and close the existing information gap between rural communities and urban centres.

**Keywords:** Traditional mainstream media, Development Communication, and Rural Development.

# INNOVATIVE 21<sup>ST</sup> CENTURY STRATEGIES FOR CONSUMERS' SUSTAINABLE CONSUMPTION IN A HEIGHTENED GREENWASHING PANDEMIC ERA AND BEYOND IN NIGERIA

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#### Abstract

The present 21st century era witnessed the global outbreak of covid-19 pandemic with its corresponding diverse impacts on lives and ecosystem, necessitating lockdown. Chiefly among the effects was on the consumption pattern with noticeable shift to eco/green products from their conventional alternatives for good health and hazard-free environment. Unfortunately, unscrupulous marketers took advantage of the heightened green movement to greenwash unsuspecting eco-conscious consumers which inhibit sustainable consumption. Worsened by the weak related regulatory bodies, the study therefore sought to equip the consumers with digital literacy skills and environmental literacy skills for detecting greenwashing. Mixed research method of Exploration design (qualitative) and Descriptive survey research design (quantitative) were adopted for the study. The study is anchored on Contingency theory and Paradigm shift theory and was carried out in the south-east federal and state universities that run marketing programmes with a population of 124 marketing lecturers. Two research questions were raised with two hypotheses of no significant difference formulated and tested at 0.05 level. The collected data were analyzed using mean (X) and standard deviation (SD) to answer the research questions while t-test and one-way Analysis of Variance (ANOVA) were used to test the hypothesis with the use of Statistical Package for Social Sciences (SPSS), version 21. A 30-item structured questionnaire on a 4-point scale titled 21st Century Skills for Detecting Greenwashing (21stCSDG) was used as the instrument for data collection. Cronbach Alpha reliability technique was utilized to establish the internal consistency of the instrument which yielded cluster coefficient of 0.97. Findings revealed that Environmental literacy skills and Digital literacy skills were highly required by consumers for detecting greenwashing. Based on the findings, it was recommended among others that the identified strategies be packaged into a training program for equipping consumers of various segments for green product consumption sustainability.

**Keywords:** Innovation, strategy, 21<sup>st</sup> Century, sustainable consumption, greenwashing, pandemic, digital literacy skills, environmental literacy skills.

# EFFECT OF SOCIAL MEDIA TECHNOLOGY ON STUDENTS' ACADEMIC PERFORMANCE IN ACCOUNTING COURSES: IMPLICATIONS FOR ALLEVIATING COVID-19 CHALLENGES ON EDUCATION DELIVERY

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#### **Abstract**

This study examined the effect of social media technology use on students' academic performance in accounting courses to alleviate the impacts of COVID-19 pandemics on education delivery. An understanding of the effects of the social media technology use by students on their academic performance will greatly reinforce the formulation and implementation of policies and strategies to overcome the challenges COVID-19 pandemic has bestowed on education, including university education all over the world. Mixed research design involving the use of structured questionnaire on students' use of social media technologies and semester results of the students was used to evaluate the students' academic performance. The population for the study comprised 111 undergraduate students of 2019/2020 session in University of Nigeria, Nsukka. The questionnaire which was validated by experts yielded Cronbach Alpha reliability of 0.87. All the 111 copies of the questionnaire personally administered by the researchers were returned and analyzed for the study. The research questions were answered using mean and standard deviation while the hypothesis were tested using Chi-square at 0.05 level of significance. It was found that, the students primarily use social media technologies to connect friends on Facebook and whatsapp chats sometimes for educational purposes. It was also found that students' use of social media technologies has significant impact on their academic performance in accounting courses. The majority of the respondents were of the opinion that the use social media technologies will help universities in the discharge of their academic objectives to students now and in the post *COVID-19* pandemic. The researchers therefore recommended that business education lecturers should incorporate and implement the use of social media technologies into the curriculum for teaching and learning of accounting courses and other disciplines in tertiary institutions in Nigeria and other countries of the world.

**Keywords:** Social Media, Social Media technologies, Academic Performance, Accounting Courses, Covid-19 Pandemic

### SOCIO-ECONOMIC AND POLITICAL ISSUES OF COVID-19 PALLIATIVES

SALARY STOPPAGE AMIDST COVID-19 LOCKDOWN AND SURVIVAL MECHANISM OF MEMBERS OF THE ACADEMIC STAFF UNION OF UNIVERSITIES (ASUU) IN NIGERIA: THE SOCIAL WORK ROLE

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#### Abstract

Globally, nations have been facing serious socio-economic hardship occasioned by the novel COVID-19 virus, which started in late 2019 in Wuhan, China. Nigeria as a nation has had its own share of socio-economic downturn as many activities were shutdown to contain the spread of the virus in the absence of vaccine. Apart from general lockdown and inter-state border closure, which crippled economic activities in Nigeria and plunged many Nigerians into hardship and starvation, lecturers in federal universities and their families were further subjected into harsh living conditions as the Nigerian government stopped their salaries for months without COVID-19 palliatives for failure to register with IPPIS. This study seeks to find out how lecturers survived the lockdown without salaries. The study adopted a cross-sectional research design with in-depth interview as the instrument for data collection. Twenty-four respondents were purposively selected for the study. Collected data was analysed using themes and quotes. Findings from the study revealed that most lecturers took loans to enable them feed, while others used their cars for shuttles/taxis. The results further indicated that lecturers who have lands went into farming for food production, while some others engaged in home lessons for the children of the rich to make ends meet. The study recommended among others that government should declare state of emergency in education sector and appropriate at least 20% of annual budget to education. It further recommended that government and the union should make efforts and sacrifices to resolve the lingering issues.

**Keywords:**ASUU, COVID-19, Lockdown, Salary Stoppage, Social Work Role, Survival Mechanisms

### SOCIAL INJUSTICE AND DISTRIBUTION OF COVID-19 PALLIATIVES IN SOUTH EAST NIGERIA: ADDRESSING THE QUAGMIRE

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#### Abstract

COVID-19 has caused tremendous havoc and pains in planet earth. This ranges from death of over 3.9 million people worldwide and 2,119 in Nigeria; morbidity of millions of people; deepening poverty; misery to pains associated with lockdown at various times. It was consequent upon these negative social conditions that governments, philanthropic organizations, corporate organizations and kind people rolled out palliatives to soothe the pains experienced by citizens, especially the poor. Unfortunately, the distribution of the palliatives across Nigeria is replete with weak distribution template, exclusion, unfairness, misapplication, misappropriation and diversion, to the detriment of the needy. It is against this backdrop that the general goal of this

study is to investigate the various shades of social injustice observable in the distribution of COVID-19 palliatives in southeast Nigeria with a view to address the problems in order to make recommendations aimed at developing a mitigative public policy. The specific objectives include; investigating the effectiveness of the template used in distributing the palliatives primarily meant for the poor and the vulnerable. The study will use a multi-dimensional approach which includes visits to sample communities in three out of the 5 states in southeast Nigeria, In all 60 out of the 604 communities will be visited. In addition, documentary evidence, interviews with key informants (KIs) in relevant Ministries and Focus Group Discussion (FGDs) with Town Union Presidents of the selected Communities will be used. Thematic descriptive analysis will be used to analyze the data and the findings will be discussed based on conflict theory which is the theoretical platform of the study. The preliminary findings indicate that politics and inadequate data negatively affected the implementation of the distribution of palliatives to the disadvantage of the needy.

**Keywords:** COVID-19, Pandemic, social injustice, politics, palliatives, southeast Nigeria.

### IGBO'S CREATIVE ENGAGEMENT WITH POLITICIZED ACCESSIBILITY OF COVID-19 PALLIATIVES IN NIGERIA

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#### **Abstract**

The #EndSars protests against the highhandedness and excessive corrupt practices of the Special Anti-Robbery Squad (SARS) of the Nigerian Police Force (NPF), ended with none of the demands of the protesters properly met. However, one of the interesting revelations of the destructive dimensions of the protest was the hoarding of food rations meant for distribution to vulnerable citizens as palliatives during the Covid-19 lockdown. Until the protesters stormed into the monumental hoard of palliatives rotting away in gigantic warehouses across different states, Nigerians hardly knew that such enormous supply of palliatives was received on their behalf by state government. Government officials received these from the international community and NGOs, and opted to politicize its accessibility. Nonetheless, before the #EndSars protests, Nigerians, especially the Igbo of southeast Nigeria, responded creatively to the inaccessibility of the Covid-19 palliatives during the total lockdown. Relying on secondary sources, interviews and observations, this study assesses this creative response, arguing that the gathering and distribution of food items and other resources as palliatives was creatively and effectively undertaken by citizens without involving the state officials. The media and churches facilitated what is considered another demonstration of how Nigerian citizens creatively engage the inefficient resource distribution structures in Nigeria. This creative engagement substitutes for violent demand for fairness witnessed across parts of Nigeria and lends credence to the institutional bricolage offered as a solution to the shortcomings of mainstream institutionalism. Keywords: Covid-19 Palliatives, Igbo, Creative engagement, Nigeria, Institutional bricolage

### THE DISTRIBUTION OF COVID-19 PALLIATIVES AND THE SOCIO-ECONOMIC LIFE OF NIGERIANS

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#### **Abstract**

The COVID-19 epoch in the late 2019 was a devastating period in modern world history. It was, a period where every nation on the globe was affected by the virus in one way or the other. Apart from the massive number of lives claimed by the virus, the pandemic brought about negative socio-economic implications to the affected countries where the virus had spread to. As a means to handling and mitigating the impacts of this global pandemic, International Organizations, regional organizations, Non-Governmental Organizations and Nations all over the world with Nigeria not being an exception, initiated several measures aimed at preventing the spread of the virus, alongside various strategies on assisting its citizens during the challenging period. These strategies included; distribution of palliatives, interest free loans, reduction in prices of public goods and services among others. This study used human needs/socio-economic perspective theory to analyze the positive and negative effects of the distribution of COVID-19 palliatives on the Nigerians. The research design used in this study is descriptive research design and it utilized secondary data sources. Data were analyzed using descriptive analysis and the results found out that the COVID-19 pandemic had negative effects on the Nigerian economy which included loss of jobs, increase in unemployment, increase in hunger, malnutrition, starvation, inflation, and poverty among others . We recommend that the federal government should address acts of injustice which reflected in the distribution of the COVID-19 palliative to avoid further grievances among Nigerians.

### ASYMMETRICAL COVID-19 VACCINE DISTRIBUTION AND CHALLENGES OF ACHIEVING UNIVERSAL HEALTH COVERAGE IN AFRICA

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#### **Abstract**

Sustainable Development Goal (SDG) 3 seeks to achieve universal health coverage by ensuring that all individuals and communities enjoy access to quality health services, when and where they need them equitably. The global distribution of covid-19 vaccines show that despite having over 17 percent of the global population, only less than 2 percent of the world's covid-19 vaccines have been administered in Africa as against over 60 percent in the developed countries of the world. Africa has a growing number of covid-19 cases particularly in the current third wave, having reported over 5 million confirmed cases and 140 thousand deaths. This development elicits great concern on the likelihood of the continent bearing the final burden of covid-19 pandemic as projected in several quarters. Against this background, this study analyzes the disparities in the global distribution and administration of covid-19 vaccines vis-à-vis the achievement of goal 3 of the global development agenda in Africa. Using the centre-periphery model of the dependency

theory as well as secondary data, this study argues that the current pattern of covid-19 vaccine distribution represents the asymmetrical interaction between the centre nations and the periphery occasioned by capitalism, in which the former uses its economic, political and trade powers to manipulate the global distributive system to its advantage and to the disadvantage of the latter. Restructuring the global political economy is pertinent to reversing the existing trend. **Keywords:** Covid-19 vaccine, SDG, universal health coverage, pandemic, unequal distribution.

### UNINTENDED CONSEQUENCES OF FOREIGN AID: THE CASE OF INSECURITY IN NIGERIA

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#### Abstract

The effectiveness of foreign aid in developing countries has been a subject of interest in extant literature by scholars. Hence, pointing at the purpose to which foreign aid is spent in these countries; as aid gets diverted to the fight against insecurity through military budget, in the form of budget support. Greater parts of aid meant to support development in these countries are diverted to military spending. A good example is evident in Nigeria, where budgetary allocation to military keeps improving, yet insecurity in the country keeps worsening and seemed to be encouraged by the huge finance budgeted to the fight insecurity on daily basis. This study therefore, using annual time series data and employing the Vector Auto-regressive (VAR) Model would examine the unintended consequences of foreign aid and its impact on insecurity in Nigeria.

**Keywords:** Foreign Aid, military Spending, insecurity, VAR, Nigeria.

# PUBLIC PERCEPTION OF THE AVAILABILITY AND ACCESSIBILITY OF GOVERNMENT SPONSORED POVERTY ALLEVIATION PROGRAMMES IN EBONYI STATE, NIGERIA

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#### **Abstract**

In the last two decades or more, Nigeria has to grapple with many emerging social problems as a result of increasing rate of poverty. Nigeria is currently the world capital of people living in extreme poverty and about six (6) people slide into poverty line of \$1.90 per day. Ebonyi, being one of the poorest states in Nigeria is characterized by lack of employment and social infrastructures. Though the Federal and Ebonyi State governments have over the years initiated and implemented several Poverty Alleviation Programmes (PAP) like the National Poverty Eradication Programme, N-Power, Community and Social Development Agency etc. aimed at reducing the poverty level as poverty has continued to rise. This study therefore, seeks to investigate the public perception of the availability and accessibility of government-sponsored PAP in Ebonyi State, Nigeria. Participatory approach was used as its theoretical framework. The

study adopted a cross-sectional research design with in-depth interview as the instrument for data collection. Twenty-six respondents were purposively selected to constitute the sample size. Collected data was subjected to thematic analysis. Findings from the study revealed that accessing PAP was difficult because of the stringent conditions attached. The result also indicated that lack of proper coordination of the programmes, hijack by politicians and lack of adequate sensitization have made the people perceive PAP as ineffective in poverty reduction. The study recommended that both the social workers and the potential beneficiaries should be involved in the formulation and implementation of people-oriented PAP to address the issue of poverty.

**Keywords:** Community and Social Development Agency, N-Power, Poverty Alleviation Programmes, Poverty, Participatory Approach

### IMPACT OF COVID -19 ON THE MORALITY OF PRIVATE SECONDARY SCHOOL ADMINISTRATORS IN NIGERIA

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#### Abstract

Covid -19 otherwise known as corona virus has been a pandemic ravaging the country and the world since the year 2019. This originated from Wuhan in China and has done more harm than good to the moral rectitude of private school administrators in Nigeria and the entire globe. This pandemic cannot be controlled if adequate planning and achievement of the stipulated measures to control it are not carried out. This study outlined the symptoms of Covid-19, the spread, and the general impact of Covid-19 on Nigerian private secondary school administrators which among others include nonpayment of salaries and allowances, starvation of teachers /workers, non provision of palliatives to teachers and students, release of school facilities to food/palliative hoarders. This study therefore showcased the health practices for Covid-19 which include regular hand washing with soap and water or alcohol based sanitizer, use of face masks, physical distancing and stay at home. This also exposed the moral weakness of some educational administrators in the face of minimum challenges. This became obvious that many people in the Education industry are not there for mission but for profit making. Recommendations were made among others that medium of transmission of Covid-19 should be discouraged to mitigate its impact on the morality of Nigerian private secondary school administrators.

**Key words**: Impact, Covid-19, Morality, Private school, Administrators.

# MECHANISMS FOR QUALITY ASSURANCE OF PERFORMANCE OF TRAINEES IN OFFICE MANAGEMENT ON EMPLOYMENT AFTER GRADUATION: A CASE OF OFFICE TECHNOLOGY MANAGEMENT IN KWARA STATE COLLEGES OF EDUCATION, NIGERIA

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Corresponding Author: Babalulu, M. M, <u>babalulu.madu-saba@unn.edu.ng</u> & 08036971202 Abstract:

Many youths in the area of study have attended training in school but were assessed more through knowledge examination rather than performance assessment. They become unemployable in the field, although they claimed to have been certified as competent for employment; a few of the job seekers when asked can tell stories about the requirements for a job but cannot perform when requested. This study, therefore, become interested in mechanisms for quality assurance for performance on the job rather than absolute knowledge of job requirement. This study, therefore, developed psycho-productive test items that covered perception, set, guided response, mechanism, complex overt response and adaptation in the ratio of 6, 6, 22, 23, 23 and 6 respectively. The test was validated and administered to 167 students after training from two selected Colleges of Education. The test revealed that students given this test after training performance better in the test than those other halve exposed to knowledge teaching but given the psycho-productive test. With this finding, if students in training performance are assessed at the end of training with psycho-productive test items the quality assurance of these graduates can be guaranteed as against ordinary lecture and cognitive assessment as practiced in the area of study. The study recommended that students in training in skill programmes should be trained in skill programme and be assessed through psychomotor test items for quality assurance of performance for employment.

Keywords: Mechanism, Trainees, Performance, Quality Assurance, Office Management

### AN ANALYSIS OF THE IMPACT OF COVID-19 PANDEMIC ON URBAN LIVELIHOODS

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#### Abstract

This study analyzed the impact of COVID-19 pandemic on urban livelihoods with specific focus on the income of low income households (LIH) in the urban areas that experienced total lockdown (Lagos) and partial lockdown (Enugu metropolis). Data were obtained via survey from 400 respondents using stratified and random sampling methods while the mixed method approach was adopted for analysis. A comparative analysis between Lagos and Enugu metropolis shows a noticeable change in income with Lagos having higher percentage in reduced income than Enugu metropolis. The multiple regression analysis results revealed that health, food security, nutrition, water and sanitation were significantly affected by the reduction in income than education,

shelter and social life. Strategies that predicate on social cognitive theory that nurture inclusivity in the urban areas, and are effective for COVID-19 pandemic and future infectious disease outbreak have been recommended to promote the Sustainable Development Goal (SDG) 11 which seeks to make cities inclusive, safe, resilient and sustainable for all.

Keyword: COVID-19, LIH, Lockdown, Livelihoods, SDGs

### SOCIAL EXCLUSION AND DEMOCRATIC GOVERNMANCE IN POST CIVIL WAR NIGERIA: THE CASE OF THE FIVE SOUTH EASTERN NIGERIAN STATES.

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#### Abstract

This paper examines the issue of social exclusion and its implication for democratic governance in post Civil War Nigeria with particular emphasis on the five South-eastern Nigerian States of Abia, Anambra, Ebonyi, Enugu and Imo. Specifically, the paper examined the distribution of the appointment of Service Chiefs namely, Chief of Army Staff, Chief of Defence Staff, Chief of Air Staff, and Chief of Naval Staff among the various regions in the country from 1970 to 2021. The office of the Inspector General of Police as well as that of the Head of State and President was also examined. Using documentary method to gather information on the subject, this study noted that scholars have not adequately taken into consideration the fact of inability of the Nigerian government over the years to engage in inclusive governance. The study revealed that the Eastern region occupied mostly by the Igbo ethnic group have been systematically excluded from these major positions by successive administrations in the country both military and civilian. Social exclusion breeds suspicion, distrust, heightens tension in the polity and may eventually lead to conflict over the sharing and allocation of power and resources. Democratic tradition, which is imperative for development, cannot blossom in the context of any form of conflict. Thus, social exclusion, whether apparent or real, has the potential for disrupting the drive towards democracy. Therefore, social exclusion in whatever form must be adequately addressed.

#### OLDER ADULTS, POOR AND VULNERABLE PEOPLE

# IMPACT OF SOCIAL CAPITAL ON LIVELIHOOD ACTIVITIES OF VULNERABLE WOMEN DURING COVID-19 PANDEMIC IN LAPAI LOCAL GOVERNMENT AREA NIGER STATE, NIGERIA

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#### **Abstract**

The number of vulnerable women in Nigeria and in many developing countries across the world has continued to be on the increase in the past two to three decades. This situation is mainly a result of weak capacity to withstand social, economic and environmental shocks and stress due to the Covid-19 pandemic. In seeking ways to reduce vulnerability in women livelihood activity, Alex (2014) encouraged, the adoption of social capital as it has been identified a crucial element

in promoting resilience of people in vulnerable situation. Different studies have explored the concept of social capital and the role it can play in preventing livelihood vulnerability. This study therefore seeks to identify the social capitals available to the vulnerable women of Lapai Local Government Area during the pandemic period and determine its impact on their livelihood activities. The study is a descriptive research that employed purposive sampling technique to administer questionnaires to the sample size of 383 women in the different wards of the study area. The research establish that there are gender base, profession base, ward base, religious, and other form of social capital within Lapai Local Government, all of which if properly engaged would reduce the likelihood of vulnerability due to weak adaptive capacity in economic, social and environmental activities. The study findings promote participation in social capital activities, as it is a tool reduces the likelihood of vulnerability and in turn mitigates poverty during the Covid-19 pandemic.

Keywords: Vulnerable Women, Social Capital, Livelihood Vulnerability, Covid-19 pandemic

### EXAMINING CONCERNS FROM ADULT OFFSPRING CAREGIVERS ON FILIAL CARE FOR OLDER ADULTS IN NIGERIA

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#### Abstract

Filial care for older adults is the norm in Africa, and most often, the responsibilities of adult offspring. Changing orientations in Africa(Nigeriainclusive), from the normative extended family setting to the nuclear family structure poses a threat to filial care for older adults. This is worsening with increasing family obligation and economic pursuit involving males and females alike.In this article, results were presented from a qualitative study using Focus Group Discussions (FGDs) with 32 adult offspring residing in Nsukka urban, EnuguState. They were purposively selected to share experiences pertaining to caring for their older adults. An inductive coding approach was adopted, to develop themes from the transcripts by relating outstanding points of their response and analytical concepts to the objectives of the study. Results suggest that filial care remains the most culturally acceptable and feasible assistance for older adults in Nigeria. Though filial care is challenged by changing gender roles, age of adult offspring, uncooperative older adults, and worsening economic conditions; participants indicated optimism in filial care. They rather would pay younger unemployed persons to assist them with the responsibilities of caring for their older adults. Participants were less reliant on the government as regards the welfare and care of their older adults. Therefore, challenges of filial care should be managed. Social workers alongside civil/non-governmental groups are important stakeholders. It is imperative that Nigerian government should become committed and strategic with the concerns of caregivers in the care for older adults.

**Keywords:** adult offspring, caregiving, filial care, older adults and social workers

### OLDER ADULTS IN THE COVID-19 PANDEMIC ERA: A REVIEW OF THE HEALTH CHALLENGES AND PREVENTIVE MEASURES

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#### Abstract

The outbreak of COVID-19 is an era that changed the routine of everyone and also to a greater extent disproportionately affected the older adults. This pandemic era affected the older adults mentally and physically, thereby making them most vulnerable to the COVID-19 disease. Most of the older adults during the pandemic era experienced discrimination, suffered anxiety, panic, adjustment disorder, depression chronic stress and insomnia. Some of these health problems were brought about due to the occurrence of immunosenescene that is age related remodeling of the immune system. Many older adults could no longer access the health care facilities due to lockdown order. The older adults suffered also from social isolation and loneliness caused by social distancing as a measure of controlling the spread of the disease. The measures taking to contain the virus were the major risk factors that have been linked with poor physical and mental health status, increased blood pressure, heart disease, obesity, diminished immune system functioning, depression, anxiety, poorer cognitive functioning, increased Alzheimer's disease and mortality. So many recommendations were made by both World Health Organization and Centers for Disease Control and Prevention on the need for older adults to get vaccinated, frequent washing of hands, adequate nutrition, maintaining their medication and keeping good communication link with families and friends as a of managing the challenges and impact of COVID-19 pandemic era.

### FRUITS AND VEGETABLES CONSUMPTION AMONG PREGNANT WOMEN IN ENUGU STATE, NIGERIA

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#### Abstract

Despite the importance and nutrient composition of fruits and vegetables, its consumption is still below the world's recommended threshold in Nigeria even among pregnant women. Therefore, this study examined the important socioeconomic and demographic factors that associate with fruits and vegetable consumption among pregnant women. Multi-stage sampling techniques and a semi-structured questionnaire were employed to collect data from 100 pregnant women from the study area. The descriptive statistics show that the majority (91%) of the respondents belong to the age bracket of 20 to 36 years, while 97% of pregnant women are married. Likewise, 36% attained secondary education, 62% attained tertiary education, while the majorities (42.4%) of the respondents are civil servants, 30.3% are not employed and 17.2% are into trading as their

primary occupation. Also, the majority (56%) of the respondents are in their third trimester, while 30% and 14% were in the second-trimester and first-trimester of their pregnancy respectively. Inferential statistics such as Multiple regression, Quantile regression, and Zero-truncated Negative Binomial regression were used to analyze expenditure and frequency of fruits and vegetable consumption. The results indicate that Education, Trading, first-trimester, income, and nutrition advice positively influenced expenditure on fruits and vegetables. On the other hand, age, second-trimester, third-trimester, attending ante-natal, and distance from home to market have an inverse relationship with expenditure on fruits and vegetables. Likewise, education, nutrition advice, trading, first-trimester positively influence the frequency of fruits and vegetable consumption, while ante-natal attendance inversely influenced fruit consumption. The study recommended that policymakers, government, and NGOs should be focused on the significant socioeconomic factors to increase fruit and vegetable consumption among pregnant women.

**Key words:** maternal nutrition, healthy-diets, pregnant women, fetus, socioeconomic determinants, count model, Nigeria

### INTEREST AND PARTICIPATION IN POLITICAL ACTIVITIES AS SUPPORT MECHANISMS BY OLDER ADULTS IN SOUTH-EAST NIGERIA

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#### **Abstract**

Nigeria is undergoing a tremendous increase in the number of older adults resulting from improvement in both sanitary and health domains. Usually, old age is associated with withdrawal from certain societal and participatory activities that provide support to older adults, hence, the experience of an inadequate support system is inevitable. Inadequate support leads to physical and emotional breakdown and other associated perils. This study, therefore, sought to ascertain the interest and participation of older adults in political activities as support mechanisms in Nigeria's southeast region. In-depth interviews were used to collect data from older adults (N=24) who are 60 years or older. The thematic method of analysis was adopted to analyse the generated data. Findings show that some of the malpractices experienced in political activities in Nigeria deter older adults from participating despite indicating their interest as well as perceiving political activities as an important support mechanism. Thus, to achieve the 2030 global agenda and African Union commitment to "leave no one behind", the study recommends the need for modification in the political behaviours of Nigerians especially the youths. Through policies, stringent sanctioning, public enlightenment from social workers and non-governmental organizations, a drive for change in political behaviours will be achieved. Social workers should also desensitise the negative feelings of the older adults towards the political activities.

**Keywords:** Older adults, political activities, social policies, social support, social work.

# INFORMAL CHILD FOSTERING PRACTICE IN NIGERIA: CHALLENGES AND SUSTAINABLE INNOVATIVE INTERVENTIONS FOR VULNERABLE CHILDREN AND FAMILIES

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#### **Abstract**

Informal child fostering practice in Nigeria and other parts of sub-Saharan Africa is a cultural and prevalent alternative child care practice. This alternative child care practice serves as a means of strengthening the solidarity that exist between households within a social and kinship network. Weakening extended family ties and lack of support services for informal foster care providers, however, have necessitated the act of child labour in informal child fostering practice. The study was carried out in Anambra state; South-East Nigeria. A phenomenological research design using the qualitative research approach was used to explore and described lived experiences of research participants. Six community leaders and 11 child welfare practitioners responded to a semi-structured interview. One hundred and sixty-four community members participated in focus group discussion and 24 foster children shared their lived experiences. Responses were analyzed using grounded theory and thematic analysis approach. Five challenges with informal child fostering practice are discussed: abuse of children by young married mothers, lack of schooling opportunities for foster children, lack of data on informal fostering arrangement, repeated moves and lack of support to foster parents. Intervention strategies that emerged during the study are discussed in the paper. Sustainable innovative intervention and engagement of stakeholders can promote social work support services and generate data for programme development in the field of child and family welfare services. The study therefore recommends that statistic of foster children and foster families be accounted for in the state. This will provide evidence-based data in the social register of vulnerable children and families in Anambra state given the social investment programme of President Mohammadu Buhari led administration.

**Keywords:** Alternative child care, indigenous knowledge, informal child fostering practice, kinship care, vulnerable children.

### PATTERNS OF VIOLENCE AGAINST OLD-OLDER WOMEN IN NIGERIA AND IMPLICATIONS FOR SOCIAL WORKERS

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#### **Abstract**

Violence directed towards older adults is perceived as a public health issue. It can contribute to the death of older adults, suicidal ideation, physical injury and pain, psychological impairments such as depression, anxiety, and post-traumatic stress. Several studies have validated the prevalence of violence on women more than men; however, few studies have ascertained the pattern of violence against old-older women especially in Nigeria using a qualitative approach. This study will fill the vital gap and also suggest the need for social work professionals. In-Depth Interviews were conducted on older women aged 75 years or older (N=20) in Nsukka Local Government Area. The generated data were analyzed in themes. The findings of the study revealed that older women suffer financial/material; emotional violence; denial/neglect, etc.

They usually felt sad and depressed whenever this violence occurs. The study, therefore, recommends social policies that protect the rights of older adults in Nigeria. Social workers should also advocate for the protection of older adults' rights; also, ensure that defaulters are punished accordingly.

Keywords: Elderly women, Maltreatment, older adults, Social policy, Social work, Violence

### A REVIEW OF THE IMPACT OF COVID-19 ON VULNERABLE GROUPS IN NIGERIA

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#### Abstract

The COVID-19 pandemic has significantly increase the fragility and inequality already experienced by vulnerable people, particularly in developing countries where there is poor social security. There are various known vulnerable groups, but this study will focus on the elderly population and people living with disabilities. The Center for Disease Control (CDC), has emphasised that COVID-19 is often more severe in elderly population (60 years and above) and are considerably at higher risk of contracting the virus, because most of them are already immune-compromised. Similarly, 80% of people with disabilities in the world live below the poverty line, according to the World Health Organization and are often braved with stigmatisation. Consequently, they are faced with multiple obstacles in affording good health services, transport costs and having access to information. This study review literatures on the impact of COVID-19 on these two vulnerable groups (elderly population and people living with disabilities) in Nigeria. The results showed that there are increased inequalities, communication gaps, lack of inclusiveness, and poverty on these vulnerable groups. Furthermore, most studies reviewed showed that these vulnerable groups are being marginalised in health care, education and digital technology, as a result of them being incapacitated financially and physically. Hence this study recommends that government creates more inclusive policies and strengthens social support system for people vulnerable groups.

Keywords: COVID-19, Vulnerable groups, Elderly population, disabled persons

### AWARENESS AND KNOWLEDGE OF DYSLEXIA AMONG PARENTS AND PRIMARY SCHOOL TEACHERS IN ILORIN, METROPOLIS

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#### **Abstract**

The study focused on awareness and knowledge of dyslexia among parents and primary school teachers in Ilorin, metropolis. Few schools were selected in Ilorin south, Ilorin east and Ilorin west. A descriptive survey questionnaire was used on this study titled "Awareness and Knowledge of Dyslexia among Parents and Primary School Teachers in Ilorin Metropolis. This study was conducted among parents and primary school teachers who reside in the three local government areas of Ilorin, Kwara state. The method employed in this research work was the survey methods which involved the use of questionnaire. The survey was an attempt made to sample the views, opinions of people selected to represent the entire population under the study topic. In the

research study, 200 respondents were chosen. Two hundred questionnaires were administered and were duly completed and collected. The major objective of the study was to find out the awareness and knowledge of dyslexia among parents and primary school teachers in Ilorin metropolis. The specific objectives were to examine the extent of awareness of dyslexia in Ilorin metropolis and determine how dyslexia affects children's academic performance. The findings showed that education and occupation are good determinant factors that influence awareness of dyslexia among parents and teachers, Also it was shown that environment is a good determining factor that influences awareness of dyslexia among parents and teachers, However, the study recommends that parents and teachers should spend more time with their dyslexic's children in other for them to improve in certain areas.

## RESILIENCE AND SOCIAL SUPPORTERS PREDICTORS OF POSTS TRAUMATIC STRESS DISORDER AMONG BEREAVED INDIVIDUALS IN POST PANDEMIC FRA

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#### Abstract

The study used a cross-sectional survey design to investigate the influence of resilience and social support on post-traumatic stress disorder, using a total of two hundred and forty two (242) bereaved individuals in post pandemic era from Ebonyi and Enugu states, selected through snowball sampling. They comprised of unequal sample of males and females, from ages 20-50 years, with a mean age of 27.8 and standard deviation of 5.3. The Kilpatrick, Resnick and Friedman (2013) National Stressful Event Scale (NSESSS), the Smith et al, (2008) Brief Resilience Scale (BRS) and the Zimet et al, (1988) Multidimensional Scale of Perceived Social Support (MSPSS) were used for the study. Cross sectional survey design was employed while Multiple linear regressions were used to analyze data gotten from this study. Result of multiple linear regression showed that resilience significantly and negatively predicted post-traumatic stress disorder. Social support did not predict post-traumatic stress disorder. In the light of the present economic condition and lowered physical interaction orchestrated by technological advancement, it may be healthier to depend more on the personal resilience to overcome the pains of bereavement.

**Keywords:** Resilience; Social support; posttraumatic stress; bereavement; psychological disorder.

### LAGOS STATE SPECIAL PEOPLES LAW AND SOCIO-ECONOMIC CONDITIONS OF PHYSICALLY CHALLENGED PERSONS LIVING IN LAGOS STATE

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#### **Abstract**

The convenience and safety of persons living in disabilities are given primary considerations in all civilized societies of the world. Lagos state which is ranked the largest sub-national economy in Africa also boasts of high population density of physically challenged persons in the sub-Saharan Africa. To ameliorate the plights of these persons in terms of access to public utilities, the state government granted assent to the Lagos state Special Peoples Bill passed by the State House of Assembly in 2010. The paper examined the impact of Lagos state Disability Law on the living conditions of disabled persons in the state. The study relied on the qualitative data collected through primary sources such as interviews, and secondary sources such as scholarly works, official documents and media reports; and was analyzed descriptively. We found among other things that weak implementation of the policy has continued to increase the vulnerability of this minority group and recommended adequate funding of the Lagos state Office for Disability Affairs to ensure stringent implementation of the policy and provision of relevant facilities that will ease the structural barriers that undermine their wellbeing.

Key words: Lagos state, disability law, minority group, public utilities, living conditions.

#### CHALLENGES OF FAMILY BASED CARE FOR OLDER ADULTS DURING COVID-19 LOCKDOWN

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#### **Abstract**

Family based care is a process whereby older adults are taken care of in their immediate family or home as against institutional based care such as old peoples' home. The novel COVID-19 pandemic took the world by surprise and had great impact on the older adults, families, and communities. The COVID-19 lockdown had great impact on older adults because they could not access funds for their upkeep, resulting to hunger, starvation, and ill-health. This study employed the phenomenological and exploratory research design in its inquiry. Sixteen respondents made up the sample size for the study. An in-depth interview guide was the instrument for data collection. The results of the study showed that the COVID-19 pandemic with its resultant lockdown had a devastating effect and impact on socioeconomic wellbeing of the older adults and the caregivers. Secondly, government was ill-quipped and under prepared to handle the COVID-19 pandemic and could not provide food items and basic needs for older adults. The caregivers of the older adults had to wear face masks, frequently wash their hands with soap and water, sanitize the environment etc. and these practices made some of them give up the care as it became too tasking; the older adults faced hunger and starvation because even when their children send money to their bank accounts, they find it difficult to access it. The vulnerability of the older adults clearly manifested during the COVID-19 lockdown. The study recommended that before embarking on another lockdown in the future, if need be, there should be proper planning and provisions of basic needs for the older adults and their caregivers.

**Keywords:** Challenges, Family based care, Older adults, COVID-19, Lockdown

#### SOCIO-ECONOMIC SUSTAINABILTY

### SOCIAL INTERVENTION SCHEMES AND SOCIO-ECONOMIC SUSTAINABILITY AMONG NIGERIAN YOUTHS

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#### Abstract

The entrenchment of liberal democracy and its attendant participation of the constituents in Africa and Nigeria in particular have over the time heightened the level of youths' engagements in the political processes. Bestowed with fundamental obligations arising from the principles of social contract, the state has become a social agency for providing safety nets for vulnerable youths in the society. Nigeria being a developmental state has in the recent time been forced with the initiation of interventionist programmes aimed at alleviating the sufferings of the teeming population. Unfortunately, implementation of the social schemes by government has been characterized by institutional incapability and lack in needed executive capacity to achieve the philosophies of the programmes. The thrust of this paper is to investigate governmental social schemes aimed at alleviating the youths in the pandemic era. Methodologically, the study utilized qualitative method while generating its data and analyzed in content. The theoretical framework of analysis is significantly anchored on the theory of Empowerment. The findings of the study reveals that social intervention packages by government had help in alleviating the vulnerable youths. The paper strongly recommends among others; the strengthening of executive capacity and institutions involved.

**Keywords:** Entrepreneurship, N-power, Nigeria state, Recession, Youth Empowerment.

#### COVID-19 PANDEMIC AND THE WORKING BEHAVIOUR OF HOUSEHOLD NON-FARM ENTERPRISES: EVIDENCE FROM NIGERIAN DATA

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#### **Abstract**

This study investigated the influence of Covid-19 pandemic on the working or operating behaviour of household non-farm enterprises (HNEs) in Nigeriaexploring MultinomialLogistic regression and using Nigeria's 2020 Living Standard Measurement Surveydata. Specifically, the study addressed two main questions: how has Covid-19 outbreak impacted nthe working behaviour of HNEs in Nigeria? What other factors significantly influence the working behaviour of these enterprises? The resultsshow that the influence of Covid-19 pandemic on the working behaviour of HNEs in Nigeria is negative and significant. The results further indicate that other key drivers of the working behaviour of HNEs include are: sufficient soap to wash hand, type of food, skippinga meal, thought to eat less, and running out of food. Consequently, the studyrecommended that government should ensure that HNEs are adequately funded during and after the pandemic in order to strengthen their operations on a sustainable basis and empower them to continue to play their roles of job creation, income generation and poverty alleviation.

**Keywords:** Covid-19 Pandemic; Household Non-farm Enterprises; Working Behaviour; Multinomial Logit Model

### SOCIO-ECONOMIC CHARACTERISTICS OF RURAL NON-FARMERS AND THEIR NET INCOME IN RURAL COMMUNITIES OF ENUGU STATE, NIGERIA

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#### Abstract

There is an ongoing shift in the economic mainstream of rural areas from farm to nonfarmactivities. Non-farm activities are well recognized by its significant role in complementing agricultural income. There is also the recognition that sustainability of economic, social andenvironment of rural areas is highly attributed to engagement in non-farm activities. However, what is lacking is the linkage between the socioeconomic and net income status of these non-farmers in the rural communities of Enugu state and this provides the basis for this research. This study is aimed atassessing the socioeconomic characteristics of non-farmers in the rural communities in Enugustate, Nigeria. The research used primary data which were obtained through questionnaire, oralinterviews and key informants. Data for the research were analysed using descriptive analysis, mean, percentage, map and Ordinary Least Square Regression. The study found that themales are more generally engaged with non-farm activities than females, while householdsengage more with self-employment than wage employment. The study also found that trading is the most common activity initiated to support household income. The Ordinary least square regression results show that the age of farmers, educational attainment and the presence of rural development agencies positively influence non-farmers' income in the rural communities. On the other hand, the findings show an inverse relationship between the cost of basic rural infrastructure (i.e. hospital and electricity) and non-farmers' income in the areas. For the income of the non-farmers in the rural communities to be improved, the local councils should educate non-farmers on the modern use of instrument for sustainable non-farming and best practices. Additionally, critical rural infrastructure, such as hospital and electricity should be provided at affordable rates. Arguably, this could not only improve non-farmers' earnings, butalso make the communities attractive to the rural non-farmers and young people, and stabilizerural populations. This study therefore suggests that the achievement of SDG goal seven on thesustainability of rural communities' especially rural areas of Enugu state requires deliberatepolicies to improve on non-farm activities since it complements household's agricultural income.

Keywords: Rural; Sustainability; Non-farm activities; Agriculture; Socio-economic

# INFORMATION AND COMMUNICATION TECHNOLOGY AND UNEMPLOYMENT IN THE ERA OF POST-COVID-19 ECONOMIC PLANNING IN NIGERIA

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#### Abstract

With the outbreak of the novel coronavirus disease, many Nigerians were forced to work from home through the aid of the ICT. This measure was to mitigate the consequent human deaths and economic losses arising from the spread of the virus and government-imposed lockdown during the active months of the pandemic. However, as Nigerians continued to exploit the many benefits that came with ICT, a new trend of downward spiral in the ratio of Human Development Index and

the Gross Domestic Product of the Nigerian-state was kick-started. This study examines the negative impact of ICT in the production process of post COVID-19 economy of Nigeria. Utilizing the explanatory framework of the agenda setting theory, as well as qualitative data generated from relevant documents, it argues that this downward spiral into unproductivity was because of the losses of conventional jobs and opportunities to machines which has also cut down on earnings and wages; thus, making life very difficult for average Nigerians. As human ideas and physical involvement in the production process are the drivers of development in a country, it is recommended that economic planning and other development processes in the post-Covid-19 era should be tailored in a manner that fully permits the use of technologies to hone human skills. It further recommends efficient human-machine interplays in the production process in order to position human beings at the core of production so as to reduce unemployment.

Keywords: Development, economy, unemployment, information management, technology.

# DIGITAL INNOVATIVE APPROACHES TO SUSTAINABLE MATHEMATICS TEACHING AND LEARNING IN THE PANDEMIC ERA: PROBLEMS AND PROSPECTS

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#### **Abstract**

The era of the COVID-19 pandemic has transformed the way we live, learn and work. The emerging questions in one's mind are: How is the school changing in the pandemic era? How does learning theory change in the pandemic era? How is the teaching and learning of Mathematics affected by such rapid transformations? The nature of Mathematics is such that permits Mathematics Education to thrive in a face-to-face teaching space requiring learners to make sense of the abstract mathematical concepts and phenomena. This notion of sense making builds on the learners' experiences as teachers unveil mathematics knowledge for their students by implementing pedagogical strategies, such as problem posing/solving, inquiry based teaching, using manipulative, and collaborative work. COVID-19 and its constraints have compelled education stakeholders to move from face-to-face delivery to virtual delivery model while dynamic mathematical digital resources and techniques promise a transformation of theteaching and learning of mathematics as they enable teachers and learners to experienceand explore difficult mathematical ideas in an effective way. Very little research has been done in the context of COVID-19 pandemic in Nigeria. Using secondary sources, this study reviews the state of adoption of digital innovative approaches in mathematics teaching and learning under the following broad sub-themes: digital mathematics techniques in the pandemic era, digital resources/tools used in the pandemic era, problems and prospects. Research findings indicatean underuse of such technologies/resources and practices particularly by learners and also articulate the complexities of the process of classroom integration by teachers in classroom practice. In conclusion, widespread adoption of the digital innovative models is recommended to enhance mathematics teaching and learning in a post-pandemic era.

**Keywords**: Digital Mathematics techniques, Digital Mathematics resources/tools, Prospects and Problems, COVID-19

### MOBILITY AND MIGRATION MANAGEMENT

### PERCEPTION AND ATTITUDE TOWARDS THE COVID-19 PANDEMIC AMONG INTERNAL MIGRANTS AND NON-MIGRANTS IN SOUTH AFRICA

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#### Abstract

Testing for COVID-19 remains one of the measures adopted to manage the pandemic. However, the perception of people about the illnesses and their perceived health status are known to affect people's attitude towards any illness. This paper, therefore, examines the influence of people's perception of their susceptibility to COVID-19 on testing for the pandemic among interprovincial migrants and non-migrants in South Africa. Data were sourced from the National Income Dynamics Study - Coronavirus Rapid Mobile Survey (NIDS-CRAM) which is a nationally representative panel survey of 7,000 South African individuals in all the nine provinces. The outcome variable was testing for COVID-19 and data analysis involved descriptive statistics, Chi-square test and logistic regression. More migrants (45%) compared to non-migrants (37.77%) took the COVID-19 tests. The results of the chi-square tests showed no significant differences in the way different population groups among the migrants took the *COVID-19 test. On the other hand, there were significant differences in the way the age groups,* the race group and the residents of different provinces took the COVID-19 test among the nonmigrants. The factors which significantly increased odds of taking COVID-19 tests among the non-migrants included being a resident of Northern Cape (1.752; p=0.002), Free State (2.231; p=0.000), North West (3.130; p=0.000), Gauteng (1.505; p=0.05), and Mpumalanga (3.000; p=0.002). Conversely, the factors which significantly reduced odds of taking the COVID-19 test among the non-migrants were being aged 65+ years and being a non-Black. No factor significantly increased the odds of taking COVID-19 test among the migrants. This study recommends the sensitization of migrants, as well as non-migrants in specific provinces with low testing attitudes on the need to take the COVID-19 test. In addition, there is need for more concerted enlightenment efforts on those aged 65+ years, and the non-Blacks on the relevance of taking the COVID-19 test.

Keywords: Attitude; COVID-19; Migration; Perception; South Africa

### RURAL-URBAN MIGRATION AMIDST COVID-19 IN NIGERIA: EVIDENCE FROM ITINERARY TRADERS

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#### Abstract

Since the outbreak of corona virus disease (Covid-19) was reported in Wuhan China, in December 2019, and its subsequent designation as a public health emergency of international concern by World Health Organization (WHO) in January 30, 2020, the entirety of human activities have been affected one way or another. In Nigeria, the government imposed a number of measures such as ban on inter-state travel to curtail the spread of the virus. Rural-urban migration being an aspect of internal migration was not left out. Humans are known to have migrated extensively throughout prehistory and human history and the movement of people in modern times has remarkably continued under various forms. This paper examines compliance to Covid-19 guidelines among itinerary traders in Nigeria using a total of 40 (25 males and 15)

females) eligible participants. The study adapted purposive and snowball sampling techniques with in-depth interview as the method of data collection. Thematic analysis was used to analyze the elicited data. Among other findings, result showed that many internal migrants did not comply with the government directives on restrictions on inter-states movements. The result also showed that despite the directives to security agents to ensure complete compliance to the order, they in part aided the process. The study findings therefore highlight how those entrusted with the responsibility of ensuring the implementation of government order or directives aid the violation of such rules.

**Keywords:** Covid-19, Rural-Urban, Migration, Itinerary, Compliance.

### AGRICULTURAL INNOVATIONS AND FOOD SECURITY

# EFFECTS OF COVID-19 ON FOOD SECURITY STATUS AMONG SMALLHOLDER FARMERS HOUSEHOLDS IN ENUGU STATE, NIGERIA

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#### Abstracts

For the past couples of decades, food insecurity is one of the major global phenomena which makes zero hunger the second Sustainable Development Goals. Despite this, COVID-19 set-in which posed a serious threat to the food system. Thus, the need to assess its effect on food security arise. This study, therefore, investigated the effects of COVID-19 on smallholder farmers households' food security in Enugu State, Nigeria. Data collected from 120 households were analysed using food security index, logistic regression and Likert scale. The results revealed that majority (64.5%) of the households were food insecure with a shortfall index of 0.313 while only 35.5% were food secure with a surplus index of 0.109. The average daily adult equivalent calorie consumption of food secure and food insecure households were 1552.52 and 2506.88 kcal, respectively. COVID-19 pandemic due to the imposed lockdown had a negative effect on household food security. Low availability of food in the households (p<0.01), increase in food price (p<0.01) and inability to harvest crops (p<0.1) increased the probability of being food insecure. Whereas, education (p<0.1), cooperative memberships (p<0.01), income (p<0.05) and access to credit (p<0.01) influenced food security status positively. Eating less expensive food, reducing rational consumption, allowing children to eat first, engaging in additional small-scale productivity activities and buying food on credit were the major food insecurity coping strategies adopted by households during COVID-19. The study recommends provision of financial supports by governments and NGOs to smallholder farmers to curb the adverse effects of COVID-19 on food security.

**Keywords:** COVID-19, food insecurity, rural households, smallholder farmers, copying strategies

### ANALYSIS OF COVID-19 PANDEMIC EFFECTS OF SMALL HOLDER OIL PALM FARMERS CROPPING SYSTEM IN EDO STATE

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#### Abstract

The study analyzed the effect of COVID-19 pandemic on small holder oil palm cropping system in Edo State. The study employed a random sampling method in which a sample size of 30 respondents was used for data analysis. The data collected were analyzed with descriptive statistics and regression model. The result showed that 83.3% by age and more of females had the highest of the COVID-19 pandemic effect of small holder oil palm cropping system in the area. The result of the socioeconomic features further revealed that the annual income and farm size at 66.7% of 1-2 hectares earned less than \mathbb{1}100000 per annum. The regression result revealed that age, educational level, household size, Income, cropping practice, distance and cost of planting material were negatively significant and the likelihood of the COVID-19 pandemic effect of small holder oil palm cropping system. The coefficient of multiple determination of 80.8% variations of the COVID-19 pandemic effect of small holder oil palm cropping system was accounted for by the explanatory variables such as; age, Household size, Income, cropping practice, distance and cost of planting material.

Key Words: COVID-19 Pandemic, Effect, Small Holder, Oil Palm, Cropping System

# IMPACT OF COVID-19 ON AGRICULTURE IN SUB-SAHARAN AFRICA AND POLICY RESPONSES (2019-2021)

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#### Abstract

This research reviewed literature on the impact of corona virus (COVID-19) pandemic on agriculture in44 out of the 49 countries of Sub-Saharan Africa (SSA) and theresilient policy responses. The pandemic compelled most countries in the region to adopt particular measures to combat the virus, most of which were non-pharmaceutical such as social distancing and selfisolation. Accordingly,the regional countries-imposed travel and trade restrictions in order to prevent the virus from spreading. However, effortstocombat the pandemic have had a detrimental impact on major economic sectors such as agriculture; which supports food security, human growth, regional economyand politics. Thereviewed materials were basically screened online publications on the impact of COVID-19 on agriculture in SSA and policy responses. The study is therefore, justified because the impact of COVID-19 pandemic on the agricultural sector and food directly poses a threat to human existence and theregional economy. The reviewedpandemicpolicy responses, ratherdisrupt the regionalmarket's supply chain, resulting in slowed production and distribution, as well as a shortage of personnel and materials. While thepandemicrages on with new variants, spring crops such as maize, sunflower, spring wheat, barley, canola, and open-field vegetables cannot be planted. Similarly, livestock, poultry, fisheries, and dairy output suffers. In conclusion, it has been recommended that the regionalgovernments of SSA in synergy with other regional stakeholders should urgently resolve thesechallengesvia appropriate innovations and realistic policies.

Key Words: COVID-19, Pandemic, Impact, Food, Agricultureand Policy Responses

# RICE PRODUCTIVITY AND LAND OWNERSHIP AMONG RURAL FARMERS IN NIGERIA

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#### **Abstracts**

Access to land for agricultural activities is identified as a bane for agriculture production in developing countries, thereby hindering their productivity, crop commercialization and adoption of improved agricultural technologies. Using a multi-stage random sampling technique to obtain information from rice farmers in Nigeria, this paper examines rice productivity and land ownership among rural farmers in Nigeria. Descriptive statistics and Multinomial Regression Model were used for the data analysis. Result showthe rice farmers had a mean household size of 5, with mean age of 40 years with mean farming experience, farm size of 18 years and 3.6 acres respectively. Furthermore, majority of the rice farmers owned their personal land 39.22%, with 34.55% inherited their land and 26.23% got their land through lease/rent. The multinomial regression analysis result indicates that marital status, gender, access to credit, participation in contract farming, age and primary occupation are the variables that influence rice farmer's productivity in the study area. The study therefore recommend that existing policies on credit provision to the rice farmers should be more gender inclusive with low interest rate and flexibility in payment, integration of female farmers to land access and agricultural programmes should be prioritized. Also, farmers that have rice farming as their primary occupation should be provided with more incentives that can improve their productivity level.

Keywords: Rice Farming, Land Ownership, Productivity, Rural Farming, Nigeria

### EFFECTS OF COVID-19 ON FOOD SECURITY IN NIGERIA

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#### Abstract

COVID-19 is of public health concern due to the devastating effects it has on the food security of the developing world particularly Nigeria. Nigeria being one of the African countries, is one of the most vulnerable countries to socio-economic impacts of Covid-19 lockdown. Higher percentage of the people living in developing countries, depend on daily income with less than 1 dollar a day. For this reason, any interruption on their daily activities will definitely affect their ability to afford an adequate daily meal thereby impacting on their food security. This study is a review study using secondary data on the effect of COVID-19 lockdown on food security in Nigeria. COVID-19 affected most food availability and access among the four dimensions of food security. COVID-19 lockdown has changed the eating pattern of some foods particularly fruits and vegetables which are sources of vitamins and minerals, important in building a stronger immunity that can fight the disease. However, people of low income group were affected most during lockdowns due to their inability to have access to adequate food. Unfortunately, little or no attention was given on the destructive effects of lockdowns on the people's ability to adequately feed themselves.

Keywords: COVID-19, food security, food adequacy, Nigeria

### ECONOMIC EFFECT OF SOIL FERTILITY MANAGEMENT OPTIONS ON RICE PRODUCTIVITY IN ENUGU STATE NIGERIA

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### **Abstract**

There is a concern about declining levels of crop yield which poses a threat to farm yield, income, and food security. This has been linked to problems of soil degradation, the availability, and affordability of both organic and inorganic fertilizers, and in some cases, farmers' preference and perception of the economic benefits of the soil management options. This study, therefore, aims to investigate the economic effect of soil fertility management options on rice productivity in Enugu State, Nigeria using organic and inorganic fertilizers as proxies. We studied 150 randomly selected smallholder rice farmers across three agricultural zones; Awgu, Nsukka, and Udi to analyse the costs and returns of applying a particular soil fertility management option. Based on the soil fertility options, we found that the gross margins of the farmers were significantly different at 5% while 35% reported non-practice of soil fertility management due to the high cost of materials. Among measures used, approximately 53% of farmers practiced both organic and inorganic methods of soil fertility management while age, education, land ownership, income, farm experience, access to extension service, farm size, cost of materials, scarcity of materials, and labour availability were recorded as factors affecting farmers choice of these practices. For sustainable productivity and higher yield, the study recommends the need for sensitization and encouragement of rice farmers to use integrated (organic and inorganic fertilizer) soil management strategy.

# INNOVATIVE BEHAVIOUR AND PRODUCTIVE EFFICIENCY AMONG PLANTAIN FARMERS IN SOUTH-SOUTH, NIGERIA

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### **Abstract**

The study seeks to investigate productive efficiency and innovative behaviour among plantain farmers in South-South, Nigeria. The objectives of the study were to analyze production factors of plantain farmers in the study area, measure productive efficiency of adopters and non-adopters of improved technologies, examine the determinates of productive efficiencies of the farmers, and examine the innovative behaviour of plantain farmers in the study area. Multi stage sampling technique was used to collect data from 280 plantain farmers. Descriptive statistics, stochastic frontier production and cost function models and logistic regression model were used for analysis. The results showed that farmers in the adopters' category obtained a higher yield than the non-adopters (p<0.01). Significant difference existed between adopters and non-adopters in terms of farm size, hired labour, inorganic fertilizers, pesticides, herbicides, technology adoption index, income, membership of cooperative, education, credit status and extension contacts. The mean technical efficiency of the sampled famers was 0.66 and 0.52 for adopters and non-adopters

respectively which differs significantly (p<0.01). The mean allocative efficiency was 0.57 and 0 .44 for adopters and non-adopters respectively, the mean economic efficiency (EE) was 0.52 and 0.42 for adopters and non-adopters respectively which differs significantly(p<0.01). Farming experience, family size, age of farmers, technology adoption index, education, extension contacts, credit status and membership of association were factors that significantly affected both productive efficiencies and innovative behaviour of the farmers. The study recommended increased extension contacts, increased plantain farmers targeted interventions and farmers' membership of association should be encouraged.

# POVERTY AND AGRICULTURAL RESILIENCE: EXPERIENCE FROM HERDSMEN AND CROP FARMERS' CONFLICT IN ENUGU STATE, NIGERIA

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### Abstract

The problem of herdsmen and rural farmers' conflict took critical dimensions in recent times suggestive of the vulnerability of the farmers as the conflicts persisted and decanted into serious security threats in some parts of Nigeria. In the light of the lingering conflicts between herders and farmers, which has a serious influence on the vulnerability and poverty among the farmers, is the motivation of the study. Therefore, this study attempt to examines the poverty and agricultural resilience as a result of herders and crop farmers' conflicts in Enugu State, Nigeria. The study used primary data administered to 60 crop farmers as well as key informants' interviews with 10 herdsmen in Enugu State, Nigeria. The data were analyzed with descriptive statistics and Foster-*Greer-Thorbecke (FGT) Index. The result shows a relatively higher incidence of poverty among* the crop-farming households, who experienced conflict. In addition, the result shows a relatively high severity of poverty among crop farmers. The major causes of conflicts according to the study were; destruction of crops, sexual harassment, preventing the animal from grazing, and threat to life by herders. Crop farmers lost on average N97583.34 per period due to conflict. The study, in addition, identified that herders had a relatively lower incidence of poverty than crop farmers except that they lost on average a cow per conflict. Thus, the number of farmers affected by conflict was relatively high for crop farmers than herders. The study recommends agricultural resilience strategies and increasing stakeholder meetings between the herders and crop farmers as veritable mitigation strategies to the conflicts.

**Keywords:** poverty, herdsmen, crop farmers

# A REVIEW OF CROP MANAGEMENT INNOVATIONS FOR CLIMATE CHANGE IN THE POST-PANDEMIC ERA

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#### **Abstract**

The wavering nature of environmental conditions caused by human-induced emissions of greenhouse gases and agricultural practices have resulted to global warming, a large shifts in weather patterns deepened by increasingly intensive agriculture, deforestation and increased use of fossil fuels. Patchy crop management innovations to reduce global warming has resulted into climate change with negative effects, such as, violent weather phenomena, drought, fires, death of animal and plant species, disruptions of food chain and destruction of agricultural resources. In order to safeguard the negative effects of climate change on agriculture, there is a need to embrace crop management innovations to combat the perils of climate change in the postpandemic era. To sustain food security propelled by crop management innovations, there is a need to embrace practice of crop rotation, reduction in tillage practices, planting of cover crops, livestock reintegration into crop production systems, a well structured irrigation systems and genetically modified varieties, and effective pesticides and fertilizer application. There is a need for agriculturists to develop crop management innovations that will tackle climate change deleterious effects on man, animal and environment by engaging more on scientific research of innovative technological developments. A good food is needed by every man at a affordable price to boost the immune system that can combat this COVID-19 virus in the body system. However, efficient fight against climate change hazards should be considered as a way forward for food security in the post-pandemic era.

**Keywords:** Crop management innovations, climate change, post-pandemic era, COVID-19, food security

## FOOD SECURITY IMPACT OF SMART AGRICULTURE AND INNOVATION IN AFRICA: EVIDENCE FROM NIGERIA

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### **Abstract**

Globally, increasing lack of access to safe, nutritious and affordable food has been part of the greatest challenge of the world economies (FAO, IFAD and WFP, 2015). Solution to this global challenge has been part of main focus of the United Nations Sustainable Development Goals (SDGs). In order to achieve SDG-2, which is to "end hunger, achieve sustainable food security, improved nutrition and promote agriculture by 2030", there has been global call for climate smart and innovative agriculture. Due to poor agricultural productivity occasioned by lack of smart agriculture and innovation, Africa has been the epic center of this global menace of food insecurity and malnutrition, with about 26% of 153 million adult populations suffering severe food insecurity (FAO report, 2016). Furthermore, the United States Department of Agriculture (USDA) prediction suggests that Sub-Sahara Africa (SSA) would remain the region with the

highest level of food insecurity up to the year 2025 (Tandon et al., 2017). In African region, Nigeria is feared to be one of the countries said to be most at risk, due to her heavy food import-dependence. This has been linked to lack of agricultural technology adoption and heavy subsistence farm participation of greater populace in Nigeria. Hence, this study seeks to investigate the effects of smart agriculture and innovation on food security in Nigeria, using data from World Development Indicators (WDI), and Food and Agricultural Organization (FAO). This study would adopt linear regression approach and the expected result would be beneficial for policy formulation in agricultural sector.

# REPRODUCTIVE PERFORMANCE OF RABBIT DOES SUBJECTED TO DISCARDED COCOA SEED MEAL (THEOBROMA CACAO) BASED DIET

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### Abstract

Food Security is a challenge in developing countries. Animal scientists are tasked with finding alternative feedstuffs that would reduce cost but sustain production for the rising population. Thirty six (36) 5 months old rabbits comprising of 24 does and 12 bucks of an average initial weight of 1380g were used to evaluate the effect of discarded cocoa seed meal (DCSM) based diet on reproductive performance of rabbit does. Diets containing 0, 15, 30 and 45% DCSM were compounded for T1, T2, T3 and T4, respectively. The experiment was in a randomized complete block design (RCBD) with each treatment having 8 does and 3 bucks. The bucks were used to breed the does. Water and feed were given ad-libitum and the experiment lasted for 19 weeks. Reproductive indices indicated no significant (P>0.05) differences in gestation length among the treatment groups. However, rabbit does fed 15% DCSM performed significantly (P<0.05) better in litter size at birth, litter size at weaning, mortality rate, kit weight at birth, kit weight at weaning than the rest of the treatment groups. From these result, it was concluded that inclusion of 15% DCSM in rabbits ration had no adverse effects but improved reproductive performance of breeding does. Rabbit farmers can therefore use DCSM as an alternative feedstuff.

Keywords: Rabbit does, cocoa seed meal, kit weight, litter size, alternative feedstuff

# EFFECTS OF SALINITY STRESS ON EARLY GROWTH STAGE OF IRRIGATED FLUTED PUMPKIN (Telfairia Occidentalis)

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#### Abstract

Fluted pumpkin (Telfairia occidentale Hook. F.) is of a great economic importance in Nigeria. The young shoots and leaves of fluted pumpkin are harvested and can be consumed either raw or cooked. Despite the high nutritional value of Fluted pumpkin and its importance, there is dearth of information on its methods of production and their constraints under certain conditions. It is necessary to determine how this plant respond to salinity with an aim to improve crop productivity under such condition. The objective of this research was to study the effects of salinity on early growth stage of irrigated Fluted pumpkin. Completely randomized design (CRD) with ten

replicates was used in this experiment to check the effect of three levels of salt (Sodium chloride-NaCl) on the early growth stage of this crop. The treatments were TI = 0g of NaCl as control (topsoil growth medium without added NaCl); T2 = 10g of NaCl (10g of NaCl added to the 10litre bowl of topsoil growth medium); and T3 = 20g of NaCl (20g of NaCl added to the 10litre bowl of topsoil growth medium). The results of this study showed that at these levels of salinity the Fluted pumpkin performance were not perturbed.

Keywords: Fluted pumpkin, Salinity stress, Crop growth, Performance

### PREVENTING POSTHARVEST LOSSES THROUGH THE USE OF TECHNOLOGY TO ACHIEVE FOOD SECURITY IN THE PANDEMIC ERA: A REVIEW

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#### Abstract

The Covid-19 pandemic caused untold hardship on people, worsened by food insecurity a consequence of postharvest losses. Poor postharvest handling practices, lack of knowledge on the use of postharvest technology and inaccessibility to improved postharvest technologies engender postharvest losses. Most farmers especially those in the rural areas rely on the indigenous methods of handling and preserving their crops after harvest. Reducing postharvest losses of food crops increases agricultural productivity, food supply and combats food insecurity. This has been empirically documented in literatures. Thus, this paper reviews the causes of postharvest losses and the stages which they occur, the indigenous postharvest handling methods, low cost technology and the effect of the technology on food security. The findings showed that losses could occur during transportation and poor crop harvesting with outdated techniques resulting in crop damages by pests and diseases. The indigenous methods of postharvest handling were; sun-drying by roadside and rooftop and use of iron drums sealed with mud or wooden cribs. These methods do not guarantee food security as crops are exposed to rain, temperature, pest and diseases. However, the use low cost technology such as; plastic bin, improved crop storage bag and metal silos have shown to reduce postharvest losses, thereby increasing food security. Therefore, it is recommended that improvement on the indigenous method of postharvest handling and the production of low cost technology will be the best bet for farmers.

**Keywords**: Food security, postharvest losses, indigenous methods, technology

### PROFILE DYNAMICS OF SOIL EXCHANGEABLE PROPERTIES OF AN ULTISOL UNDER DIFFERENT LENGTHS OF FALLOW

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### Abstract

Bush fallows are utilized in soil fertility restoration, yet its specific effect on composition of exchangeable cations is undocumented. This research evaluated the vertical distribution of exchangeable bases and acids and cation exchange capacity (CEC) of an Ultisol under short and long-term fallow. A profile pit was dug in each fallow type; short-term and long-term fallows, after which soil samples were collected in triplicates from predetermined depths of 0-20 cm, 20-40 cm, 40-70 cm, 70-100 cm and >100 cm. The experimental design was  $2 \times 5$  factorial in RCBD and two-way analysis of variance was used for statistical analysis. The result showed that

the vertical distribution of exchangeable potassium (K+), calcium (Ca+), hydrogen (H+) and aluminium (A+) were significantly (p < 0.05) affected by soil depth while fallow significantly affected all exchangeable cations and CEC, except Ca. Long-term fallow had higher CEC (10.48 cmolKg-1), Al (1.81 cmolKg-1) and K (0.18 cmolKg-1) than short-term fallow (CEC =9.11 \text{cmolKg-1}, Al = 1.81 cmolKg-1, K = 0.11 cmolKg-1). Exchangeable H and Mg were higher in short-term fallow. In long-term fallow, Al contributed 34% of the soil's effective cation exchange capacity (ECEC), while in short fallow, it contributed only 8%. Soil depth with exception of Ca, had other exchangeable bases higher at 020 cm depth and decreased further down the profile. Exchangeable H and Al were higher at 2040 cm depth. There was a significant interaction effect on Na, K, K and K and K and significant negative correlation with K and K an

**Key words:** Bush fallow, cation exchange capacity, exchangeable acidity, exchangeable bases, soil depth,

### ADOPTION OF ZERO TILLAGE DURING COVID-19 PANDEMIC AND ITS EFFECTS ON SOIL BIODIVERSITY CONSERVATION IN ABIA STATE, NIGERIA

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### Abstract

Zero tillage farming is advocated for its ability to reduce soil erosion, agricultural runoff and improve farmland wildlife habitat while maintaining or improving crop yield. This was adopted in the study area during COVID-19 pandemic to improve food production without taking cognizance of its effects on biodiversity conservation. The purpose of this research is to improve understanding of zero tillage adoption decisions by grain farmers in the study area. A total number of two hundred (200) questionnaire were administered for data collection in the eight (8) sampled communities. The choice of this number was to ensure even coverage of the sample frame. The data were analyzed using descriptive statistics to elicit information on the implications relating to a range of possible agronomic interactions associated with the relative economic advantage of adopting zero tillage cropping system during COVID-19 pandemic. Mean, Media and standard deviation were used to elicit information on the implications relating to a range of possible agronomic interactions associated with the relative economic advantage of adopting a zero tillage cropping system. The results from the standard deviation indicates that reduction of soil erosion of 1.253, soil water availability of 1.165 and reduction of production cost of 1.164 suggests that zero tillage enhances soil structural stability through its positive effects on soil moisture, organic matter and microbial activities. The study recommends that an effective approach should be developed to integrate the zero tillage farming practices into the conventional tillage farming so as to reap the beneficial aspects of both options.

**Key words**: Zero tillage, COVID-19 Pandemic, Soil biodiversity conservation, Abia state, Nigeria

# AGRICULTURAL FINANCING AND THE NIGERIAN ECONOMY: HOW FAR AND HOW WELL?

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#### Abstract

This study examined the impact of agricultural financing on agricultural output. Annual time series data were sourced from the Central Bank of Nigeria Statistical Bulletin for the period 1987 to 2019. Agricultural financing was proxied by commercial bank loan to agriculture and the disbursement of the Agricultural Credit Guarantee Scheme Fund. Agricultural output was proxied by the contribution of agriculture to overall GDP. Trend analysis and the Ordinary Least Square (OLS) Method were used in the data analysis. The trend analysis revealed that commercial bank credit to agriculture and agricultural output had marginally increasing trend. However, disbursements from agricultural credit guarantee scheme fund fluctuated. Evidence from the regression results shows that agricultural financing had a positive impact on agricultural output. However, most basic food crops such as rice, beans, garri, among others are still in short supply and quite expensive when available. The study therefore recommended that the government should make policies that will enhance agricultural production through increase in agricultural credit guarantee scheme fund, monitoring to ensure that funds are utilized for agricultural purposes, and ensure all inclusive agricultural financing to the benefit of the poor rural farmers.

### AGRICULTURAL FINANCING AND BUSINESS

ECONOMIC ANALYSIS OF BAMBARA GROUND NUT MARKETING IN ENUGU EAST AND ENUGU NORTH LOCAL GOVERNMENT AREAS OF ENUGU STATE, NIGERIA

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#### **Abstract**

This research evaluated the economics of Bambara groundnut marketing in Enugu East and Enugu North Local Government Areas (LGAs) of Enugu State, Nigeria. Multi-stage survey design was used to sample 60 respondents. Gross Profit Margin, (GPM) Net Profit Margin (NPM), Benefit/Cost Ratio (BCR), Return on Investment (ROI), Marketing Efficiency Ratio (MER) analyses were carried out. A 4- pointLikert Scale Rating was used to ascertain the challenges faced by the marketers. Results show that majority of the respondents were males (78.3%); modal age category was 43-53, followed by 23-33 age category; while the mean years spent in school was 16.07 years. Only 28.3% of the respondents had access to credit, while 71.7% financed their marketing businesses through personal savings; mean years of marketing experience was 12.7. The following results were also observed from analyses: GPM

(16.5%);NPM(14.7%);BCR (1.17:1);ROI (17.3%); andMER (8.2:1). Major constraints associated with Bambara groundnut marketing in the study area include: inadequate finance with mean score of 3.93, seasonal price fluctuations (3.93), poor road network (3.70), weevil attacks (3.23) and high cost of goods (3.28). The study recommends that government agencies should continue to boost Bambara groundnut marketing in the study area through provision of credit facilities to encourage new entrants and expansions, in order to reduce poverty and unemployment levels. Adequate and efficient infrastructural facilities such as good roads and storage systems should be provided by government to ensure easy movement of goods, as well as curtail post-harvest losses.

Key Words: Bambara Groundnut, Marketing, Enugu East, Enugu North

### DETERMINANT OF PROFITABILITY DIFFERENCE AMONG FLUTED PUMPKIN AND GREEN AMARANTH VEGETABLE MARKETERS IN ENUGU STATE NIGERIA

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#### Abstract

Understanding the factors affecting the profitability among the actors in the marketing of the most common vegetable crops and the underlying socio-economic factors influencing it presents a veritable approach in the transformation of vegetables in Nigeria. In view of the aforementioned, the study assessed the profitability difference of selected vegetable marketers in Enugu State, Nigeria. A total of 120 respondents were sampled from the area, comprising of 60 green amaranth marketers and 60 fluted pumpkin marketers. The data generated were analysed using descriptive and inferential statistics. The profitability analysis of fluted pumpkin and green amaranth marketers revealed that a gross margin of №25,210.0 was made by the fluted pumpkin marketers and ₦23,572.0 was made by the green amaranth marketers per month. Comparatively, the study obtained a t-statistic of 1.0911 with the corresponding p-value of 0.2839 which was insignificant at 95% confidence level, the study concludes that the mean net income of the fluted pumpkin and green amaranth marketers had no significant difference. The results of the analysis of factors affecting profitability among the fluted pumpkin marketers and green amaranth marketers revealed five variables to be significant viz: household size (-7.9043 and -7.3153), gender of the household head (0.372203 and 0.3948026), access to credit (-2.8746 and -3.0151), machinery access (8.16172 and 8.018447) except for farm size (0.1244789) which was significant for only fluted pumpkin marketers. The study recommends among others that the government should provide vegetable storage facilities for vegetable marketers to ensure that wastages are minimized.

# AN ASSESSMENT OF FINANCIAL INCLUSION AMONG RURAL FARMERS IN NSUKKA LOCAL GOVERNMENT AREA, ENUGU STATE

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#### Abstract

Financial inclusion has gained increased attention globally, because of its fundamental role in economic growth and development. This study assessed financial inclusion among rural farmers in Nsukka local government area of Enugu State, Nigeria. The research seeks to answer the

following questions; what are the saving behaviours of rural farmers? What are the perceptions of the rural farmers to formal and informal saving and how do socioeconomic characteristics of rural farmers affect their access and usage of formal financial institution products? Data for the study was collected from 60 rural farmers using a well-structured questionnaire. The data were analysed using descriptive (mean, percentage and standard deviation) and inferential statistic (Binary logistics). The result of the analysis shows that 46.7% of the rural farmers has account in formal financial institution, but only few of them are able to save money in their about because of their low income. The bank products often used by the farmers are debit cards and deposit slips. Also only 1.7% of the farmers with bank account have been able to access loan from the formal financial institutions. On the other hand, 75% of the farmers save money with informal saving groups and 65% of them have been able to access loan from the informal saving groups. The findings also show that only 23.3% of the farmers prefer saving in formal financial institutions, while 58.3% prefers saving in informal saving groups. The farmer's preference for informal saving group was as result of perceived difficulty in opening a bank account, distance to bank, language barrier and high bank charges. The major constraints to access and usage of formal financial institution from the farmer's perception are bank procedures (98.3%), technicality (98.3%), language barriers (90.0%), lack of collateral security (86.7%), high interest rate (81.7%) and distance to financial institutions (78.3%). The binary logistics was used to analyse the effect of socioeconomic characteristics on the access to formal institution. The result shows that only the gender of farmer had a significant effect on their access to bank account. The study therefore recommends that dynamics of informal saving groups, be adopted by formal financial institution. Government and financial institutions can also establish financial outlets for easy access in rural areas.

**Keywords:** Financial Institution, Saving behaviour, formal institution and informal saving groups

# FISH PREFERENCES AND DEMAND ELASTICITIES AMONG HOUSEHOLDS IN UMUAHIA METROPOLIS OF ABIA STATE, NIGERIA

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### **Abstract**

This study analyzed fish preferences and demand elasticity in Umuahia metropolis of Abia State, Nigeria. The study was guided by the following specific objectives: ascertain frequency and pattern of consumption of fish, determine the factors that influence quantity of fish consumed and estimate own price, cross price and income elasticities for fish in the study area. Primary data were collected from a total of 80 fish consumers using simple random sampling technique. The data were analyzed using descriptive and inferential statistics. Among the four functional forms (linear, exponential, double and semi-log) used for estimating the demand for fish among the consumers in the study area, the linear functional form was chosen as the lead equation based on econometric and statistical reasons such as the number of regression coefficients that are significant (the value of R2 (0.9732) and the significant level of F-ratio (157.86) which is significant at 1.0 alpha level (P<0.01)). It was also evident from the study that the higher the income level of the respondents, the higher the expenditure on fish and fish demand also increases as household size and level of education increases. The result of price and income elasticity of demand revealed that fish is relatively elastic to changes in income and price. The consumers should be encouraged to embark on formal education as it enhances their consumption decisions. Since most consumers preferred the commodity (fish), the productivity and availability should be ensured to guarantee food security.

Keywords: Fish, Preferences, Demand, Elasticities, Households, Nigeria

# GENDER ECONOMIC ANALYSIS OF SMOKE-PROCESSED FARMED CATFISH IN KAINJI LAKE BASIN, NIGERIA

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#### Abstract

The study investigated gender economic analysis of smoke-processed farmed Catfish in Kainji Lake Basin, Nigeria. Specifically, the study assessed the methods used in smoking, described the gender roles in fish processing, estimated the profitability and gender gaps in smoke fish processing and evaluated the socio-economic and institutional determinants of net-income. Random sampling technique was used to select 80 farmed-catfish processors from 20 communities. Primary data were collected through interview schedule and presented using descriptive statistics, budgetary technique and 2-stage least square regression analysis. Results showed that the use of local ovens (bandakilns) constitute the majority (over 65 %) of the method used in fish smoking. Roles such as gutting, folding, salting/brining, setting of fire and fish monitoring were mostly performed by the women while the men and youths supply fire woods as well as fish arrangement on racks. The average gender ratio between the men, women and youths was 0.79, indicating a near gender equality in terms of value of fixed assets, revenue, employees and wage. Profitability indicators showed that smoke fish processing is a viable business with ROI of 11.71%, 9.99% and 8.48% for the men, women and youths respectively. Furthermore, the major socio-economic and institutional determinants of net-income were age, experience and initial capital investment. Hence, it is recommended that the processing industry should be strengthened through subsidy on improved smoking kilns to enable processors produce high quality processed farmed Catfish.

Keywords: Gender, Smoke-processed, Catfish, profitability

# ROLE OF CREDIT IN FINANCING SMALL-SCALE POULTRY ENTERPRISE IN NSUKKA LOCAL GOVERNMENT AREA, ENUGU STATE, NIGERIA

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#### Abstract

This paper examined the role of credit in financing small-scale poultry enterprise in Nsukka Local Government Area, Enugu State, Nigeria. Specifically, the study described the socioeconomic characteristics of small scale poultry farmers, identified the various sources of credit available to poultry farmers, described the role of credit to poultry enterprise, and identified the constraints to credit acquisition among poultry farmers in the study area. Primary data were collected from 60 respondents using both purposive and random sampling techniques. Data collected were analyzed using descriptive statistics. The result revealed that the socio-economic characteristics of the respondents were found to be significant. The result further showed that

credit from friends (91.2%) and relatives (93.1%) were the major sources of agricultural credit to farmers in the area. The result also showed that the major role of the credit was for a startup capital (88.1%), procurement of farm inputs (88.1%), the building of poultry house (66.1%), expansion into the integrated farming system (82.5%), and maintenance of poultry farm input (81.4%). Finally, the study revealed that high-interest rate and lack of collateral were the most significant constraints to poultry farmers' credit acquisition in the study area. The study recommends that policies that would address the problem of high-interest rate should be enacted and implemented so as to assist farmers to start up their poultry business, buy farm inputs, build poultry houses, and migrate into the integrated farming system and maintaining poultry equipment.

Keywords: Credit; Poultry Enterprise, Small-scale and Financing

### ENGINEERING AND MATERIAL SCIENCE INNOVATION

# SYNTHESIS OF ZEOLITE-A MODIFIED CATALYST FROM KAOLIN FOR BIODIESEL PRODUCTION USING JATROPHA SEED OIL

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#### Abstract

This paper is on optimization and kinetic study of biodiesel produced from jatropha seed oil using Zeolite A modified catalyst synthesized from kaolin. Oil characterization show that its physiochemical characteristics meet acceptable ASTM (D6751) standards for biodiesel feed stock. Zeolite A was synthesized using natural kaolin from Ahoko in Kogi State. Raw kaolin was beneficiated and calcined at 650oC for 3hrs to obtain metakaolin for the synthesis of Zeolite A via hydrothermal synthesis before doping with KOH. EDS analysis show the kaolinite material used to synthesis zeolite A has a composition of Silica to alumina ratio of 54.195% and 28.477% respectively. SEM analysis for Zeoilte A show the typical cubic shaped crystals of zeolite A with rounded edges with an average particle size of 3µm, XRD analysis shows a high crystallinity with characteristic peaks at 2-theta to be at 10 o, 13 o, 16 o, 20 o, 22 o, 24 o, 28 o, 30 o, and 34o. BET analysis for KOH doped zeolite A shows a decrease in surface area and pore size to be 521.380 m2/g and 2.861nm respectively. The optimization study using RSM resulted in an optimal yield of 90% obtained at a methanol to oil ratio of 8:1, catalyst loading of 7%, reaction temperature and time of 90oC and 52.50 minutes respectively, with an R2 of 0.9594 and CV of 4.06% and an activation energy and pre-exponential factor of 85.845KJ/mol.K and 4.915 x 1011min-1 respectively.

**Keywords:** KOH doped Zeolite A, Jatropha Curcas Oil, Biodiesel, Transesterification, RSM Optimization

### INVESTIGATION INTO THE EFFECT OF MILLET WASTE ADDITIVE ON THE INSULATING PROPERTIES OF BRICKS

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#### Abstract

This study presents an investigation into the effect of millet waste additives on the insulating properties of bricks. The project entailed the evaluation of two insulating properties (Thermal conductivity and compressibility factor) of locally made bricks mixed with millet waste additive and the effects of the additives on these two properties of bricks. A wooden rig of dimensions 480x 350x 250 mmwas constructed to enclose the brick samples and a 1200 watts heat source. The brick samples were made of clay laced with millet waste additives ranging from 100 to 600 grammes and then formed into rectangular bricks of dimensions 250 x 115 x 75 mm. Fourier's law of heat conduction was extensively used to estimate the rate of heat flow across each brick sample, while also subjecting them to axial compression in a testing machine so as to determine the numerical index of the strength of the bricks. The result showed that the materials present a good thermal performance and energy saving characteristics with increasing millet waste additives ratio. However, it also showed that millet waste additives significantly reduced the crushing strength of the sample bricks.

Keywords: Bricks, Insulation, Millet waste additives, Conductivity

# ELECTRICAL CONDUCTIVITY-DEPTH STRUCTURE DETERMINED WITHIN THE MANTLE USING SOLAR QUIET (SQ) DAY CURRENT VARIATIONS IN LUSAKA REGION

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### Abstract

The electrical conductivity-depth structure of the mantle within Lusaka in Zambiaregion was determined using solar quiet day (Sq) current variations. Spherical harmonic analysis (SHA) was employed in separating the external and internal field contributions to the Sq variations. After which a transfer function was used to estimate the conductivity depth profile for the paired external and internal coefficients of the SHA. The variations observed in the currents are seen to be a dawn to dusk phenomenon with the variations in the external currents quite different from that of the internal currents both in amplitude and in phase. A downward increase in electrical conductivity wasobserved within the mantle with an initial magnitude of 0.084 S/m, 0.040 S/m and 0.037 S/m, at a depth of 74.11 km, 293.80 km and 115.45 km, for the years 2008, 2009 and 2011 respectively. The conductivity rose steadily with some fluctuations until it finally reached its peak of 0.683 S/m, 0.104S/m and 0.276S/m at the depth of 854.69 km, 1389.37 km and 1510.32 km in the lower mantle. Also the year 2008 was observed to have the highest Sq current and the year 2011 has the highest depth of Sq current penetration. An evidence of discontinuity was also

observed in all the profile but more prominent in 2009. All these may be attributed to the atmospheric condition and conductive properties of the Earth's interior within the study region at that particular year.

**Keywords:** Solar quiet day current, Spherical harmonic analysis, electrical conductivity, mantle, discontinuity

### TRANSPORT AND TRANSIT SYSTEMS

# MAPPING AND GEO-VISUALIZATION OF ROAD TRAFFIC ACCIDENT BETWEEN THEPANDEMIC YEAR AND THE PREVIOUS YEAR IN ENUGU STATE, NIGERIA

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#### Abstract

Digital mapping and geo-visualization road traffic accidents incorporating the nature of the roads using Cartographic support tools is pertinent in this digital era. This study assessed road traffic accidents using digital maps and linear referenced road features in geo-spatial analysis and visualization of road traffic crashes in Enugu north Senatorial Zone as previous studies especially in Nigeria have not incorporated the two variables before. Data on road traffic accidents in different relative locations were obtained from the FRSC Offices and Nigerian Police Force Divisional Head Quarters in the study area for years 2018 to 2020. Dynamic segmentation was used to divide the roads into 5kilometer segment (Basic Spatial Units (BSUs). Spatial statistics, Cluster Analysis and overlay operations were employed. The result mapped areas of high concentration of traffic crashes along the roads and across BSUs through linear referencing and the contributions of nature of roads to the road accidents. Crash and hotspots are found along BSUs in OPi- 9Th-Miles road and Opi- Obollo road. Better engineering works on the roads, proper use of road maps, proper visualization of road traffic accidents with the use of maps and proper symbolization, the use of traffic signs, traffic policing, proper recording of traffic crashes using GPS, and an improved map for both road users and traffic policing was recommended.

### IMPACT OF COVID 19 ON TRAVEL BEHAVIOUR AND MOBILITY CHANGES AND THEIR POTENTIAL IMPLICATIONS FOR FUTURE TRAVEL PATERNS AND SUSTAINABLE MOBILITY IN NIGER

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### **ABSTRACT**

The travel and mobility sectors were most affected by global Coronavirus (COVID-19) pandemic and its governmental restrictions, with, among other things, a huge drop in mobility behavior due to travel bans, lockdowns, and a reduced need to be mobile. This study assessed the extent of how the COVID-19 and its restrictions affected travel behaviour and mobility changes and their potential implications for future travel patterns and sustainable mobility in Nigeria. Online questionnaire survey was used to study the consequences of the COVID 19 restrictions on Nigerians' daily and travel mode choices and on their wishes for future mobility, preferences for a

variety of trip purposes for "before" and "during" COVID 19 situation. This was used to assess changes in (i) trip frequencies, and (ii) travel mode preferences using contingency tables, and ordinal logistic regression. Furthermore, we examined the effects of Nigerians' personal norms to protect the climate on changes in their mobility behavior toward sustainable mobility, both within and beyond the coronavirus pandemic. The results of the Analyses revealed that COVID 19 caused huge variation in mode preferences and overall reduction of mobility across almost all modes of transport fordaily and travel mobility during time periods of COVID 19 restrictions compared to preCOVID 19 times in Nigeria,. Even though online services rose, it was mostly limited to urban areas. Most people used public transport modes, eg. bus, at the expense of their health for lack of cheaper alternatives. Potential implications for travel behaviour and sustainable mobility as well as policy measures are discussed Results imply that the government needs to ensure proper hygiene practices in public transit vehicles. Our results further depict the relevance of personal norms to protect the climate for the change toward sustainable mobility practices in the country. Besides, Information and Communication Technology (ICT), pedestrian and bicycle facilities need to be improved.

Keywords: Covid-19 impact, travel behaviour, mobility changes, sustainable mobility

### **ENERGY ACCESS AND UTILIZATION**

PYROLYSIS OF BIDA BASIN KEROGEN USING TGA AND FIXED-BED REACTOR: THERMAL BEHAVIOURS, KINETICS AND PRODUCT CHARACTERIZATION

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#### Abstract

This research was aimed at determining the hydrocarbon generating potential and the kinetic studies of Bida Basin kerogen. This was achieved, first, by performing a thermogravimetric analysis (TGA) on the kerogen sample from Bida Basin, which showed two peaks at 350°C and 430°C in its derivative thermogravimetric graph (DTG). Next, a Fixed-Bed pyrolysis was performed for 2 hours at 10°C/minutes in the presence of nitrogen gas at 350°C and 430°C respectively. It was found that the sample generated 39% gaseous and 20% liquid products at 350°C; 63% and 10% gaseous and liquid products respectively at 430°C. The pyrolysate was analysed using FTIR to determine functional groups in it. Global kinetic expression and Consecutive Integral approaches were applied for the kinetic study of the TGA result. It was discovered that, zeroth order kinetics were more suitable for the overall Global Kinetics. It was also discovered that Bida Basin kerogen has the potential to generate hydrocarbons with a higher potential to generate hydrocarbon gas than sweet oil on maturation. For consecutive integral approach, it was discovered that R² is not enough evidence to determine a suitable order for the kinetic study, more study should be carried out to determine a better basis of choosing suitable order for any kinetic study; and further study should be carried out using GC-MS, Rock Eval Pyrolysis and Closed Pyrolysis.

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# PHARMACEUTICAL INNOVATIONS AND VACCINE DEVELOPMENT

EFFECT OF VIRGIN COCONUT OIL, LAURIC ACID AND MYRISTIC ACID ON SERUM AND PROSTATIC MARKERS OF BENIGN PROSTATIC HYPERPLASIA IN ANIMAL MODEL

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#### Abstract

This study investigated the effect of virgin coconut oil, lauric acid and myristic acid on serum and prostatic androgens in testosterone-induced prostatic hyperplasia. Benign prostatic hyperplasia (BPH) was induced in the animals by repeated subcutaneous injection of testosterone propionate (5 mg/kg b.wt) at the inguinal region once a day for 28 days and was treated for 56 days by oral administration of virgin coconut oil, lauric acid and myristic acid. The rats were sacrificed under light anaesthesia and blood samples collected for the determination of serum prostate specific antigen (PSA), prostatic acid phosphatise (PAcP), dihydrotestosterone (DHT) and testosteronelevels. The animals were dissected to obtain prostrate specimen for the determination of prostate DHT and testosterone levels. A non-significant decrease was observed in the prostate specific antigen (PSA) levels in the treatment groups when compared with the positive control. A significant decrease was observed in serum PAcP and DHT in all the treatment groups when compared with the negative control. In the prostate, testosterone levels were observed to be lower than DHT levels in all the groups and prostatic testosterone was significantly low (p< 0.05) in the negative control (0.67±0.06) when compared with the normal group (0.77±0.09ng/ml). This study provides evidence that virgin coconut oil, lauric acid and myristic acid may be useful in the management of BPH because they exerted some anti-proliferative effects in the development and progression of BPH. Coconut may therefore be proposed as a functional food for the management of BPH patients because it is rich in both lauric and myrisitc acid.

**Keywords:** Benign prostatic hyperplasia, virgin coconut oil, lauric acid, myristic acid, prostatic acid phosphatise, prostate specific antigen.

# PERCEPTION OF MODE OF DELIVERY AMONG PREGNANT WOMEN ATTENDING UWANI COTTAGE HOSPITAL ENUGU

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### Abstract

Pregnant women and children are often classified as the vulnerable group. Childbearing women and newborn require safe family centred care especially during the current Covid -19 pandemic, hence the increasing concerns about safety/benefit of modes of delivery among pregnant women. Cross-sectional descriptive survey design was adopted. 148 pregnant women (aged 18 –48 years) attending antenatal clinic in Uwani Cottage Hospital Enugu were studied using researcher developed questionnaire. Data was analysed using simple descriptive statistics. Chi-

square test (p<0.05)at 95% confidence interval was used to determine the association between study variables. Findings revealed that 80(54.1%) received health advice on the most appropriate and safe mode of delivery for their pregnancies, however, there is low level of knowledge about safe modes of delivery 56(37.8%). Majority, 132(89%), prefer vaginal delivery in terms of safetyand benefits to health. Majority, 128(86.5%) intend to deliver per vagina. There is a significant association between age (p=0.00), occupation (p=0.01) and level of education (p=0.01) and choice of delivery mode. Vaginal delivery is the most preferred choice of delivery. Healthcare providers should take a leading role in educating pregnant women about safe modes of delivery; they should identify and address misconceptions related to all modes of delivery. **Keywords:** perception, mode of delivery, pregnant women, intending mode of delivery.

# ASSESSMENT OF THE CYTOLOGICAL STAINING POTENTIALS OF CURCUMA LONGA (TURMERIC) EXTRACTS

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#### Abstract

Synthetic dyes are the most popular group that make up cytological stains. These dyes are also known to be toxic and expensive, hence the need for alternatives from natural sources which are both safe and affordable. The aim of the study was to assess the staining potentials of extracts of C. longa when used as a cytological stain alone and compared to the standard Papanicolaou staining technique as substitutes. C. longa rhizomes were obtained, dried and ground into fine powder. The powder was divided and dissolved 100 ml each of cold water, hot water (heated to 1000C) and ethanol, centrifuged and the supernatant collected and used as dyes. Buccal smears were prepared, fixed and stained with each extract alone, and as substitutes for eosin azure, and orange G6 in the standard protocol for Papanicolaou staining. Potassium alum was added as mordant in a batch of the staining solutions. C. longa extracts used stained the cytoplasm of the cells more than the nucleus with the cold waterand ethanol extracts with mordant showing the best staining among other extracts. C longa extract has potentials as a natural dye for cytological preparations.

**Keywords:** natural dyes, cytological stains, cytopathology, turmeric.

### ANTIDIABETIC ACTIVITY OF APIGENIN (4, 5, 7 – TRIHYDROXY FLAVONE) FROM LEAVES OF *STARCHYTARPHETA JAMAICENSIS* (L) VAHL (VERBENNACEAE)

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#### Abstract

**Background:** Apigenin is polyphenolic compound that belong to the class of flavonoids and considered as highly therapeutic.

Aim: To evaluate the antidiabetic activity of apigenin isolated from dichloromethane:methanol extract of leaves of Stachytarpheta jamiacensis (L) Vahl (Verbennaceae) in alloxan-induced diabetic rats.

Method: The powdered leaves of Stachytarpheta jamiacensis were extracted with dichloromethane: methanol (1:1) using cold maceration method. The extract was fractionated to obtain hexane, dichloromethane and aqueous methanol fractions. The dichloromethane fraction (DCMF) was then subjected to column chromatography and eluted with different solvents mixtures in order of increasing polarity to isolate the bioactive compound. The structure of the isolated compound was characterized using FTIR, UV, GC-MS, 1HNMR (400MHz), 13CNMR (101MHz) data. The anti-diabetic potential of the isolate was assessed by determining fasting blood glucose level on alloxan-induced rats at the dose of 25 and 50 mg/kg body weight.

**Results:** The compound was identified as apigenin (4, 5, 7 - trihydroxy flavones) and showed significant (p < 0.05) reduction of 79.56 and 81.74% in fasting blood glucose levels at the dose of 25 and 50 mg/kg respectively when compared with the standard drug (glibenclamide 83.40%).

**Conclusion:** The results demonstrate that Apigenin isolated from Stachytarpheta jamaicensis (L) Vahl possesses significant antidiabetic activity.

Keywords: Stachytarpheta jamaicensis, apigenin, antidiabetic, phytochemical analysis

### QUALITATIVE PHYTOCHEMICAL ANALYSIS, ANTI-INFLAMATORY AND IN-VITRO ANTIOXIDANT POTENTIALS OF THE LEAVES *COMBRETUM BAUCHIENSE* HUTCHINSON AND DALZIEL (COMBRETACEAE)

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#### Abstract

**Aim**: This study is aimed at investigating the phytochemical profile, anti-inflammatory and the anti-oxidant properties of the Dichloromethane: methanol (1:1) extract of the leaves of Combretum bauchiense Hutchinson and Dalziel (Combretaceae).

Method: The acute toxicity was carried out using standard method. The powdered leaves of Combretum bauchiense was extracted with Dichloromethane: methanol (1:1) using maceration method. The anti-inflammatory activity was screened and investigated in rats using: egg-albumin induced paw oedema in rats and xylene-induced ear oedema in mice. The extract was suspended in 3% tween 80 and administered systemically for egg albumin induced paw oedema at concentrations of 100, 200 and 400 mg/kg, using 10 mg/kg of diclofenac sodium BP as standard and 5 ml/kg of 3% tween 80 as negative control. The extract was administered topically for xylene induced ear oedema at dose of 50, 100, and 200 µg/ml, using 150 µg/ml of Eucalyptus globulus leaf oil as standard and distilled water as the negative control. The Antioxidant activities of the extract was evaluated using 2,2-diphenyl-1-picrylhydrazyl radical scavenging (DPPH assay model), Superoxide radical scavenging activity (reducing power model), and Hydrogen peroxide radical scavenging activity models with ascorbic acid as standard.

**Results:** The Phytochemical analysis of the leaf extract showed that the extract contains saponins, flavonoids, terpenoids, steroids, resins, alkaloids, fats and oils, tannins and proteins. A significant (p<0.05) inhibition of 75.00 and 78.60 % was observed for egg albumin induced paw oedema and xylene induced ear oedema respectively for 400 mg/kg at the 4th h. The extract significantly (p<0.05) reduced hydrogen peroxide and DPPH radical-scavenging activities by 21.43 and 84.86 % respectively at 200  $\mu$ g/ml and 60.47 % for Superoxide radical scavenging activity at 25  $\mu$ g/ml compared to the standard.

**Conclusion:** The findings indicate that the plant extract has significant antiinflammatory and antioxidant activity.

Keywords: Combretum bauchiense, Anti-inflammatory, antioxidant, Egg-albumin,

Phytochemical analysis

### **ANIMAL HEALTH MANAGEMENT IN COVID-19**

THE ROLE OF VETERINARIANS AND ANIMAL HEALTH WORKERS IN MITIGATING COVID-19 FOOTPRINT ON LIVESTOCK PRODUCTION AND VALUE CHAIN

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#### **Abstract:**

The livestock industry contributes enormously to human nutrition, household income and livelihoods in many developing countries. The recent Covid-19 pandemic took the world by surprise, disrupting human activities and negatively impacting the livestock industry. Some of these impacts include restrictions on animal transportations, input procurements, reduced labour provisions, as well as lowered capacity for production, processing, and marketing of animal products. The reports of this disease incidence sparked off speculations of an animal origin for the virus (SARS-CoV-2), with possible cross-species transmissions to man. Also, the emergence of this virus has exacerbated the impact of existing animal pandemics in many countries. The inextricable associations between animal, human and environmental health (One-health) necessitates a multifaceted approach in providing effective and sustainable solutions to global health issues. This review, therefore, summarized the epidemiology of the covid-19 pandemic and its impact on the livestock value chain. It was noted that animal species played a significant role in the spread of the covid-19 virus necessitating a total transformation in the health management strategies undertaken by livestock farmers, veterinarians and other animal health workers during the current covid-19 pandemic. The support of animal health practitioners to the onehealth policy via the effective diagnosis, surveillance, and management of zoonotic diseases were envisaged as a positive way of mitigating the impact of the virus on animals and humans while safeguarding our environment. Precisely, this paper advocates for developing innovative animal health management strategies to prevent, diagnose, control, and manage zoonotic diseases under the existing covid-19 pandemic to forestall future occurrences.

**Keywords:** Covid-19, One health, animal, zoonotic, animal species

# EFFECT OF SOCIAL MEDIA TECHNOLOGY ON STUDENTS' ACADEMIC PERFORMANCE IN ACCOUNTING COURSES: IMPLICATIONS FOR ALLEVIATING COVID-19CHALLENGES ON EDUCATION DELIVERY

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#### **Abstract**

This study examined the effect of social media technology use on students' academic performance in accounting courses to alleviate the impacts of COVID-19 pandemics on education delivery. An understanding of the effects of the social media technology use by students on their academic performance will greatly reinforce the formulation and implementation of policies and strategies to overcome the challenges COVID-19 pandemic has bestowed on education, including university education all over the world. Mixed research design involving the use of structured questionnaire on students' use of social media technologies and semester results of the students was used to evaluate the students' academic performance. The population for the study comprised 111 undergraduate students of 2019/2020 session in University of Nigeria, Nsukka. The questionnaire which was validated by experts yielded Cronbach Alpha reliability of 0.87. All the 111 copies of the questionnaire personally administered by the researchers were returned and analyzed for the study. The research questions were answered using mean and standard deviation while the hypothesis were tested using Chi-square at 0.05 level of significance. It was found that, the students primarily use social media technologies to connect friends on Facebook and whatsapp chats sometimes for educational purposes. It was also found that students' use of social media technologies hassignificant impact on their academic performance in accounting courses. The majority of the respondents were of the opinion that the use social media technologies will help universities in the discharge of their academic objectives to students now and in the post COVID-19 pandemic. The researchers therefore recommended that business education lecturers should incorporate and implement the use of social media technologies into the curriculum for teaching and learning of accounting courses and other disciplines in tertiary institutions in Nigeria and other countries of the world.

**Keywords:** Social Media, Social Media technologies, Academic Performance, Accounting Courses, Covid-19 Pandemic