UNIVERSITY OF NIGERIA, NSUKKA

2ND UNN ANNUAL INTERNATIONAL CONFERENCE (HYBRID)

6TH - 7TH DECEMBER 2022

Multiple Dimensions of Human Security: Prognosis, Challenges and

Panacea in a Globalized World.

Book of Abstracts
OPENING REMARKS BY CHAIRMAN OF PLANNING COMMITTEE OF THE 2^{ND} ANNUAL INTERNATIONAL CONFERENCE OF THE UNIVERSITY OF NIGERIA, HELD FROM 6^{TH} – 7^{TH} DECEMBER 2022.

Protocols!
On behalf of the UNN Conference Planning Committee, I am pleased to welcome the Vice-Chancellor of the University, Prof. Charles Arizechukwu Igwe, FAS, Principal Officers and Members of the University Management, Distinguished Keynote Speaker, Prof Usman A Tar, Special Guests and Conference Participants to the University of Nigeria Nsukka (UNN) Multidisciplinary International Conference on the theme: **Multiple Dimensions of Human Security: Prognosis, Challenges and Panacea in a Globalized World.** This event is the second in the series of annual conferences of the university aimed at addressing issues of global concern.

It is an undisputable fact that security is at the heart of human survival on planet Earth, and an issue of generally recognized importance in all aspects of human existence. On a daily basis, issues bordering on security make headlines in print and electronic media worldwide and within our country. People live in constant fear of breaches to their security and personal safety. Threats to security of communities, technological systems, infrastructure, health systems, and organizations worldwide are increasing on a daily basis. Thus, innovative thinking and practical governance approaches are required in today's world to overcome these multiple security challenges.

The primary aim of this conference is to disseminate the results of research, innovations and developments in human security at national, regional and global levels and to make actionable recommendations to inform security policy and security management in the different dimensions. The conference is also expected to develop early warning systems and identify areas where there is gap in knowledge and the priorities for further research on ways and means of fighting the present and future security challenges.

I would like to use this medium to thank the Vice Chancellor, University of Nigeria, Prof. Charles Arizechukwu Igwe, 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 acknowledge in a special way the Keynote Speaker, Professor Usman A. Tar, for accepting to share his knowledge and wealth of experience with the conference participants.

May I at this point express my sincere 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 the current challenges faced by the Nigerian university system.

Distinguished Guests, Ladies and Gentlemen, I wish you all a productive time in our University and fruitful conferencing!

**Professor Chidi Nzeadibe**  
*Chair, UNN Conference Planning Committee*
Health security in particular is an issue at the front burner of international development discourse. For example, the outbreak and spread of diseases such as Ebola in Africa (2014-2016), COVID-19 (2019 to date) and other epidemics represent serious threats to health security on the continent. The continent of Actions aimed at protecting communities, technological systems, infrastructure, health systems, and organizations from possible harm, damage or breach of their integrity means securing them. In an increasingly globalized world, security can no longer be thought of as a zero-sum game involving states alone. Therefore, global security and the security of any state or culture cannot be achieved without good governance at all levels that guarantees security through justice for all individuals, states, and cultures.

This year's conference is being organized in recognition of the centrality of security to human survival on planet Earth. Multiple dimensions of security and threats to security abound and heighten the precarity of lives and livelihoods as well as human existence on the earth's surface. The unsettling of a nation's security apparatus and the outbreak of full-blown crises has created new opportunities for terror, insurgents and criminal groups to thrive and expand. Actions aimed at protecting communities, technological systems, infrastructure, health systems, and organizations from possible harm, damage or breach of their integrity means securing them. In an increasingly globalized world, security can no longer be thought of as a zero-sum game involving states alone. Therefore, global security and the security of any state or culture cannot be achieved without good governance at all levels that guarantees security through justice for all individuals, states, and cultures.

Health security in particular is an issue at the front burner of international development discourse. For example, the outbreak and spread of diseases such as Ebola in Africa (2014-2016), COVID-19 (2019 to date) and other epidemics represent serious threats to health security on the continent. The continent of
Africa could build on the gains it has made in surveillance and public-health responsiveness to outbreaks in recent years to ensure its health security, and position itself as a world leader in fighting infectious diseases.

A case can also be made for other dimensions of security in a globalized world. Thus, innovative thinking and practical approaches are required in today's world to overcome these multiple security challenges. Our aim is to use the conference to disseminate the results of research, innovations and developments in human security at national, regional and global levels and to make actionable recommendations to inform security policy and security management in the different dimensions. The conference is also expected to develop early warning systems and identify areas where there is gap in knowledge and the priorities for further research on ways and means of fighting the present and future security challenges.

This conference, which has about 230 paper proposals spread into 20 parallel sessions and addressing 11 subthemes over two days, brings together researchers, policy makers, multilateral development agencies, Industry Practitioners, security agencies, Government MDAs, NGOs and other development actors to explore the theme.

I warmly welcome the keynote presenter, Prof. Usman A. Tar, Distinguished Endowed Chair of Defence and Security Studies, & Dean, Faculty of Arts and Social Sciences, Nigerian Defence Academy, Kaduna, Nigeria to our University. As an internationally acclaimed security strategist, I am aware that the participants in the conference will benefit immensely from sharing some of your perspectives on human security, research and development as well as policy advisory on the security matters.

I am optimistic that papers at this conference will contribute solutions to the multiple security challenges in an era of globalization. I urge all participants to take advantage of the opportunities presented by this conference to contribute innovative ideas for dealing with the multiple dimensions of human security in Nigeria and beyond.

APPRECIATION
I would like to congratulate the UNN Conference Planning Committee for going to great lengths to ensure that this edition of the Annual International Conference of the university is a huge success. This annual harvest of ideas in our university has come to stay, and I thank you all for your contributions towards making this conference a Flagship Programme of the University of Nigeria.

Distinguished Guests, Ladies and Gentlemen, I hereby declare the 2nd Annual Multidisciplinary Conference of the University of Nigeria open.

Professor Charles Arizechukwu Igwe, FAS
Vice-Chancellor
# MEMBERS OF UNN CONFERENCE PLANNING COMMITTEE

1. Prof. T. C. Nzeadibe  
   **Geography**  
   **Chairman**

2. Prof. O. Onwujekwe  
   **Director of Research, UNN**  
   **Member**

3. Prof. G. E. Ugwuonah  
   **Marketing**  
   **Member**

4. Prof. B. C Nwanguma  
   **Chair, Senate Ceremonials Committee**  
   **Member**

5. Prof. T.C. Ogbuganya  
   **Industrial Technical Education**  
   **Member**

6. Mr. Paul C. Oranu  
   **Director of ICT, UNN**  
   **Member**

7. Prof. E.O Ezeani  
   **Director UNN Consult**  
   **Member**

8. Dr. C. N. Igwesi-Chidobe  
   **Medical Rehabilitation**  
   **Member**

9. Mrs. Chizoba Oranu  
   **Agric Economics**  
   **Member**

10. Mr. K. P. Adeosun  
    **Agric Economics**  
    **Member**

11. Prof. C.K Ajaero  
    **Geography**  
    **Member**

12. Obianagwa Christopher  
    **Political Science**  
    **Member**

13. Mr. Uche Nwamrah  
    **ICT, UNN**  
    **Member**

14. Mr. Ayobami Odubiyi  
    **ICT, UNN**  
    **Member**

15. Mr. Chibuike Onyekwelu  
    **ICT, UNN**  
    **Member**

16. Mr. Inya Agha  
    **PRO's Office UNN**  
    **Member**

17. Mr Emmanuel Eze  
    **Social Science Education**  
    **Member**

18. Mrs Bianca Mbonu-Adigwe  
    **Science Education**  
    **Member**

19. Mr Okezi Obara  
    **PALG**  
    **Member**

20. Dr. Felix O. Egara  
    **Science Education**  
    **Secretary**
Health is a fundamental driver of economic growth and development and is, along with education, an important factor for human capital development and the basis of an individual's economic productivity and poverty reduction. As a result of this, states and the global community take steps to ensure health security and wellbeing for citizens through legislation and policy formulation, among other measures. The global community under the auspices of the United Nations currently urges member states to work towards the realization of universal health coverage (UHC) as well as the achievement of the health goal (Goal No. 3) on the Sustainable Development Goals (SDGs). This paper critically examines the principal legal and policy frameworks on health in Nigeria (the National Health Act 2014 and the National Health Policy 2016) with a view to finding out how robust or otherwise they are as instruments for achieving UHC, Goal No. 3 on the SDGs and overall health security and wellbeing for Nigerians in this post-COVID era. Employing the doctrinal method of research as well as the analytical approach, the paper finds that, though these frameworks are fortified with provisions which, if adequately implemented, have the capacity to provide effective health security for Nigerians, they also have numerous shortcomings which, unless addressed, are capable of achieving the exact opposite of what they set out to do. The paper identifies lack of proper implementation of laws and policies as a major problem with Nigeria and makes useful suggestions.

REGULAR PHYSICAL ACTIVITY A SURE WAY TO MITIGATE DEPRESSION TO ACHIEVE HEALTH SECURITY AND WELLBEING OF UNIVERSITY OF NIGERIA UNDERGRADUATES

Perpetua Chinyere Ofili
University of Nigeria, Nsukka
Email: chinyere.ofili@unn.edu.ng, 07033751545

Increased prevalence of depression symptoms, which is a strong predictor of suicidal behavior and thoughts, may be connected to an increase in the rate of suicide cases among University of Nigeria, Nsukka (UNN) undergraduates. Literature suggests regular physical activity (PA) reduce depression related symptoms and the associated negative health consequences. This study aims to identify levels of depression and PA among UNN undergraduates and association between PA and depression. A survey was conducted using 383 participants recruited for the study. Participants completed self report questionnaire on Patient Health Questionnaire-9 (PHQ-9) for measuring depression severity and International Physical Activity Questionnaire-Short Form (IPAQ-SF). The result on PA showed that large proportion of the participants were inactive, above half were moderately active while only a few achieved high (health enhancing) PA level. Above one fifth of the participants experienced minimal or none depression while a good percent had mild, moderate, moderately severe and severe depression. The result of Chi-square test on PA level and depression level based on academic level of participants was not significant. Also Kruskal-Wallis tests revealed no significant difference among academic levels and depression symptoms. Spearman's correlation showed strong negative relationship between PHQ-9 scores and IPAQ-SF scores. The result shows that high PA level is associated with lower depression symptoms. It was recommended that University administration should promote regular PA in all the students to...
There are three stages in life; one of which is old age. Ageing comes with susceptibility to ill health and a decline in body functioning. Oftentimes, older adults are unable to cope with the activities of daily living including managing medication, and routine hospital visits, and are frail, vulnerable to falls, and feeling insecure. Hence, the need for assistance from family members arises. This paper aims to examine how family members manage the health, security and well-being of older adults in South-East, Nigeria. Adopting the quantitative study approach using focus group discussion, 48 family caregivers aged 20-59 years, were selected from three southeast states in Nigeria, using purposive and snowball sampling. Themes developed from the transcript were used to analyze the collected data, based on the research objectives. Results showed that managing with health, security and well-being of older adults was perceived as a family member's obligation. Since this is the only functional form of social support for the aged in Nigeria, family caregivers experience difficulties in managing the provision of these services while adopting the culture of silence. Finding also depicts that with the difficulties experienced, family caregivers adopt inadequate coping strategies to meet their challenges. Findings show that the government have not been actively involved in implementing programs for the welfare of older adults whereas family caregivers do not know geriatric social workers. Recommendations were on resuscitating the community-based care system, developing care–aid program, enact health and security policies that will ensure the well-being of older adults in Nigeria.

**Key Words:** Depression, Physical activity, Undergraduates, University of Nigeria Nsukka, Students mental health

MANAGING WITH HEALTH, SECURITY AND WELLBEING OF OLDER ADULTS BY FAMILY MEMBERS IN NIGERIA

Ene, Jecinta Chibuzor
Department of Social Work, Faculty of the Social Sciences, University of Nigeria, Nsukka
Enugu State
E-mail: jacinta.ene@unn.edu.ng

One of the most vulnerable groups in contemporary society is the girl-child. With education as a major step toward achieving a better life, they strive to acquire basic knowledge in academic institutions. Unfortunately, in some countries in Africa, Nigeria inclusive, still accounts for the highest number of girl-child school dropouts with concerns about their health, security and well-being. It then becomes essential that their welfare is achieved by ensuring that safe education becomes a reality for the girl-child. This study, therefore, is concerned with exploring the girl-child's education need in academic intuitions on their health, security and well-being; with practice consideration for school social workers in Nigeria. Adopting the phenomenological design of the qualitative research method, data was sourced using Focus Group Discussions. A total of 48 participants were purposively selected. Findings depict that girl-child education provides socio-economic development for the individual, family and nation. While major health challenges were substance use and sexual activities; security challenges include hate speech, abduction and rape. It was found that girl child education promotes positive well-being by producing literate women with health knowledge, thereby reducing communicable diseases and mortality. Suggested interventions were on revitalizing traditional norms, through adequate education and enlightenment, with effective social protection strategies and policy frameworks. This study recommends concerted effort and interagency collaboration between school social workers and other stakeholders in providing support services on the health, security and well-being of the Nigerian girl-child.

**Keywords:** education, girl-child, health, security, social worker, wellbeing
BARRIERS TO ACCESS AND UTILIZATION OF MATERNAL HEALTHCARE SERVICES AMONG GOVERNMENT-OWNED HOSPITALS IN NIGERIA: A STUDY OF ETCHE LOCAL GOVERNMENT AREA OF RIVERS STATE

Blessing Obinna & *Charity N. Uzuegbu
Department of Social Work, University of Nigeria, Nsukka
Email: blesoul2006@yahoo.com
*Corresponding author: uzuegbu@unn.edu.ng

Health security is very essential for human survival; governments establish health facilities to provide health services to their citizens. The federal government of Nigeria through the Ministry of Health set up primary health services to provide Maternal Health Care Services (MHCS) for women and children. This study examined the barriers to access and utilization of maternal healthcare services among government-owned hospitals in Etche Local Government Area of Rivers State, Nigeria to improve the MHCS services. Data was collected using a questionnaire and focus group discussion guide. The sample size consisted of 609 persons. Quantitative data gathered were analysed using Chi-square ($\chi^2$) and regression analysis while the qualitative data were analysed in themes as a complement to the quantitative data. Findings from the study revealed that government owned facilities were poorly accessed and utilized. Negligence to maternal health care facilities, lack of money and lack of support from significant others stand as barriers to access to MHCS services, while lack of equipment, cost of the medical bill and long distance to health facilities stand as barriers to the utilization of maternal healthcare services. Regression analysis predicting future barriers showed that place of residence had a significant relationship with both access and utilization of MHCS. It was recommended that the government and general public should rehabilitate the primary health facilities to ensure health security in the country. Social Workers should engage in enlightenment programmes to ensure secure health care.

Keywords: Access, Health, Nigeria, Security, Social work,
In this study, we examine health security and the well-being of women in Cross River State by analyzing their fertility and reproductive health history. Concern for women's fertility health and well-being is at the core of the global movement aimed at ensuring that the world population grows at a sustainable rate because this has serious repercussions for food security and demand for finite resources. This paper, therefore, evaluates the attainment of the third sustainable development goal (SDG) which pertains to the pursuit of 'health and wellbeing for all people'. To this end, this paper examined some of the critical demographic and sociocultural factors that may explain women's fertility in Cross River State. A survey design was adopted whereby women aged between 15 and 49 years old and women who have ever given birth (either as single parents or in a civil union) constituted the research population. Two Local Government Areas (LGA) were randomly selected from each of the three Senatorial Districts in the State, and questionnaires were proportionally administered to a purposively selected sample of 100 participants per LGA (i.e., n = 600). Specifically, information was collected on demographic characteristics, reproductive health history, fertility levels, family planning, knowledge and use of contraceptives as well as their side effects. Two hypotheses were formulated and tested using the parametric statistical techniques (Independent Sample t-test and Analysis of Variance (ANOVA)) in SPSS. Results of data analysis show that age at marriage (adolescence fertility) and use of birth control measures (family planning) were the most important factors that affected women's fertility health and well-being in the study area, and the proportions of births attended by skilled health personnel have significantly improved. The implications of our findings to sustainable population growth and health security are also discussed.

Keywords: COVID-19/SARS-COV-2, Survivors, Experiences, Thematic synthesis, Systematic review

ANALYSIS OF WOMEN FERTILITY AND REPRODUCTIVE HEALTH IN CROSS RIVER STATE – NIGERIA

Eni, Precious Edu*1 & Essien, Eyo Emmanuel2
1 Department of Geography and Environmental Sciences, University of Calabar, Calabar.
2 Department of Marketing, University of Calabar, Calabar.
*Correspondent Author: precheni@yahoo.com.

In this study, we examine health security and the well-being of women in Cross River State by analyzing their fertility and reproductive health history. Concern for women's fertility health and well-being is at the core of the global movement aimed at ensuring that the world population grows at a sustainable rate because this has serious repercussions for food security and demand for finite resources. This paper, therefore, evaluates the attainment of the third sustainable development goal (SDG) which pertains to the pursuit of 'health and wellbeing for all people'. To this end, this paper examined some of the critical demographic and sociocultural factors that may explain women's fertility in Cross River State. A survey design was adopted whereby women aged between 15 and 49 years old and women who have ever given birth (either as single parents or in a civil union) constituted the research population. Two Local Government Areas (LGA) were randomly selected from each of the three Senatorial Districts in the State, and questionnaires were proportionally administered to a purposively selected sample of 100 participants per LGA (i.e., n = 600). Specifically, information was collected on demographic characteristics, reproductive health history, fertility levels, family planning, knowledge and use of contraceptives as well as their side effects. Two hypotheses were formulated and tested using the parametric statistical techniques (Independent Sample t-test and Analysis of Variance (ANOVA)) in SPSS. Results of data analysis show that age at marriage (adolescence fertility) and use of birth control measures (family planning) were the most important factors that affected women's fertility health and well-being in the study area, and the proportions of births attended by skilled health personnel have significantly improved. The implications of our findings to sustainable population growth and health security are also discussed.

Keywords: Fertility; family planning; population; health security and wellbeing

EVALUATION OF THE AMELIORATIVE EFFECTS OF ALLIUM SATIVUM (GARLIC) AND VITAMIN C ON NIFEDIPINE-INDUCED REPRODUCTIVE DISORDERS IN ALBINO MALE RATS

Department of Veterinary Obstetrics and Reproductive Diseases, Faculty of Veterinary Medicine, University of Nigeria, Nsukka 410001, Nigeria; Samuel.ekere@unn.edu.ng, faithnmachuks@gmail.com, Kenneth.anya@unn.edu.ng
*Correspondence: ugochinyere.njoga@unn.edu.ng (U.J.N).

Nifedipine, a calcium-channel blocker is employed in the management of high blood pressure but it causes untoward reproductive effects. Consequently, this study investigated the ameliorative effect of garlic (Allium sativum) and vitamin C (ascorbic acid) on nifedipine-induced reproductive disorders in male albino rats in vivo. Twenty-five (25) male rats weighing between 144-210g were divided into five groups (A- E) of five (5) rats each. Group A (positive control) received distilled water while Groups B (negative control), C, D, and E were treated with 0.571 mg/kg of nifedipine alone, 0.571 mg/kg of nifedipine and 200 mg/kg of vitamin C, 0.571 mg/kg of nifedipine
and 200 mg/kg garlic and 0.57 mg/kg of nifedipine and a combination of 200 mg/kg of vitamin C and garlic respectively for 40 days. Epididymal and testicular tissues were harvested and processed for sperm analysis. Results showed that there was a significant decrease (p<0.05) in the mean sperm motility, mean epididymal sperm reserve, and mean normal sperm in all the treated groups (B, C, D, and E) when compared to the control group (Group A). The ameliorative effect of vitamin C and garlic alone and the combination of the two, showed no significant difference (p>0.05) in the mean sperm motility, mean epididymal sperm reserve and mean normal sperm between groups C, D, and E and group B. Additionally, there was no significant difference (p>0.05) in the mean sperm viability, testicular sperm reserve, testicular and epididymal sperm concentrations and all weight indices between groups B, C, D and E, and group A. Vitamin C and garlic does not ameliorate the reproductive disorders induced by nifedipine therapy.

Keywords: Nifedipine; reproductive disorders; calcium-channel blocker; sperm

EXAMINATION OF JOLLOF RICE SERVED IN SOME RESTAURANTS IN BONNY ISLAND FOR THE PRESENCE OF SALMONELLA TYPHI AND STAPHYLOCOCCUS AUREUS

Chijioke, Ikechukwu1 Jumbo, Elizabeth I. 2
Ikor, Peter U3 Chijioke, Nkiruka A.4
Science Laboratory Technology (Applied Biology Unit)
Federal Polytechnic of Oil and Gas, Bonny
Email: chrischijioke_1@yahoo.com
ikorpeter3@gmail.com lizzyibjumbo@gmail.com
nkiruka61@yahoo.com
Mobile: 08161614147, 08134023421, 08131917717, 08067469640

Jollof-rice sold in some restaurants in Bonny Island, Rivers State was examined for contamination by Salmonella typhi and Staphylococcus aureus. The microbial load (Total Heterotrophic Bacteria) in the rice was determined using the plate-count method. Salmonella typhi was isolated and characterized using Salmonella/Shigella Agar (SSA). Staphylococcus aureus was isolated and characterized using mannitol salt agar. The microbial load of the Jollof-rice samples studied ranged from 1.3 x 10^2 cfu/g to 1.0 x 10^3 cfu/g. Twenty-seven (27) isolates were recovered in the study, composed of 12 and 15 each of Salmonella typhi and Staphylococcus aureus. Due to the presence of these organisms in Jollof rice sold in restaurant in Bonny Island. The Jollof-rice is unsafe for consumption. Hence, for safety of consumers, a good hygienic condition should be maintained at the restaurants and food handlers who are carriers, should be trained in the area of good hygiene practices.

Keyword: Jollof Rice, Bonny Kingdom, Contamination, Salmonella typhi, Staphylococcus aureus.

COVID-19 VACCINE MANDATE AND THE RIGHT TO HEALTH IN AFRICA: SHOULD AFRICA TOE THE PATH OF THE UNITED STATES?

1Obiajulu Nnamuchi
1Faculty of Law, University of Nigeria, Enugu Campus
obi.nnamuchi@yahoo.com
2Annastecia Eze
2University of Nigeria, Enugu Campus
3Mariah Ilodigwe
3Faculty of Law, Chukwuemeka Odimegwu Ojukwu University, Igbariam

As Coronavirus or COVID-19 continues to ravage the world and vaccine uptake in many communities begins to decline, different measures are being rolled out to combat the onslaught of the pandemic. Because the world is in uncharted waters, it is difficult to predict with any degree of certainty which intervention would be successful or vice versa. Although there seems to be a consensus that the starting point of any sustainable victory over the virus is the attainment of herd immunity, the path to this goal is mired in controversy. Whilst some favor attaining herd immunity through natural infection, others prefer the route of vaccines. A key proponent of the latter is the World Health Organization (WHO). But although the WHO advocates vaccination as an avenue to achieving herd
immunity, it frowns upon the natural infection approach and compulsory vaccination. Yet, several nations, most remarkably the United States, are proceeding to impose vaccine mandates on their people, even those with religious or other objections. This coercive exercise of power raises a number of questions, some of which have profound significance to the enjoyment of the right to health, particularly in Africa. Should Africa join the bandwagon? In other words, is it appropriate for countries in the region to impose vaccine mandates? Unravelling these questions is the task of this chapter, a task that is centered on analyzing the ethical/legal, ideological, and pragmatic considerations underpinning the relationship between the individual and the state in the realm of public health.

Key Words: Resilience; Family functioning, Body image dissatisfaction, Intimate Partner Violence

MODERATING ROLE OF RESILIENCE IN FAMILY FUNCTIONING, BODY IMAGE DISSATISFACTION AND INTIMATE PARTNER VIOLENCE AGAINST WOMEN: IMPLICATIONS ON WOMEN’S HEALTH AND SECURITY

*Blessing Nneka Onyekachi, Peace Onyinyechi Imoh & Joseph Chinenye Aliche
Department of Psychology University of Nigeria, Nsukka, Enugu State, Nigeria
*corresponding author’s email: blessing.ome@unn.edu.ng

This study adopted the engendering resilience to survive intimate partner violence (IPV) model and examined the moderator role of resilience in the relationships among family functioning, body image dissatisfaction (BID), and IPV against women. Participants were 398 married women. Pearson's correlation and multiple regression analysis were used for data analysis. Results showed that resilience moderates the relationships between family functioning and IPV as well as BID and IPV. This means that resilience as a core factor implicated in women's ability to survive IPV is achieved via a moderator pathway, by reducing the impact of negative factors such as family dysfunctionality and BID on intimate relationships. Implying that, IPV despite being a threat to human lives and security, women could condone the consequences on the premise that they have the ability to bounce back which could have devastating consequences. It was concluded that the inclusion of resilience building programmes as a form of humanistic and existential interventions to life-threatening situations such as IPV should be accompanied by physically protective measures against insecure circumstances.

SOCIO-CULTURAL FACTORS THAT BRING ABOUT STRESS AMONG WORKING MOTHERS OF UNDERAGE CHILDREN IN THE UNIVERSITY OF NIGERIA NSUUKKA CAMPUS, ENUGU STATE

1Nwadike, Ngozi Christiana; 1Anugwom, Kenechukwu Nwakaego; 1Okpara, Kelechi & 2Ofem Nnana Okoi
1Department of Social work, University of Nigeria, Nsukka
1Department of Sociology & Anthropology, University of Nigeria, Nsukka
2Department of Social work, University of Calabar
*Correspondence: ngozi.nwadike@unn.edu.ng

Contemporary, the society is characterized by women involvement in various professional occupations with mothers expanding their lives in different careers while maintaining their traditional roles at home. This dual role invariably aggravates the stress/health conditions of working mothers especially working mothers with underage children as they try to balance their work and family. The study was carried out in University of Nigeria Nsukka Campus and the data was obtained from a randomly selected sample of 485 working mothers with underage children using questionnaires and seven IDI respondents. The data gotten from the questionnaire were analyzed quantitatively using Statistical Package for Social Sciences (SPSS) while the responses for IDI were analyzed in themes as a complement to quantitative data. Findings from the study showed that majority of the respondents (96.1%) indicated that they have experienced stress. The hypothesis showed that a statistically significant relationship ($\chi^2 = 4.878$) existed between working mother's number of children and their stress experience. The study further revealed that there was a statistically significant relationship ($\chi^2 = 11.788$)
between access to social support and stress among working mothers with underage children. This study recommends among others that government need to review the working condition of women and regulate same appropriately to ensure that working mothers of underage children are mandatorily placed in a position that are not time and energy demanding. Social workers are also recommended to be involved in some government and organizational policies that will help to reduce work overload for working mothers.

**Keywords:** Social, Cultural, Stress, Working mothers, Underage children

---

**GLYCOSURIA IN SECONDARY SCHOOL STUDENTS OF FURAKA COMMUNITY JOS**

**Shindang John and Adi Asoo Winifred**
Department of Medical Laboratory Science, Faculty of Health Sciences and Technology, University of Jos, Jos

Glycosuria is a public health problem globally because of its associated health hazard in diabetes mellitus. Nowadays, diabetes is often found in children and adolescents and one of the important screening tests for Diabetes mellitus is urine examination to determine Glycosuria. A cross section of 100 secondary school students aged 10-24 in Furaka Community Jos North, Plateau State, Nigeria, were sampled. The samples were analysed using Clinistix dipsticks method. The samples were collected in sterile universal containers and screened for the presence of glucose using Combi-2 dipsticks(glucose-oxidase test strips), which is a qualitative test used to detect the presence of glucose in urine. Out of 100 urine samples analysed, 49.0% were males and 51.0% were females. 29.0% of the subjects were aged 10-14years, the age range 15-19 had a frequency of 65.0% while the age range 20-24 had a frequency of 6.0%. The study showed a prevalence of 3.0% with a higher incidence in females 66.7% than in males 33.3%. A positive case was identified in each of the three age ranges sampled which were age range 10-14 with a prevalence of 33.3%, age range 15-19 with a prevalence of 33.3% and age range 20-24 with a prevalence of 33.3%. The study, showed no significant difference in the distribution of Glycosuria with respect to age and gender of the subjects (P>0.05). There was no relationship between the diet of the positive students and the presence of Glycosuria. In Conclusion, Glycosuria testing for Diabetes in children is recommended because it is a non-invasive test.

---

**VIOLENCE INDUCED POST-TRAUMATIC STRESS DISORDER AND INDIRECT TRAUMA ON A WIDENING SCALE IN NIGERIA**

**Uzochukwu Chukwuka Chinweze¹, David O. Iloma², Chiedozie Okechukwu Okafor³, Caesar Dibia⁴**
University of Nigeria, Nsukka¹ University of Uyo, Uyo², Alex Ekwueme Federal University, Abakaliki³, Achieving Health Nigerian Initiative ⁴

Email: uzochukwu.chinweze@unn.edu.ng

This study investigated violence induced post-traumatic stress disorder and indirect trauma among a heterogeneous population in the Northern and Southern regions of Nigeria. The study identified a lacuna from previous studies and the current study relating the violence to presence of post-traumatic stress disorder among those involved. However, this was conducted purposively by recruiting 737 participants from Jos and Awka. Participants were 305 male and 432 female with age group of 19-53 years and mean age of 31.83 (SD = 5.82) years. In order to empirically measure variables of interest, demographic factors were designed and the 24-item Scale for Indirect Trauma caused by Media Exposure to Social disaster (SITMES) developed by Choi, Choi, and Lee (2021) was adapted. By utilizing the multiple linear regression and one-way analysis of variance (ANOVA) statistics, the hypothesis which stated that socio-demographic variables will significantly predict indirect trauma as a result of media exposure to social and violent events in Nigeria was confirmed. Educational status was more pronounced in predicting indirect trauma; and descriptive statistics revealed 62.5% prevalence of indirect trauma among participants. Hence, the study concluded that as the volume of attacks move from one place to another so also do its terrible experiences affect more people and communities. In extension due to these terrible experiences a growing number of individuals and communities as a whole face the rising possibility of suffering indirect traumatic stress disorder (ITSD) as against the known PTSD. Recommendations and
policy implications bothered on establishing indirect trauma centers across the six geopolitical zones of Nigeria in addition to involving other relevant corporate bodies in this fight towards addressing the growing rate of indirect trauma.

**Key Words:** Violence, PTSD, Indirect Trauma, Media Exposure, Disaster, Nigeria.

HEALTH SECURITY AND SOCIAL/ENVIRONMENTAL WELLBEING AND VULNERABILITY

1 Obioha, Kingsley Chukwu Episteme,  
2 Obioha, Jane Onyinyechi,  
3 Nezako, Uchechukwu Tochukwu  

1 Department of Obstetrics & Gynaecology, University of Nigeria Nsukka/University of Nigeria Teaching Hospital, Ituku-Ozala, Enugu, South-Eastern Nigeria.  
2 Faculty of Education, University of Nigeria, Nsukka.  
3 School of Basic Midwifery, Alex Ekwueme Federal University Teaching Hospital, Abakiliki, Ebonyi State, Nigeria.  

*Corresponding author’s e-mail: episteme4all@yahoo.com*

Health security is the activities (both proactive and reactive), required to minimize the danger and impact of acute public health events that endanger people's health across geographical regions and international boundaries. Globally, there is a growing recognition of the importance of health security to economic development. 'Health security' as a phenomenon continues to receive the attention of academics and policymakers in the course of ensuring a state of complete physical, mental and social well-being for all. Nigeria's health policy equally gives a premium to this. Health security focuses on pandemics, epidemics, and the spread of infectious diseases which are the most significant threat to public health (Ahmadu, 2019). The aim of this article, hinging on archival and qualitative research design, is to explore health security in Nigeria vis-à-vis the constraining social/environmental wellbeing and vulnerabilities. The discourse took into account unfolding social and environmental challenges coupled with the high level of poverty. It indicates that social and environmental uncertainties interact with many parts of the health care system in a variety of ways. This hurts health security in Nigeria as a result of poor infrastructure development, insufficient government financing, the lack of an integrated system for disease prevention and monitoring, frequent policy reversals, security issues, and unimpressive health indicators (Bello, 2013). Because of this and considering the state of the Nigerian health care system that is worsening on a global standard, it is obvious that health security is yet to have a strong footing. For health security to have a meaningful impact on people's wellbeing, appropriate health services should be made accessible to those who need them (Carson, 2012). The spread of infectious disease can be deadlier than world wars; the Spanish flu (one of the deadliest conflicts in human history), for instance, killed millions more people than World War I. The Monkey-pox, and the COVID-19 pandemic are also subject of great health security concern. It is apt to say that, any country that truly tends to harness its potential and utilize the intellect of its citizen ought to give preferential treatment to its healthcare system (Adeloye, A. J., & Rustum, R., 2015). It is only when people are alive in sound and good health that they can work and become productive. In this Perspective, the authors maintain that global health security requires greater systematic focus on the complex inter-linkages among human physical and mental health, animal health, and the environment. The authors recommend that infectious disease remain a priority of global health security and that efforts to increase collaboration and trust among international leaders be fostered.

**Keywords:** Health security, social and environmental wellbeing and vulnerabilities

PREVENTIVE HEALTH CARE AS A REMEDY TO MATERNAL AND CHILD MORTALITY IN RURAL COMMUNITIES IN NIGERIA

1 Nnama-Okechukwu, Chinwe U.,  
2 Okoye, Uzoma O.,  
3 Obikeguna C. N.,  
4 Nkechukwu Chiamaka N.  
5 Mbachi Winnfred  

1 Department of Social Work, University of Nigeria, Nsukka.  
2 Medical Center, Federal Polytechnic Oko, Anambra State,
Children under five years and women of childbearing age still die of preventable causes in rural communities in Nigeria. This largely is due to lack of awareness on what constitute simple preventive health care practices. Preventive health care has an immediate and long term impact, particularly on the lives of women and children. Women of childbearing age based on our field experiences as social workers and nurses showed that the right attitude to child immunization, basic hygiene and adequate nutrition is yet to be adopted by women of childbearing age in rural communities in Nigeria. We therefore argue that if the SDG goal 3 on “Good health and well-being” is not a wish and if indeed “no one is to be left behind by 2030”, then women of childbearing age whether in rural or urban communities in Nigeria should be enlightened on the gains of preventive health care services. Enlightenment through community health education using various stakeholders will no doubt promote health security and well-being and make preventive health more than a wish. Social workers and nurses are very vital in this change process for a sustainable future.

Keyword: Child mortality, health security, maternal mortality, preventive health care, SDGs, well-being

HEALTH SYSTEM GOVERNANCE AND PERFORMANCE IN AFRICA: A CHALLENGE TO ACHIEVING UNIVERSAL HEALTH COVERAGE

Casmir Chukwuka Mbaegbu, Deborah O. Obi
Department of Political Science, University of Nigeria, Nsukka
Peace and Conflict Studies Unit, University of Nigeria, Nsukka
* Corresponding author's email: casmir.mbaegbu@unn.edu.ng

Health system governance in Africa, nay Nigeria is inefficient, with attendant shortage of critical drugs, disproportionate monetary allocation, out-of-pocket payments (OOPs) and heavy reliance on foreign donors. The increasingly weak link between health system governance and performance produces negative outcomes on the achievement of universal health coverage (UHC). Although literature on healthcare governance has accumulated, extant analyses have focused largely on the performance of health systems, operationalized around indicators such as maternity care, immunization coverage, mortality and vulnerability rates, National Health Insurance Scheme (NHIS) among others, with inadequate attention accorded to the link between the dominance of foreign donors and the quality of health services in the achievement of UHC in Nigeria. Based on qualitative data drawn mainly from interviews, focus group discussions, and archival materials from Google Scholar, PubMed, Medline, Science Direct and WHO Library Database, the study argues that the ineffective role of national actors in health systems governance breed health tourism and heavy reliance on foreign donors in addressing health services. Given that the quality of health systems governance is an important structural determinant of health systems performance, the study makes a case for alternative funding for health services involving for a multi-pronged synergetic collaboration between the Nigerian government and Non-Governmental Organizations which encourage indigenous capacity for pharmaceutical research and development.

Keywords: Health governance, health system performance, Universal health coverage, foreign donors, Health services

DOMESTIC VIOLENCE AND SAFEGUARDING CHILDREN IN NIGERIA: A FOCUS ON AFFECTED CHILDREN AS VULNERABLE VICTIMS

Gloria Nwandu Ozor
Department of English and Literary Studies, University of Nigeria, Nsukka
Department of Language and Communication Studies, The Technical University of Kenya
* Corresponding email: glosunny2005@gmail.com
Children are the product of their environments and societies. The environment has a lot of influence on the total wellbeing of a child. Various studies on children's wellbeing have shown that a supportive, loving, and caring environment has greater tendency to produce a psychologically, emotionally, and mentally balanced adult. During the period of childhood, memories are made and these memories play important roles in forming the kind of a person a child becomes in the future. The study adopts the United Nation's view of domestic violence, as a pattern of behavior in any relationship that is used to gain or maintain power and control over an intimate partner. This could be physical, sexual, emotional, economic or psychological actions or threats of actions that influence another person. Domestic violence is a threat to the wellbeing of every child. It does not only create a toxic environment for the abused partner but for the children as well, thereby, making them vulnerable to different kinds of abuses. This study, therefore, views Nigerian children living in such violent environments as vulnerable victims and the need to safeguard them. Domestic violence poses a threat to the safety of children. This research uses secondary data for its analysis. The data will be derived from published works like academic articles, books, Newspaper publication, and from different social media platforms.

Keywords: Domestic Violence, vulnerability, victims, Nigeria, safeguarding children

HEALTH SECURITY AND WELLBEING AMONG YOUNG ADULTS IN NIGERIA

Agu, Chinonso*, 1,2 Aidi Hakeem, 1 Ameh Chika 3
Department of Economics, University of Nigeria, Nsukka

*Corresponding author's email: chinonso.agu@unn.edu.ng

The state of individual health and wellbeing among young Nigerian adults, age 15 – 49, is of major concern. Health security is attracting more and more attention in developing countries as a means for improving healthcare utilization and protecting young adults against impoverishment (Spaan, Mathijssen, Tromp, McBain, Have, & Baltussen, 2012). Ranging from mortality due to non-communicable and infectious diseases facilitated by globalization and associated trades, to lack of reliable health-related products and services, and to weakening socioeconomic transformations, health security and wellbeing is threatened (Kabiru, Izugbara, & Beguy, 2013). These health burdens have far reaching implications on the health and wellbeing of young adults. Using data from the Nigerian General Household Survey (NGHS) wave 4, and Multiple Indicator Cluster Surveys (MICS) wave 5, this paper aims to examine individual health security and wellbeing among young adults in Nigeria.

Keywords: health security, utilization, wellbeing, FMM

REVIEW OF NIGERIAN STANDARD FOR DRINKING WATER QUALITY

Gladys Ogochukwu Chukwurah & Matthew Ogorchukwu Isimah

1Department of Urban and Regional Planning, University of Nigeria, Nsukka, e-mail: ogochukzi@yahoo.com
2Department of Geography, University of Nigeria, Nsukka, e-mail: ogormatsi@gmail.com

This paper reviewed the Nigerian standard for drinking water quality with the WHO standard. It also examines whether water producers understood and accepted the Nigerian standard for drinking water quality. The study finds that the quality of Nigerian standards for drinking water is within the limit of the World Health Organization (WHO) standard. However, the negligence of water producers towards Nigerian standards for drinking water quality is a growing concern as poor water quality has wrecked health havoc. Furthermore, the study shows that most water producers have not fully understood the Nigerian standard for drinking water quality. Practices such as the production of low-quality water to economize cost and maximize profit with less or no consideration for its aftereffects were observed. The following recommendations, therefore, ensue: (i) Water quality data should be simplified for easy understanding and application by the public. (ii) There should be a collective drive to provide safe and good-quality water in Nigeria. (iii) Priority should be given to constant
access to potable water for sustainable development. (iv) Water quality monitoring is necessary to curtail excesses in drinking water.

STREET LIFE AND MENTAL HEALTH: IMPLICATIONS ON THE FUTURE HUMAN RESOURCE DEVELOPMENT IN NIGERIA

Uchenna Bartholomew Nwokoma & Chinonso Akudo Okoro*
Social Sciences Unit, School of General Studies, University of Nigeria, Nsukka
uchenna.nwokoma@unn.edu.ng; chinonso.okoro@unn.edu.ng*

The study examined the psychological implications of street life on children's mental health and its impact on future human resources development in Nigeria. It was conducted in Enugu Metropolis, using quantitative and qualitative techniques to collect primary data from the participants, who were between the ages of 10 and 16 years old (mean age = 13 years). Participants completed the General Health Questionnaire (GHQ-12) to screen for psychological distress among them, including in-depth interviews. Study findings showed that children who engage in street life enjoy more support from community members but are socially excluded in Nigeria. Such exclusions have severe implications for the country's future, such as the proliferation of street gangs often involved in crimes and are ready instruments of abuse and violence. Their coping techniques include hawking, scavenging, and street begging. They found refuge in the street because of the challenges of surviving in poor houses, ill-treatment, and lack of parental care. These findings imply that the incidence of street life is a response to poverty, parental interest, child labour, etc., which impacts the socio-economic environment. The study recommends regular inspection of child labour and street life to monitor the trends with policies aimed at improving child welfare in Nigeria for healthy child-parent and household relationships. In addition, public enlightenment campaigns should educate parents, guardians, and children on the dangers of street life on children's educational development and future.

Keywords: Development, Human resource, Mental health, Nigeria, Street life

ANTI-INFLAMMATORY AND ANTI-NOCICEPTIVE PROPERTIES OF LEAF FRACTIONS OF SIDA LINIFOLIA L. (MALVACEAE) POSSIBLY MEDIATED BY PERIPHERAL AND CENTRAL MECHANISMS

Nwankwo Nicodemus Emeka a,b, *Ezeako Emmanuel Chimeh c, Ogara Amaechi Lydia, and Ezenabor Emmanuel Henry a,c
aDepartment of Biochemistry, University of Nigeria, Nsukka, Enugu State, Nigeria
bNatural Science Unit, School of General Studies, University of Nigeria, Nsukka, Enugu State, Nigeria, cScience Laboratory and Technology, University of Nigeria, Nsukka, Enugu, Enugu State 410001, Nigeria
*Correspondence: emmanuel.ezeako.188647@unn.edu.ng; Tel: +2348140123037

Sida linifolia L. is a common weed found in dry forest areas in West Africa and other parts of the world. It is associated with several African folkloric applications, including its use in assuaging painful whitlows and in malaria management. However, no scientific study has validated its bioactivities. Herein, we investigated the anti-nociceptive and anti-inflammatory mechanisms of ethanolic (ELFSL), and ethyl acetate (EALFSL) fractions of Sida linifolia leaves. The in vivo anti-inflammatory activities were evaluated by edema induction with an intraperitoneal injection of freshly prepared carrageenan (0.1 ml of 0.01 g/ml) and 0.1 ml of undiluted fresh egg albumin into mice's hind paw, while hind paw licking and writhing were induced in mice using formalin (i.p.) (0.02 ml of 1 % v/v) and 0.6 % (v/v) (10 ml/kg bw) (i.p.) acetic acid, respectively, to assay for the anti-nociceptive potentials. Varying amounts of flavonoids, tannins, and other phenols, terpenoids, saponins, steroids, and alkaloids were detected in the fractions. The LD 50 study showed no toxicity up to 5000 mg/kg body weight (per oral) ELFSL and EALFSL. Interestingly, oral administration of various concentrations (200, 400 and 600 mg/kg bw) of the fractions significantly (P < 0.05) inhibited all phases of edemogenesis, mice's hind licking, and writhing compared with control and were comparable with 100 mg/kg bw (p.o.) aspirin. However, ELFSL showed significantly (P > 0.05) better anti-nociceptive and anti-inflammatory activities than EALFSL. These suggest that leaf fractions of Sida linifolia possess anti-inflammatory and anti-nociceptive potentials, possibly mediated by peripheral and central mechanisms.

Keywords: NSAIDs; Anti-inflammation; Anti-nociceptive; Antioxidants; Rheumatoid arthritis; Malaria; Whitlow
ASSESSMENT OF PROXIMATE AND MICRONUTRIENT COMPOSITIONS OF SOME SELECTED LOCALLY CONSUMED BISCUITS WITHIN ENUGU STATE, NIGERIA

*Nkwocha Chinelo Chineny, Akeke Augustine Akomaye & Ezeanyika Lawrence Sunday
Department of Biochemistry, University of Nigeria, Nsukka.
Corresponding Author:
chinelo.nkwocha@unn.edu.ng

This study evaluated the proximate, mineral and vitamin compositions of some locally consumed biscuits within Enugu State, Nigeria. The nutritional compositions of the biscuit samples were analyzed using standard methods. The results of the proximate analysis showed that the moisture contents of the different biscuit samples ranged from 1.82±0.03 to 4.58±0.10 %, and ash content ranged from 0.55±0.04 % to 2.24±0.01%. The crude lipid content ranged from 11.56±0.05% to 26.63±0.04% while the crude fibre content ranged from 0.03±0.01% to 3.50±0.40%. The crude protein content in the biscuit samples ranged from 2.49±0.00% to 5.04±0.05%. The total reducing sugar contents in the biscuit samples ranged from 24.89±0.28 mg/100g to 39.80±0.42 mg/100g while the calorific value ranged from 1740.49±0.64 kj to 2259.05±1.63kj/100g. Vitamin C contents of the different biscuit samples ranged from 1.02±0.19 mg/100g to 12.95±0.17 mg/100g. The vitamin B1 contents of the different biscuit samples ranged from 1.30±0.14 µg/100g to 51.90±0.14 µg/100g while the vitamin B2 contents ranged from 1.30±0.14 µg/100g to 51.90±0.14 µg/100g. Vitamin B12 content ranged from 0.34±0.07 µg/100g to 41.12±0.28 µg/100g.

QUALITY ASSESSMENT AND SENSORY ACCEPTABILITY OF CUSTARD ENRICHED WITH LIMABEAN AND RIPE PLANTAIN FLOURS (PROXIMATE, MINERAL, VITAMIN, AND SENSORY EVALUATION)

Okoye, Joseph Ikechukwu1, Omah, Esther Chinelo2, Aniagor, Ebele Nwamaka2 and *Onwuama, Ngozi Nwamaka3
1Department of Food Science and Technology, Enugu State University of Science and Technology (ESUT), Enugu, Nigeria
2Department of Food Science and Technology, University of Nigeria, Nsukka
3Department of Nutrition and Dietetics, University of Nigeria Teaching Hospital, Ituku-Ozalla, Enugu, Nigeria.
*Correspondence Email: ngozionyeyili2009@gmail.com

This study was designed to evaluate the nutrition composition, and sensory properties of custard enriched with lima bean and plantain flours, Maize grains were prepared into cornstarch, while the lima bean seeds and ripe plantain fruits were separately prepared into flours. The lima bean and plantain flours were used at various replacement levels (5-25% and 5-25%) for cornstarch in the production of custard formulations with the custard produced from 100% cornstarch as control. The formulated custard samples produced were evaluated for proximate, mineral, vitamin, and sensory properties using standard methods. The moisture, crude protein, fat, and crude fibre contents of the samples increased significantly (p < 0.05) with increased substitution of lima bean and plantain flours from 9.19-9.91%, 9.18-19.42%, 2.10-3.23%, 3.38-3.67% and 3.38-4.90%, respectively, while the carbohydrate and energy contents decreased from 72.98-58.90% and 347.44-342.27 KJ/100g, respectively. The control sample (custard made with 100% cornstarch) had the highest carbohydrate (72.98%) and energy (347.44KJ/100g) contents, respectively. The mineral content of the samples showed that the calcium magnesium, phosphorus, potassium, iron and sodium contents of the custard samples ranged from 113.34-126.02mg/100g, 48.48-69.30 mg/100g, 76.35-94 mg/100g, 36.10-67.30mg/100g, 2.29-3.77mg/100g, and 31.77-41.68mg/100g, respectively, the vitamin content of the custard sampled showed similar increases in niacin (4.34-4.6mg/100), thiamine (3.03-3.33mg/100g), riboflavin (6.35-9.27mg/100g), vitamin A (8.10-10.17mg) and vitamin C (3.74-4.77mg/100g), respectively as the ratios of lima bean

Keywords: Biscuits; vitamin; mineral; calorific value; proximate
and plantain flours increased in the samples. The colour, taste, flavour and texture of the control sample were the most acceptable to the panellists compared to the samples substituted with lima bean and plantain flours at different graded levels. The study, therefore, showed that the macro and micro nutrient contents and custards could be improved by substituting cornstarch with lima bean and plantain flours at varying proportions, thus extending the use of these locally available novel flours in the preparation of nutrient-dense custard samples.

EFFECTS OF TRADITIONAL MYTHS AND BELIEFS ON MOTHERS' ATTITUDE TOWARDS INFANT IMMUNIZATION IN ISIALA NGWA SOUTH LOCAL GOVERNMENT AREA, ABIA STATE

Chidiebere Obinna Nwoke and Ijeoma J. Ogu
Department of Sociology and Anthropology, University of Nigeria, Nsukka. E-mail: chidiebere.nwoke@unn.edu.ng

Vaccine-preventable diseases (VPDs) are responsible for close to 20% of deaths among children under five years old globally. This high infant mortality rate due to VPDs has attracted global attention leading to vociferous calls for enhanced child immunization especially in less developed countries such as Nigeria. Goal 3 of the United Nations sustainable development goals (SDGs) targets the achievement of more than 90% coverage of all basic vaccinations in children under 5 years old. Studies have shown low immunization coverage among infants in Nigeria and a major factor associated to this is the attitude of mothers. This study looked at traditional myths and beliefs and their effects on the attitude of mothers to infant immunization in Isiala Ngwa South LGA of Abia State, Nigeria and employed quantitative methodology to achieve this. The dependent variables for the research were the mothers' attitudes towards infant immunization. The study revealed that mothers whose partners are adherents to African Traditional Religion were less interested in child immunization than mothers whose partners are Christians. Also, mothers who have low level of education were found to believe strongly on myths against infant immunization than mothers with high level of education. Aggressive awareness on the need for child immunization and the debunking of the long held myths against it were therefore recommended.

NATIONAL HEALTH INSURANCE SCHEME: KNOWLEDGE AND ENROLMENT PREDICTORS FOR WOMEN IN SOUTH-EAST, NIGERIA

Ijeoma Igwe, Ijeoma Julia Ogu, Nneka Lynda Nzewi and Chiemezie Atama
Department of Sociology & Anthropology
University of Nigeria Nsukka
Correspondence: ijeoma.igwe@unn.edu.ng

Introduction: Health insurance avails individuals the opportunity to access desired healthcare services while payment is done at a regular interval. The scheme was implemented in Nigeria to ensure access to excellent healthcare. However, there has been low knowledge and coverage of the scheme. Health care expenses in Nigeria are however done mainly through out-of-pocket. Due to economic recession, rising health care costs in Nigeria coupled with the effect of economic downturn women find it hard to pay for health services. This leads them to forego, postpone medical care or in some cases seek alternative healthcare which could lead to severe health consequences. This study is aimed at identifying the predictors of women's enrolment in National Health Insurance Scheme in South-East, Nigeria.

Method: A cross-sectional survey, enrolling 522 women participants, was carried out in Enugu East and Nsukka Local Government Areas of Enugu State. The survey was a self-administered questionnaire which covered information about participants' general demographics, knowledge and utilization of National Health Insurance Scheme and access to needed healthcare needs.

Result: The result shows that place of residence affects NHIS knowledge (p<0.05); enrolment of women for NHIS (p<0.00) and their ability to pay medical bills (p<0.01). Furthermore, employment status (p<0.01), employer type (p<0.05) and income status (p<0.00)
were found to affect women's ability to pay medical bills.

**Conclusion:** Policy reforms that ensure women's full enrolment in NHIS in Nigeria which will further reduce the burden of women in assessing health care and achieving health coverage should be encouraged owing to the fact that they have higher need for medical care than their male counterparts.

**Key words:** Health Insurance, women's health, healthcare payment, medical bill, NHIS

---

**EFFECTS OF SCULPTURAL CONFIGURATION OF TABLETS ON CONSUMER'S ACCEPTABILITY OF ANTIHYPERTENSIVE MEDICINES IN ABIA STATE, SOUTH-EAST, NIGERIA.**

1Chikelue Chris Akabuike and 2Nkeiruka Grace Osuafor

1Department of Fine and Applied Arts, University of Nigeria, Nsukka, 2Department of Clinical Pharmacy & Pharmacy Practice Madonna University Nigeria

E-Mail: chikelue.akabuike@unn.edu.ng

The patient's needs and preferences should be considered in pharmaceutical drug product design, to facilitate drug administration and overcome medication challenges. The sculptural configurations (shapes, and sizes) of tablets may affect patient acceptability. However, while studies have been conducted on the acceptability of tablets on children and adults, focus has not been given to hypertensive patients. This study, therefore, set out to assess the effects of sculptural configuration of medicines on consumers' acceptability of antihypertensive tablets in Abia State, Southeast Nigeria. The study was a cross-sectional study among hypertensive patients between April to August 2021. A self-administered questionnaire was used to collect data on the preferences of shapes, and sizes of tablets. The data were analyzed with descriptive statistics using IBM SPSS version 23. The most preferred tablet configuration among the consumers was small-sized and round-shaped tablets. Capsules are also acceptable dosage forms for consumers of antihypertensive tablets. The sculptural configurational design for the antihypertensive tablet should encompass round-shaped small-sized tablets.

**Keywords:** Sculptural design, Hypertensive patients, cardiovascular diseases, Tablet dosage form, Drug acceptability.

---

**ANALGESIC ACTIVITY OF THE METHANOL LEAF EXTRACT OF VITEX DONIANA IN MICE**

Nwonu, P.C.¹, Nwonu, C.N.² and Olojeme, D.C.³

¹²Department of Pharmacology and Toxicology, Faculty of Pharmaceutical Sciences University of Nigeria, Nsukka, Enugu State, Nigeria ²Department of Pharmacology and Therapeutics, Faculty of Basic Clinical Sciences College of Health Sciences, Benue State University, P.M.B. 102343, Makurdi, Nigeria

Correspondence: Email: patience.nwonu@unn.edu.ng

The study investigated the analgesic activity of the methanol leaf extract of Vitex doniana in mice, using three animal models, namely the tail flick, acetic acid-induced writhes and the hot plate analgesimeter. The rationale for the study was to determine the potential of the plant extract for analgesia. Male and female mice (n=5) were used for the study, and were randomised into test and control groups, while the control groups were divided into positive control or standard and negative control or vehicle. Animals weighing 18 – 25 g were administered test doses of 100, 200, 400 mg/kg, p.o. of the extract. Standard drug, aspirin 100 mg/kg, i.p. and vehicle 5 % tween 80 (1 ml per 100 g), p.o. were administered to the animals. Scoring was done singly for each mouse in the tail flick, acetic acid-induced writhes and the hot plate models, with reaction time and cut-off point rigidly observed in the experimental subjects in order to avoid thermal injury. Findings showed that the methanol leaf extract of Vitex doniana has central and peripheral analgesic activities, as demonstrated in the hot plate analgesimeter and the acetic acid-induced writhes models. The results in these two behavioural paradigms significantly (p < 0.05) and dose dependently decreased abdominal writhes and increased reaction time to pain in the animals respectively. The study concluded that the methanol leaf extract of Vitex doniana possesses analgesic activity in mice.
FACTORS INFLUENCING EXCESSIVE JUNK FOOD CONSUMPTION AMONG UNDERGRADUATE STUDENTS OF THE FACULTY OF HEALTH SCIENCES AND TECHNOLOGY, UNIVERSITY OF NIGERIA, ENUGU CAMPUS

Pleasure Nwakego Ogbonna, Makuachi Chinwendu Irobi.
Department of Nursing Sciences, Faculty of Health Sciences and Technology, University of Nigeria, Enugu Campus
Corresponding author's email: pleasure.ogbonna@unn.edu.ng

The researcher aimed to identify the factors influencing excessive junk food consumption among students of the faculty of Health sciences and technology (FHST), University of Nigeria Enugu Campus (UNEC), and to determine their knowledge of junk food as well as their knowledge of health risks associated with excessive consumption of junk food. Design: A descriptive survey method was used for the study. A sample of 364 undergraduate students of FHST, UNEC was selected for the study using proportionate stratified random sampling technique. A questionnaire was used to collect data, and the analysis was done using descriptive statistics and the Chi-Square Test of Association. About 89% of the students had good knowledge of junk food, while 81.3% had good knowledge of health risks associated with it. There was significant association between the sex, level of study, marital status, and their knowledge of junk foods ($P = .038$, .000 and .002 respectively). The major perceived factors that influenced excessive consumption of junk food among students were: large academic workload ($3.5 \pm 0.8$); junk food being readily available without stress and saves time ($3.5 \pm 0.7$); junk food being easy to prepare ($3.3 \pm 0.8$); junk food being less expensive than home-made meals ($3.1 \pm 1.0$) and living close to fast food joints and restaurants ($3.1 \pm 0.8$). Conclusion: The study recommends that measures to minimize academic stress should be put in place in each department by school administrators such as appropriate course load, in order to lessen the constraints of time that influences excessive consumption of junk foods. Also campaigns against unhealthy eating habits should be carried out often on campus.

Key words: Knowledge, health risk, Junk Food, Consumption, Students

EDUCATIONAL STATUS OF CIVIL SERVANTS AS A CORRELATE OF EMOTIONAL HEALTH PROBLEMS IN THE SOCIETY: A CASE FOR ENVIRONMENTAL EDUCATION AND SUSTAINABILITY

Elufidipe-Olumide, Happiness A.1 & Dike Felix O (Ph.D)2,3
1Department of Human Kinetics and Health Education, University of Nigeria , Nsukka. happiness.olumide@unn.edu.ng
2Department of Social Science Education, University of Nigeria Nsukka.
3*Institute of Education, University of Nigeria Nsukka. felix.dike@unn.edu.ng

Issues about Emotional Health Problems (EHPs) and their consequential effects on society on the sustainable environment have been as old as man's civilization. A suspicion in many quarters is that a relatively well educated society or a sub sector in a society should be well informed to have (relatively) less issues concerning EHPs. While many believed this a rule of the thumb, some dismiss this assertion pointing that even many well educated people sometimes act irrational. Nonetheless, this debate had continued because there is no known empirical study that had established the relationship between Emotional Health Problems and the educational level of a society or a sub sector in the society. In this study, we investigate for the relationship between the educational level of a sub sector – the Civil Service workers in the society and prevalence of emotional health problem in their society. The design adopted for the study is cross-sectional Survey. 282 Civil Servants in Nsukka LGA of Enugu State constituted our sample. A standardized instrument (DAS) was employed to measure the EHP of the the civil servants as a correlate of their educational status. Findings show a weak positive relationship ($\rho=0.15$, $p$-value = 0.278) between educational status and DAS among civil servants. Therefore, the authors recommend quarterly workshops and seminars on emotional health education by public health educators to provide needed information to civil servants to minimize emotional health problems and their predictors in the society.
COVID-19 AND ACCESS TO SEXUAL AND REPRODUCTIVE HEALTH SERVICES: PERSPECTIVES FROM ADOLESCENTS AND WOMEN IN RURAL AREAS OF ENUGU STATE, NIGERIA.

Ugochukwu Simeon Asogwa
Department of Sociology & Anthropology
University of Nigeria, Nsukka
Correspondence Email: ugochukwu.asogwa@unn.edu.ng

The COVID-19 pandemic has changed human activities and relationships with effects on sexual and reproductive health (SRH). The pandemic exposed the unpreparedness of many nations' governments to respond to the longstanding health needs of the people. Adopting a qualitative research design, the study examines access to quality and affordable SRH in Enugu state during the COVID-19 pandemic as it is paramount to SRH wellbeing. Analysis of the results showed that SRH products were not easily accessible as the lockdowns orchestrated by the pandemic meant that markets were closed for a long time. Where available, adolescents and women were discouraged from procuring and accessing SRH services as appropriate due to artificially induced high prices of the products and the added feeling of nosocomophobia which kept people away from medical outfits. More effort is needed by government and non-governmental organizations to strengthen access to SRH products in Nigeria, especially in pandemic situations.

Keywords: Social workers' roles, response to pandemics, health security threats, strengthening health care systems, COVID-19 pandemic.

EVIDENCE OF SOCIAL WORKERS' ROLE IN STRENGTHENING HEALTH CARE SYSTEMS FOR COMPREHENSIVE RESPONSE TO HEALTH SECURITY THREATS IN NIGERIA: LESSONS FROM COVID-19 PANDEMIC

Patricia Uju Aghawodikeizu, Chukwuma Felix Ugwu, Christopher N. Ngwu
Department of Social Work, University of Nigeria, Nsukka
Corresponding Author Email: patricia.aghawodikeizu@unn.edu.ng

Aqueous leaves extract of Gongronema latifolium (Benth) downregulates the expression of IFN-γ, IL-10 and cell surface markers in rabbits

Adekunle Babajide Rowaiye*, Moses Njoku†, Angus Nnamdi Oli‡, Nwamaka Henrietta Igboke‡, Titilayo Asala†, Suliat Adebola Salami†, Ikemefuna Chijioke Uzochukwu‡, Charles Okechukwu Esimone‡

1Department of Medical Biotechnology, National Biotechnology Development Agency, Abuja, Nigeria
The pathophysiology of the inflammatory process reveals intricate signaling which includes the IL-1β, IL-6, and TNF-α pathways that could serve as drug targets. **Aim:** This study determined the effect of the aqueous extract of *Gongronema latifolium* (AEGL) leaves on the expression of IFNγ, IL-10, CD3, and CD56 in rabbits. **Materials and Methods:** ELISA tests were performed to determine the effect of the AEGL on the expression of a pro-inflammatory cytokine (IFN-γ), an anti-inflammatory cytokine (IL-10), and CD3 and CD56 cell surface markers in rabbits. Twenty cross-bred male rabbits with an average weight range of 1.0 - 1.5 kg were selected. The rabbits were separated into four groups of four rabbits, each treated as follows: Grp1 is the untreated control; Grp2 is the treated control; and Grp3, Grp4, and Grp5 were treated with 200, 400, and 600 mg/kg of AEGL respectively for 28 days. **Results:** The AEGL showed its greatest inhibitory effect in Group 4 on IL-10 (118.5 pg/ml), and IFNγ (332 pg/ml) on days 14 and 21 respectively. AEGL also showed the highest inhibition of CD3 expression on days 14 and 21 (0 pg/ml) in Group 3; and CD56 expression on day 21 (630.5 pg/ml) in Group 4. **Conclusion:** AEGL showed exhibited strong T cell mediated anti-inflammatory, and immunomodulatory activity in test rabbits within the 28-day period which can be confirmed by cell-based assays. Specifically, at 400 mg/kg, AEGL exhibited the greatest anti-inflammatory activity which is suggestive of its maximum effective dose. **Keywords:** Inflammation, Cell Surface Markers, Cytokines, Hepatic Toxicity, *Gongronema latifolium*
studies showed that SP2 had the strongest intensity while TR2 was the least. Therefore, Triacetin/NaF (TR1) and span 85/ NH,F (SP2) are potential candidates for the preparation of UCNPs suitable for bioimaging.

Keywords: Upconversion nanoparticles (UCNPs), Lanthanides, solvothermal, surfactants, fluorides, luminescence.

THE IMPACT OF THE COVID-19 PANDEMIC ON HUMAN SECURITY IN NIGERIA

Sharkdam Wapmuk
Department of Defence and Security Studies, Faculty of Arts and Social Sciences
Nigerian Defence Academy Kaduna
swapmuk@nda.edu.ng; sharksnaw@yahoo.com
08060282057

The paper examines the impacts of the COVID-19 pandemic on human security in Nigeria. The paper adopts a qualitative approach, with data sourced from secondary sources and analysed thematically. The coronavirus disease (hereafter, COVID-19) emerged in Wuhan, China in December 2019 and spread to other parts of the world. It marked a historic turning point in global affairs, causing major disruptions in many spheres of life including human security. Since then, Nigeria has been struggling with the uncertainty of recovery as new variants of the COVID-19 pandemic have emerged, notwithstanding the efforts at stemming the tide of the spread through diverse measures including vaccination. Human security is a broad and multidimensional concept that incorporates three freedoms, namely, freedom from fear, freedom from want and the freedom from indignity. The paper argues that the concept of 'human security' is one of the most important frameworks for understanding the complex and inter-related challenges the COVID-19 pandemic has generated across multiple dimensions associated with human security: health security, economic security, food security, environmental security, personal security, community security and political security. Findings reveal that the COVID-19 has reversed a number of Sustainable Development Goals (SDGs) gains as much uncertainty continue to surround pathways of recovery from the pandemic's wide-ranging effects in Nigeria as in other parts of the world. It concludes by stating that the idea of human security provides a more comprehensive understanding of the multidimensional challenges to human survival and well-being by focusing on people's needs.
INSECURITY, VOTER'S APATHY AND THE 2023 GENERAL ELECTIONS IN NIGERIA: OPEN DEBATE

Ifeanyi E. Iwundu*, Matthew Ikehkwu Eze† and Nkiru E. Iwundu‡

*Institute of African Studies
†Department of Library and Information Science
‡University of Nigeria, Nsukka
ifeanyi.iwundu@unn.edu.ng

Many years ago until now, frantic efforts are made, requesting Nigerian citizens to fully decide who would lead them. Democracy made it simple for citizens to make such a choice. However, citizens have not fully heeded to the calls due to many incredible factors, hence voter's apathy. The 2023 general elections may be under the same tension, this time due to insecurity situations in all parts of the country. This paper was set to gather the views of citizens on whether insecurity would lead to voter's apathy in the 2023 Nigerian general elections; and determine possible measures to avoid it. 500 hundred citizens were purposively selected from the five states of South East geopolitical zone as population. Focus group discussion and interview were the primary data collection methods used. The results were provided qualitatively. The study revealed that the citizens are aware of the need to make a choice and are ready to do so; they are also watching conscientiously for any incredible behaviour that would tantamount to violence.

Key Words: Insecurity, Voters Apathy, 2023 General Elections and Open Debate


1S. I. Okoro; 2C. M. Amaechi.
1Department of History & International Relations, Ebonyi State University, Abakaliki
2Department of History and International Studies, University of Nigeria, Nsukka.

The political process which is marked by the process of the acquisition of political power is necessarily preceded by political socialization. Basically, the later refers to the process through which citizens acquire, or are imbued with, the right political attitudes and values. The role of the political parties is quite indispensable in steering these processes towards the agreed national political goals cum interests. As people engage in these processes and adhere strictly to the rules, a political culture emerges and guarantees the general well-being and security of the political entity. Historically, Nigeria's match towards the institutionalization of a healthy democratic culture is traceable to the 1922 Clifford's Constitution and its appurtenants – mainly the electoral principle which gave vent to the formation of political parties and increased political awakening in the colony – and reached a disturbing crescendo during the 2015 general elections in the country. This paper intends to engage the Nigerian State in the pristine task of discovering the course and pattern of the political socialization that eventually gave rise to the political culture of apathy, violence and insecurity that is prevalent in Nigeria at present. A thematic, chronological and descriptive approach of the historical sciences is adopted, based on a theoretical construct of prebendalism and instrumentalism.

IMPROVED ELECTORAL SYSTEM AND GOOD GOVERNANCE IN NIGERIA DEMOCRACY: THE ROLE OF ELECTRONIC VOTING AS A POLICY OPTION

Nwachukwu, Stephen Tochukwu, Oluwole Israel Oluwasanmi, Obioji, Josephine Nneka Ph.D
Department of Public Administration Local Government
University of Nigeria, Nsukka, Enugu State, Nigeria.
tochukwu.nwachukwu@unn.edu.ng.

Nigeria has been deviled by politicians that are bent on serving their selfish interests at the detriment of societal welfare and good governance. Over the years politicians have taken advantage of the porous...
electoral system to manipulate the system and got into power, this, therefore, has accelerated corruption and mismanagement of public funds. The above assertion has triggered a clarion call on the need for improved electoral law towards electronic voting. The work tried to argue that the improved electoral system in Nigeria will have a positive impact on good governance through the use of an electronic voting system. This is predicated on the fact that the electoral system will restore the state sovereignty to the people thereby forcing every politician towards fulfilling the people's mandate against personal or Gods Fathers mandate. Anchoring Josef Stalin's anecdote model, this work compared the United State electoral system and that of Nigeria, the research questions include: Is there any significant relationship between the US electoral system and its economic growth and Nigeria's electoral system and its Economic growth? What are the impacts of Short and long-term socio-economic impacts of democratic choice on community development and individual development? How can electronic voting ensure good governance in Nigeria's democracy? What are the challenges of adopting electronic voting in Nigeria's democracy? A documentary type of research was used to carry out the study.

Keywords: electoral system, good governance, electronic voting, Nigeria.

SECURITY AND DEVELOPMENT CRISIS IN THE NIGERIAN STATE: THE WAY FORWARD

'Dare Isaac, Akindoyin and ,Chukwuebuka Akuche

'Department of Political Science and International Relations, Augustine University Ilara-Epe, Lagos, Nigeria, 'Department of Politics and International Relations, Lead City University, Ibadan

Email: dareakindoyin@augustineuniversity.com

This research paper ensue a different approach in explaining as well as understanding the motives behind the incessant security challenges confronting the Nigeria state. As a result of these security challenges, the Nigeria State is gradually slipping into the mantra of a failed state. This research paper exposes that, the prevailing security challenges confronting the state is a structural entrenched one which is deeply rooted in development crisis. This vacuum has led to the emergence of other societal maladies such as inequality, unemployment, poverty, marginalisation to mention a few. As a result of the forgone, these have led to alienation, distrust, social displeasure and frustration within the polity which often spark violence as well as insecurity. If only the Nigeria state had a functional system, the prevailing challenges could not transfigure into a national security problem which now seems to threaten the unity of the state. The findings of this research paper is that, the Nigeria state may seems to be failing and heading towards the mantra of a failed state, however, the situations are still redeemable if sustainable and proactive measures are urgently adopted by the central government. The implication of this is that the arms of government (executive, legislature and judiciary) must obey the clarion call by addressing this drift through justice, equity as well as development. It is safe to say that addressing insecurity challenges in Nigeria transcends to addressing the challenges of development.

Key words: Development, Unemployment, Security, Poverty, Marginalization, Inequality.

GOOD GOVERNANCE: ANTIDOTE FOR NATIONAL DEVELOPMENT AND SECURITY CHALLENGES IN NIGERIA

Isigwe Paulinus Obinna1 and Amaefule Athanasius Nwabueze2

1Department of Public Administration, Abia State Polytechnic, Aba, 2Department of Public Administration, Akanu Ibiam Federal Polytechnic, Unwana

Email: obinnapaulinus123@gmail.com

This paper examined the nexus between good governance and a Nigeria's development and security. The paper noted that the myriad of insecurity and underdevelopment challenges facing Nigeria are the consequences of bad governance the country has continued to experience overtime. It is the view of this paper that the absence of an ideal and functional
democracy and its accompanying principles account for the absence of good governance in the country. In essence, national development and national security will continue to elude Nigeria until democracy and not the kleptocracy we have now is fully entrenched in the country. As a way out, the paper recommended a pragmatic and realistic reform of the country's electoral system with the primary goal of enthroning good governance through democratic governance. Good governance is only possible when the leaders apart from being visionary and patriotic, are popularly elected, responsible and accountable to the people. The paper further recommended a stringent fight against corruption, improved funding of the education sector, reduction in the size of government, diversification of the economy and the convocation of a national sovereign conference.

Keywords: Good Governance, National Development, National Security, Democracy, Leadership.

PARTY DEFECTION AND FactionsALISM IN NIGERIA'S FOURTH REPUBLIC: An ANALYSIS OF CRITICAL TRIGGERS

Daniel Godwin
Department of Political Science, College of Arts and Social Sciences, Evangel University Ekaeze, Ebonyi State, Nigeria.
Email: danielharry700@gmail.com

This paper examined some critical triggers of party defection and factionalism in Nigeria's Fourth Republic. Party defection and factionalism are progressively becoming a character of Nigerian party politics which is also posing a threat to political security. A case study design was employed for the study with a special focus on three political parties: All Progressives Congress (APC), All Progressives Grand Alliance (APGA) and Peoples Democratic Party (PDP). However, references were made to other political parties. Key Informant Interviews were conducted with politicians, party leaders, academicians and heads of civil society organisations to elicit relevant information. They include the National Publicity Secretaries of the three parties, four National Directors from APC's Headquarters, and nine serving members of the National Assembly from the three parties – three APC, two APGA, and four PDP, out of which four were defectors. Others were Director Generals, one each from the Electoral Institute of Nigeria and Centre for Democracy and Development (CDD); one programme manager from CDD, one United Nations Development Programme consultant, and two researchers from the National Institute for Legislative Studies. Secondary data were sourced from the Nigerian constitution, party constitutions, party guidelines, researched articles and media reports. Data sourced were content analysed. The discussion of findings revolved around: the weakness of political institutions, the sordid role of the political class and the lack of internal party democracy. Civic political culture sustained reorientation of the political class and internal party democracy are needed to curb the menace of party defection and factionalism which will ultimately enhance political security.

CONSTRUCTING YOUTHS' DIFFERENT VOICE IN 2023 NIGERIA GENERAL ELECTION: A CRITICAL SOCIOLINGUISTIC APPROACH

David Wayas
Department of Linguistics
University of Nigeria
david.waya@unn.edu.ng

Since the 1990s, media commentators in Nigeria and elsewhere have praised youth involvement in mainstream politics introducing a visibly different style of politicking in Nigeria. One symbol of which is the alleged preference of young politicians and the campaign slogan of take back your country initiated by Nigerian youths in advancing their preference for character and competence for a more co-operative style of campaign. Drawing on an analysis of the 2023 Nigeria General Election campaign speeches, the paper argues that this notion of youth “different voice” has become increasingly central to the media's construction of prominent juvenile politicians as public figures, despite the evidence that it does not reflect any clear-cut pattern of differentiation between young and old political speakers of equivalent status and experience. Though it may seem to be an advance on previous negative representations of Nigerian youths, the paper suggests a long-established tendency...
of the media to evaluate young-people oriented norms and expectations while the old are being adjudged as favorable political participants over the years. However, the narrative is fast changing paving way for a new voice evident in the use of social media to advance their aspiration.

Keywords: campaign; youth; voice; politicians; election; sociolinguistics

NEGOTIATING HUMAN DEVELOPMENT AS AN ELEMENT OF NATIONAL POWER IN NIGERIA

Danga, Jamilu Yusuf
Department of History and War Studies
Nigerian defence academy, Kaduna
Email: fydanga@nda.edu.ng, 2348102693009

No nation is insulated from police brutality. This is a result of the enormous powers wielded by the law enforcement body. However, over the years, and with the transition from state-centric security to human security, the activities of the police have come under spirited public scrutiny. Although there are a plethora of studies on the police and human rights in Nigeria, the human security dimension, which is all-encompassing, is largely understudied. With a qualitative-dominant approach and securitization theory, this article investigates the extent of implementation of the two broad action strategies of human security: protection and empowerment, in Nigeria. The article finds that policing in Nigeria is fraught with cases of extortion, intimidation, extrajudicial killings, indiscriminate/illegal arrests, long pre-trial detention, disproportionate use of force against unarmed civilians, and compromised/biased policing. Hence, two years after the ENDSARS protests, police brutality has remained unabated. The article is of the view that a reorientation from the cradle to the top echelon of police institutions in Nigeria will imbue human security psychology. The article concludes that mainstreaming the three freedoms encapsulated in human security in all levers of policing would moderate the negative perception of the police, and in turn, mobilize public solidarity, which is a sine qua non for effective policing.

Keywords: Human security, Police brutality, ENDSARS protests, People-centered policing, Human rights violations.
GAGGING THE MEDIA: IMPLICATIONS FOR POLITICAL SECURITY IN NIGERIA

Nwokedi, Michael E. *, Nwokedi, Ozioma P. and Aroh, Aniemeka A.

Department of Political Science, University of Nigeria Nsukka
Department of Mass Communication, University of Nigeria Nsukka.

*Correspondence Email: ozioma.nwokedi@unn.edu.ng

Gagging the media is a common practice among Autocratic and despotic regimes. This practice is more prevalent in developing countries like Nigeria. In these countries, media suppression is normally used as a tool to reduce or avoid opposition to government programmes and policies. In Nigeria, different regimes both military and civilian administrations have employed this to intimidate and harass dissenting voices through limited or outright restriction of press freedom or censorship of news items and denial of access to information. Political security hinges on the prevention of government repression, systematic violation of human rights and threats from militarization, while political stability ensures the stability of the government and gives legitimacy to both government and the state. The major task of this paper is to interrogate the implication of gagging the media and how it poses threat to political security, stability of governance and sovereignty of the Nigerian state. Relying on the social responsibility theory of mass communication which postulates that the press should be allowed to operate without censorship, but also be subjected to some level of external control to maintain balance, this paper concludes that there is a direct linkage between the free press and political security and so gagging the press in Nigeria and inhibiting them from performing their constitutional roles will impinge on political security. This study employed the secondary source of data generation and content analytical tool.

**Keywords:** Gagging, Political Security, Mass Media, state, Governance

GLOBALIZATION, SECURITY CHALLENGES AND THE DYNAMICS OF STRUGGLE FOR STATE POWER IN AFRICA: IMPLICATIONS FOR SOCIAL WORK

Nkemdilim Patricia Anazonwu
Department of Social Work, University of Nigeria, Nsukka
nkemdilim.anazonwu@unn.edu.ng

The disintegration of the security arrangement of African states has produced serious discussions about the concept of globalization and national security which underlies relations of power in Africa. The widespread insecurity is swelled not only by the process of globalization but also by weakened state institutions and economies found in a definite economic relation between foreign capital and local bourgeoisie in the process of exploiting economic resources in Africa. Since all aspect of globalization is closely interconnected, in motion and related to economic resources and power, analysis of globalization and security challenges makes it necessary to consider the struggle for state power and the proliferation of small arms and light weapons imperative. The two make national security and development difficult. This paper aims to explain how the great struggle for state power by contending ethnic groups breeds conflict and instability through the sale of small arms and light weapons made easily available under the rubric of globalization. Documentaries were used for data collection and content analysis for analysis. The paper concluded that Africa must raise a prosperous leadership that is self-disciplined and self-sacrificing and develop its science and technology for rapid economic development that ensures the security of life and property, the type that brought the industrial revolution to Europe, Malaysia, Singapore, and Japan. There is a need for an interface between social workers, government and its agencies to promote innovation, collaboration, and expansion of proven, evidence-based programs to create meaningful and measurable progress on preventing solving security problems in Africa.

**Keywords:** Globalization, Security, State power, Small arms and Light weapons, Social work
VIOLATION OF FEDERAL CHARACTER PRINCIPLE AND UPSURGE OF INSECURITY IN NIGERIA, 2016 –2021

Ugonma Joy Kalu Ugbor 1, *Ugo Charity Kalu 2 & Osuigwe Nancy Chiamaka 2
1 Department of Political Science, University of Nigeria, Nsukka
E-mail: ugonma.ugbor@unn.edu.ng
2 Social Science Unit, School of General Studies, University of Nigeria, Nsukka
*Corresponding Author: ugo.kalu@unn.edu.ng

The challenges of secessionist agitation pose a threat to the national integration process since Nigeria's independence in 1960 till date. This study explored the violation of the federal character principle under Buhari's All Progressives Congress (APC) led administration and the increase in security outfits in the country. The objective of the study was to ascertain if the inability of the Buhari regime to tackle the insecurity crisis accounts for the proliferation of local security outfits in the southern region of Nigeria. The relative deprivation theory was adopted. We relied solely on the documentary method of data collection; the ex-post facto research design was applied to provide plausible answers to the research question raised. The findings reveal that the violation of Federal Character Principles by the APC-led administration accounts for the upsurge of a separate state by the ethnic groups in Nigeria between 2016 – 2021; and that the inability of Buhari's regime to tackle the insecurity crisis accounts for the proliferation of local security outfit in the southern region of Nigeria, in the quest to stop kidnapping, raping and cattle rusting among others between 2016-2021. The study recommended, that inter-alia, the Buhari-led administration should as a matter of urgency brace up the fight against insecurity that is currently ravaging the entire state.

Keywords: Democratization, gender participation, general election, violence, political structures

THE POLITICAL ELITE AND THE NIGERIA'S INSECURITY CRISIS SINCE 1999

Emmanuel T. Eyeh
Department of History & International Studies
University of Nigeria, Nsukka
emmanuel.eyeh@unn.edu.ng

After some 16 years of military dictatorship, punctured by a three-month quasi-civilian interregnum, Nigeria returned to civilian government in 1999. From this date, the country has lurched from one violent conflict to another, ultimately plunging the nation into unprecedented insecurity crises. Some of these conflicts include the Boko Haram insurgency, herders-farmers clashes, armed banditry, unknown gunmen attacks, kidnapping for ransom, and separatist agitations among several others. These have heightened levels of insecurity in the country and no portion of the country is spared. The spread of these conflicts, their frequency, intensity, and resultant fatalities seem to have overwhelmed the country's security system as none of the six geo-political zones has been spared. In light of the above, the role of the political elite which was charged with the responsibility of running the affairs of the country calls for close scrutiny. This paper seeks to investigate and interrogate the roles of the Nigerian political elite in the inception and escalations of insecurity in Nigeria since 1999. It shall also demonstrate how the actions and inactions of the government have served to escalate and in some cases instigate these conflicts. It shall conclude by proffering possible solutions to the crises. Research of this currency draws its sources majorly from reliable secondary sources such as news reports, journal articles, local and international agency report among others.

INSECURITY CHALLENGES: BANE TO NATIONAL DEVELOPMENT: THE NIGERIA EXPERIENCE

Abalogu, Divine Maduka; Ekenedilichukwu A. Okolo
Department of Religion and Human Relations, Nnamdi Azikiwe University, Awka. Anambra State
Corresponding author's email: dm.abalogu@unizik.edu.ng.

Presently, the Nigeria society is suffocating from series
of societal challenges of which insecurity is obviously inclusive and occupies a prime spot in the nation's structural process. The heightened rate of insecurity challenges in the history of the country is considerably alarming, with myriad effects visible in all ramifications and dimensions of the society. The Nigeria nation is grappling with the endemic realities of underdevelopment which is intricately linked to the issues of insecurity in the country. Urban and infrastructural development is among the Sustainable Development Goals (SDGs) adopted by the United Nations Member States with an actualization target in the year 2030. Despite the concerted effort in achieving this goal, insecurity has continued to pose a big threat by frustrating all the available avenues employed for the development of the country. Developmental blueprint employed by the government seems to be unattainable due to the indices of insecurity challenges evident in terrorism, kidnapping, arm robbery, banditry, vandalism and massive destruction of lives and properties which have subjected the populace to live in abject fear, tension and apprehension. Against this backdrop, it will be worthwhile to posit that for development to be achieved in Nigeria, the trend of insecurity must be arrested. This study adopts the sociological method of research and will be framed with relative deprivation theory. The paper therefore observes that insecurity challenges are rife in Nigeria which is the rationales for underdevelopment of the country. It further observes that the reason behind insecurity challenges is based on agitations and unsatisfactory ends among the ethnicities in Nigeria. It finally observes that if the challenges of insecurity are tackled, the development of the country will take an unprecedented acceleration. The paper concludes that Nigeria government should be alive and active in her war against insecurity in Nigeria which will give way to national development. The study therefore recommends that the government and all well-meaning Nigerians should take the insecurity situation of the country seriously. Also, the government should create a forum for dialogue among the aggrieved ethnic groups for the resolution of protest and agitations. Finally, Nigerians should endeavor to build legacies of peace for an environment devoid of hostility, tension, apprehension and fear towards achieving the sustainable development goals.

**Keywords:** Insecurity, Challenges, Bane, National Development, Nigeria, Experience

---

**RURAL BANDITRY AND HUMAN SECURITY IN KANO SOUTH SENATORIAL DISTRICT**

Auwalu Abdullahi¹, Daiyabu Muhammad Hassan PhD²

¹Department of Social Sciences, Rabiu Musa Kwankwaso College of Advanced and Remedial Studies, Tudun Wada Dankadai, Kano State.
²Department of Political Science and International Studies

Ahmadu Bello University, Zaria

In the most recent years, the activities of rural banditry constitute one of the major security issues that have become so prevalent that didn't only threaten state security in Nigeria but constitute serious concerns to human security in the country. Thus, there is a need for a proper understanding of the causes of this rural banditry and how it poses threats to human security, and the ways of resolving it to ensure human security and peaceful coexistence hence, it has the potential of truncating economic growth, development and mutual trust among diverse groups in the country. Despite different policies and strategies adopted at various levels of government towards addressing the violent activities of these rural bandits, the phenomenon is everyday exacerbating with excruciating consequences. In light of this, the paper intends to understand why rural banditry and how it poses threats to human security particularly in the study area. The study adopted descriptive and historical methods while data were generated from documentary sources which were analyzed qualitatively. The paper adopted the collective security framework as its theoretical construct for its analysis since it's understood that, rural banditry is everyday degenerating and posing more serious threats to human security hence, the task of achieving peace, security, and human security is of eminent importance. As a result, the paper concludes and recommends that to resolve the menace of rural banditry and enhance human security of people, there is a need for collective efforts to ensure good governance, and synergy between governments, civil societies, groups, and individuals in policy formulations and implementations especially those related to land, community relations and security issues.

**Keywords:** Rural Banditry, Human Security, Collective Security
COUNTERING RURAL ARMED BANDITS: 'YANBULA MILITIA AS COMMUNITY RESILIENCE TO SOCIAL ORDER

Auwalu Abdullahi¹, Daiyabu Muhammad Hassan PhD²

¹Department of Social Sciences, Rabiu Musa Kwankwaso College of Advanced and Remedial Studies, Tudun Wada Dankadai, Kano State.
²Department of Political Science and International Studies
²Ahmadu Bello University, Zaria

In much of the academic literature on contemporary militia groups in Nigeria, much of the emphasis is placed on their negative and destructive anti-government and anti-community characters as demonstrated in their violent criminal acts and behaviours. This is, by contrast, a negation and setback to militias as an agent of local and community resilience and liberation that aspires for the common good of all: good governance, positive transformation and ensuring peaceful co-existence among individuals and groups at the grassroots level. In the light of role theory as its theoretical framework, the paper examines various reasons why the prevalent of rural armed banditry and the subsequent formation of 'YanBula to counter the menace of rural armed bandits. This is despite the fact that most of the members of 'YanBula were initially engaged in this rural armed banditry that is now became organized, coordinated, regulated and directed their behaviour and activities against rural armed bandits for the common peace, security and prosperity of their various communities. Based on this background, the paper intends to understand the logic of forming 'Yan Bula militias and how they seek to counter the activities of rural armed banditry and other atrocities that are perpetrated in the area. The study adopted descriptive and explanatory methods while data were generated from primary sources that were analyzed qualitatively. The paper concluded that, although 'Yan Bula were unable to completely prevent the violent activities of rural armed banditry in the study area, they were able to deter their widespread and as such, they were not such kind of predatory militias known in most parts of Nigeria

Keywords: Rural armed banditry, 'yan bula militia, social order.
Evidence abounds, in the last three decades, on the impact of climate change on human and natural systems. One of such impacts is drought which cause natural resource scarcity, hence migration and agro-conflict issues in Nigeria. This paper examines the effectiveness of the legal regime for climate change in maintaining internal security in Nigeria and the apparent failure of environmental governance. The method adopted is the doctrinal approach which is based on both primary and secondary sources of data collection. The primary source includes statutes while the secondary sources include text books, journal articles, internet materials and lecture notes. Findings reveal that although climate change does not fit into the mode of traditional threats to national security, such as war, terrorism and insurgency, its non-violent and gradual manifestation tend to disguise its impact on the civic, political and socio-economic lives of the citizenry. Although, the Nigerian State appears to have a robust climate change regime, but the problem boils down to enforcement of the regimes and the neglect of its impact on national security. We posit that solutions to the rising insecurity in Nigeria cannot be attained through force alone without regard to wholesome environmental governance and strict implementation of climate change regulations. We conclude with a recommendation that legal and programmatic interventions in tackling climate change in Nigeria should aim at ensuring sustainable internal security.

**Keywords:** Global warming, sustainable development, Conflict, Environment, Regulation

---

Many countries around the world are planning to reach 100% renewable energy use by 2050. In this context and due to the recent sharp increase in RE utilization in the global energy mix along with its progressive impact on the world energy sector, the evaluation and investigation of its effect on achieving sustainable development goals are not covered sufficiently. Currently, renewable energy development is emphasized for sustainable development goals accomplishment and the better realization of sustainable development globally. Nigeria, like other developing countries, is striving to adopt different ways of ensuring affordable and accessible energy supply to its socioeconomic and political sectors to achieve renewable energy development. To secure affordable and accessible energy in the country, renewable energy is termed as an alternative energy source because it is environmentally friendly. If renewable energy is produced and utilized in a modern and sustainable manner, it will help to eliminate energy problems in Nigeria. Thus, this study aims to review the current potential renewable energy for the achievement of sustainable development in Nigeria. Moreover, the challenges of renewable energy development are examined.

---

**CLIMATOLOGY OF IONOSPHERIC PEAK PARAMETERS AT EQUATORIAL AFRICA USING COSMIC-2 MEASUREMENTS**

Obiageli J. Ugonabo¹, Chukwuemeka A. Osueke², Tafon W. Sivla³

¹²³University of Nigeria Nsukka.

Corresponding author: Osueke Chukwuemeka. A (Email: emekaosueke92@gmail.com)

Phone number: +2348135752624

Satellite based radio occultation (RO) measurements are providing new solutions for ionospheric data acquisition, especially for places such as the African equatorial region where there is paucity of ground-based instruments like ionosondes and incoherent scatter radars. The first climatology of ionospheric peak parameters in equatorial Africa using RO
measurements from the recently launched COSMIC-2 (Constellation Observing System for Meteorology, Ionosphere, and Climate - 2) mission is presented. Data obtained over Abuja (8.99°N, 7.38°E) and Ilorin (8.50°N, 4.50°E) from October 2019 to December 2020 is used. The results show that diurnal profiles of NmF2 and hmF2 have troughs at around 04:00 to 05:00 UT, and crests at around 10:00 to 18:00 UT. The NmF2 values are usually less than $2 \times 10^5$ cm$^{-3}$ during the early morning hours before sunrise, and they can reach $6-10 \times 10^5$ cm$^{-3}$ after sunrise, depending on season. The values are greater during the equinoxes (March and September) than during the solstices (June and December). The IRI-2016 model clearly overestimates the COSMIC-2 NmF2 measurements, especially during the decline phases of the diurnal profiles when the differences can get up to 60%. The percentage RMSD (root-mean-squared deviation) is smallest during the March equinox season (~29%), closely followed by values during the solstice seasons (~30%). The greatest disparities are observed during the September equinox, when the RMSD reaches $1.7 \times 10^3$ electrons/cm$^3$ and the percentage RMSD reaches ~35%.

**Keywords:** Ionosphere; Electron density; COSMIC-2; NmF2; hmF2; International Reference Ionosphere Model.

---

**ASSESSMENT OF ENVIRONMENTAL HEALTH IMPLICATIONS OF INFORMAL SOLID WASTE RECYCLING ACTIVITIES IN MINNA, NIGER STATE**

Alkali H.I and Dukiya J. J
Department of Urban and Regional Planning
Federal University of Technology, Minna
Email: alkalihajaraidris@gmail.com
Phone number: 08160681218

This study on assessment of environmental health implications of informal solid waste recycling activities Minna seeks to assess the impact informal recycling Centre has on the soil, heavy metal chemical concentration at the vicinity of those Centres. This was carried out through laboratory test of soil samples of five (5) major Centre, using the atomic absorption spectroscopy (AAS) test method, the result of the soil analysis was compared to that of the Nigeria's National Environmental Standards and Regulations Enforcement Agency (NESREA) and the World Health Organization (WHO) standard. The result of some of the locations are Pb= 9.24 mg/kg, Cd= 15.30 mg/kg, Cu= 33.34 mg/kg and Zn= 72.48 mg/kg which exceeded the NESREA permissible limit of 28 and

---

**GEO-VISUALIZATION OF WOODY PLANT SPECIES DIVERSITY IN ABIA STATE, SOUTHEASTERN NIGERIA**

Chukwuemeka A. Onyekwelu¹, Godson C. Asuoha¹ and Uchenna P. Okafor*²
Department of Geography, Faculty of the Social Sciences, UNN
*Corresponding Author: Uchenna P. Okafor (uchenna.okafor@unn.edu.ng)

Plant species diversity is the basis of the life support system on which all life depends. The study adopted a survey design that included both primary and secondary data to spatially investigate the woody plant species and its diversity in Abia State, Southeastern, Nigeria. A three-zone vegetation map was generated for the study area based on the spatial resolution of the acquired satellite imagery. Landsat 8 satellite imagery spanning thirty years (1988-2018) was used to determine the rate of vegetation loss. Landsat 8 TM image of Abia State spanning thirty-one years from 1988 to 2018 was obtained to determine the rate of vegetation loss. Normalized Difference Vegetation Index (NDVI) was applied in determining the characteristics of the spectral signatures that produce land cover changes over the study scenes in Abia State. Arc GIS 10.6 software was used in digitizing the area and the images were imported into the Erdas Imagine 9.2 environment and rectified to a common projection, Universal Traverse Mercator (UTM). The study revealed that vegetation changes from 1988 to 2018 had adversely affected the woody plant species existence and diversity. Recommendations were made on measures to encourage and sustain woody plant species conservation in the study area.

**Key Words:** Geo-visualization, Geo-referencing, woody plants species, Vegetation Distribution, Diversity.

---

28
WHO permissible limit of (Pb 0.01-1.0/kg, Cd 1.3/kg Cu 36/kg, Zn 50/kg). It therefore, means that the primitive techniques employed by the informal recycler's releases harmful substances into the environment which also has direct impact on human health. The study therefore recommended the training of all the recycler and public enlightenment on the health hazard inherent at unofficial recycling Centers.

**Keywords:** Heavy metal, Informal sector, Livelihood, Soil pollution, Waste recycling.

### SOLID WASTE GENERATION AND MANAGEMENT IN HIGHER INSTITUTIONS IN NIGERIA

Okafor, Chidinma A. & Nzegbule, E.
Department of Environmental Management and Toxicology
Michael Okpara University of Agriculture, Umudike.
*chidiokafor72@gmail.com*

Waste management is vital to environmental sustainability and sustainable development efforts, which are key goals of the SDGs. This study investigates waste generation and management practices among students in higher institutions of learning in Nigeria, particularly at Alvan Ikoku Federal College of Education, Owerri. Adopting a descriptive cross-sectional design, 480 students of the College were selected by multi-stage sampling technique. Data were collected using interviews, observation and questionnaires. Descriptive and inferential statistics were used to address the research questions raised to guide the investigation. The findings revealed that the composition of solid waste generated and disposed of in the study area were predominantly food items, bottles/cans and plastics, paper/cartons, nylon of sachet water, and sanitary pads. These items were mostly found around the hostels. The study area's predominant solid waste management strategies are open dumping and burning. Further findings show that waste management strategies adopted in the study area do not conform to sustainable waste management strategies, which result in environmental degradation and health risks. The study suggests that the College Community should adhere to the reduce, reuse and recycle (3Rs) approach. A sustainable development model within the College environment and in the society at large that will be responsive to environmental sustainability is herein proposed.

**Keywords:** Waste, Generation, Management, Sustainability, 3Rs (reduce, reuse, recycle).

### ECONOMIC ANALYSIS AND ENVIRONMENTAL IMPACT WITH HYBRID CONTROLLED ENERGY SYSTEM: CASE STUDY OF UNN

Izuchukwu T. Ozue1*, Victor Idigo1, Uzoejinwa B. Bernard1

1 Department of Electronic Engineering, University of Nigeria
2 Department Electronic and Computer Engineering, Nnamdi Azikiwe University
3 Department of Agricultural and Bioresources Engineering, University of Nigeria

Correspondence: izuchukwu.ozue@unn.edu.ng;
ve. idigo@unizik.edu.ng;
benjamin.uzoejinwa@unn.edu.ng

Fast depleting fossil fuels and the growing awareness for environmental protection have led to energy crisis and corresponding economic implications. Hence, efforts are being made by researchers to investigate new ways to extract and manage energy from renewable sources. 'Microgrids' with Distributed Generators (DG) are being implemented with renewable energy systems and University of Nigeria Nsukka (UNN) is considered as a case study in understanding the eco-environmental impact. Hybridized energy system method did improve the cost of investment of a microgrid by enabling economic and reliable utilization of the resources. This paper strives to bring to light the concept of Hybrid Controlled Energy Systems (HCES) and its application in microgrids to integrate renewable energies for eco-environmental benefit. With an extensive literature survey on HCES, a framework was developed to achieve the objectives of the study.

**Keywords:** Hybrid, Microgrid, economic, environment.
OIL ACTIVISM AND ENVIRONMENTAL SECURITY IN NIGER DELTA, NIGERIA

Collins Chikwado Ezugworie¹, Victor Arinze Nwawube¹ and Chukwuemeka Quentin Chukwu²

¹Department of Political Science, University of Nigeria, Nsukka
²Social Science Unit, School of General Science, University of Nigeria, Nsukka

Correspondence Email: arinze.nwawube@unn.edu.ng

Social and environmental problems such as oil pipeline vandalism, robbery, piracy, oil spillage, air pollution, and destruction of farmland persist in the Niger Delta region of Nigeria. Contestations on the legalities of resource control and internal squabbles over resource allocation formulas and derivation principles have been compounded by incessant disruptions of crude oil pipelines, causing a drastic reduction in the country's petroleum output and revenue derived from the global economy. Thus, this study is an attempt to investigate if oil activism undermines environmental security in the Niger Delta region of Nigeria. The study employed the documentary method of data collection and the qualitative descriptive method of data analysis otherwise known as content analysis while the Eco-violence theory formed the theoretical framework. The study concluded that oil pipeline vandalism by activists and the continued struggle for the control of oil undermines the struggle for hydrocarbon pollution restoration projects and the commitment to the maintenance of the environment by oil companies. Consequently, the study recommended that the federal government should commit its obligations under the Strategic Implementation Work Plan, established in 2017 in response to militant agitations in the region, as well as the Action Plan enacted by the Ministry of Niger Delta.

Keywords: Resource control, activism, environmental security, oil, pipeline vandalism.

Ugochukwu Ogechi Iwuji
General Studies Unit, University of Agriculture and Environmental Sciences
Email: ugoiwuji@gmail.com, Tel: 08068781712

This paper critically examines the centrality of nature and environmental security in the poetry of Philip Onuoha. It deploys the theoretical framework of Ecocriticism to appraise the selected poems from Onuoha's Song for my Mother. The literary theory of Ecocriticism which was foretold through a seminal article by William Rueckert in 1978 was given breath at the latter part of the 20th century by Cheryl Glotfelty. Since then studies in nature and environmental issues have developed in geometric dimensions. Critics foresee an unimaginably large harvest of literary productions on nature and environment due to the daily vitiation of nature and its consequences to the human world. From time immemorial, literature has always served as a credible pendulum that gauges the activities of man. This paper, therefore, adds to knowledge forms because it underpins the seriousness of nature in the survival of mankind. Its uniqueness derives from the fact that the poems examined are Children's works. The age of childhood is an age of innocence hence it veritably serves as a fertile period for the indoctrination of nature ideals. The methodology deployed in the study is qualitative as relevant symbols and images in the verses are romanticized in the light of their natural aesthetics. The aim principally is for child readers of the works to be taken in by nature and its verities. The psychological effect of this inspires them to grow up to become conscious of the ideals of nature and the environmental security it guarantees. The study thus takes a refreshing approach in the areas of nature and environmental security by examining the representation of nature in selected Children's poems. It further opens vistas into the centrality of literature in the global fight against environmental security.

Keywords: nature, environmental security, poetry, ecocriticism, literature

NATURE AND ENVIRONMENTAL SECURITY IN PHILIP ONUOHA'S SONG FOR MY MOTHER

IMPROPER SOLID WASTE MANAGEMENT PRACTICES: A SIGNIFICANT BARRIER TOWARDS ACHIEVING SUSTAINABLE DEVELOPMENT
Environmental pollution caused by municipal solid waste is mostly as a result of human anthropogenic activities, including the quest to adopt contemporary technologies, urbanization, industrialization, with a corresponding inefficient waste management strategy (Rajaganapathy, et al. 2011). Solid waste management is the supervised handling of solid waste materials from generation, separation, storage collection, transportation, treatment to its proper disposal (Zhang et al., 2010). Communal solid waste storage points in several cities of developing countries serve as a breeding ground for mosquitoes as well as rodents, in addition, scattering of waste by wind, scavenging by birds, animals and humans (waste pickers) create aesthetic nuisance (Abah and Ohimain, 2010). Malicious odour emanating due to the degradation of the solid waste in such containers has nuisance effects and decrease the economic and social value of such locality. In addition to hydrogen sulphide gas which is responsible for the foul odour, huge piles of solid waste also emit methane and carbon (iv) oxide, which are two of the leading greenhouse gases. All of these are barriers towards achieving sustainable development. The objective of the study is to assess the negative effects of communal solid waste points on ambient air quality and ultimately; sustainable development. This it will attempt to achieve through the review of numerous relevant literatures.

**Keywords:** environmental pollution, solid waste management, ambient air quality, sustainable development

---

**THE IMPACT OF CLIMATE CHANGE ON SECURITY IN NORTH EAST NIGERIA**

Becky Ade Aliegba, Amehojo Daniel and Mary Oyine Inalegwu Department of Public Administration Nasarawa State University Keffi

Email: beckyaliegba@nsuk.edu.ng

Phone: 0803540581

Climate change has become an everyday reality with the increasing intensity and frequency of floods, droughts, earthquakes, and extreme weather disasters. This paper assesses the impact of climate change on security in north east Nigeria. The main objective is to examine the relationship between climate change and security in North East Nigeria. Thus the paper interrogates the question, to what extent does climate change impact on agriculture and security in the Northeast? Documentary method of data collection was adopted where exiting relevant data on climate change and security around the world and Northeast Nigeria in particular were reviewed. Empirical review was also conducted to identify the gaps which this study tried to fill. It was realized that, researches in climate change focuses more on scarcity of natural resources and the mismanagement of available resources as the major causes of civil unrest in Nigeria without looking at what causes the scarcity of these resources. The study found out that, Nigeria as country suffers unpredictable weather conditions that affect agricultural activities in several negative ways, thus leading to loss of arable land and crops. This ultimately leads to loss of livelihood and hence poverty. It also creates total despondency and frustration among the agricultural population, mostly made up of youths who are made redundant. Consequently, most of the youths migrate to the urban centres in search of jobs. These migrant youths lack formal education and skills vital for survival in the urban areas and become vulnerable to various criminal activities. The study therefore recommends for increase in budgetary allocations in order to address climatic change disasters as well as the development of land preservation techniques.

**Key Words:** Climate change, Security, National security, subsistence, Agriculture

---

**WOMEN AND THE ENVIRONMENT: A CRITICAL ANALYSIS OF EGBA-ALA FESTIVAL OF THE EARTH GODDESS AMONG THE IGBO PEOPLE OF NIGERIA**

Chinasa Abonyi

English and Literary Studies

University of Nigeria, Nsukka, Nigeria

Email: chinasa.abonyi@unn.edu.ng

Climate and environmental insecurity is a global phenomenon that affects all life especially women and
children. One major cause of climate and ecological insecurity is environmental degradation which comes as a result of incessant land use and environmental negligence. Igbo communities in Nigeria are presently facing lots of ecological challenges from oil pollution to soil depletion that displace inhabitants and leave the land useless for agricultural activities. Yet, indigenous festivals that celebrate and empower women for environmental sustainability are fast diminishing. This study is an ecofeminist analysis of Egba-ala festival of the earth goddess and the institutionalization of women council as indigenous tradition of ecological sustainability in Nsukka Igbo, Nigeria. From Greta Gaard's integral ecofeminist theory, the paper engages eco-poetry, oral narrative and ritual performances of Egba-ala festival in selected communities of Nsukka Igbo using ethnography and participant observation methods. However, ecological insecurity can be tackled through some indigenous festival and knowledge of the environment that foregrounds epistemic decolonization.

RESERVED/SACRED LAND SPACES IN TRADITIONAL IGBOLAND: A TOOL FOR ENVIRONMENTAL PROTECTION AND A HAZARD FOR HUMAN HEALTH

Abah, George Ohabuenyi (Ph.D)
Department of Philosophy, University of Nigeria, Nsukka
Email: george.abah@unn.edu.ng

Onah, Sebastian Okochukwu (Ph.D)
Department of Sociology & Anthropology, University of Nigeria, Nsukka
E-mail: sebastian.onah@unn.edu.ng

This work intends to show that some reserved/sacred land spaces in parts of Igboland are guarded by traditional and religious principles/practices that support sustainable environmental protection on one hand, and endanger human living on the other. One of these practices inter alia is: limited access to the reserved/sacred land spaces for religious reasons. Social development within the modernization paradigm portends a confrontation to natural habitats given the violent movements from biosphere to Technosphere in human developmental exploits. Nevertheless, development faces a resistance before reserved areas in Igboland because the principles that guard these reserved areas forbid deforestation. The dilemma here is that although the guarding powers of these religious principles resist deforestation and sustain green vegetation of the reserved areas, they also generate dangers to human health. Therefore, the task of emancipating these reserved areas from their unhealthy evolutions is the problem that this work aims to address. The study will explore how the religio-cultural principles that guarded reserved/sacred land spaces in traditional Igboland can be isolated, theorized and integrated into the modern bioethical frameworks that improve human lives and environmental protection. To achieve this goal, the research will explore the philosophical nature and foundations of traditional Igbo thoughts and practices regarding “sacred lands” and develop concepts on how these foundations can be reconceptualized to promote healthy and sustainable interactions between human beings and the environment.

ADOPTING TRADITIONAL IGBO MORAL CODE FOR THE CONTROL OF ENVIRONMENTAL CRIME IN NIGERIA

'Okwor, Christopher Okonkwo, Okoli, Anuli Blessing and Eze, Ekenedirichukwu
Department of religion and cultural studies, UNN
'Corresponding author: christopher.okwor@unn.edu.ng

Igbo tradition is replete with moral sanctions which protected the environment from harmful anthropogenic activities in the past. Yet earlier studies focused more on Igbo moral sanctions as instrument of controlling/maintaining social order at the expense of its ecological significance which impinge on human-earth relationships. Therefore, this study examined various Igbo moral sanctions relevant in controlling environmental crimes in Nigeria. Interpretive retrieval method was used in analyzing data generated from secondary sources. The study reveals that the moral principles, ethical sanctions and prohibitions, existence of body of taboos, customs, laws, myths and rituals underpins human-earth relationships and helped the environment to flourish. In all, the figure of the earth deity against whom all moral breaches are
directed looms large in controlling environmental crime. Long before the current crisis in the environment, the moral sanctions which the Igbo applied in their relationship with nature contributed significantly to sustainable environment. The study therefore suggests that recovery and application of Igbo moral sanctions will checkmate environmental crimes in Nigeria.

**Keywords:** traditional, Igbo moral code, moral sanctions, Igbo tradition, environmental crime.

---

**RUSSIAN-UKRAINE WAR: IMPLICATIONS FOR NET-ZERO EMISSION**

Paul C. Ezinna, Emma Nwanmuoh & Ijeoma, U. Camenus

1. Institute Maritime Studies, University of Nigeria, Enugu Campus
2. Institute Maritime Studies, University of Nigeria, Enugu Campus
3. Centre for Distance Learning & e-Learning, University of Nigeria, Nsukka

Correspondence: paul.ezinna@unn.edu.ng

The ongoing climate change impact – heat waves, drought, flooding and deaths are due to overheating of the global temperature caused by carbon dioxide emission from fossil fuels. Global energy-related carbon dioxide emissions increased by 6% in 2021, totaling 36.3 billion tonnes, pumped into the atmosphere and the highest ever. Carbon dioxide among other Green House Gases (GHG) is the dominant gas responsible for global warming and damaging impact of climate change. The global community under different fora such as, Paris Agreement set to limit global warming by 1.5°C, thereby reducing global carbon emission by 45% by 2030. By 2050 the global community is also expected to achieve global carbon emission balance between carbon dioxide emitted into the air and the one removed at next to zero or zero balance. Achieving this lofty climate objective is determined by the commitment and cooperation of various national governments. Against this backdrop, this study is an attempt to examine Russian invasion of Ukraine, associated energy crisis, the triggered fancy for fossil fuels and the implications for net-zero emission target. The study is based on Documentary Method and Hedge Principle as a framework of interpretation. Records reveal that countries are failing to live up to their commitments to combat climate change and if there is no change in the trajectories the earth by 2100, will warm between 2.1 to 2.9 degrees Celsius, compared to preindustrial levels.

**Key words:** Russia, Ukraine, War, Fossil fuels, Net-zero emission

---

**ACCESS TO FUELWOOD ENERGY IN THE FACE OF CLIMATE CHANGE AND ENVIRONMENTAL CONFLICT: EFFECTS ON WOMEN'S EVERYDAY LIVES IN NORTH-EAST NIGERIA**

Rahmatu Buba

Department of Political Science
Faculty of Arts and Social Sciences
Gombe State University
PMB 127, Tudun Wada, Gombe State, Nigeria
Email: rbuba@gsu.edu.ng
+2348036346858

Climate change is a threat to human security. Changes in the climate and natural degradation, especially forest degradation are threatening livelihoods. In Nigeria, fuel wood has grown in importance as a source of energy for cooking, heating and other uses. The impacts of climate change, conflict and security challenges, and gender inequality converge in a number of contexts in northeastern Nigeria, creating challenges in the availability and access fuelwood. This affects rural women who are dependent on trees and woody vegetation to meet their basic energy needs. This paper examines how women in North-East Nigeria experience their everyday life and livelihood activities within fuelwood access and collection have been affected by climate change and Boko Haram insurgency. A qualitative method was employed to collect data from 120 rural women using a feminist lens. The study finds that climate poses serious threat to their security and livelihoods. It also placed heavy domestic responsibilities on the women. The study also demonstrated that men and women have different capabilities for coping with climate change resulting in different adaptive capacities.

**Keywords:** Climate Change, Conflict, Fuelwood energy, Boko Haram, women
CLIMATE CHANGE, HUMAN ACTIVITIES, AND POSSIBLE REMEDIES

Otegbulu, Gabriel Chukwuebuka and Obidebube, Emerem Jennifer
School of General Studies, (Humanities unit) and Department of Philosophy
University of Nigeria Nsukka, Email: gabriel.otegbulu@unn.edu.ng, 07032975070

The good health and long life span of human beings are dependent on the functionality of the environment and atmosphere where human's coexistence is embedded. There is no doubt that one of the significant causes of global climate change is as a result of human activities. Such human activities include burning fossil fuels, agriculture and deforestation, land-use change, and so on. These human activities have caused some devastating effects on our environment hence the climate change that we are witnessing. Climate change refers to changes in the earth's climate, at local, regional, or global scales. The fact that climate change causes devastation in the world is a pointer that it is a disaster for humanity. This work, therefore, seeks to investigate to what extent human activities have contributed to climate change-related issues. This work will outline the possible remedies to climate change caused by human activities. This work will contend that if human beings do not reduce their negative impact on their habitat, the world will continue to suffer the devastation of climate change. The research method will be expository, analysis and evaluation.

Keywords: Climate Change, Climate Issues, Environment, Human Activities.

VALUE IN NATURE AND ENVIRONMENTAL SECURITY

Ignatius Ifeanyichukwu Ogbodo
Department of Philosophy
University of Nigeria, Nsukka
Email: ignatius.ogbodo@unn.edu.ng, +2347030181880

This paper studies intrinsic value of the natural world in the light of Rolston Holmes III's environmental ethics with a view to demonstrating that respect for the value of the environment and environmental security are co-extensive. The ultimate preoccupation of environmental ethics is the conservation of the earth and environmental security. Nature seems indifferent to Mountains, rivers, humans, fauna, flora, forests and grasslands; yet, nature has bent towards making and maintaining its projects, and providing security for millions of species for several billion years. This constitutes value with which humans are charged up, because, our values are moulded in significant proportion to our notion of the kind of universe in which we live. This drives our sense of duty to the natural world for the security of millions of kinds. This paper adopts hermeneutical, expository and textual analysis methods. This paper demonstrates that there is value in natural world and respect for this value maintains the security of the environment and that man's security in his environment is co-extensive with his respect for the intrinsic value of the natural world.

Keywords: Nature, Value, Environment, Security.

CLIMATE CHANGE AND ITS CONSEQUENCES ON NIGERIA'S NATIONAL SECURITY: AN ASSESSMENT

Jude Uwakwe Eke
Department of History and Strategic Studies, Alex Ekwueme Federal University Ndịfu-Alike Ikwo, Ebonyi State, Nigeria, Corresponding mail: ekejude2000@yahoo.com

This paper assesses the consequences of climate change on Nigeria's National security. It is germane to note that climate change has had and is still having both direct and indirect implications on national security in Nigeria. For instance, due to constant desertification, flood, drought, and environmental degradation many lives and property have been lost. Similarly, the constant search for grazing space by Fulani herders from the northern region down south has led to series of violent conflicts between the pastoralists and the farmers, which has also led to the loss of many lives and property. It must also be noted that desertification
and farmers-herders conflicts have had and is still having devastating effects on food security in Nigeria. Therefore, as a threat multiplier, climate change also has damaging effects on human health as a result of greenhouse gas emissions, caused by human activities. The infiltrations of Nigeria by arm bearing foreign herdsmen as a result of desertification up north have also compounded the security situation in Nigeria. It is against this background that this paper argues that Nigeria's National security has suffered and is still suffering from negative effects of climate change. The paper therefore, concludes that if adequate measures are not taken urgently by the appropriate authorities to address this menace, climate change will continue to have unprecedented negative consequences on Nigeria's National security through potent non-military threats such as poverty, food insecurity, environmental degradation, health related issues among others.

**IMPACT OF FULANI HERDSMEN ATTACKS ON ENVIRONMENTAL SECURITY IN SOUTHEAST NIGERIA: A REGIONAL SURVEY**

Okpe, Kenneth Emenike*, Innocent Ebere Okereke & Sunday Emeka Amaja
Department of Science Education, University of Nigeria Nsukka
*drkenemenike@gmail.com

The study examined the perceived impact of Fulani herdsmen attacks on environmental security in southeast Nigeria. Specifically, the study explored the impact of Fulani herdsmen attacks on food security; and the effects of Fulani herdsmen attacks on human security in southeastern Nigeria. The descriptive survey design was used for the study. The population of the study comprised the adult population in the five states in Nigeria’s southeast zone. An online questionnaire using Google Forms was used to collect data for the study. To ascertain the reliability of the questionnaire, the southwest Nigeria population was used for trial testing. The collected data from trial testing was analyzed using Cronbach Alpha. The overall reliability coefficient of the entire items was found to be 0.85. A total of 5723 responded to the survey. The study was anchored on the theoretical tenets of the Resource-Curse Theory by Auty (1993). Data collected was analyzed using mean and standard deviation. The findings revealed that the Fulani herdsmen crisis has a negative impact on the environmental security in southeastern Nigeria. In addition, Fulani herdsmen attacks affect food security in Southeast Nigeria as farmers are now afraid to go to the farm. The study also revealed that Fulani herdsmen's attacks continue to threaten sustainable development and human security in southeast Nigeria. The study recommended, among other things, that state government should ensure adequate security in southeast, so that farmers will have access to their farms and reduce the incidence of the destruction of farm crops in southeastern Nigeria.

**Keywords:** Environmental Security, Food security, Human security, Fulani herdsmen attacks, Farmers.

**EVALUATION OF LOKOJA WATER DISTRIBUTION SYSTEM, CHALLENGES AND SOLUTIONS**

*Email: josephfatoye1@gmail.com, Mobile: +2348036204741

Inadequate water supply service is a common phenomenon in many developing countries. Increasing population and urbanization have continued to put pressure on the available water infrastructures. This study investigates the performance of Lokoja water distribution system. Relevant literature bearing on the issue of urban water supply was studied for the purpose of finding the causes and developing relevant solutions. Relevant data bearing on the city water distribution/supply system were analyzed. A stratified technique was used for the household survey. The survey result from the 196 selected households in both planned and unplanned neighborhoods revealed the challenges culminating in the water supply varied across the sampled neighborhoods. The survey revealed that in spite of the Greater Lokoja Water Supply Scheme which was developed to increase water supply in the town in 2011, access to the potable water supply was...
inequitable. To meet water needs, inhabitants also depend on several sources of water like groundwater sources, rainwater harvesting, water vending, and river or stream water. It was also found that the lack of water supply in urban areas manifests in the exceeding water demand over supply, low piped-water coverage, and intermittency of water supply; whereas poor governance and lack of water tariff are the root factor that causes them. Consequently, in this research, solutions were proposed to the identified problem.

**Keywords:** water supply infrastructures, intermittency, tariff, and good governance
STRENGTHENING NATIONAL SECURITY IN NIGERIA THROUGH REGIONAL INTEGRATION AND COOPERATION

John Funsho Olorunfemi, Benson Ayodele Oloworaran and Sylvester Ndubuisi Anya
Faculty of Law, University of Nigeria, Enugu Campus
Faculty of Law, Rivers state university of science and Technology, Port Hacourt
Corresponding author: john.ororunfemi@unn.edu.ng

Since Nigeria returned to civil rule in 1999, security challenges have been on the increase. This challenges have manifested in such horrendous crimes as murder, rape, kidnapping, suicide bombing, terrorism, armed banditry, political assassinations, robbery, arsons and several other such like crimes perpetrated mainly through ethno-religious conflicts, banditry, economic and environmental agitations. Starting with the emergence of such dreaded ethnic based militias like Egbesu Boys, Bakassi Boys, Odua Peoples' Congress (OPC), and progressing to more complicated and subtle ones like the Niger Delta militants and insurgents, Indigenous People of Biafra (IPOB), Nigeria's security have suffered near total collapse in the past one decade with the entram of such groups with international dimension like Boko Haram, cattle herdsmen, commercial kidnappers, armed bandits and cattle roosters. The consequences on the nation are enormous; leading to loss of lives and properties; destruction of investments and investment opportunities, political instability, economic disruption and social insecurity. This paper looks at the available preventive and enforcement measures against insecurity in Nigeria and assesses their performance and limitations. Even though the paper admits that poor training, ineffective and stale intelligence gathering mechanism, lack of modernised and adequate equipments and lack of motivation have largely hampered the existing preventive and enforcement measures; the paper identifies the international dimensions to the security challenges as constituting a major hindrance to effective management of the issue. The porosity of the Nigerian borders allowing easy access and movement of weapons, machineries, humans and animals undisturbed, lack of commitment on the part of neighbouring countries; spill over effect of security challenges in other countries as a result of globalisation amongst others are factors that have contributed immensely to the challenge. The paper observes that regional co-operation and integration in curbing insecurity has been an effective means of enhancing national security in modern times, and based on empirical deductions advocates regional co-operation and integration as a vital means of curbing insecurity in Nigeria.

NIGERIA’S CONFOUNDED SECURITY ARCHITECTURE AND ITS IMPLICATION ON NATIONAL SECURITY

Terwase Isaac Sampson Ph.D BL, MPHil (SSS), fdc(+)
Principal Research Fellow, Centre for Strategic Research and Studies, Directing Staff, National Defence College, Abuja.
Email: isaacteewa@yahoo.com

The concept of security has undergone transformation since its internationalisation by the Treaty of Westphalia. The Second World War and its accompanying bi-polar era, however, altered the Westphalian conception of security, which was essentially state-centric. The Westphalian theory of security was challenged on the grounds that state security did not necessarily translate to protection of the individual within it, who ought to be the primary referent of security. As the individual person increasingly occupied centre stage in security analysis, the elasticity of the concept also expanded to cover a wide array of threats to the human person; while the gamut of state security institutions also burgeoned. The new conception of security has therefore, expanded the compass of 'state security agencies' thereby making effective coordination of their diverse operations problematic. This paper therefore, seeks to examine the litany of security agencies in Nigeria, with a view to evaluating the vertical and horizontal relationship between them, if any. It argues that the web of security agencies in Nigeria as well as their cross-cutting, and oftentimes appropriated mandates, have gravely hamstrung the effectiveness of their local and cross-border operations. It contends further that the legal and
INFORMAL SECURITY NETWORKS AND CONUNDRUM OF PERSONAL SECURITY IN SOUTH-EASTERN NIGERIA

'Ogechukwu Celestine Okafor, 'Ngoka Ruth Obioma, 'Omiunu, Funmilayo I & 'Kelechi Elijah Nnamani

ocelestineogechukwu@gmail.com; ruth.ngoka@unn.edu.ng (corresponding author); funmi.omiunu@gmail.com; kelechi.nnamani@unn.edu.ng

1Department of Political Science, Federal University Wukari, Taraba State, Nigeria
2Department of Political Science, University of Nigeria, Nsukka, Enugu State, Nigeria
3Department of Political Science, Gregory University, Uturu, Abia State, Nigeria

The escalation of violence in Nigeria and the government's reluctance to stem insecurity has given rise to the formation of informal security networks in some geopolitical zones of the country including the South-East. This informal security mechanism is saddled with the responsibility of countering the violent threats posed by the activities of the herdsmen in their respective localities among others. Section 14(2b) of the 1999 Constitution of the Federal Republic of Nigeria accords the state the exclusive responsibility to the safety and wellbeing of the people. Despite this provision, heinous crimes are committed daily against the defenseless people of Nigeria. Studies have examined the effect of informal security network on the broader context of human security; others have specifically focused on economic and political security. However, there is currently a dearth of research on how they impact on personal security. This study utilizes the Marxist theory of the postcolonial state and the dominant qualitative methods comprising interviews and documented evidence. The study interrogates the rationale for the formation of informal security networks with specific attention on the Eastern Security Network and how its activities affect personal security in the South-East Nigeria. Basically, it seeks to determine whether the implementation of the sit-at-home order has instigated killings, torture, kidnapping and fears in the zone. Based on the findings, the study renews calls for state policing, and the political inclusion of the South-East region to checkmate marginalization which sparks actions that endanger personal security.

Keywords: Biafra, Security, Marginalization, Governance, Violence

INSTITUTIONAL MECHANISMS THAT ESTABLISHED THE DISPARATE SECURITY AGENCIES WERE CONCEIVED AND EFFECTUATED UNDER DIFFERENT POLITICAL DISPENSATIONS WITH DIVERSE ACTORS AND DOGMATA; HENCE THE CHARACTERISATION OF THEIR SIGNIFICANCE, DUPLICATION OF MANDATES AND INEVITABLE OPERATIONAL OVERLAPS. IT THEREFORE, ADVOCATES WHOLISTIC LEGAL, POLICY AND INSTITUTIONAL OVERTHROW OF THE SECURITY SYSTEM TO ENGENDER EFFECTIVE COORDINATION, EFFICIENCY AND EFFECTIVENESS.

"BIAFRA IS MADE IN HEAVEN": EXPLORING THE RELIGIOUS FRAMING OF THE IGBO STRUGGLE FOR SELF DETERMINATION.

George C. Nche
Department of Religion Studies, University of Johannesburg, South Africa
Corresponding Author: nche.george@unn.edu.ng; gcnnche@uj.ac.za

There is a burgeoning stream of studies on the religion-social movement connection. However, while these studies have been geographically biased, their perspectives have been conceptually and theoretically inconclusive. As a contribution towards filling this gap, the present study, while relying on the cultural framing perspective, explored the religious framing of the Igbo struggle for the actualization of Biafra in Nigeria. Using content and thematic analytical methods, the study analyzed 8 speeches delivered by the Indigenous People of Biafra (IPOB) leader, Nnamdi Kanu. With the findings showing an overwhelming frequency of religious concepts and the leader's attempt to blend the socio-political and the religious aspirations of Igbo people, the study suggest that religion is not only central to the Igbo struggle for Biafra, but also one of the major factors responsible for the formidable nature of the movement in Nigeria. Implications of the findings for research and policy are discussed.

Key words: Igbo, IPOB, Nnamdi Kanu, Cultural framing perspective, Biafra, religion, religious framing, social movement
CREDIBILITY AND PROFESSIONALISM ASSESSMENT OF MILITARY OPERATIONS IN NIGERIA'S CONFLICT ZONE: IMPLICATIONS FOR MILITARY PUBLIC RELATIONS

Eze, Ogemdi Uchenna, Mgboji, Olanrewaju Abosede, Nwabunze, Uzoma Oluchukwu, Orekyeh, Emeka Samuel, Cokey, Ibiere Tom, Department of Mass Communication, Faculty of Arts, University of Nigeria, Nsukka
Corresponding author: ogemdi.eze@unn.edu.ng

Nigeria is witnessing serious security challenges on all fronts with the military dragged in to support the Nigeria Police Force. The success of the military's operations in these troubled areas is dependent on the level of support it enjoys from the host community in which it serves. Such support is contingent upon how the host communities perceive the credibility and professionalism of the military. This study presents a credibility and professionalism assessment of military operations in Nigeria's conflict zone through a survey of 367 residents of Makurdi, Benue State capital. A regression analysis was employed to establish the relationship between (1) audience perception and exposure to military activities in the media and (2) audience attitude to the military and direct contact with the military. Factor analysis was used to ascertain the effect of age, sex, religion, ethnicity, and education on the audience's expression of confidence in the military. The study found a relationship between audience perception and exposure to military activities in the media (F1, 365=1962.522, Sig=0.000) and; audience attitude to the military and direct contact with the military (F1, 365=876.059, Sig=0.000). The study also found that age, sex, religion, ethnicity, and education have a significant effect on the audience's expression of confidence in the military. The implications of the findings for military public relations were discussed.

Keywords: military; PR; professionalism; credibility; audience; Nigeria

POLITICS OF INSECURITY REPORTAGE IN NORTHERN NIGERIA

Isa Sa'idu, PhD
Department of Political Science and International Studies
Faculty of Social Sciences
Ahmadu Bello University, Zaria
08038608418
liman.isa@gmail.com

Nigeria is faced with different challenges that nearly comatose the security architecture of the country. In the North, particularly North-West geopolitical zone of Nigeria, it started as mere conflict over access to land largely involving herders and farmers. It metamorphosed to gangsterism that was restricted to cattle rustling. The challenge has now snowballed into full-pledged entrepreneurial terrorism where the actors amass wealth through kidnapping, banditry and other forms of criminal activities. Nowadays, no one is guaranteed of his safety in Nigeria, North-West in particular. With the use of the Political Economy of Communication, Framing, Social Responsibility and Agenda Setting Theories, the paper will review relevant literature in order to establish how Nigerian media used their organisations to report the phenomenon of insecurity both for and against the country's national interest. The study's focus will be on how media outlets, both new and conventional, have over the years engaged on unethical practice that both exacerbates security challenges as well as threatens Nigeria's corporate existence. It is on the basis of the foregoing that the paper will analyse the politics that shrouded the coverage of security challenges and the role being played by journalists in fueling or taming the security challenges in Nigeria. Documented literature and participant observation method will form the basis upon which the paper will be constructed. The coverage of insecurity must be married with patriotism to safeguard the sovereignty and corporate existence of Nigeria. It is therefore instructive for Nigerian media to always report insecurity and conflict from nationalistic perspective, which entails restraint in language use, framing of stories to promote national interest as well as de-escalation of tension.
NATIONAL SECURITY, UNEMPLOYMENT AND SUSTAINABLE ECONOMIC GROWTH: THE NIGERIAN PARADOX

Benedict Azu
Department of Economics, University of Delta, Agbor
benedict.azu@unidel.edu.ng
08037847512

The largest hurdle to Nigeria's development and prosperity has been identified as insecurity, among many other issues. Since the country became independent in 1960, development efforts have been hindered by some kind of insecurity. Over the years, the nation has faced a number of challenges, including a high percentage of poverty, youth unemployment, a widening income gap, disputes and conflict, and violence, with over 70% of her population living in poverty. Security is the bedrock on which any significant progress may be realized and maintained. Give credence to the claim that security is highly valued among the most developed countries in the world. Despite the fact that Nigeria is endowed with an abundance of natural resources and human capital, failure to address a number of environmental security issues appears to have led to a porous security situation that has encouraged violence and slowed growth and development. This paper aims to scientifically prove the relationship between economic growth and national security in Nigeria. The impact of national security on sustainable growth in Nigeria is also estimated. An Autoregressive Distributed Lag (ARDL) Model is constructed for the analysis, taking into account the fact that uncertainty has a time lag effect on growth. In contrast to insecurity, which prevents sustainable growth, security is projected to have beneficial time lag impacts on growth.

RISING TIDE OF HUMAN INSECURITY IN NIGERIA: ARE THE YOUTH BULGE AND YOUTH UNEMPLOYMENT KEY FACTORS?

Emmanuel Onyebuchi Ezeani¹, Christopher Ewuzie Obianagwa², Louiemarie Adaeze

All the geopolitical zones in Nigeria are currently threatened by different forms of human insecurity. While torrents of extant literature have interrogated extensively various dynamics of these security threats in Nigeria, there is less scholarly attention to the interplay between youth bulge and youth unemployment as key drivers of human insecurity in Nigeria. Making use of mixed data, the paper examines the link between youth bulge, youth unemployment and spate of human insecurity in Nigeria. The study adopted both Ex-post facto and Time series research designs which helped to track events bordering on the key variables of this study in retrospect and as they happen. However, the youth bulge theory was adopted as a framework of analysis, while the data were analyzed qualitatively. The study affirmed its hypothesis which states that the youth bulge and youth unemployment have significant effects on the rising insecurity in Nigeria, and recommended thus, that as Nigerian government invests on its security architecture to address the nation's security problems, effort should be made to provide enabling environment for job creation and employment of the teeming youth population, which is expected to impact positively on crime reduction in the country.

Keywords: Nigeria, youth bulge, youth unemployment, human insecurity, enabling environment, job creation, etc.

HOW SECURE IS MANKIND? THE UNITED NATION’S SECURITY COUNCIL AND THE WORLD AT WAR

Joshua Jones Oguadinma
Department of Political Science, University of Nigeria, Nsukka
Correspondence Email: Joshua.oguadinma@unn.edu.ng
The horrific war raging in recent times between some members of the United Nations Security Council and other nations remains incomprehensible. It came perilously close to triggering a third World War. These superpowers are, statutorily, entrusted with the prevention of international conflicts and the promotion of global peace and security to preserve mankind. However, the war between Russia and Ukraine, which has claimed many innocent lives, came as a surprise to many. Also, another war has become imminent between China and Taiwan; with missile bombardments from the former on the latter. The momentum that has gathered around these conflicts has engendered fear across the globe regarding the possibility of escalating into another major global warfare since a clueless breakdown of diplomacy has been conveyed. The paper interrogated whether the Russia-Ukrainian war has triggered divisiveness among the members of the United Nations Security Council. Again, can this culminate into a failed mandate in preventing international conflicts? The power theory employed by the study explicated the war dynamics while relying on extant documented literature as sources of data. Ultimately, the UN Security Council has lost the synergy to maintain a peaceful world order since its members have joined the league of aggressors; considering the existential events. This calls for a restructuring of the UNSC by co-opting more permanent members into the UNSC to increase the power of persuasion. Also, the United Nations should be diplomatically responsive in developing new strategies to restore a balance of power in the world system.

Keywords: Diplomacy, peace, power, security, world order.

INSECURITY IMPLICATION AND NATIONAL SOCIO-ECONOMIC DEVELOPMENT IN NIGERIA

1Machebe Chioma Henrietta and 2Peter Ndubuisi Chukwu
chioma.machebe@unn.edu.ng* (+2348063735621)
1Department of Social Science Education, University of Nigeria Nsukka
2Department of Educational Management, Enugu State University of Science and Technology (ESUT)

This paper examines the unprecedented security challenges and its implication for socio-economic development in Nigeria, occasioned by the activities of the herdsmen, political assassination, kidnappers in the south east, ritual killings, armed robbery and more recently activities of Boko Haram in almost all parts of the country. These social menace trigger off a worrisome sense of insecurity that challenge Nigeria's efforts towards national economic development, hinders business activities and discourages local and foreign investors. Using a review of relevant literatures, internet search engines data basis, the paper analyzed its effect on some economic parameters. This paper recommends effective leadership and good governance as a panacea to solving problems of insecurity, unemployment, poverty, hunger etc. through modern methods of intelligence gathering, and sharing among security personnel, and deploying advanced technology in managing security challenges.

Keyword: Socio-Economic, Development, Insecurity, Unemployment, Foreign investors

NATIONAL UNION OF ROAD TRANSPORT WORKERS (NURTW) AND SECURITY CHALLENGES IN LAGOS STATE, NIGERIA

Ilemikun Oluwaseun Abiodun
Ekiti State University
Department of Peace and Security Studies
ilemsathol19899@gmail.com

National Union of Road Transport Workers (NURTW) is ordinarily an umbrella body of transport service providers. However, union members' penchant for violence in Lagos State has increased drastically in the current democratic dispensation (1999 till date) especially over leadership succession crisis. Anytime, the union members engage in intra/inter group violent-conflict, human security of Lagos dwellers is threatened. This study examined the causes and implications of incessant violence among National Union of Road Transport Workers in Lagos State as well as efforts of the state government in tackling security threat posed by the union. The study adopted survey research design. Data were collected from both primary and secondary data sources. Self-administered structured questionnaire and interview were used to collect primary data for the study. Multi-stage sampling techniques- stratified, purposive and
simple random sampling techniques were used for the selection of respondents. A total of 300 structured questionnaires were administered directly to respondents with 283 retrieved while 60 people were interviewed. Findings among others revealed that NURTWP poses a serious threat to some components of human security (economic, personal, political and community) of Lagos populace during their bloody violent-conflicts. The study therefore recommends that local government should take over the control of Motor Parks from chairmen and other executives of NURTWP while reengaging the union on salary basis.

CHALLENGES OF NIGERIA'S DEMOCRATIC SUSTENANCE: INTERROGATING THE NATIONAL SECURITY AND LEGITIMACY QUESTION

Abdullahi Abiodun Oyekanmi, Adeola Aderayo Adebajo and Ashimiyu Adenuga

Tai Solarin University of Education, P.M.B 2118, Ijagun, Ogun State, Nigeria

Email: oyekanmiabdollahi655@gmail.com

National security and legitimacy are essential issues of governance that no nation desirous of political, economic and democratic stability can afford to take with levity. Thus, when countries begin to struggle in these critical areas of governance, her democracy becomes threatened. Nigeria's national security, legitimacy and democratic sustenance are not exempted from a number of challenges, threatening her democracy in the Fourth Republic. Hence, the paper is an interrogation into the challenges of national security, legitimacy and democratic sustenance. The paper adopted desk research method to gather secondary materials that were contently analyzed and the failed states theory was used as the explanatory framework of the research. The paper identified inherited colonial security orientation, Boko Haram insurgency, herdsman clashes, banditry, ethnicity, separatist agitations, underdevelopment and electoral malpractices as the core challenges of Nigeria's democratic sustainability. It recommends a review of the entire national security apparatus, citizen's welfare through good governance, and public enlightenments to strengthen supports for democratic institutions in Nigeria.

Keywords: Democracy, development, legitimacy, national security, insecurity

THE DILEMMA DISCLOSURE OF COVERT CONFLICT AND INSECURITY IN NIGERIA

Adeola Aderayo Adebajo, Adepelumi Funsho Osikoya
Department of Political Science, Tai Solarin University of Education, Ijebu-Ode, Ogun State, Nigeria.
Email: adebajoade@gmail.com / adebajoaa@tasued.edu.ng
Phone No.: +2348084593852

Decision taken by consensus might not be obvious due to the fact that parties involved in any conflict have unique agenda and interests. These might either be overt or covert. The attempt to address the Nigerian secret conflict and insecurity has birthed this inquiry. Thus, this paper examined the dilemma disclosure of covert conflict and insecurity in Nigeria. Qualitative research was adopted as the study's method, while systems theory was used as its theoretical framework. It was discovered in this study that Nigeria's worst conflicts can be traced to covert situation between organisations, communities, indigenes and settlers. These secret clashes have been discovered to be deadlier and numerous as times unfold. Its findings disclosed that the transition of covert conflicts encompasses a fundamental change in the state of the country's security. The paper concluded that secret conflict lays solid foundation for insecurity in Nigeria. The paper, therefore, recommended that traditional dispute resolution mechanisms should be adopted, in that, grassroots rulers can appropriately address conflicts at their instigative phase. It further suggested that there should always be an open dialogue among parties involved, in order to negotiate and proffer ways of harmoniously overcoming security challenges.

Keywords: Conflict, covert, covert conflict, insecurity, security
THE ROLE OF DIPLOMACY IN STRENGTHENING INTERNATIONAL LAW AND COMBATING TRANSNATIONAL CRIMES

Nwala Paul.
Department of History and International Diplomacy, Rivers State University, Port Harcourt, Nigeria.
Corresponding email: princepaulnwala@gmail.com

Transnational crimes have become a growing concern in the international community. These crimes range from drug and human trafficking, smuggling of persons, trafficking of firearms, terrorism, sea piracy, cyber-crimes, money laundering, importation of contraband goods etc. These crimes gradually damage the national and international security needs in the protection of lives and properties; threaten the global economy, cause poverty and an uncomfortable life to the people, poses serious threat to world peace and development etc. The United Nations has given special attention to the issue of transnational organized crimes in which similarly, regional, sub regional and bilateral agreements has employed both diplomatic measures and international legal frameworks to combat the growing threats of transnational crimes in the world today. To this effect, an ad hoc committee was created by the United Nations for the purpose of drafting a comprehensive international convention on transnational organized crime, thereby showing how serious and inevitable it has become to combat such. This paper aims at discussing the role of diplomacy in strengthening the applicability of international law in the fight against transnational crimes. Diplomacy seeks to rid corruptible practices by individuals and groups, reinforce the international system and international law through diplomatic intercourse among both states and non-states of universal character in order to combat issues of transnational crimes growing threats. This study made use of secondary sources of data collection in which books, journals, online reading materials among others were used to gather needed information relevant to this study while historical legal approach was adopted as the research methodology. This study recommends among others that more international cooperation should be promoted between countries with or without mutual legal assistance and extradition treaties in order to avert or limit the hurdles posed by territorial jurisdictions in terms of arresting and prosecuting anyone or any group engaging in transnational crimes. There is also difficulty when the request for extradition is refused on various grounds, including the principle of non-extradition for political crimes. Hence, international organizations through diplomatic negotiations should come to agreement with best applicable practices and common ground for issues such as extradition.

Key Words: Strengthening, Combating, Diplomacy, International Law, and Transnational Crime

APPLICABILITY OF INTERNATIONAL LAW AND DIPLOMACY IN CONFLICT RESOLUTION AMIDST RESURGENCE OF MILITARY COUPS IN AFRICA

Nwala Paul, PhD.
Faculty of Legal Studies and Security Management
The West African Union University, Cotonou, Benin Republic
+22964115701, +2348037750746
princepaulnwala@gmail.com

And
Amah, Nsa Duckham
Department of International Relations and Diplomacy,
The West African Union University, Cotonou, Benin Republic
+2348163799108, amahnsa@gmail.com

The post-independent era ushered African states into a series of military coups. These military coups were engendered by exorbitant spending and economic instability caused by civilian government, personal ambitions of military leaders/officers characterised by sheer struggle for power, external influences amongst others. Even after the adoption of democracy by most African states, there has been a resurgence of number of coups and coup attempt in recent years. Just in the year 2012 Africa had a great number of coup attempt and between August 2020 to October 2021 the continent has had 5 successful coups in Sudan, Mali, Chad and Guinea. International law which can also be regarded to as international ethics has to do with the
governing principle that exist in the relationship and dealing of one state with another as well as between state and individual and also international organization. The objective of this study is to consider the limitations of states' principle of self-determination; to access the causes of the resurgence of military coups in Africa and the applicability of international law in resolving conflicts emanating from military coups resurgence. Therefore, this study explores the functionality of international law in the process of conflict resolution amidst revived military coup in this era when democracy is said to be promoted globally. This paper made use of archival materials, historical analysis and review of related literatures and documents to address the issue of military coup resurgence within the purview of international law. Apart from domestic factors and influences which are promoters of these military coups, this study holds that pseudo-democracy and misappropriation, misconception of the position of international law on modern democracy by coup plotters in Africa, the imbalance in the political system of most African states and concentration of power in the hands of a particular political class could be said to account for the resurgence of military coups in Africa. This study also holds that provisions of international law are not sufficient to restrict the action of military coup in this contemporary era, hence more of diplomatic approach should be finetuned and applied. The paper recommends that international law should spread to cover the actions of states' military, in keeping with the provisions of democracy and that stronger deterrence measures should be adopted by the international community aimed at preventing the resurgence of military coups in Africa.

Key Words: International Law, Diplomacy, Conflict Resolution, Resurgence, and Military Coup

THE POLICY OF BORDER CLOSURE AND ITS IMPACT ON NATIONAL ECONOMY AND SECURITY IN NIGERIA

Sulaiman Aminu Sulaiman
Department of Political Science and International Relations, Faculty of Social Sciences, Kaduna State University,
Correspondence Email: sulaimanaminu25@gmail.com

ARCHAEOLOGICAL SITES AND THE QUESTION OF INSECURITY IN NORTHERN NIGERIA: A CASE STUDY OF SAFANA LOCAL GOVERNMENT AREA OF KATSINA STATE, NIGERIA

Zainab Kabir
Department of History
Isa Kaita College of Education, Dutsen-Ma
kabirz0687@gmail.com

This paper attempts to cross-examine the impact of insecurity in Northern Nigeria with particular reference to how it affects archaeological researches in the region. Using a qualitative research methodology, this paper finds out that the current security situation in Nigeria had also made it almost impossible for many archaeologists to conduct their excavations at certain sites such as Munia, Illela, Guzurawa and Maikada all located in Safana Local Government Area of Katina State. These challenges include; kidnapping, rape, assassination, as well as armed robbery attacks. The study concludes that due to security challenges in the region, many archaeologists both scholars and students find it difficult if not impossible to excavate in the trouble ridden sites and thus has affected their academic and professional careers.

Keywords: Archaeological Site, Security, Crimes, Katsina State, Northern Nigeria

A STUDY OF THE SECURITY CHALLENGES CONFRONTING ARCHAEOLOGICAL FIELD SCHOOLS IN NSUKKA, NIGERIA

Joshua O. Uzuegbu and *Abiola O. Tella
1,2  2
1Humanities Unit, School of General Studies, University of Nigeria, Nsukka
2Department of Archaeology and Tourism, Faculty of Arts, University of Nigeria, Nsukka
*Corresponding author: bamidele.abiola@unn.edu.ng

The challenges of security in the country in recent times have impacted negatively on archaeological field schools annually organized by the Department of Archaeology and Tourism, University of Nigeria, Nsukka. In this work, some of the salient challenges like kidnapping, armed robbery, and hostile attitudes of some local communities towards the researchers
among other things were identified. The adverse effect of these challenges has resulted in the reduction of the number of days spent on the field, a cautious approach in volunteering information by the locals and the restriction of site visits. This research was carried out by reviewing the report of field schools in the last five years. Also, the experiences of the researchers in the field during the period come in handy. Some useful recommendations on how to mitigate security challenges confronting field schools were made.

**Keywords:** Archaeological, challenges, field schools, national, security

---

**THE REPRESENTATION OF SECURITY APPARATUS IN HAUSALAND: A CRITICAL STUDY OF ABUBAKAR IMAM’S MAGANA JARI CE**

Usman Muhammad  
Department of African Languages and Cultures  
Ahmadu Bello University, Zaria  
msusman2@gmail.com

**Abstract**  
Security is a key issue in any living society. History has shown that large societies are formed on the basis of agreement amongst individuals and groups to live together as an entity. Due to certain unforeseen issues, these individuals and groups have to make arrangements to secure themselves from any internal or external aggression. Most of the societies around the globe started as such and the Hausaland is no exception. Using a formal and textual analysis, this paper intends to examine the nature and dynamics of Hausaland security system in Abubakar Imam's *Magana Jari ce*. Based on Imam's submissions, the paper finds out that the Hausa people have their own kind of security system. In his book, Imam attempts to describe and bring to light the internal underlying forces of the Hausa security system not only in maintaining justice, but also in promoting peaceful co-existence. It finally concludes that Hausa literature plays an important role in the contemporary discourses on insecurity in the northern region in particular and Nigeria in general.

**Keywords:** Representation, Hausa Literature, Security, Northern Nigeria

---

**DEMOCRACY, GOOD GOVERNANCE, FOOD SECURITY AND RURAL DEVELOPMENT PROGRAMMES IN NIGERIA**

Nadir A. Nasidi and Rukayya Maisara Wali  
Department of History  
Department of Sociology  
Ahmadu Bello University, Zaria  
nanasidi@abu.edu.ng

The attainment of a higher level of development is the pride of any serious government so that its citizens would benefit from the dividends of democracy and good governance. For a nation to be in a phase of development however, there must be the presence of some key indicators, which include socio-political and economic stability. It is estimated that majority of the world's population in developing world live in a state of poverty. This became more obvious with the current problems of urban growth, rural stagnation, unemployment and growing socio-political and economic inequalities. In this entire milieu therefore, Nigeria, the most populous African nation seems to have taken the centre table and that is why aspirations by the citizenry for accelerated development are difficult to realize. This is because, Nigeria has not been able to record meaningful development in spite of her huge human and natural resources due to the growing rate of corruption, the breakdown of rule of law and a flawed democratic system. Using primary and secondary sources, this paper therefore, examines the development, challenges and impact of four different, but related rural development programmes in Nigeria aiming to address the problems of food security such as (1) to Rural Infrastructural Development Scheme, (2) Rural Electrification Scheme (3) Rural water supply scheme, as well as the (4) Integrated Rural Development Scheme. The paper finds out that democracy and good governance in Nigeria are central to the development or failure of such rural development programmes. It equally finds out that corruption and the seeming absence of good governance in Nigeria has not only affected the implementation of these rural development schemes, but has also highlighted some grey areas in terms of food security in the country and led to the breakdown of law and order, which impacted negatively on its people and democracy.

**Keywords:** Rural Development, Good Governance, Corruption, Food Security.
SECURITY AND DEVELOPMENT CRISIS IN THE NIGERIA STATE: THE WAY FORWARD

Dare Isaac Akindoyin and Chukwuebuka Akuche
Department of Political Science and International Relations, Augustine University, Ilara-Epe, Lagos, Nigeria
dareakindoyin@augustineuniversity.com,
dhareydrezzy@gmail.com
(+234)8128366161

This research paper highlights a different approach to explaining and understanding the motives behind the present incessant security challenges in Nigeria. The country is gradually slipping into the mantra of a failed state as a result of numerous security challenges. The insecurity in Nigeria has led to a deeply rooted development crisis. This research paper reviews the nexus between the prevailing security challenges and development in Nigeria. The review shows that the level of inequality, unemployment, poverty, and marginalization, have resulted in alienation, distrust, social displeasure, and frustration, which sparks violence as well as insecurity in Nigeria. The lack of a functional system has also worsened the prevailing security challenges, posing threat to national security and unity. Previous studies showed that sustainable and proactive measures taken by the central government can help address insecurity and development. Hence, it is critical that the arms of government (executive, legislature, and judiciary) promote justice, and equity, which will consequently lead to development in Nigeria.

Keywords: Development, Unemployment, Security, Poverty, Marginalization, Inequality.

THE IMPACTS OF INSECURITY ON HERITAGE RESOURCE MANAGEMENT IN NIGERIA

Ogechi Ivy Anyanwu, Nyey, Tabitha Benson, and Tella, Abiola Opemipo
Department of Archaeology and Tourism, University of Nigeria, Nsukka
Corresponding author: ivy.anyanwu@unn.edu.ng

For more than two thousand years, Nigerians have proven their ingenuity through ironworking, bead and pottery making, wood carving, etc. The country is blessed with a plethora of heritage resources bequeathed to her by nature, which has been handed down from one generation to another. These heritage resources are expected to be used judiciously by the present generation whilst also being held in trust for the future. However, achieving this might be difficult as these heritage resources have in recent times become endangered because of insecurity in many parts of the country, especially in the northern and middle belt regions. Therefore, this paper seeks to explore the negative impacts of insecurity on heritage resource management and development, and ways of reducing the challenges. The qualitative method was employed in the research through in-depth interviews to elicit information from key stakeholders, including security agents, government officials, security experts and cultural resource managers. Findings show that insecurity has affected heritage resource management negatively by reducing patronage to important sites and affecting revenue accruing from such visits. The paper concludes that addressing these issues is a prerequisite for the survival of these heritage resources and would require serious government oversight.

Keywords: crisis, heritage resource management, insecurity, Nigeria

PERSONAL VALUES, TIME ORIENTATION AND DOMESTIC TOURISTS' TRAVEL INTENTION: A CULTURALLY-RELEVANT ANALYSIS

Eyo Emmanuel Essien
Department of Marketing, University of Calabar, Calabar – Nigeria
E-mail: ecubed@unical.edu.ng

Abstract
Tourism is increasingly being recognized as a veritable contributor to the socio-economic and cultural development of nations, but scholars have observed that more attention is accorded to international inbound/outbound tourism activities, with little attention being paid to domestic (national) tourism. This study aimed at contributing to the literature on domestic tourism by identifying the socio-culturally relevant psychological factors that may influence domestic tourists' travel behaviour. Specifically, this study examined personal value orientation and
individuals' temporal time orientation as determinants of domestic tourists' travel intention. Data were collected from staff and students of three tertiary educational institutions in Calabar using structured self-administered survey questionnaires and analyzed using structural equation modeling (SEM) techniques. Results of hypotheses testing show that openness-to-change (i.e., self-direction, stimulation, and hedonism), self-enhancement values (i.e., power and achievement seeking), and self-transcendence values (i.e., benevolence) significantly influence domestic tourists' intention to travel for leisure purposes, while conservatism values (i.e., security, conformity, and tradition) had no such influence. This study also found that polychronic individuals expressed significantly greater intention to travel than monochronic individuals. Mixed results were obtained for the hypothesized moderating effect of polychronicity on the relationship between personal values and travel intention; While polychronicity moderated the relationship between openness-to-change values and self-enhancement values, on the other hand, and travel intention, on the other hand, no such moderating effects were found for the other value dimensions. It was concluded that individuals' personal value goals relating to pursuing personal success and recognition, seeking pleasure, adventure, and novel experiences, as well as their proclivity to engage in several activities within a given time period, will explain their intention to travel for tourism purposes. The implication of our findings for theory and tourism marketing was also discussed.

Keywords: Personal values; time orientation; domestic tourism; travel intention

This study evaluated the principal approaches used in preserving the relics of the Nigerian-Biafran civil war at the National War Museum and its annex in Umahia, Nigeria. With 2-Dimensional pictography and 3-Dimensional sheltering as hybrid methodical thrusts, the depth of psychosomatic conflict resolution targeted and presumably achieved by the National Commission for Museum and Monuments was examined. The content analysis and historical research designs were combined. The study objectives were: (i) to find out the circumstances that necessitated the establishment of the museum, (ii) to find out the subsisting modes of operation in the museum for showcasing the war relics, and (iii) to figure out whether published literature really describe the relics and pictographic representations on ground. The instruments for information collection were: books, journal articles, the internet, oral interrogations and direct photography. Findings show that there was an equitable combination of 2-D pictography and 3-D sheltering of war relics at the museum and its extension. Most of the literature contents about the museum really tally with what was found on ground. The role of visual culture in the preservation of war relics cannot be overemphasized.

Key Words: Psychosomatic, pictography, war relics, content analysis.

STRENGTHENING NATIONAL SECURITY IN NIGERIA THROUGH REGIONAL INTEGRATION AND COOPERATION

John Funsho Olorunfemi, Benson Ayodele Oloworaran and Sylvester Ndubuisi Anya
Faculty of Law, University of Nigeria, Enugu Campus.
Email- john.olorunfemi@unn.edu.ng

Nigeria is bedeviled with terrorism, ethno-religious conflicts, armed banditry, economic and environmental agitations culminating in loss of lives and properties; socio-economic disruptions with negative impacts on foreign investment, conduct of governmental affairs, thereby threatening its corporate existence and battering its international image. In spite of legislative and institutional efforts, insecurity persists due to weak leadership, inequitable distribution of resources, poor training of operatives, porosity of Nigeria's borders, inefficient intelligence
monitoring strategies and lack of sophisticated equipment that will make security officials step ahead of offenders. It recommends prohibition of open grazing and a comprehensive legislative reform that will harmonize all the relevant laws in order to avert possible jurisdictional conflict. Notwithstanding existing regional and international cooperation such as ECOWAS, Lake Chad Basin Commission, African Union etc, there is the need for a Coordinated Border Management that will encourage the use of technology to protect the Nigerian porous borders and encourage cooperation with other countries beyond the regions which already enjoys strong National security. The effectiveness of such cooperation depends on coordination, funding, manpower contribution, intelligence management and leadership of such regional arrangements.

**Keywords:** Insurgency; International Cooperation; National Security; Regional Integration; Terrorism.

---

**ISSUES OF INSECURITY IN NIGERIA: HUMAN DEVELOPMENT AS A TRANSNATIONAL MEASURE IN A COMPARTMENTALIZED REGION**

**SONEYE, Abdul-Azeez Lekan**  
Department of Political Science,  
Tai Solarin College of Education, Ogun State.  
soneyeabdazeezl@gmail.com

The Nigerian state is confronted with security challenges that are becoming overwhelming. Banditry, kidnapping, and of course, terrorism with religious and economic interests have all become fundamental issues threatening the existence of the country in the Northern parts of the country sharing boarder with countries like Chad, Niger, etc. This is aggravated by rising internal aggression with call for secession in the Southern part of the country. Yet, there seems to be no properly coordinated efforts between Nigeria and her neighbours to jointly defeat insecurity. This paper seeks to examine the link between human development in Nigeria and her neighbouring states and the implication on security. Adopting the Marxian framework which advocates for maximum human development, equitable distribution of wealth, mass literacy, among many other social policies, this paper recommends that Nigeria and her neighbouring state must collaborate in implementing pro-people policies that will rebuild patriotism and discourage their citizens in aiding or engaging in security threatening actions.

**Keywords:** Security, secession, human development, distribution of wealth, mass literacy, policy, patriotism

---

**POLITICIZATION OF INTERNAL SECURITY AND NATIONAL DEVELOPMENT IN NIGERIA**

¹Ogu Esomchi Chris-Sanctus, ²Chukuemeka Vincent Nwokocha, ³Kalu Nnaemeka Uduma, ⁴Faith Chinenyenwa Madueke  
¹Department of Political Science, University of Nigeria, Nsukka  
²Department of Archeology and Tourism, University of Nigeria, Nsukka  
³Corresponding author's email: esomchi.ogu@unn.edu.ng

Security is the most important requirement in any state, without which nothing can work. Hence, the importance of examining the status of internal security and the attendant consequence therefore, has become very obvious to every political analyst especially in the rise of varying global interests and the effect it has had and continues to have on various states. This paper therefore examined the effect of politicizing internal security in Nigeria and its implication on the Nation's development. Using the social contract theory, the study demonstrated the enormous benefit as well as the consequence of a strict adherence or renege to the desired contract reached between the people and the government respectively. Data for the study was collected through documentary sources and analyzed appropriately using the qualitative-descriptive method of data analysis. The study established that the reluctance of the federal government to apply a uniform security framework against insurgency across the nation, as well as the growing intolerance between various political and social classes in Nigeria have both resulted in diverse security threats in the country and has discredited the mutual trust in collective nation-building. To fully realize and properly sustain the
benefits of a functional internal security mechanism, we recommend that the federal government of Nigeria embarks on a total overhaul of all important security dynamics that would give rise to the desired sustainable development possibilities like increased attention towards her military exercise and recruitment, the emergence of regional security networks and education across the board.

**Keywords:** Internal Security, Politicization, Development, Insurgency, Nigeria

---

**A CASE FOR COMBATING TERRORISM IN NIGERIA THROUGH INTERNATIONAL COOPERATION, RISK-BASED FORMAL AND INFORMAL FINANCIAL SECTOR REGULATION**

Iguwo Kanayo Ukwu and Ukwueze, Festus Kanayo
Faculty of Law, University of Nigeria
Corresponding Author: iguwoukwu@gmail.com

Terrorism has afflicted mankind from as early as between 66 and 70 AD. It has remained unabated and Nigeria has not been spared its deleterious effects through the ages. The loss of human life and disruption of economic and educational activities has been unquantifiable. The 11 September 2001 attacks in the USA resulted in more globally concerted efforts to combat the scourge of terrorism. This paper examines the importance of combating terrorism in Nigeria through international co-operation; risk based formal and informal financial sector regulation and monitoring. The paper adopts the doctrinal approach to interrogate the adequacy of extant Nigerian anti-terrorism regulations and international cooperation. The positions of the law and practices in other jurisdictions are discussed for comparative purposes. The paper highlights the advantages of risk-based regulation and monitoring and finds that the largely informal and unregulated spaces in Nigeria serve as conduits for illicit financial flows and financing of terrorism. The paper proffers recommendations for international cooperation, risk-based and country specific regulation and monitoring as an optimal approach towards combatting terrorism financing in Nigeria.

---

**GOVERNANCE AND TRANSNATIONAL SECURITY IN WEST AFRICA, 2015-2022**

Adibe Raymond
Department of Political Science
University of Nigeria
raymond.adibe@unn.edu.ng

This paper investigated the link between governance and transnational security in West Africa and contended that governance failure escalate the security threats that emanate from the West African sub region. We departed from existing viewpoints in literature by arguing that the security institutions of West African states are weak to address the security challenges of the sub region because they are incapacitated by governance failure. The institutional framework was adopted for analytical purpose. The framework suggests that the manifestations of institutional weakness in any state is a direct consequence of governance failure and states with weak institutions lack the capacity to effectively tackle both the internal and external security threats they are faced with. The findings of the study show that West African states are poorly governed, hence, they are characterized by weak institutions. Thus, despite the abundance of wealth, citizens in these states are mostly poor and lack adequate access to basic necessities like healthcare, education, food security, clean water, security, among others. This creates both internal and transnational security problems for these states. ARISING from our findings, we recommended that there is need to promote good governance by democratizing the management of national resources. This will drastically reduce or eliminate these threats that often consume states in West Africa since it will increase or promote economic and political inclusion of all citizens.

**Keywords:** Governance, Governance Failure, West Africa, Transnational Security and Institutional Weakness

---

**QUEST FOR WEALTH AND THE UPSURGE IN RITUAL KILLINGS AMONG NIGERIAN YOUTHS: A POLICY AND MORALITY CHECK**

Ikechukwu E. Emeh; Charles N. Olise & Nkechi Anyadike, Nkechi
Department of Public Administration and Local Government, University of Nigeria Nsukka

This paper investigated the link between governance and transnational security in West Africa and contended that governance failure escalate the security threats that emanate from the West African sub region. We departed from existing viewpoints in literature by arguing that the security institutions of West African states are weak to address the security challenges of the sub region because they are incapacitated by governance failure. The institutional framework was adopted for analytical purpose. The framework suggests that the manifestations of institutional weakness in any state is a direct consequence of governance failure and states with weak institutions lack the capacity to effectively tackle both the internal and external security threats they are faced with. The findings of the study show that West African states are poorly governed, hence, they are characterized by weak institutions. Thus, despite the abundance of wealth, citizens in these states are mostly poor and lack adequate access to basic necessities like healthcare, education, food security, clean water, security, among others. This creates both internal and transnational security problems for these states. ARISING from our findings, we recommended that there is need to promote good governance by democratizing the management of national resources. This will drastically reduce or eliminate these threats that often consume states in West Africa since it will increase or promote economic and political inclusion of all citizens.

**Keywords:** Governance, Governance Failure, West Africa, Transnational Security and Institutional Weakness
This study performed policy and morality checks on the relationship between the quest for wealth and the upsurge in ritual killings among Nigerian youths. As a basic qualitative research, data were generated from textbooks, journals, internet materials and related legislations to draw conclusion on the upsurge in ritual killings among Nigeria youths within the frame of unguarded quest for wealth and material possessions in contemporary time. Those data generated were analyzed using descriptive analysis technique; where those data were subjected to critical examination based on Nigerian condition. The study is anchored on Social conflict theory that sees the society as an arena of inequality that generates conflict and social changes, sometimes, adverse changes. This is because the society is structured in a way that benefits a few individuals at the detriment of the majority, and factors such as class and age are linked to social inequality. The paper found the government and parents culpable for the upsurge in ritual killing among youths. While the government is blamed of running political system that is iron-gated and manned by mean and supercilious politicians whose purpose is to perpetuate personal and clannish interests at the detriment of the masses who have been treated as expendables, parents are blamed for watching their children become extravagantly rich through illegitimate means without reprimand for implications. In tandem with the findings, the study recommended the restructuring of the political system to inclusive governance where the youths and their needs such as job opportunities, entrepreneurship supports and conducive environment to live and thrive are paid attention to. Again, parents should bring back the African morality imbedded in family values and use them on their children so that while the government restructures the political system, the family remolds their children for the good of the society such that ritual killings and other atrocities that many youths are involved for the purpose of quick money making will subsided and gradually fizzle out.

Keywords: Quest for wealth, Ritual Killings, Policy and Morality checks, government and families.

### ANTI-GRAZING LAWS AND CROP FARMERS-NOMADIC HERDERS RELATIONS IN NIGERIA, 2016-2022

Ifeoma F. Nzekwe1; Christian I. Nnadi2; Adanne C. Ozor2; Kelechi E. Nnamani3 & Jude C. Anih3

1Department of Public Administration & Local Government University of Nigeria, Nsukka.
2Social Sciences Unit, School of General Studies, University of Nigeria, Nsukka
3Department of Religion & Cultural Studies, University of Nigeria, Nsukka
4Department of Political Science, University of Nigeria, Nsukka.

Corresponding Author: kelechi.nnamani@unn.edu.ng

Violent tension between the sedentary farmers and nomadic herders fuelled by environmental degradation and resource competition has intensified, leading to deaths and displacements of 1,300 and 300,000 people respectively. Apart from the destruction of lives and livelihoods, the violence is increasingly posing serious threats to the sovereignty and corporate existence of the Nigerian state. As part of measures aimed at containing the rising hostility between the two parties, most states in the southern axis of Nigeria enacted anti-grazing laws. This study therefore examines the efficacy of the open grazing prohibition legislation in fostering healthy relations between the crop farmers and the nomadic pastoralists. Drawing from the postcolonial state theory and mixed methods approach and data, the study argues that the centralized character of the Nigerian state in which the central government monopolizes excessive control over the security architecture weakens the enforceability of the open grazing prohibition legislation. The enactment of the laws have not only increased hostilities and mutual suspicions between the conflicting parties, it has further exacerbated the human security dimension of the conflict. Given that the anti-grazing laws undermine the economic interests of the elites who control the law enforcement agencies, attempts at deploying the legal framework to address the unhealthy interactions between the sedentary farmers and nomadic pastoralists have only yielded meagre outcome. This study therefore concludes on the need to elevate rule of law and social justice over primordial interests in Nigeria.

Keywords: Anti-grazing law, violent tension, law enforcement agencies, nomadic pastoralists, sedentary farmers.
SMALL ARMS PROLIFERATION AND THE CHALLENGES OF CRIME CONTROL IN EBONYI COASTAL COMMUNITIES: PRACTICE CONSIDERATIONS FOR SOCIAL WORK IN NIGERIA

Agha A. Agha & Tanyi Lum Perpetua
Email Correspondence:
ali.agha@unn.edu.ng

Small arms proliferation and its attendant social vices have become a growing social menace in Nigeria, which has resulted in untimely loss of lives especially youth, children and women. This study examines small arms proliferation and crime control challenges in Ebonyi coastal communities, Nigeria. The study adopted a qualitative approach using In-depth Interview (IDI) and Key Informant Interview (KII) methods to gather data from the study area. A sample of 23 participants drawn from four coastal communities (5 representatives each), and three key informants from the law enforcement agency were used for the study. Results of the study revealed that small arms proliferation in the communities contributed largely to the upsurge of crimes in the area particularly armed robbery, cultism, drug/substance use, political thuggery, murder/assassination and other coordinated attacks on unsuspected community members. Addressing the effect of small arms proliferation and the challenges of crime control require multi-sectorial collaborative approaches, and this has practice implications for social workers in Nigeria. Social workers are professionally trained to address issues that limit optimal functioning of individuals, groups and communities at different levels of interventions. The study recommended the integration of social work professionals in the multi-sectorial team approach of crime control both at rural and urban areas in Nigeria.

Keywords: Small arms proliferation, crime control, Ebonyi Coastal Communities, Social Work

The threat of various criminal activities has spread throughout the community in recent years, resulting in a variety of victimizations, including death, making communal living a pipe dream, and an unattainable goal. Hence, this paper evaluated community policing as a strategy for reducing crime and initiating mediation processes to promote a nonviolent society. Data were obtained from 16 respondents (n=16) in two local government areas in Lagos State using a qualitative research design. In-depth interviews were carried out with police officers, neighborhood watch groups, and community residents, and the data were analyzed using content analysis. The results show that there are different types of community policing, including those funded by residents of the community to combat criminal activities. Most of the community members are comfortable with the operations of local vigilante groups and feel criminal activity will be reduced if they work alongside the police. More so, the findings show that cooperation among community leaders and policing agents was crucial in the mediation process between criminally prone neighborhoods. Although the study established that community policing organizations are discharging their tasks to some extent, however, underfunding and distrust from the public have hampered their efficiency. The study, therefore, suggests that regulations be developed to improve the effectiveness of community policing organizations and promote peaceful collaboration among them. It also suggests that social workers collaborate with communities to eradicate the core causes of criminality by advocating for legislation that meets the need for public safety.

Keywords: community policing, crime-reduction, mediation neighborhood watch, social worker

IMPACT OF COMMUNITY POLICING ON CRIME RATE IN HADEJIA METROPOLIS, JIGAWA STATE

Mohammed, Lawan.
School of Preliminary Studies, Sule Lamido University Kafin Hausa, Jigawa State
Corresponding email: lawandunari@gmail.com
Reports on the upsurge in crimes of different forms in urban areas such as Hadejia Metropolitan of Jigawa state necessitated the shift of security management from the old policing method to the innovative police-community partnership. The thrust of this study therefore is to examine whether the presence of community police as a security unit has contributed to a decline in the level of crime perpetrated in the study area. To achieve the objective of the study, cross-sectional descriptive survey research design was applied to reach the targeted respondents. Using r-value calculated at 0.463 as against critical value of 0.098, the study shows that there is a relationship between the presence of community policing and absence of crime. To reduce crime and enhance security in the area, the study recommends that the police in collaboration with local residents of the community should occasionally organize series of meetings which will aim at building support for community policing and improve social cohesion among the people in the area.

Key Words: Community Policing, Crime, Security, Hadejia Metropolis

---

FIGHTING CRIME: ANALYSIS OF STRATEGIC APPROACHES IN POLICING NIGERIA

Emmanuel Eshiotse, John Thompson Okpa & Lilian Ubi Otu
Department of Sociology, University of Calabar, Cross River State, Nigeria
eshiotsseemmanuel@yahoo.com

The study provides insights and in-depth analysis of the various strategic security measures adopted in the fight against crime in Cross River state, Nigeria. Using a combination of rational choice and routine activity theories, the study highlights that the decision of the government to strategically invest in the safety of lives is borne out of rational choice. The study employs cross-sectional data across selected local government areas in Cross River State at various intervals under different groupings. A specifically structured questionnaire and an in-depth interview with respondents (n = 384) were conducted, and the data received was analyzed using descriptive statistics, Pearson Product Moment Correlation (PPMC), and content analysis. Findings revealed that the use of CCTV camera footage during an investigation by law enforcement agencies has contributed significantly to crime control in Cross River State. The findings of the study show that the adoption of the community policing model in police operations has contributed significantly to crime control in Cross River State, Nigeria. The policy implications of this study are that the use of CCTV cameras to secure public properties can be enhanced if the factors militating against the effective use of CCTV cameras are solved by: increasing the number of CCTV cameras installed in strategic places; educating business owners on the importance of installing CCTV cameras within and around their business premises; and encouraging business owners to hire professionals to manage the hardware or software issues that may arise.

Keywords: crime fighting, strategic, approaches, policing, CCTV, community policing

---

STATE POLICE, FISCAL RELATIONS AND THE FIGHT AGAINST INSECURITY IN NIGERIA

Department of Public Administration and Local Government, University of Nigeria, Nsukka

This paper examines Nigeria's fight against insecurity in light of the present fiscal relations and police structure. Nigeria has been rated third among the most insecure countries in the world. For more than a decade, insecurity has been a severe threat to the existence and progress of Nigeria. Kidnappings, killings, rape and attacks have been daily occurrences. Through the federal security forces, the federal government has battled insecurity for a long time. However, it is clear that there has not been any meaningful success, instead, it is fast spreading. These acts of terrorism and insecurity occur in the state, local government areas and communities. Therefore, the challenge is more on the subnational governments. They are at the receiving end of the crisis and should be important actors in overcoming it. Secondary sources
were used to collect data for the study, and data were analyzed through analytical discourse. We found out that there is an absence of state control of the police and that Nigeria's present fiscal relation structure is skewed in favour of the federal government to the detriment of the subnational governments. This arrangement does not allow enough resources for subnational governments to constitute their security forces or control the police force that will be accountable to them and not to the federal government. Therefore, it is our contention that having state police and better fiscal relations will enable the subnational governments closer to the attacks to be more responsive to the insecurity and attacks bedevilling their people.

Keywords: Insecurity, state police, Fiscal Relations, Subnational government, security forces

INTER-COMMUNAL CRISES AND SOCIO-ECONOMIC DEVELOPMENT IN CENTRAL SENATORIAL DISTRICT OF CROSS RIVERS STATE, NIGERIA

*Igbe Joseph Egidi*1, Areh Chinwe Edith2 & Ushie Evaristus Akpanke

1 Department of Sociology, University of Calabar, Cross River State.
Email: igbejoe@unical.edu.ng; evaristusushie@unical.edu.ng

2 Department of Criminology and Security Studies, Chukwu Emeka Odumegwu Ojukwu University, Anambra State.
Email: Arehchinwe2015@gmail.com
*Corresponding author: igbejoe@unical.edu.ng

The study investigates the effects of inter-communal crises on social-economic development in the Central Senatorial District of Cross River State, Nigeria. The study hypothesised that inter-communal crises have no significant effect on socio-economic activities like farming, trading and festival celebrations in the study area. It follows by reviewing the literature on the variables under study. A cross-sectional survey design was adopted with a focus on simple, stratified and convenient sampling techniques. A total of three hundred and sixty-one (361) respondents were drawn from the study area and a questionnaire was used for data collection. Statistical Package for Social Science (SPSS) and Pearson Products Moment Correlation Coefficient (PPMCC) was adopted for data analysis. It was revealed that inter-communal crises have significant effects on socio-economic development in the study area and by extension, Nigeria. Based on the results of the analysis, it was recommended that the state government and security agencies should strengthen partnerships with traditional leaders, religious leaders, women and youth groups, civil society organizations, local non-governmental organizations (NGOs) and other relevant actors to engage in dialogue that would lead to a peaceful resolution of the protracted conflicts.

Keywords: Communal, crises, ethnicity, socio-economic activities, development

PUBLIC PERCEPTION OF HATE SPEECH AND ITS CONSEQUENCE ON SAFETY OF LIVES IN ANAMBRA STATE OF NIGERIA: A QUALITATIVE STUDY

Egbuche Nkiruka Miriam, Nwoke Chidiebere Obinna & Onwuama Onyeyilichukwu Peter
Department of Sociology and Anthropology, University of Nigeria, Nsukka.
Email: nkiruka.egbuche@unn.edu.ng; chidiebere.nwoke@unn.edu.ng & onyeyilichukwu.onwuama@unn.edu.ng

Hate speech covers many forms of expressions which advocate, incite, promote or justify hatred, violence and discrimination against a person or group of persons for a variety of reasons. Hate speech poses grave dangers for the cohesion of society, the protection of human rights and the rule of law. If left unaddressed, it can lead to a complete breakdown of law and order. For any control measures to be meaningful the perceptions of the community should be sought and incorporated into any remedial programme. Consequently, little or no empirical studies have focused on public perceptions of hate speech and its consequences on the safety of lives. This study determined public perceptions of hate speech and its consequences on the safety of lives in the Anambra State of Nigeria. The study adopted a cross-sectional survey design which involves an in-depth interview of 250 adults in two Local Governments Areas in Anambra State. The study revealed that people are
informed of what constitutes hate speech in Nigeria. Factors that influence hate speech include unemployment, frustration and perceived marginalization of a group among others. People perceive hate speech as a way to promote ethnicity and demean people. The consequences of hate speech are discrimination and violence against a person or group of persons. It is recommended that massive enlightenment and adequate implementation of the hate speech bill as well as the effective execution of programmes to reduce tendencies to hate speech should be conducted.

**Keywords:** Discrimination, Hate speech, Perception, Safety, Violence

---

**LANGUAGE NEGATIVISM, HATE SPEECH AND NATIONAL SECURITY IN NIGERIA**

Ndiribe, Matthew Onyebuchi  
Department of Linguistics, Igbo and Other Nigerian Languages  
University of Nigeria, Nsukka  
Email: matthew.ndiribe@unn.edu.ng  
08037308497

The place of language in a multilingual and multicultural setting cannot be over-emphasized. This is because language could either be a blessing or a curse. Language is the most potent weapon given to mankind by the Almighty God. It is the freest gift given to mankind because it is acquired effortlessly by any normal human being (Homo sapiens). Language could be used positively or negatively with the attendant consequences of either a peaceful or chaotic atmosphere. This study investigates the effects of language negativism, and hate speeches as they relate to the national security of the country—Nigeria. The study adopts as its frameworks the theories of Speech Act (SAT) and Political Discourse Analysis (PDA) in the analyses of data chosen for this study. The study is of the opinion that language negativism and hate speeches are one of the many causes of insecurity in the country, especially when those vices come from people who wield one political influence against certain people or the other. The study will analyze the speeches of people it considers relevant to the corporate existence of the country and how their misuse of language in the realm of negativism and hate speech could be a danger to national security. The study concludes that speech planning and execution is the first step to achieving healthy national security and a reduced threat of insecurity.

---

**LINGUISTICS PROBLEMS IN CONFLICT RESOLUTION IN NIGERIA**

1. Obioha, Jane Onyinyechi, Obioha, 1Kingsley Chukwu Episteme  
1. Use of English School of Basic Midwifery, Alex Ekwueme Federal University Teaching Hospital Abakaliki.  
2. University of Nigeria / Department of Obstetrics & Gynaecology, University of Nigeria Teaching Hospital, Ituku Ozalla, Enugu.  
Corresponding author's email: onyiepisteme@gmail.com

Linguistics is the scientific study of language and its structure, including the study of grammar, syntax, and phonetics. Specific branches of linguistics include sociolinguistics, dialectology, psycholinguistics, computational linguistics, comparative linguistics, and structural linguistics. Language on the other hand is the structure of meaning, giving and reality creation is composed of words, phrases and sentences. Humans' communications are based on these features to describe an event, explain one's emotions, needs, interests and fears etc. Language which is an aspect of linguistics is used to resolve or escalate dispute. People from different culture and social units perceive the world through their distinctive languages. Meaning that language provides repertoire of words that name the categories into which the language users have divided their world. In fact, definitions of words are linguistically, culturally and contextually bound. This is because words carry meanings that make sense to members of a shared social environment. Conflicts resolution relies heavily on words (language). However, there is an underlying assumption in Nigeria that all these words should be in English – the second language. Therefore, this work posits that if English is to be a conflict resolution tool in Nigeria, it must accommodate the diversity of culture and language usage. This paper also explores the problems of English language in intercultural conflict resolution, and emphasizes the need to consider the different uses of the language in national and transnational conflict resolution.

**Keywords:** Linguistics, Language, Culture, Conflict Resolution, English, Lingua Franca
STIGMATIZATION ASSOCIATED WITH COVID-19 PANDEMIC AS EMBEDDED IN LANGUAGE USE IN NIGERIAN NEWSPAPERS.

*Crescentia N. Ugwuona; Roseline Okorji.
Department of Linguistics, Igbo and Other Nigerian Languages, University of Nigeria, Nsukka
*Corresponding author's email: crescentia.ugwuona@unn.edu.ng

Nigeria is currently facing increased threat in health security, and stigmatizing language associated with COVID-19 pandemic in Nigerian print media are at the peak of the lots of the nation's health insecurity and terror, but have not been explored properly. Besides, studies that recorded issues on language use in the contexts of COVID-19 elsewhere, did not analyse how stigmatizing language can serve as a threat to health security and wellbeing of the populace. This study investigates the patterns of stigmatizing language about COVID-19 pandemic in Nigerian print media and how they affect the management of the pandemic and the implications for health security and wellbeing in Nigeria. Some aspects of discourse analysis and theory of language use are utilized as the framework and the methodological paradigm of qualitative research is adopted to analyse data elicited from selected online version of Nigerian newspapers. The study reveals that stigmatizing discourses about COVID-19 pandemic in print media and informal public places in local communities are the major threats to health security; and marginalization of people living with COVID-19 in contemporary Nigeria. The researcher recommends that COVID-19 discussants should always employ preferred, appropriate, and empowerment language in the print media. Medical professionals can also play a role in reframing the language around COVID-19 in order to empower and educate the general public about the pandemic. This study will contribute to discussions that will shape future health and security policies and patient care around communities and the world.

Keywords: discourses, health security, COVID-19, Nigeria, pandemic

USE OF LANGUAGE IN PROMOTING NATIONAL SECURITY IN NIGERIA

Kiani Aaron Tamuno¹, Christiana Ihuoma Pepple¹, Duru George N², and Nelson, Ekeuwe Ebiunene Rachael¹
¹Languages Unit, School of General Studies, Federal Polytechnic of Oil and Gas, Bonny, Rivers State, Nigeria.
²Humanities and Social Sciences Unit, School of General Studies, Federal Polytechnic of Oil and Gas, Bonny, Rivers State, Nigeria.

Nigeria's national security situation has been difficult and unsettling. National security agencies have made numerous attempts to offer lovable and useful security mechanisms, but the issue of national security has persisted. This paper examines the role of language in maintaining national security. Many crises have plagued Nigeria's current democratic system, with language misuse and ineffective communication being the primary causes of most of them. The main focus of this essay is to show how language may be used effectively to control and reduce insecurity in a nation. The key message of this study is that, for Nigeria as a whole to achieve peace, success, and continuity in language use, the opinion should be expressed frequently and strategically while also being understood by others when engaging in interpersonal interactions. Government is not the only entity with responsibility for national security. Nigerians should work together to ensure that language is used in communication acceptably and effectively. Finally, the investigation makes the following recommendation: Nigerians should refrain from speaking out in a way that could endanger national security, especially politicians. The Federal Government could demonstrate a greater commitment to the subject of national security by holding those who make inciting statements accountable. People should also increase their feedback channels and communication skills.

Keywords: communication, language, security
Kingsley Ikechukwu Uwaegbute & Damian Onyemaechi Odo  
Department of Religion and Cultural Studies, University of Nigeria, Nsukka.  
kingsley.uwegbute@unn.edu.ng; damian.odo@unn.edu.ng

The dominant narrative(s) in understanding religious violence in Nigeria has been to link it with socio-economic, political, historical and extremist issues. This work argues that religious violence in Nigeria currently goes beyond the identified issues above. The work argues that the central force at play, as long as religious violence in contemporary Nigeria is concerned, is state failure. Using Rotberg’s (2003) key indicators of state failure, the work contends that unless the Nigerian state plays its basic role in showing itself as a strong state, religious violence will continue to simmer in the country. The study recommends that political leaders of Nigeria should strengthen state institutions, improve standards of living in the country, and find ways of dialoguing with its aggrieved country members instead of a violent clampdown to stem the tide of violent killings in the name of religion in Nigeria.

Keywords: Nigeria, Religious violence, State failure, Politics, Socio-economic issues

ENGAGING THE INDIGENOUS AFRICAN RELIGION AND CULTURE TOWARDS A SUSTAINABLE GLOBAL PEACE AND SECURITY  
Ifanyi Okeke  
Department of Philosophy/Religion, Alex Ekwueme Federal University, Ndufu-Alike, Ikwo, Ebonyi State, Nigeria.  
chilurumogu@gmail.com, +2348036716310

Abstract  
Globally, the world is under attack. Call it al-Qaeda, Hezbollah, ISIS (Islamic State of Iraq and Syria), Boko Haram, or banditry. In fact, the list is endless. These organizations are increasingly assuming the position and posture of a hydra-headed monster. The combined forces of the military incursion of America, Britain and the United Nations joint forces have not succeeded in silencing these forces that tend to annihilate humanity from the faces of the earth. In Africa and Nigeria, nobody can give accurate figures of lives lost daily due to the activities of these terrorists, insurgencies and banditry. Military weapons are acquired daily, and personnel are daily trained, equipped and lined up to confront these forces, yet these anti-state forces do not seem to be waning. It is to be noted that African Traditional Religion and Culture can boast of components and contents that can be deployed to assist in curbing the activities of these enemy powers. Such contents as witchcraft, medicine, masquerades, secret cults and the like can provide the needed panacea for ensuring peace and security in the global world. The world recognizes and allows orthodox medicine to thrive with traditional medicine in providing and promoting human health. Is acupuncture not a key component of traditional Chinese medicine? Do our laws and Courts not recognize our Customary Arbitration, especially oath-taking, as veritable means of conflict/dispute resolution? It then becomes pertinent that orthodox Military Weaponry can go hand in hand with African Traditional and cultural forces and powers in our collective search for global peace and security. Indeed the world stands to benefit from African Traditional Religion and its culture of peace.

Keywords: Engaging, Forces, Fight, Global, Security, Peace

MODERATING ROLES OF THRIVING AT WORK IN THE ASSOCIATIONS OF COMBAT EXPOSURE, EXPERIENCES, AND SOLDIERS' ORGANISATIONAL COMMITMENT  
Gabriel C. Kanu, Ikechukwu V. N. Ujoatuonu*, David T. Amirga, Obinna O. Ike, & Okechukwu, V. Odo,  
Department of Psychology, Faculty of the Social Sciences, University of Nigeria, Nsukka.  
*ikechukwu.ujoatuonu@unn.edu.ng, Phone+2348062985998

The security difficulties that Nigeria is currently facing have led to an overtaxed military on the part of the government. As a result, the perceived military organisation's commitment to safeguarding the nation's territory and the citizens' lives and property seems politicised and in doubt. The researchers examined how military personnel's organisational
commitment, combat exposure, and combat experiences are moderated by their ability to thrive at work. This study included 252 Nigerian soldiers from the Nigerian Army School of Military Engineering (NASME) and the 72 Special Forces Battalion in Makurdi, Benue State. The researchers used four scales: Combat Exposure, Combat Experiences, Thriving at Work and Organisational Commitment. Using Hayes PROCESS macro, the researchers discovered a statistically significant positive relationship between combat exposure, thriving at work, and organisational commitment. Showing that when soldiers are exposed to combat, they learn, become vital and stay professionally committed to their work and organisation. However, combat experiences showed no significant effect on organisational commitment. Also, survival of combat experiences with insurgencies, Boko haram and other security challenges will not make them stay professionally committed. Also, the association between exposure to combat and organisational commitment was not moderated by thriving at work, although the relationship between combat experiences and organisational commitment was. Our findings imply that combat experience keeps soldiers loyal to their careers, organisations and countries. We found a significant security danger influencing combat (exposures and experiences), learning, vitality, and commitment. Discussion of the study's limitations and recommendations are made for additional research.

**Keywords:** Combat exposure, combat experiences, military personnel organisational commitment, thriving at work.

---

**HUMAN SECURITY: A PANACEA TO ENDURING NATIONAL SECURITY IN NIGERIA**

*Ukah Finian O. & Agnes Chukwu*

Department of Industrial Relations and Personnel Management
Michael Okpara University of Agriculture, Umudike
finejoe86@yahoo.com

Promoting human security has become the central focus of the new development paradigm because building arms and ammunition does not bring peace, security and political stability. Eradicating hunger, diseases, poverty and unemployment through sustainable development programmes is the key to enduring national security. Against this backdrop, this paper examines the impact of human security on overall national security in Nigeria. The paper, with the use of the Natural State theory, argued that the state emerged to provide the needs of individuals, given that human beings cannot satisfactorily provide their basic needs. The paper adopted purposive sampling of secondary data from literature and published reports on the variables, analyzed using qualitative content analysis of the textual data to establish a link between human security and national security. The paper concludes that fortifying the security walls with the latest security equipment/gadgets and assigning security professionals to secure the populace will amount to nothing if the threats of hunger, diseases, poverty, unemployment, political and economic exclusion and lack of social amenities are not addressed. It recommended that including human security issues in strategic security policies is essential to addressing national insecurity and instability in Nigeria.

**Keywords:** Human Security, National Security, Political Stability, Sustainable Development

---

**INTER-GROUP RELATIONS AND THE CHALLENGE OF SECURITY AND DEVELOPMENT IN BENUE STATE**

*John Tor Tsuwa fspsp.*

Department of Political Science, Benue State University, Makurdi

Nigeria is a multicultural society with each segment agitating for both self-sufficiency, defense and inclusivity. The various groups have different worldviews and different behavior towards their neighbors. The dynamics of this relations has led to different actions and outcomes particularly as it affects security and development. This paper used both primary and secondary sources of data and analyzed this data using the Behaviouralists perspective of inter-group theory. The findings reveal that, when the various groups within a geographical boundary relate peacefully and share security intelligence and collective strategies, they experience more collective peace and security. It also discovered that, underdevelopment which is at the center of insecurity is more prevalent when there is hostile inter-group relations between communities. This is because, mobilization of resources and citing of projects becomes difficult in such disunited communities. The paper therefore suggest that inter group studies and committees relations should be introduced and encouraged between communities and joint ownership of resources and projects by communities should be adopted. This will enable communities appreciate the benefits of cordial inter group relations.

**Key Words:** Inter-Group, Relations, Security, Development, Community
This study investigated the strategies for combating cybercrime among undergraduate students in Nigerian tertiary institutions. Survey research design was adopted for the study. The population for the study was 541 Computer Science Education students in tertiary institutions in Enugu State. The instrument for data collection was structured questionnaire, which comprised 25 items. The instrument was validated by three ICT experts. The reliability of the instrument was obtained using Cronbach Alpha method which yielded an overall coefficient of 0.81. The instrument was designed in Google Forms and distributed to the respondents with the help of three research assistants. The data collected from the respondents were analyzed using mean scores and standard deviations while t-test statistic was used to test the null hypotheses formulated for the study at .05 level of significance. The findings of the study revealed that students are aware of the different kinds of cybercrimes such as online drug trafficking, cyber stalking, account/profile hacking, internet scamming, identity theft, spamming, phishing and online child sexual abuse. The study also found that internet literacy/skills, ego in committing internet fraud, quest to make quick money, acknowledging cybercrime as a social exposure are among the reasons why students get involved in cybercrimes. It was therefore recommended that creating regular awareness on the negative effects of cybercrimes to the individual and society; enacting severe punishment act/law on cybercrimes; the use of e-security features like firewalls, IP Address verification and tracking systems are among the strategies to combat high rate of cybercrimes among Nigerian schooling youths.

**Keyword:** Strategies, Cybercrime, Undergraduate Students, Universities

---

As the lowest tier of government, local government authorities have the highest proximity to the people such that their performances have direct implications on the general well-being of the people. Globally, the adoption of Information Communication Technology (ICT) has proved a potent tool in enhancing organization performance. Empirical evidence suggest that ICT adoption in local government authorities in Nigeria remains low, thus motivating this study to investigate the factors, conditions, and environments that are responsible for low ICT adoption across the 21 local government authorities in Enugu State. By adopting a survey research design; this study used snowball sampling technique to collect data through the distribution of questionnaire from 94 local government workers across the state. Data analysis was conducted using the structural equation modeling using Statistical Package of Social Science (SPSS) Amos version 24 and triangulated by a thematic analysis. Findings show that ICT policy is the dominant factor for low ICT adoption in local government authorities in Enugu State with lack of political will the emerging predictor of ICT policy across the local governments. The study therefore recommended, among others, that the political will of local government administrators in formulating policies that would improve adoption and deployment of ICT in administration of local governments.

**Key Words:** Information Communication Technology, Local Government Area, Performance, Enugu State, Nigeria.
COMPARATIVE REVIEW OF MIMO CHANNEL ESTIMATION TECHNIQUES

S. E. Eleje1, C. L. Anioke2, and C. I. Ani3

1, 2, 3 Department of Electronic Engineering, University of Nigeria Nsukka, Enugu State, Nigeria

Corresponding author's e-mail address: Samson.eleje.pg91123@unn.edu.ng*

The promising characteristic features of multiple input multiple output (MIMO) systems rely on the knowledge of the channel state information (CSI) for coherent signal detection and decoding. The determination of the CSI is achieved using various estimation techniques such as pilot-aided, blind, and semi-blind channel estimation techniques. Channel estimation as well as the accuracy of the estimates are significant tasks in MIMO communication systems. This paper presents a performance evaluation of various techniques presented in literature from conventional techniques to more recent neural network-based techniques.

Keywords: Channel Estimation, complexity, pilot, pilot-aided, Blind, Semi-blind

DIGITAL LITERACY AND E-GOVERNANCE ADOPTION FOR EFFECTIVE SERVICE DELIVERY IN THE PUBLIC SECTOR: EVIDENCE FROM CROSS RIVER STATE CIVIL SERVICE, NIGERIA, 2010-2020

Inakefe Gabriel Inakefe 1, 2 & Abue Regina Eleje1

1 Department of Public Administration, Faculty of Management Sciences, University of Calabar, Calabar- Nigeria

E-mail: inakefegabriel@unical.edu.ng

2 Department of Public Administration and Local Government, Faculty of the Social Sciences, University of Nigeria, Nsukka

E-mail: inakefegabriel@unical.edu.ng

E-government has emerged as the most desired public sector innovation of the 21st century. This study looks at how ICT literacy has hampered e-government and service delivery in the Cross River State Civil Service between 2010 and 2020. A mixed-method research design was used in this study. A sample of 295 was drawn from a population of 1,123. The study's data was gathered through primary and secondary sources. One-way ANOVA was used to analyze the quantitative data, while descriptive evaluation was used to analyze the qualitative data. The findings show that digital literacy is a barrier to e-government and service delivery in the Cross River State Civil Service. The study recommends that organizations periodically assess their ICT needs and the ICT competency of their workforce to design and implement appropriate ICT training programs. The study also recommends that ICT training should be continuous and broad in scope for organizations to achieve their objectives.

Keywords: e-government; service delivery; digital literacy; public sector; civil service

SOCIAL NETWORKING AND DIGITAL SAFETY: A RISING CONCERN IN THE NIGERIAN STATE

Christian Akpan, Nuhu Umar Mukail & Anafa David Mudi

Department of Computer Science, School of Science and Technology, Isa Mustapha Agwai I Polytechnic (IMAP), Lafia, Nasarawa State, Nigeria.

cfa.chrisakpan@gmail.com, uma_zai@yahoo.com, dahvids@gmail.com

Social Network Service allows virtual connection between people with similar interests across the globe. However, the enormous benefits of social networking and digital lifestyle in the 21st century are not without implications and consequences. Social networking platforms have garnered global attention creating a significant trend and an unsolicited volume of personal data on the web. The communication phenomenon referred to as “information overload” has been set in motion the last few years. The world panics as threats to digital safety increase in our socially networked society. In Nigeria, government efforts towards regulating internet usage and social network censorship constantly come under massive attack and stiff resistance. Several government policies to
manage the outburst of private information on social networks to promote digital safety are dampened by core political, socioeconomic and ethnic influences. In this paper, security and privacy threats targeting users of social networks are discussed, and the current state-of-the-art defence solutions are enumerated. This paper highlights the effect of social networking and the sociocultural strains while suggesting easy-to-apply response techniques to secure the social network ecosystem and promote digital safety in Nigeria.

**Keywords:** Digital Safety, Social Networks, Data, Information, Security

---

**YOUTH, INTERNET FRAUD AND NIGERIA’S IMAGE ABROAD**

*Muhammad, Muhammad Bature; Sekpe, Sheneni Samuel*

Department of Political Science, Prince Abubakar Audu University, Anyigba.

*Corresponding author's email: jikankaka@gmail.com*

The importance of internet to human society is ostensibly amplifying. Its relevance cut across socioeconomic and political activities among and within societies in the world and remained one of the most efficient domains to explore business, education, communications, as well as social relations. Conversely, despite its reputation, the gory state of internet activities in Nigeria is gradually becoming a threat to the image of the country. Internet fraud, which constitutes phishing, spamming, ATM fraud, are perpetually condone in the country in a colossal manner. The demographic population that perpetrate these frauds are convincingly and largely youths, they engage in this illicit activity in trough. Most importantly, they used the internet domain obscenely to elicit economic gains and defraud unsuspecting netizens both within and outside Nigeria. This paper explicated the nexus between youth and internet fraud in Nigeria, thereby, holds that the unabated internet fraud in the country will add to challenges of the country's image abroad. The paper explore the secondary sources, which include and not limited to textbooks, journals, newspapers, government reports and bulletin. Subsequently, the paper, among other factors, recommends that government at all levels and strata as well as private entities should employ the service of effective Cyber security to nuance the activities of internet fraudsters, and furthermore sensitize youths on the implications of internet fraud on country's image and development.

**Keywords:** Youth, internet fraud, Nigeria's image, Cyber security, Development

---

**INFORMATION SECURITY SYSTEM: POLICIES AND PROSPECTS A PANACEA TO THE MODERN CYBERSECURITY THREATS**

Christian Akpan, Anafa David Mudi & Nuhu Umar Mukail

Department of Computer Science, School of Science and Technology, Isa Mustapha Agwai I Polytechnic (IMAP), Lafia, Nasarawa State, Nigeria.

cfa.chrisakpan@gmail.com, dahvids@gmail.com, uma_zai@yahoo.com

It is imperative to initiate, design and implement policies that regulate the web space as a panacea to data and human security threats in a porous, high-risk, and security-threatened society. Also, issues steering security concerns must be prioritized to avert the exacerbation of their consequences. The greatest nightmares of 21st-century society are human and data security. Therefore, stakeholders must escalate efforts and monetary budgets to guarantee data and human security. This paper analyzes threats and vulnerabilities in information security systems and suggests regulatory policies against cyber-related attacks/threats. Governments at various strata, regulatory bodies and field practitioners (or professionals) can adopt these in mitigating the rising cybersecurity threats in our society. The methodology used for data collection was oral interviews and observations. The unstructured data was analyzed, and a Structured Systems Analysis and Design Method (SSADM) was employed for implementing the suggested design. During the systems analysis and application design, a waterfall model was recommended. Challenges identified include increased cybercrimes, increased demand for data protection, the presence of crime syndicates, cyber armies, financial fraud and terrorism. In conclusion,
incident response management and secured enterprise architecture are recommended for designing security systems. As global cyber-crime statistics surge, the role of the stakeholders is to develop processes, tools, techniques and technologies to protect network programs, data, and sensitive information from illegal or unauthorized modification, disruption, destruction and inspection.

**Keywords:** Data, Human, Information, Policies, Regulatory Bodies, Cybersecurity

---

**THE EFFECT OF IDENTITY THEFT AND CLICKJACKING ON PERSONAL SECURITY IN NIGERIA**

Christian Akpan and Garba M. Rabiu
Department of Computer Science, School of Science and Technology,
Isa Mustapha Agwai I Polytechnic (IMAP),
Lafia,
Nasarawa State, Nigeria.
Correspondence: cfa.chrisakpan@gmail.com

Identity theft is a common phenomenon in the 21st century. Today, identity theft and clickjacking jointly complicate personal problems leading to psychological pain of loss, helplessness, anger, isolation, betrayal, rage and even embarrassment. In Nigeria, data theft and cybercrimes have become widespread crimes making the EFCC preoccupied with the arrest and prosecution of the perpetrators. Identity thieves have stolen significant worth of identities. Nigeria has been tipped to anticipate a loss of about US$6 Trillion to cybercrimes by 2030. Similarly in 2018, commercial banks in Nigeria lost a cumulative sum of N15 billion (US$39 million) to e-fraud and cybercrimes indicating a 537% increase from the N2.37 billion lost recorded in 2017. In Nigeria, Cybercrimes are estimated to cost over US$42 billion currently. In this study, data were collected using 1500 questionnaires administered via online and offline mediums. 30% of the total was analyzed and used to obtain the result for the study. Results and Findings indicated that identity fraud and clickjacking have emerged as one of the most severe and familiar patterns of cybercrime. Preemptively, social networkers have a 46% higher risk of account takeover fraud and 1 out of 4 never fully recover a stolen identity. This paper highlights the effects of identity theft and clickjacking in society and suggests preventive measures using easy-to-apply techniques available.

**Keywords:** Clickjacking, Catfishing, Identity Theft, Cyberstalking, Cybercrimes

---

**DIMENSIONS OF HUMAN SECURITY: EXPLORING THE POTENTIALS OF DISGUISE /IMITATION FOR SECURITY SURVEILLANCE AND MANAGEMENT IN SELECTED AFRICAN PLAYS**

Cindy A. Ezeugwu¹ and Oguejiofor V Omeje ²
¹Department of Theatre and Film Studies, University of Nigeria, Nsukka
²Humanities Unit, School of General Studies, University of Nigeria, Nsukka
Correspondence: cindy.ezeugwu@unn.edu.ng

The issue of security and the challenges associated with it in Nigeria is rather alarming and the impact quite devastating. This study examines dimensions and utility of the theatre in security management. The dynamics of theatre have gone beyond the teaching methods which include medical therapy, entertainment and other nominal relevancies, to incorporate emerging trends like the application of elements of disguise and imitation in security surveillance and management which is often latent and surreptitious in nature. The above-mentioned areas of discovery have been assumed by many to be the limit of the relevance of theatre to the society, but beyond these functions, theatre has broken new grounds in its services to humanity especially in the area of security operations in the 21st Century through the infusion of disguise and imitation. Over the years, this theatrical method has been successfully applied in different security operations, but has not been accorded its due recognition as an academic discipline. The aim of this study therefore, is to suggest that Theatre Arts should be adopted as one of the prerequisite studies necessary for employment of security personnel with a view to boost security management in Nigeria. The study adopts the theory of Enlightened Guile as its framework, using Ngugi Wa Thiong'O's play *The Trial of Dedan Kimathi* and Femi Osofisan's *Morountodun*. The study concludes that security challenges in Nigeria could be brought to the barest minimum with the
incorporation of security personnel with at least certificate study in Theatre Arts.

**Keywords:** Enlightened Guile, Theatre, Security, Surveillance, Potent, Morountodun.

---

**HUMAN NEED FOR DIGITAL LITERACY**

**Apollons, Godiya Jozadak**  
Innovation/ICT Centre, University of Nigeria,  
Nsukka.  
Correspondence Email: godiya.apollos@unn.edu.ng

With the speed at which information and communication technology is spreading worldwide, cybercrime appears to be a potential threat to confidential computer data and systems. Humans are inherently complex and multi-faceted creatures with our agendas, influences, faults, beliefs, and priorities. Sometimes we're also simply just too trusting. Even the most hardened system can be breached through social engineering – the 'hacking' of people. No amount of secure network topologies and firewalls or security software can withstand a user innocently clicking on an email link, or being convinced to give up login details over the phone by someone pretending to be from the ICT department. A recent study by researchers revealed that just over 50% of people click on links in emails from strangers, even when they were aware of the risks. And so, as a result, cyber security isn't just about technological defences: it's also about people. From the home user through to industry and government, everyone needs a basic understanding of cyber threats and how to recognize them, something which comes under the umbrella of digital literacy. It should be clear by now that we live in a world reliant on technology, and that this technology can also be vulnerable if it's not designed with security in mind. While some products and services are, many more are not, and to this end, the development of cyber security tools, skills, and education is essential to protecting both our infrastructure and way of life. This paper aims to sensitize individuals and organizations on the need to be proactive and more cautious while navigating cyberspace given the prevalent threats to cyber security.
The farmer-Herder conflict (F-H-C) has evolved into the most salient resource-based conflict in West Africa. The devastating effect on national security is evident on the number of lives lost and increasing number of displaced persons. Although its effects on national security have been documented in literature, the food security impacts of the conflict have been under-examined in the literature. Relatedly, there is paucity of information (especially at aggregate level), on the impact of the farmer herder conflict on agriculture land use, especially in West Africa. Our aim is to address these knowledge gaps and improve understanding on the implications of the farmer herder conflicts for Land Use and Food Security in West Africa. To investigate the above-mentioned issues, we focused specifically on six West African countries namely Nigeria, Ghana, Chad, Côte d'Ivoire, Mali, and Burkina Faso. These countries presents an interesting context as they represent the countries with the highest number of fatalities resulting from farmer herder conflicts as reported by The Armed Conflict Location & Event Data. To estimate the impact of farmer herder conflict on food security and land use, we implemented a two-stage least squares estimator for the linear panel data model. This study appeals to the role of climate change as an ideal instrument for the conflict variable (endogenous regressor). Our result showed that a percentage increase in farmer herder conflict increased food insecurity 0.5% and reduces land under cultivation by 0.74%. These finding implies that the F-H-C has as much impact on food security as on national security.
In developed countries, advancement in agriculture has evolved and farmers find their profession worthwhile due to the use of electronics, information technology and communications, as well as technical ability. Agriculture can be interesting when it is infused with necessary high technology sensor and analysis tools needed to make the work easier. The way agriculture is being practiced in Nigeria is worrisome as foods produced by Nigerian farmers are in small quantity and poor quality. It saddens the heart to know that little or nothing has changed over the last two decades. Nigerian youth do not see agriculture as a profession due to the primitive way it is being practiced. However, precision agriculture is a system of farm management that employs information technology (IT) to ensure that crops and soil get exactly what they need to thrive and produce at their best. Precision agriculture has been considered as a concept in Nigeria without actualization. Precision agriculture should become necessary in Nigeria in order to ensure food security for the teeming population which has been projected to be 400 million in 2050. There are drawbacks to precision agriculture in Nigeria, even with this, precision agriculture benefits outweigh its challenges as it is economically and ecologically sound. This review will examine how precision agriculture can be explored for food security in Nigeria.

**Keywords:** Precision agriculture, food security, information technology, Nigeria.

---

**MAIZE (**Zea mays** L.) DRY MATTER ACCUMULATION IN RESPONSE TO WEATHER FACTORS AT THE SEEDLING AND VEGETATIVE GROWTH STAGES**

The rate of partitioning of photosynthetic assimilates for dry matter production is dependent on several environmental factors. Due to the myriad of environmental challenges facing crop production, including climate change, these factors must be properly isolated to aid proper environmental modifications and guarantee optimum crop growth and development. Consequently, dry matters sampled at 5-day intervals from 9 to 39 days after planting (DAP), from sixteen maize varieties planted in RCBD experiments at the Obafemi Awolowo University Teaching and Research Farm in 2013 and 2014 were used to investigate the response of dry matter to weather factors and determine its relationship with adult plant traits. Additional data were collected on flowering, plant and ear heights, and ear weight from which grain yield in t/ha was calculated. Data were subjected to ANOVA and correlation analysis. Results showed significant effects of the environment on dry matter accumulation; and environment, genotype and gxe interaction on grain yield. Generally, dry matter scored significant negative correlations with minimum temperature (T\text{min}), minimum dew point (Dew\text{min}) and wind speed. Specifically, dry matter was significantly correlated with T\text{min} at 19, 29 and 34 DAP; and Dew\text{min} at 19 DAP. Dry matter also had significant correlations with flowering (negative), and plant cum ear heights (positive). However, there was no significant direct interaction of dry matter with solar radiation and grain yield. In conclusion, maize dry matter accumulation was generally influenced by the environment for which climate was prominent. It increased significantly with reduced T\text{min}, Dew\text{min} and windspeed, and vice-versa.

**Keywords:** Crop physiology, climatology, phenology, net assimilation rate, Zea mays L.
COMMERCIALIZATION OF BAMBARA NUT PRODUCTION IN KOGI STATE NIGERIA: IMPLICATIONS FOR FOOD SECURITY

Ridwan Mukaila”, Abraham Falola’, Ikenna Charles Ukwuaba’, Lynda Ogechi Egwue’, Angela Chidimma Igweh', Tochukwu Linda Onah1
1Department of Agricultural Economics, University of Nigeria, Nsukka, Enugu State, Nigeria
2Department of Agricultural Economics and Farm Management, University of Ilorin, Ilorin, Kwara State Nigeria

The global population increases daily which requires a considerable increase in food production. Bambara nut is an important staple food crop capable of supplying essential nutrients to the body and providing the farmers with income, yet it is underutilized. This study, therefore, assessed the commercialization of Bambara nut production in Kogi state Nigeria to enhance food availability. Primary data were collected from randomly selected 240 Bambara nut farmers. The data were analysed using descriptive statistics, household commercialization index and the Tobit model. The results revealed that the mean household commercialization index was 0.56; indicating that there exists a gap of 44% for Bambara nut farmers to reach full commercialization. Access to credit, household size, farming experience, the quantity of fertilizer use and farm output were the significant factors that enhanced Bambara nut commercialization. While age and distance to the market were significant factors that reduced the degree of Bambara nut commercialization. Inadequate access to credit/loan facilities, long-distance to market, high cost of inputs, poor road network to transport produce and incidence of pests and diseases were the militating constraints to commercialization of Bambara nut production. This study advocates for the provision of credit and inputs, by government and financial institutions, to the farmers to improve their production and commercialization endeavours which would consequently enhance food security.

Keywords: Agricultural commercialization, Bambara nut, Barriers, Food production, Food security

SOCIO-ECONOMIC STATUS AND LEVEL OF ADOPTION: A TRADE-OFF ON PRODUCTIVITY OF IMPROVED CASSAVA (MANIHOT SPP) VARIETIES BY SMALLHOLDER FARMERS IN ENUGU STATE, NIGERIA

Oguejiofor Joseph Okorie, Ibrahim Isaac Umaru, Angela Ebere Obetta, Chris Nnamdi Onyekwe
Department of Agricultural Economics, University of Nigeria, Nsukka
Corresponding author's e-mail: oguejiofor.okorie@unn.edu.ng

Amidst improved crop varieties in Nigeria, productivity among smallholder farmers is still relatively low that food security among them lingers on. The study analyzed the socioeconomic status and level of adoption trade-off on productivity of improved cassava varieties (ICV) by smallholder farmers in Enugu state. Specifically, factors affecting level of adoption of ICV and the constraints to adoption were analyzed. Multi-stage sampling technique was employed to select 240 smallholder cassava farmers from the list of beneficiaries in Enugu State Fadama III Additional Financing Project (World Bank Assisted). Copies of structured questionnaire were used to generate data during 2019 farming season. Data were analyzed using descriptive and inferential statistics (Heckman's double huddle model). Results on the discrete decision of whether or not to adopt ICV showed that farm size has negative and significant effect on it. However, the prices of labour and fertilizer, household sizes and the age of household heads were positive and significantly related with the discrete decision. These factors failed to affect the level of adoption significantly. It was recorded that the constraints militating against the level of adoption of ICV were capital, poor access to credit, low income of households, land scarcity, poor price of finished cassava product, lack of processing facilities, labour scarcity and high cost of inputs respectively.

Keywords: Productivity, Adoption, Socioeconomic status, Trade-off, Improved cassava varieties, Enugu state, Nigeria
ANALYSIS OF FOOD SECURITY STATUS AMONG COWPEA FARMING HOUSEHOLDS IN BALI AND GASSOL LOCAL GOVERNMENT AREAS OF TARABA STATE

Aboki, E.1, Umaru, I.I.1, Garba E.J.3, Onogwu, G.O.2, Ibe, J.C.2

Corresponding author
1Department of Agricultural Economics and Extension, Taraba State University, Jalingo, Nigeria
Email: abokiedon33@gmail.com, 08163502775
2Department of Agricultural Economics, University Nigeria, Nsukka
3Department of Agricultural Economics and Extension, Federal University, Wukari, Taraba State, Nigeria

Nigeria is still vulnerable to chronic food shortages, malnutrition and unbalanced nutrition. The study assessed food security status of cowpea farming households in Bali and Gassol Local Government Areas of Taraba State, Nigeria. The specific objectives of the study were to describe the socio-economic characteristics of the respondents, determine food security status and to identify factors influencing food security status of the cowpea farming households. Multi-stage and purposive sampling techniques were used to select 280 respondents. Primary data were collected from the respondents through the use of structured questionnaire. Descriptive statistics, multinomial logit regression and food security index were employed for the analysis. Findings from the study revealed the mean age of the cowpea farmers to be 37.6 years with mean farming experience of 9.6 years. The result further showed that most (80%) of the respondents were educated with mean annual income of N373, 512.50. The result of the food security index revealed that 49.64% of the respondents were food insecure, 28.93% were moderately food secure and 21.43% were food secure. The factors influencing the food security status of the respondents in the study area were membership of cooperative, access to credit and total income which had negative coefficient with estimated marginal effect of -0.0618, -0.0764, and -0.0658 implying an inverse relationship. The Farm size had a positive coefficient with estimated marginal effect of 0.0893 implying a direct relationship. Based on the findings, it was recommended that the private sectors and NGOs should make credits accessible to the cowpea producers.

Keywords: Analysis, food security status, cowpea and households.

IMPACT OF CLIMATE-SMART AGRICULTURE ON AGRICULTURAL PRODUCTIVITY IN NIGERIA: A CASE STUDY OF EBONYI RICE FARMERS

Ohakim, Emmanuel1; Otei Chinwendu1; Ugwuonah Geraldine2
1University of Nigeria Business School
2Department of Marketing, University of Nigeria Enugu Campus

The agricultural sector in Nigeria had been the main stay of the Nigerian economy before its diversification into oil. However, the present state of inflation and economic crisis has forced individuals to have a rethink towards the practice of agriculture. With agriculture being the highest employer of labor in Nigeria, it becomes pertinent to examine issues revolving around productivity as this plays a significant role in its ability to solve the current food crisis situation. This study specifically focused on determining whether socio-cultural characteristics influence farmers’ adoption of climate smart agricultural practices; and ascertaining whether climate smart agriculture significantly affects productivity of rice farmers. Copies of the questionnaire were administered to 69 randomly selected farmers each from the six local government areas of Ebonyi state, totaling a sample size of 414 respondents drawn from a population of 5,816,725. Logistic regression and ANOVA were used to test the hypotheses of the study. The study's findings show that age and gender did not strongly influence the level of adoption of CSA practices by the farmers; and that the adoption of climate smart agriculture had positive and significant effects on productivity (yield).

Keywords: Climate smart agriculture, Productivity, Socio-cultural, Rice production, Nigerian economy, Adoption

AGRICULTURE AND FOOD SECURITY; IMPLICATIONS FOR ECONOMIC GROWTH IN NIGERIA

Kashiari Esther Dibie
Department of Economics
University of Delta Agbor, Delta State.
Email: esther.dibie@unidel.edu.ng
08032708497

The Nigerian economy witnessed a robust economy in time past before the discovery of oil. The agricultural sector was neglected and government attention was dully registered on the oil sector which culminated into
vices that hindered economic growth and development. This study investigated the agriculture and food security and the extent to which they promote economic growth in Nigeria. Secondary data was collected from Central Bank of Nigeria Statistical Bulletin for the period 1981 – 2021. The presence of unit root was checked by using Augmented Dickey-Fuller (ADF). The Johansen Co-integration technique was employed to determine the long run equilibrium relationships among the variables. Thereafter, the ordinary least square regression analysis was used to determine the direction and magnitude of the independent variables on the dependent variable. The study revealed a strong correlation between the dependent variable and the independent variables. Specifically, the R-Squared of 0.96 and the Adjusted R-Squared of 0.95 showed that 95% of the changes in the dependent variable was explained by the independent variables. The coefficient of loan granted was negative, implying an inverse relationship with GDP. By implication, the money may have been diverted into unproductive venture or the interest rate charged on the loans were too high to override the accrued benefit. Food production, transport and storage had positive relationship with GDP. The study recommended that the government build more access roads to ease transportation and provide more storage facilities for the sustainability of human security.

**Keywords:** robust economy, access roads, equilibrium relationship, agriculture, food security, sustainability.

---

**THE DETERMINANTS AND ECONOMIC IMPLICATIONS OF ADOPTION OF GENETICALLY MODIFIED (GMO) CROPS: EVIDENCE FROM BAMBARA NUT (VIGNA SUBTERRANEAN) IN NIGERIA.**

**V. Okpukpara, B. Okpukpara, E. Omeje, I. Ukwuaba and C. Onyia**

*Department of Agricultural Economics, University of Nigeria, Nsukka*

**Centre for Entrepreneurship and Development Research, University of Nigeria, Nsukka*

*Corresponding Author: Benjamin.Okpukpara@unn.edu.ng*

Bambara groundnut (Vigna subterranean) is the third eaten legume after groundnut (Arachis hypogea) and cowpea. Due to the recognition of the importance of Bambara groundnut as food/feed, fertility, medicine, income and so on, exertions have been made to encourage Bambara groundnut in some African nations, including Nigeria. Bambara nut farmers are constrained by low yields. The introduction of Bambara GMO could be a veritable alternative in boosting the farmers' income and quest for national food security. However, the dearth of literature on drivers of adoption and perception of GMOs has continued to persist in Nigeria. To address this gap in the literature in Nigeria, this study was conducted with 320 respondents selected through multistage sampling techniques. Data were analysed with descriptive and inferential statistics. The major result shows that most respondents had limited information and low perception of GMO crops in Nigeria. However, lack of information, appropriate technology, and unavailability of the seed tied to the cost of the seed were major factors hindering the adoption and introduction of the GMO Bambara nut variety in Nigeria. The econometric result shows that the potential influencer of the adoption of GMO Bambara nut in Nigeria were education, presence of extension agents, cost, membership of a social group and religion. Therefore, the study recommended that there should be high-level advocacy, sensitization, and coordination, as well as setting research and development priorities in GMO Bambara nut for both the public and private sectors for easy adoption.

---

**DRYING OF SOME MARINE FISH AND QUALITY CHANGES DURING STORAGE**

**Oparaku N. F**

Department of Zoology and Environmental Biology, University of Nigeria, Nsukka

Brined and unbrined samples of the following fish species were open- sun and solar dried. Horse Mackerel (Scromber sp.) Ethmalosa fimbriata (bonga), Sardinella maderensis and shrimp (Paneaus sp). They were analyzed for mould growth and pest attack, results revealed that treatment with salt and packaging significantly retarded mould and insect attacks. At the end of three months analysis, microbial load increased in all samples, the highest 2.98×10^4 cfu/g microbial load was in sun dried mackerel with no salt treatment and lowest was in 50 brine salted and solar dried
mackerel $4 \times 10^4 \text{ cfu/g}$ microbial load. Brown paper packaging helped in retarding mould attack while polythene packaging helped in reducing insects (pest attack). These organisms were found in solar dried, *Mucor* spp., *Penicillium* spp, *Aspergillus*, *Candida* spp, *acidiophilus*, *Streptococcus lactis*, *Proteus vulgaricus* in solar dried while major organisms found in sun dried were both bacteria and fungi for example *Staphylococcus aureus*, *Streptococcus lactis*, *Micrococcus acidiophilus*, *Bacillus cereus*, *Streptococcus lactis*, *Proteus vulgaricus*, *Pseudomonas aureginosa*, *Rhizopus nigricans*, *Aspergillus niger*. Organoleptic characteristics testing showed that solar dried products were better than the sun-dried ones.

**DETERMINATION OF LENGTH –WEIGHT RELATIONSHIP, GONADOSOMATIC INDEX, CONDITION FACTOR AND FECUNDITY OF TILAPIA RAISED IN CONCRETE POND**

*Oparaku Nkiruka F; Ossai Chizoba and Andong Felix*
Department of Zoology and Environmental Biology, University of Nigeria, Nsukka
*Corresponding author: nkirukaunn.ncerd@gmail.com*

*Tilapia zilli* is a potential commercial aquaculture species due to fast growing rates, easiness to breed, high tolerance to environmental fluctuations and hardness. The fecundity of the fishes was estimated using gravimetric method. One hundred and twenty *Tilapia zilli* of three and half months of age was procured for the experiment. Ovaries were removed and fixed in Gilson reagent. Oocyte density was measured by enumerating number of oocytes in ovarian tissue weighed in a digital balance. Each fish were dissected to examine the stage of its gonad maturation. There liner relationship was positively correlated when the weight and length was used strong positive and interaction existed between the weight and length of the fish ($r = 0.904$). The condition factor of *Tilapia zilli* breed in the concrete pond similarly exhibited weak negative but significant relationship with total fish length. The gonadosomatic index was positively correlated, with the weight and length of fish ($R^2 = 0.6941$). Mean weight and mean total length of the fish were $17.74 \pm 1.04$g and $9.50 \pm 0.19$cm respectively. The mean condition factor was $2.99 \pm 0.22$ g cm$^{-3}$, fecundity $30898.45 \pm 634.72$, and gonadosomatic index $8.60 \pm 0.39$.

**THE DIALECTICS OF FOOD SECURITY IN NIGERIA: A CASE OF BANDITS, HERDSMEN AND FARMERS’ CONFLICT**

Onwubiko, Ihuoma Angela; Kalu Uche Felix & Ezeibe, Adaku B.C
Department of Agricultural Economics, University of Nigeria Nsukka
Corresponding author: ihuomangela@gmail.com ; +2348060929169

The farmers and herders/bandits conflicts have been in existence since the pre–colonial period. However, the conflicts were well managed and controlled, such that their impact was not felt on the internal security and agriculture of Nigeria in general as it is today. In recent times, Nigeria has witnessed series of violent clashes arising from the conflicts between farmers and herdsmen who move about with their cattle in search of water and pasture; and bandits who invade farming communities. These conflicts negatively affect food security. The paper therefore reviewed the effect of bandits/herdsmen and farmers conflict on food production. Data used were extracted from secondary sources like journals, textbooks, newspapers and online publications. Evidences indicated that bandits and herdsmen –farmers' conflict is prevalent in the country. Regarding the causes of conflicts, lack of grazing fields, destruction or grazing on crops, indiscriminate bush burning, insurgency, poverty, were responsible for occurrence of the conflicts. Consequently, loss of human and animal lives, destruction of crops and properties, displacement of persons and breakdown of peace relationship within many communities in some parts of the country were amongst the gross effect of the conflicts. In all this, food security is threatened. The study concluded that until this issue is resolved, food and national security will be worsened. Thus it was recommended among others that government should work out modalities on how to stop these invasion, youth unemployment and poverty. Communal security watch was also recommended.

**Keywords:** Farmers, herdsmen, banditry, food security and conflict.
The phenomenon of armed banditry which has been on a steady increase in Benue State at least in the last decade has had obvious negative implications on Agricultural productivity. Repudiated as the food basket of the nation the threat posed by the activities of these marauders cannot be taken for granted as they pose great danger to the socio/economic development as well as the food security of the State in particular and the nation at large. Since the inception of this phenomenon, Agricultural productivity has declined as farmers cannot cultivate or harvest their crops from farms. This paper examines in totality the phenomenon of armed banditry and how it poses grave danger to the efforts of farmers in their quest towards ensuring food availability through sustained Agricultural productivity. Adopting the systems approach, the paper argued that the activities of armed bandits in the form of attacks on farmers in villages and outright killings and maiming, kidnapping for ransom, armed robbery and rustling of animals has driven many farmers away from farming activities in the rural areas to IDP camps mostly concentrated in urban or semi-urban areas of the state. This ugly trend if not halted is capable of leading to poor Agricultural productivity and serious food shortages with attendant social, Economic and security implications for the well-being of the people. The paper, therefore, recommends as a way out of this menace tougher measures be put in place by the government on the bandits including the death penalty on convicted armed bandits, criminalizing ransom payments to bandits and instituting tougher gun control measures. Furthermore, persons found to be sponsoring bandits should be severely punished.

Keywords: Armed banditry, agriculture, productivity, farmers.
A study was conducted to evaluate the combined effects of feeding frequency and time on the production performance of African catfish (*Clarias gariepinus*). A total of 180 fingerlings (3.63± 0.01 g/fish) were randomly distributed into 12 plastic tanks (50-L capacity) containing 15 fish each and fed with a commercial diet to apparent satiation. The fish were fed at different feeding frequency and time of the day viz; once daily in the daytime (T1); once daily at night (T2); twice daily morning and night (T3), thrice daily morning, afternoon and night (T4). After 12 weeks of feeding, growth performance indices showed an upward trend with increased feeding frequency, with no significant variation (p > .05) between the T3 and T4 groups. However, the fish in T3 group displayed a significantly (p< .05) higher performance in terms of the fish feed utilization, body index and the economics of production when compared with those in other groups. From the current study, it was clear that feeding the fish to apparent satiation both in the morning and night everyday could maximize the production of *C. gariepinus* fingerlings in terms of biomass, survival, welfare and profits.

**Keywords:** African catfish, feeding frequency, feeding time, biological productivity, profits

---

**RURAL BANDITRY AND FOOD SECURITY IN IMEKO AFON IN OGUN STATE NIGERIA**

Adebajo Adeola Aderayo  
Department Of Political Science  
Tai Solarin University Of Education  
Ijagun, Ijebu Ode, Ogun State  
adebajoade@gmail.com/adebajoaa@tasued.edu.ng

Rural banditry is one of the security challenges being confronted in Nigeria worsening the security condition of the country. Imeko-Afon known for its agricultural activities has been facing similar challenges of rural banditry in form of kidnapping for ransom which has affected agricultural productivity thereby threatening food security in Ogun state. Adopting queer ladder mobility theory as an explanatory framework, the paper investigated the negative consequences of rural banditry on food security in Imeko Afon in Ogun state. It employed analytical method and relied on secondary sources of data. The paper argued that apart from killing of farmers, displacement of the inhabitants of Imeko- Afon, socio-economic activities particularly local food production have been affected causing acute shortage of food and astronomical increase in the prices of agricultural products in the state. It further argued that rural banditry prevalent in the local government has caused people to live below poverty line as they cannot go the farm for the fear of being killed by the bandits rampaging the area. Therefore, the paper recommended that the state government needs to deploy more proactive measure in protecting lives and property in the local government. Also, there should be synergy among the security agents, vigilante groups, community leaders and farmers in combating the menace of rural banditry affecting agricultural productivity in the area. In addition, government needs engage in empowerment programmes for the youth that venture into banditry as a way out abject poverty.

**Keywords** agricultural productivity, security, food security, violence, rural banditry

---

**THE EFFECT OF ORAL ADMINISTRATION OF GMELINA ARBOREA LEAF EXTRACT ON THE REPRODUCTIVE RESPONSE OF RABBIT DOES**

Obinna, Amarachi Linda*; Ali, Luke Chukwudi; Anizoba, Nnenna Winifred; Amaefule, Bright Chigozie and Machebe, Ndubuisi Samuel  
Department of Animal Science, Faculty of Agricultural Sciences, University of Nigeria, 410001 Nsukka, Enugu State, Nigeria.  
*Corresponding author: amara.eze@unn.edu.ng

Neuro-endocrine axis controls the reproductive activity of rabbit does but these activities are under the influence of gene, feeding and management factors.
The objective of the study is to determine the effect of aqueous administration of *Gmelina arborea* leaf extract (GALE) on the reproductive performance of rabbit does. Thirty-six (36) mixed-bred rabbits (24 does with an average weight of 1137.00±35.00g and 12 bucks with an average weight of 1100.00±52.22g) were randomly assigned to 4 treatment (T) groups replicated thrice. The experiment was subjected to a one way analysis of variance in a completely randomized design (CRD). The *Gmelina arborea* extract was administered to the rabbits at a concentration of 0, 300, 600 and 900 ml/litre of drinking water representing T₁, T₂, T₃, and T₄, respectively. Significant (P<0.05) changes were reported in water intake during gestation and lactation as a result of GALE administration. Also, litter size at birth, total birth weight, litter size at weaning, weight of kit at weaning and pre-weaning weight gain were statistically (P<0.05) affected by administration of GALE. From these results, it was concluded that administration of GALE to rabbit does above 300ml/litre of water depressed water intake with no adverse effect on the reproductive performance.

**Key words:** Aqueous extract, GALE, Rabbit does, Rabbit litters, Reproductive performance

---

**A SYSTEMATIC REVIEW OF THE IMPACT OF RUSSIAN-UKRAINIAN WAR ON NIGERIA’S FOOD SECURITY**

Francisca N. Onah, Ph.D; Chigozie F. Ugwuanyi; Okolo Modesta Chinyere; Christopher O. Ugwuibe, Ph. D

Department of Public Administration and Local Government, University of Nigeria, Nsukka, Enugu State, Nigeria

Email: onyemaechi.ugwuibe@unn.edu.ng

Nigeria has very good diplomatic relations with Ukraine and Russia. Now, Ukraine and Russia are in a war situation and this poses a threat to Nigeria's agricultural products. Nigeria is a major importer of wheat from Russia, and the product is the third most widely consumed grain in the country. Nigeria imports approximately $10 billion worth of food and agricultural products annually – mainly wheat, rice, chicken, fish, food services, and consumer-oriented meals, among others. The hike in the price of wheat has come with rising costs of inputs to flour millers and the producers of value-added products, such as bread. For instance, the average price of a loaf of bread is up about 71% to ₦600 in March 2022 from 2020. Wheat prices are now above $10 per bushel. It is against this backdrop that the study reviews the impact of the Russian-Ukrainian war on the food security situation in Nigeria. The study adopted a flexible sampling framework supported by qualitative data from the Federal Ministry of Agriculture, Wheat Farmers Association of Nigeria, Poultry Association of Nigeria, etc. An online Google Form questionnaire was linked to the researchers' google accounts to solicit responses. The study identified that the Russian-Ukrainian war had significant increases in poverty, hunger, and malnutrition in Nigeria. The paper recommended among others strategies that aimed at mechanized, irrigation farming and the promotion of large processing outlets to ensure improved agricultural production, distribution, and empowerment of agricultural resources in Nigeria.

**Keywords:** Agriculture; Food Security; Nutrition; War; Nigeria

---

**RUSSIA-UKRAINIAN WAR AND GLOBALIZATION OF FOOD INSECURITY IN DEVELOPING COUNTRIES: EVIDENCE FROM NIGERIA**

Kenneth Chinedu Asogwa¹ Chibuzo Ekemba² & Elias C. Ngwu²

University of Nigeria, Nsukka: 1Institute of African Studies, 2Department of Political Science,

*Correspondence: elias.ngwu@unn.edu.ng

Russia and Ukraine are major players in the global food market, leading in agricultural commodity production and suppliers of foodstuff. But with the ongoing war and the interconnectedness of the global political economy, the traditional food supply chains in Nigeria are arrested, thus, exacerbating the already existing food crisis. Extant literature explains this phenomenon as fallout of environmental and urbanization effects on agricultural cultivation. Others see it as a hangover of the COVID-19 pandemic which altered the global food supply chains. Still, others
implicate massive rural-urban migration and murderous attacks on farming communities by nomadic herdsmen. These factors are not irrelevant to a discussion of the problem since, acting alone or in conjunction, they appear to have undermined the nation's food production capacity. As explanations, however, they are inadequate for understanding the current food supply crisis in the country as they fail to explore the implication of Nigeria's integration into the global capitalist orbit generated by the contemporary food crisis. This paper aims to fill this lacuna by exploring the specific channels through which the ongoing war between Ukraine and Russia has exacerbated the current food crisis in Nigeria. The paper draws from the theoretical assumptions of the integration theory of international relations. Data for the study are sourced from open-source materials, such as peer-reviewed journal articles, survey reports of the National Bureau of Statistics, World Food Programme (WFP), Food and Agricultural Organization (FAO), etc. Data are analysed using deductive logical inferences, and the paper generally makes a case for an indigenous oriented solution to the problem.

**Keywords:** Russia-Ukraine war, Globalization, Food insecurity and Nigeria

---

**ANALYSIS OF BARRIERS ON RICE VALUE CHAIN DURING THE PANDEMIC PERIOD IN EBONYI STATE, NIGERIA: COVID-19 LOCKDOWN MEASURES AND CLIMATE CHANGE CRISSES IN 2019/2020**

1. Ejike -Alieji, Adaeez U.P.
Department of Geography, Alex Ekwueme Federal University Ndufu- Alike, Ebonyi State, Nigeria

2. Abu Josiah.
School of postgraduate studies, Alex Ekwueme Federal University Ndufu Nigeria
Correspondence: adaeez.ejike@gmail.com ; 08037578694

Crop production is a vital element of agriculture in Nigeria. The low output of rice farmers in 2019 and 2020 is due to high incidences of pests, labor shortages, growing prevalence of weeds, and diseases stemming from extreme climate events such as droughts, flooding, and their consequences. Climate change alters climate variables, but climate variability affects crop yield directly by influencing crop growth and development. Rice production is important in ameliorating the climate by removing methane from the atmosphere. Farmers in Ebonyi are becoming more involved in rice cultivation operations, which helps to moderate climate conditions. This, as well as other natural constraints, have an impact on the rice-producing area investigated during the pandemic. Corresponding recommendations on how to proceed in situations like these in the future are suggested. The relevance of Ebonyi state women Rice farmers was highlighted as crucial to increasing agricultural productivity and food security in the state's farming areas between 2019 and 2020, farmers despite the low rice output and labor shortage.

---

**THE TRANS-WEST AFRICAN COASTAL HIGHWAY: A PATHWAY TO UNLOCKING THE AGRICULTURAL POTENTIALS OF THE REGION**

Chikamso Christian Apeh*, Stella Nwawulu Chiemela*, Fomati Usman Tikon*, Sunday Ifeanyi Ukwuaba* and Chimeremeze Paulinus Apeh*
*Department of Agricultural Economics, University of Nigeria, Nsukka, Nigeria; *Department of Agricultural Economics and Extension, Federal University Wukari, Taraba State, Nigeria; *Soil Science Department, University of Nigeria, Nsukka, Nigeria
Correspondence author – Chikamso Apeh – apezhihkamso@yahoo.com

Agriculture is one of the main components of the West African economy. The majority of the rural livelihoods depend on it. However, the poor road network is one of the major constraints bedeviling agricultural development and leading to poor intra-agricultural trade among member countries. Some countries are not connected by roads and most of those with connecting roads are unusable in most parts of the agricultural season. One of the main priorities of the Trans-West African Coastal Highway is to accelerate agricultural trade among member countries to help them reduce poverty, and unemployment, attain food security and promote industrial development. A better coastal road network will inevitably unlock the region's potential...
for agricultural value chain development. Communities along the coastal networks, apart from their production capacities, would act as a potential conduit for agricultural products from land-locked communities to the country, regional and international markets. The coastal seaports and facilities would be a fabulous attraction for private investors and public-private partnerships to engage in vibrant agro-businesses along the agricultural value chains. However, despite the current poor performance of the labor-intensive and subsistence-based agriculture in the region, the fact remains that the region has the right conditions (climate, land area, ample water, etc.) for commercial agriculture to flourish, and farmers are much eager for opportunities to do farming as a business (increase production above family consumption level and generate incomes). Therefore, a good road network would be a motivational factor for private investments which has the potential for the emergence of agro-enterprises to operate at the various stages of the agriculture value chains.

Keywords: Coastal Highway; Agricultural Development; Intra-Trade; Food security; Poverty alleviation

RISING SECURITY CHALLENGES IN NIGERIA AND FOOD INSECURITY: A CRITICAL DISCOURSE

Chikaodili Juliet Ugwoke¹, Kenneth Nnamdi Dim², Eze Ifeyinwa Jennifer¹ & Okocha Sunday Chuks³

¹Department of Public Administration, University of Nigeria, Nsukka
²Department of Political Science/Social Sciences Unit, School of General Studies, University of Nigeria, Nsukka
³School of Primary Education, Federal College of Education (Tech) Asaba

chikaodili.ugwoke@unn.edu.ng

The implications of escalating security issues on food security are examined in this research. Food security is a top priority for Buhari’s administration to ensure long-term socio-economic development. Obtaining this primary goal in the face of various and complicated types of insecurity has become a matter of discussion among academics, necessitating this research on the impacts of insecurity on food security. Following the structural functionalism theory, this study comprehensively appraises the rippling effects of the inter-relationship of several societal institutions. Data was gathered through secondary sources and qualitatively analyzed. Findings of the study revealed that several security challenges are identified as important drivers of the looming food crisis. Insurgency in the North-east states, mostly in Borno, Adamawa, and Yobe, as well as armed banditry in several North-west states like Sokoto, Katsina, Zamfara, and Kaduna, coupled with farmers-herders clashes in North-Central states, such as Benue, Nasarawa, Niger, Nassarawa, and Plateau, are examples. It was revealed that several peasant farmers have turned to roadside workers because of perilous insecurity. Therefore, 19.5 million Nigerians are facing an acute food crisis compared to 12.8 million in 2021. This study urges the government to be proactive and demonstrate a serious commitment to collaborating with all security agencies, including the military, paramilitary, and intelligence-based institutions, to tackle the country’s myriad of insecurity.

Keywords: Food Security, Security Challenges, Farm Produce, Socio-economic Development

ROLE OF INFORMATION AGENTS IN AGRICULTURAL INSURANCE POLICY AWARENESS AMONG RURAL FARMERS FOR IMPROVED FOOD SECURITY

Adaobi D. Agbo¹, Onyinye R Ekere², Ishmeal .U. Agbo² and Ngozi J. Igwe² Elizabeth T. Babarinde¹ and Victoria Y. Fagbemi¹

¹Department of Library and Information Science, Faculty of Education
University of Nigeria – Nsukka
²Department of Adult Education and Extra-Mural Studies, Faculty of Education
University of Nigeria – Nsukka
³Department of Insurance and Risk Management, Faculty of Management Sciences
Enugu State University of Science and Technology,
Enugu State
Correspondence: david.agbo@unn.edu.ng
There is a dearth of awareness of the importance of agricultural insurance policy among rural farmers in Nsukka zone for improved food security. Thus, this study explored the role of information agents in agricultural insurance policy awareness among rural farmers for improved food security. Descriptive survey research was adopted for the study using a sample of 400 registered rural farmers in Nsukka Zone. A well validated and trial tested instrument was used to collect the data. The internal consistency reliability index of the instrument was 0.97 using Cronbach alpha method. Data collected were analyzed using mean as descriptive statistics to answer the research questions. It was found that the role of information agents in Agricultural insurance policy awareness among rural farmers is not sufficient but highly needed to improve food security in Nsukka Zone. It was also found that the role of Librarians, Adult Education facilitators and Insurance agents are key extension agents and can help create the necessary awareness of agricultural insurance among rural farmers for improved food security. It was also observed that there are several constraints inhibiting effective provision of information on agricultural insurance in rural communities. It was thus, recommended among other things that Governments should employ more information agents and also develop rural infrastructures like road network, internet facilities etc. to enhance the work of information agents. Again, government and NGOs should support information agents financially so that they can reach rural farmers easily.

**Keywords:** Information agents, Rural farmers, Roles, Constraints, Awareness, Agriculture and Food Security.

---

**ROLE OF INFORMATION AGENTS IN AGRICULTURAL INSURANCE POLICY AWARENESS AMONG RURAL FARMERS FOR IMPROVED FOOD SECURITY**

Abaobi David Agbo, Onyinye Regina Ekere and Ishmael Umunnakwe Agbo

1Department of Library and Information Science, Faculty of Education, University of Nigeria – Nsukka, 2Department of Adult Education and Extral-Mural Studies, Faculty of Education, University of Nigeria – Nsukka, 3Department of Isuurance and Risk Management, Faculty of Management Sciences, Enugu State University of Science and Technology, Enugu State

E mail: david.agbo@unn.edu.gn

There is a lack of awareness of the important of agricultural insurance policy among rural farmers in Nsukka zone for improved food security. Thus, this study explored the role of information agents in Agricultural insurance policy awareness among rural farmers for improved food security. Descriptive survey research was adopted for the study using a sample of 400 registered rural farmers in Nsukka Zone. A well validated and trial tested instrument was used to collect the data. The internal consistency reliability index of the instrument was 0.97 using Cronbach alpha method. Data collected were analyzed using mean as descriptive statistics to answer the research questions. It was found that the role of information agents in Agricultural insurance policy awareness among rural farmers is not sufficient but highly needed to improve food security in Nsukka Zone. It was also found that the role of Librarians, Adult Education facilitators and Insurance agents are key extension agents and can help create the necessary awareness of agricultural insurance among rural farmers for improved food security. It was also observed that there are several constraints inhibiting effective provision of information on agricultural insurance in rural communities. It was thus, recommended among other things that Governments should employ more information agents and also develop rural infrastructures like road network, internet facilities etc. to enhance the work of information agents. Again, government and NGOs should support information agents financially so that they can reach rural farmers easily.

**Keywords:** Information agents, Rural farmers, Roles, Constraints, Awareness, Agriculture and Food Security.

---

**IMPACT OF CLIMATE CHANGE ON HOUSEHOLD FOOD SECURITY IN A RURAL FARMING COMMUNITY IN NSUKKA, SOUTHEASTERN NIGERIA**

Jane Onyinyechi Ezeh, Edith Uzoma Madukwe, Christopher Uche Ezeh

1* Department of Library and Information Science, Faculty of Education, University of Nigeria – Nsukka, 2Department of Isuurance and Risk Management, Faculty of Management Sciences, Enugu State University of Science and Technology, Enugu State

74
This study investigated the impact of climate change on household food security in Okpuje, Nigeria. The study isolated staple food crops grown in the area affected by climate change; assessed the household dietary diversity; their food security; the association between climate change and household food security. Mixed methods of quantitative and qualitative data collection were used. A total of 344 household heads selected through single-stage cluster sampling was involved in the study. Also, 12 key informant interviews involving both males and females and two groups (female and male groups) of focus group discussions were conducted in the community. The data were analysed using both descriptive and inferential statistical tools. A greater percentage of the households (97.5%) were food insecure, of which 92.1% are severely food insecure. The majority (80.5%) of the households have high dietary diversity. This study revealed that there was no statistically significant association (p > 0.05) between climate change and food security in the study area. The food insecurity experienced in the community might be due to other confounding factors, particularly the farmers-herders conflict that was ongoing in the community at the time of this study. However, climate change impacts the region through the erratic nature of rainfall that causes unpredictability in the planting calendar and the destruction of some vulnerable food crops such as cocoyam and yam.

Keywords: Climate change, Food security, Households, Dietary diversity, Nigeria

A MULTIDIMENSIONAL APPROACH TO EXAMINE A PARADIGM SHIFT IN COMPARATIVE SOURCES OF FINANCING AGRICULTURE IN KADUNA STATE, NIGERIA

Mohammed Shamsidin Ango Abdullahi and Yogesh Kumar Gupta
Department of Sociology, Mangalayatan University, Aligarh, India
shamsudin2002@yahoo.com

Agriculture enhances food, raw materials, and household income for sustainable human security. The lack of access to finance from private and public financial institutions as well as agencies is challenging. This has influenced the increased effects of unemployment, poverty, and social inequality in society. The lack of coping strategies increases the effects of conflicts and possible measures are critical to mitigate the challenges and improve financial accessibility. This paper applied a social survey design and used a questionnaire as the instrument of data collection. A sample of 562 (50%) was drawn from a population of 1,323,305 in Kaduna state and domiciled head offices in Abuja for this study. The respondents consisted of farmers, agro-processors, agents of financial institutions, agricultural associations, and agencies. This was made possible through the cluster sampling technique. A linear regression analysis showed responsible factors for this study's challenges, effects, coping strategies, and measures. The key findings show that distance is a challenge to financing agriculture with a B score of .108 while the effect of unsustainable electricity supply affects economic growth with a B score of .151. Improving Bank draft/Mudarabah and Musharakah in banks is a positive coping strategy with a B score of .189, while the Islamic financial takeover of conventional financial institutions as a measure will provide stability in long-term agricultural loans with a B score of .118. It is recommended that financial institutions and government agencies reorganize their structures and processes to enable collaboration in an alternative source of financing agriculture.

Keywords: Agriculture, Conventional Finance, Financial Institutions, Food Security, Islamic Finance, Poverty, Social Inequality, Unemployment.
A lot of concerns have been raised on the declining fortune of agricultural productivity and its attendant negative impact on food security in Nigeria. Food insecurity in the country is alarming and worrisome. Despite huge budgetary allocation to agriculture and the assurances from the Nigerian Government, food insecurity has consistently remained significant. Farmers have also continued to raise concern about the rate of food insecurity in Nigeria. Agricultural development has enormous potential to enhance food security. This paper therefore examines how agricultural productivity can be repositioned to escalate food security in Nigeria. The method of data collection is documentary and method of data analysis is descriptive. This paper identifies pervasive insecurity, corruption, poor funding, inadequate training and extension services, lack of access to credit facilities and inputs, policy inconsistencies and capricious climate. The paper recommends robust security architecture, massive investments in agricultural infrastructure and extension services, mechanized farming, adoption of climate resilient agriculture, provision of high yielding drought resistant agricultural inputs, adequate funding, application of modern farming technology, access to credit facilities and better farming inputs as key drivers for both food availability and food security.

**Keywords:** Agricultural Productivity, Food Security
AVIATION INSECURITY AND STATE RESPONSE IN SAFEGUARDING AIRPORT IN NIGERIA: A CRITICAL ANALYSIS OF INTELLIGENCE GAP IN NIGERIA'S SECURITY.

Onuoha, Freedom Chukwudi and Okafor Joachim Chukwuma
Department of Political Science, University of Nigeria, Nsukka
freedom.onuoha@unn.edu.ng
+2348037791916
chukwuma.okafor@unn.edu.ng
+2348060962041

Securing airspace and aviation security has been blueprints of Nigeria's National Security Strategy in 2019. The increasing operations of violent non-state armed groups such as Boko Haram and Bandits in unleashing violence in the attacks of schools, terrorism, espionage, kidnapping and bombing of various government institutions are increasing dimensions of insecurity in the country. Meanwhile, aviation terrorism following the attacks by the Boko Haram-bandits who shot and killed a security officer attached to the Nigerian Airspace Management Agency (NAMA) stationed at the perimeter fence that raised the alarm on sighting them at the Kaduna International Airport and the grounding of an Azman Air Lagos-bound aircraft, shows aviation insecurity and incessant failure between Nigeria security forces and other institutions in the Airport in intelligence gathering, sharing and utilization system need to be studied. The primary target of this paper is to understand the Nigerian state response in safeguarding Airports and the challenge of intelligence gap existing between the Nigeria security forces and other institutions in the airports towards the increasing Boko Haram-Bandits attack, looks so challenging in Nigeria's national security. The documentary method and content analysis are adopted. Leveraging the state fragility index and Human Security analysis, the paper argue that containing and defeating the threat of violent attacks of airport by Boko Haram-Bandits, the adoption of human and security intelligence are strategically important in securing the airport from the attacks.

Keywords: Aviation insecurity, state response, Intelligence gap in Nigeria’s security, state fragility, human security

AIR POWER AND NATIONAL SECURITY: THE ROLE OF NIGERIAN AIR FORCE IN COMBATING BANDITRY IN THE NORTH WEST NIGERIA

Kabiru Zubairu
Department of International Relations, Faculty of Social and Management Sciences, Air Force Institute of Technology, Kaduna
E-mail: zubairukabiru@rocketmail.com

Security challenges are global phenomena that need to be tackled to create an enabling environment for socio-economic development. Insecurity does not only pose threats to the lives and properties of citizens but arrests the overall development of a nation. Nigeria has been suffering from the impact of banditry for so long and that really affected its overall development process. Air Power in crisis response and combat operations has been mainly used to enforce political decisions and national security. Air power operations in Nigeria have given the theoreticians and practitioners undoubted opinions that keeping order by intervention forces on occupied territories is a much more difficult task than defeating the bandits. This paper examines the role of the Nigerian Air Force in combatting banditry in Nigeria with a specific reference to North West (Kaduna, Katsina and Zamfara States) Nigeria. The objective of the paper is to identify the role of the Nigerian Air Force and combating banditry which resulted in relative peace and security in the affected areas under study. The paper relies on primary and secondary sources of data such as Key Informal Interviews (KII) and Focus Group Discussions, books, journals, magazines, etc. The paper employed air power theory and systems theory in its analysis. The paper reveals among others that, air power operation is more effective and efficient in the conduct of modern military operations or campaigns, especially in domestic security operations. The paper concludes that synergy among the 3 services and engaging the Nigerian Air Force to lead domestic joint security operations in the North West always yields the much-needed result.

Keywords: Power, Operations, Banditry, Air Power, National Security.
UNGOVERNED WATERS? THE CHALLENGE OF MARITIME SECURITY IN NIGERIA

Danga Jamiu Yusuf, Usman Abubakar Lamido and Mohammed Musa Usman
Nigerian Defence Academy, Kaduna
Department of History and War Studies
jydanga@nda.edu.ng, 2348102693009

Maritime security challenge has continued to pose immense security and economic threat to Nigeria. The recent discovery of a nine kilometres pipeline off Forcados into the sea for instance, indicate the increasing oil theft as a result of maritime security challenges. Aside from this, the Gulf of Guinea has been identified as the hotbed of piracy as over forty percent of pirate attacks occurred in the area. Although, Nigeria's Naval capacity have increased overtime, Nigerian Navy has not been able to ensure maritime security thereby leading to the question of whether there is a growing risk of ungoverned waters and its attendant impact on maritime security in Nigeria. using extant literature, this paper examines the challenge of maritime security in Nigeria. It identifies the threat of maritime security challenges on Nigeria's security and economic sustainability. As smuggling, piracy and oil theft increase in water bodies in and around Nigeria, it is pertinent to identify the root cause, drivers and strategies to arrest the situation. In this vein, the paper argues that increasing lack of naval security around water bodies in and around Nigeria is creating a potential for ungoverned waters with its attendant complex long and short term implication. Therefore, there is a need to equip the Nigerian Navy with the state of the art equipment to ensure adequate maritime security in Nigeria.

Keywords: Economic Sustainability, Maritime security, Nigerian Navy, Ungoverned waters

CAN NIGERIA BE A REGIONAL MARITIME POWER IN AFRICA? PROSPECTS, CHALLENGES AND SOLUTIONS

Aniefiok Peter, Edith Iteogu & Ogbonna Confidence N
Department of Political Science, Evangel University.
E-mail: p.aniefiok@yahoo.com; edizomal@gmail.com; ogbonnanwachinemere@gmail.com

History has shown that many great powers and civilizations were arguably maritime powers. Recognizing this fact, many if not all of the global and regional powers in the contemporary global power configuration have consciously and tenaciously developed and implemented a maritime power strategy. Despite having states that are regarded as regional powers, being surrounded by four different large water bodies on all four sides of its landmass, possessing a coastline of 36,888 kms and with 38 out of its 53 countries having access to the sea, the African continent is largely under-mentioned in the global and regional maritime power discourse. Arising from the above gap in the extant literature and amidst the increasing calls and push for an African maritime heavyweight, this paper interrogates the prospects, challenges and possible solutions to Nigeria's status to be a regional maritime power in Africa. Relying on Weak State Theory while adopting desk review of secondary data and Key Informant Interviews (KIIs), this paper argues that while Nigeria has a truckload of prospects (Nigeria navy is among the best in Africa, the country has 850km coastline and possesses an exclusive economic zone of over 200 nautical miles, etc) to emerge as a regional maritime power that can shape and influence socio economic and political activities on international waters. Nevertheless, this quest is besieged by plethora of challenges such as piracy, smuggling, weak maritime governance, among others, which have undermined Nigeria's regional maritime power capacity. Therefore, this paper recommends, among others the formulation and implementation of Nigeria's maritime defense policy and the liberalization of the maritime industry.

Keywords: Maritime power, regional power, international politics, Nigeria, naval
It is argued that while the participation of African countries in the ever-evolving international trade, and industrialization process, environmental sustainability remains central to the attainment of sustainable development in the continent. This paper investigates the effect of trade, foreign direct investment and industrialization on ecological footprints. The study covers 45 African countries with data from 1990-2020. The two-step system GMM estimation indicates that industrialization exerts a negative effect on ecological footprints. Foreign trade and industrialization significantly reduced ecological footprint and hence increased environmental sustainability. The study also observed that economic growth significantly increases ecological footprints while foreign direct investment inflows into African countries significantly reduce the ecological footprint. The result of the interactive effect suggests that economic growth contributes to environmental degradation. This has implications for environmental sustainability and the attainment of the sustainable development goals and Africa's Agenda 2063.

Keywords: Trade, industrialization, ecological footprint, environmental sustainability, foreign direct investment, economic growth

DO INTERNATIONAL TOURISM, FOREIGN DIRECT INVESTMENT AND TRADE OPENNESS PROMOTE ECONOMIC COMPLEXITY IN AFRICA?

Jonathan E. Ogibuabor, Ekene ThankGod Emeka, Ezebuilo R. Ukweuze
1Department of Economics, University of Nigeria, Nsukka, Nigeria
Email: jonathan.ogibuabor@unn.edu.ng
Within the last two decades, economists have realized that economies are complex systems capable of producing a variety of products competitively given the available technical know-how and other resource endowments. This realization has given rise to the concept of economic complexity, around which a growing literature has started to emerge across the world. Theoretically, it is expected that the exposure of African economies to international tourism, foreign direct investment inflow and trade openness will enhance the national incomes of these economies. Such an increase in national incomes will then lead to a higher accumulation of both human and physical capital as well as higher spending on infrastructure, thereby enhancing the overall productive capacities of these economies. Besides, international tourism, foreign direct investment inflow and openness to trade are expected to boost the integration of African economies into global economic activities, thereby increasing the diversity and competitiveness of the products of these economies. However, despite the growing literature on the factors influencing economic complexity around the world, empirical evidence on the effects of international tourism, foreign direct investment inflow and trade openness on economic complexity in Africa appears quite scanty. Hence, the broad objective of this study is to examine the impacts of international tourism, foreign direct investment inflow and trade openness on economic complexity in Africa. The specific objectives are to (i) ascertain the impacts of international tourism, foreign direct investment inflow and trade openness on economic complexity in Africa; and (ii) establish other significant drivers of economic complexity in Africa. The study will cover the period 2010 – 2020, which is the post-Global Financial Crisis period during which African economies witnessed an increased level of integration into global economic activities. In terms of methodology, the study will adopt the system GMM approach to avoid potential problems of endogeneity. The data for the study will be obtained from the World Bank's World Development Indicators (WDI) and the Economic Complexity Index in MIT's Observatory of Economic Complexity (http://atlas.media.mit.edu). This study will make two main contributions to the literature. First, to the best of our knowledge, it will be the first study to expose the role of international tourism in Africa's economic complexity. Second, even though a handful of studies have examined the effects of inward FDI and trade openness on economic complexity, little is known about the effects of these factors in Africa. It is the goal of this study to fill these gaps in the literature.

Keywords: Economic Complexity; International Tourism; Foreign Direct Investment; Trade Openness; System GMM Regression

MONETARY POLICY SHOCKS, SECTORAL OUTPUT GROWTH AND TRANSMISSION CHANNELS IN NIGERIA: A NORMALIZED FORECAST ERROR VARIANCE DECOMPOSITION APPROACH

Ekene ThankGod EMEKA¹, Jonathan Emenike OGBUABOR² and Ikenna Paulinus NWODO³
¹,²,³Department of Economics, University of Nigeria, Nsukka, Nigeria
Email: thankgademekaekene@gmail.com

In recent times, the global economy has witnessed increasing shock inducing events (e.g. COVID-19 pandemic). However, shocks are not without an effect on economic variables. This paper examined the transmission channels of monetary policy shocks on sectoral output in Nigeria employing ARDL-ECM to track the impacts and VECM for the data analysis covering 1990q1 to 2020q4. The study equally uses the normalized generalized forecast error variance decomposition (NGFEVD) approach, which is a major departure from existing studies to track the size and channel of the forecast error variance shares. The results reveal that monetary policy rate and broad money supply shocks remain the major channels through which shocks are transmitted to the sectoral output with monetary policy rate shock accounting for 15.13% of the average total shock due to sectoral output while broad money supply accounts for 4.15%. Interest rate shock is found to be particularly insignificant. Based on the above, this study recommends that monetary policy will be more effective if the inherent differences in the Nigerian sectors are factored into policy designs.

Key Words: Monetary Policy Shocks, Transmission Channels, ARDL-ECM, VAR Model, NGFEVD, Sectoral Output
The purpose of this study is to ascertain the influence of spending pattern on the profit performance of nonfarm household enterprises. The study used the 2018-2019 General Household Survey data from the National Bureau of Statistics, while descriptive analysis and binary logistic regression were adopted to unveil the patterns in the data. The results indicate that the spending pattern relating to business cost, transport and purchase of raw material influence the profit performance of nonfarm household enterprises in Nigeria positively and significantly, while the influence of the spending pattern relating to demand for products and loan repayment remained negative throughout. The study concluded that government should provide favourable business environment for nonfarm household enterprises through policies that will enable these enterprises not only to enhance their business capital but also to invest or engage in spending patterns that will optimize their performance on a sustainable basis.

**Keywords:** Profit; Spending; Household; Enterprises; Nigeria

**JEL Classifications:** L21; L11; C42; C31; N17
entrepreneurship development and that attention should be giving to vocational education through the establishment and adequate funding of vocational institutions that equips the youths with contemporary marketable entrepreneurial skills.

Keyword: Unemployment, Insecurity, entrepreneurship development, and Nigeria.

ECONOMIC AND SOCIAL INVESTMENT SCHEMES IN NIGERIA: THE INFLUENCE OF THE CONDITIONAL MONEY TRANSFER ON THE PERFORMANCE OF SMALL SCALE WOMEN START-UPS.

Igweonu, Obianuju U, Nwankwo, Christopher Emmanuel, Anyanwu, Ogochukwu Christiana and Nwokocha, Victor Chukwunweike

Department of Sociology, University of Nigeria Nsukka, Department of Economics University of Nigeria, Nsukka, Department of Geography, University of Nigeria Nsukka

victor.nwokocha@unn.edu.ng

Social investment scheme is a programme established by an act of legislation, or any other mandatory arrangement, that provides individuals with a degree of income security when faced with the contingencies of survivorship, incapacity, disability, unemployment or rearing children. In Nigeria for instance, the Conditional Cash Transfer (CCT) Program is a national social investment programme that offers financial benefits to various poor and vulnerable groups in order to raise household consumption, and encourage human capital development of Nigerians. Studies on social investment however have focused on the role of these programmes on the economy's aggregate saving, the financing system as well as the welfare implications of the programme on income redistribution. Much is not known about the influence of social investment schemes on the performance of small scale women business (SMWB) in Nigeria. The study will adopt a survey research design, a questionnaire survey of 70 SMWB and simple statistical methods of means and standard deviation to analyse the data, while tables will be used to show results. Performance in this study will be measured by the degree of satisfaction of the SMWBs on financial outputs for a period of 2 years (2019-2021). The financial indicators that will be adopted by this study are sales growth and growth in profit. The study is expected to show the influence of social security on SMWBs as well as the performance of these businesses in the area of sales and profit growth. Recommendations will be made based on the results of the study.

Keywords: Social Security, Small Scale business, Conditional Money Transfer, Performance, Nigeria

SHORT AND LONG-RUN SOCIO-ECONOMIC IMPACT OF ATTACK ON SCHOOLS IN NIGERIA BY BANDITS: THE ECONOMIST PERSPECTIVE.

Eneogu, Njideka Dorathy and Ejimonye, Jovita Chinelo

Department of Social Science Education University of Nigeria, Nsukka.

Correspondence: Email- njideka.eneogu@unn.edu.ng 08068121664

Continuing attack on schools in Nigeria is detrimental to quality education and puts at risk life of school children and teachers. It also jeopardizes the skilled labour needed to sustain the economy in the long-run. Hence, this paper investigated the short and long-run socio-economic impact of attack on schools in Nigeria from the Economists' perspective. The study adopted a descriptive statistical design. A population of 120 Economics lecturers from three South Eastern Federal Universities was the target. 60 Lecturers were sampled. Google survey questionnaire was used for data collection which was analysed using mean, standard deviation and graphs. It was revealed that school closures, drop-out from school, destruction of school facilities among others are the short-run socio-economic impact of attack on schools. The long-run impact from the findings include; lack of skilled labour, lack of human capital, lack of infrastructures, unemployment and underemployment challenges among others. Hence, the study recommends that the government of Nigeria and other major stakeholders should build up strong security force and demand for foreign assistant if need be, to protect school children and secure our education system. Also, there is need for strong polity devoid of corruption and selfishness for better Nigeria.

Keywords: Short and Long-run, Socio-economic, Bandits, Economists'
YOUTHS UNEMPLOYMENT A THREAT TO GLOBAL SECURITY: ROLE OF EDUCATION (QUALITY ENTREPRENEURIAL SKILLS) AS A PANACEA FOR HUMAN SECURITY

Chuke Ngozi Uzoamaka¹, Ike Obinna Osita² & Ogbonna Ngozi Ann¹
¹Department of Adult Education and Extra-Mural Studies Faculty of Education University of Nigeria, Nsukka
E-mail: ngozi.chuke@unn.edu.ng; annjune2014@gmail.com
²Department of Psychology Faculty of the Social Sciences University of Nigeria, Nsukka
E-mail: obinna.ike@unn.edu.ng

Unemployment among the youths have become a perplexing global problem. Consequently, this has been a global threat to human security. There is a clarion call for job creation to keep the youths busy for income and wealth generation. Therefore, this study is designed to identify quality entrepreneurial skills education that can create jobs to improve the well-being of the youths to curb human insecurity. The study was carried out in tertiary institutions with entrepreneurship education centres in Enugu State, Nigeria. The study adopted an expo-facto research design. The study consists of 181 entrepreneurship educators/facilitators who conveniently participated in the study. The participants responded to the self-report measure of Entrepreneurial Skills for Jobs Creation Questionnaire. The data collected were analyzed using mean and standard deviation for research questions and Analysis of variance for the hypotheses formulated. The results showed that there are some quality entrepreneurial skills education if adopted and given to the youths, that will facilitate and enhance job creation. In addition, there were no significant differences in the mean ratings of the entrepreneurship educators/facilitators from the different tertiary institutions. It was therefore recommended that these entrepreneurship skills education be adopted for job creation among the youths.

Keywords: Youth, unemployment, global security, entrepreneurship skills, entrepreneurship skills education, job creation

PUBLIC POLICY AND INTERNAL SECURITY SECTOR GOVERNANCE IN NIGERIA: A SITUATIONAL ANALYSIS WITH SOME ECONOMIC DEVELOPMENT INDICATORS

Inakefe, Gabriel Inakefe and Basssey, Virtue Uduak
Department of Public Administration and Local Government, Faculty of the Social Sciences, University of Nigeria
E-mail: gabriel.inakefe.pg87297@unn.edu.ng
+2348025379255

This paper examines Nigerian public policy and internal sector governance using poverty, unemployment, GDP, and foreign direct investment (FDI) as key economic development indicators. Using the above indicators as a tool of analysis, the paper seeks to investigate the extent to which policymakers in Nigeria have effectively governed or administered the country's internal security sub-sector in order to achieve desired economic development. The study's methodological orientation is descriptive research and content analysis. The paper argued that in recent times, public policy as a critical political instrument has failed miserably to ensure desired internal security sector governance in Nigeria. The paper also argued that Nigeria's critical economic indicators, such as poverty, unemployment, GDP, and foreign direct investment (FDI), have been greatly exacerbated as a result of the country's poor internal security situation. As a result, citizens are currently facing severe economic hardship, which has a negative impact on Nigeria's current internal security situation. As a result, the paper recommends, among other things, the necessity of a credible electoral process capable of bringing in high-level or qualified manpower to oversee public policy decision-making and program implementation in Nigeria.

Key Words: Public Policy, Internal Security Sector, Governance, Economic Development.

YOUTH ENTREPRENEURSHIP: PANACEA FOR YOUTH RESTIVENESS AND NATIONAL SECURITY IN NIGERIA

¹, ²Glory C Olorunfemi, ³Ogbonnaya Eze Ori, ³Awa-Samuel Oluchukwu Mmaobika
¹Centre for Entrepreneurship and Development Research, University of Nigeria, Nsukka

UNN 2nd Annual International Conference (hybrid)
This study examined how youth entrepreneurship can help in curtailing youth restiveness and promote national security in Nigeria. The broad objectives of this study is to examine the possibly ways of handling security issues and eradicating youth restiveness through the introduction and execution of entrepreneurial skills and programs in Nigeria. The type of design used in this study is descriptive survey where investigations were analyzed in their natural setting without research manipulation of either the independent or dependent variable. The study found that there are roles entrepreneurial skills and businesses play in youth employment in Nigeria through entrepreneurial development. Furthermore, it also shows that youths in Nigeria can be given basic training on how best to establish and grow business enterprises in local communities within the nation. The study therefore recommends that government should remove corruption and greed and formulate policies that will promote the success of entrepreneurship and free enterprise; government should assist entrepreneurs through regular marketing workshops and seminars; the education sector should also finance youths with entrepreneurial excursions and field trips that will equip the youths to engage their world when they graduate from tertiary institutions.

Keywords: youth, entrepreneurship, youth entrepreneurship, panacea, youth restiveness, unemployment.

HUMAN SECURITY, POVERTY AND THE PLACE OF RELIGIOUS ACTORS

Mokwenye Ekene Michael¹, Comfort Kamimi Gemade² and Dorothy Nguemo Afaor³

¹University of Nigeria Nsukka, Enugu State
²Department of Religion and Cultural Studies, Benue State University, Makurdi, Benue State

Email: ekene.mokwenye@unn.edu.ng

The security situation in the country has given room to more poverty. Prior to the advent of pronounced terrorism in Nigeria peasant farmers for example had a good harvest. Human life which is designed to be sacred is daily been defiled by all ramifications of terrorists. The scope of this work is to beam light on the possible interventions like religious actors in Nigeria at checking the effects of terrorism on poor farmers and other displaced persons. It is noted that constant crises, kidnapping, unemployment, underdevelopment, poor governance and especially insecurity have been one of the major causes of poverty. The data were collected through primary and secondary sources. Primary sources include observation and experience. Secondary sources were mainly drawn from books, periodicals, and internet materials, and also unstructured oral interviews were carried out for the study. The method used in this study is phenomenology. It opines that religious actors like Imans, Pastors and other religious policy makers can contribute to poverty alleviation.

Keywords: Human, Security, Poverty, Religious-Actors

FAITH-BASED MEDIATION IN NIGERIA: A THERAPEUTIC FUNCTION

Gloria Adaeze Adichie

Department of Religion and Cultural Studies, University of Nigeria, Nsukka

Email: gloria.adichie@unn.edu.ng

This article systematically examines the importance of including faith-based mediators in political processes of peace negotiations in Nigeria. The work focuses on the involvement of religious actors in a religiously heterogeneous country like Nigeria, where inter-religious conflict is mainly visible in the country's political system. Religious actors/groups have played and continue to play vital roles in instituting dialogues and providing emotional support to parties in need of religious values to facilitate political security. However, there are significant lapses in the effectiveness of faith-based mediation that should not be overlooked. For faith-based mediation to be successful, I contend that it should operate from what I consider a "therapeutic" point of view. I employed Lederach (1995), Umbreit (2005) & Jones (2009) theories of healing to demonstrate the importance of
faith-based mediation as opposed to secular/state mediation. I further demonstrated the need for holistic and long-lasting oriented faith-based mediation by indicating the gap in this form of mediation during political dialogues in the Nigerian context. The article discovers that Nigeria's problem of insecurity is tied to the deep-seated animosity of the Nigerian Civil war that still terrifies the present and prompting the rise of different insurgent and secessionist groups. Hence, the need for faith-based actors to initiate therapeutic elements in the political peace dialogues.

**Keywords**: Religion, Mediation, Therapeutic, security, peacebuilding, Nigeria

---

**STANCE AND STANCE TAKING IN SELECT KIDNAP FOR RANSOM NEGOTIATION DISCOURSES IN NIGERIA**

**Udoumoh, Onyinyechi Blessing**
Department of English and Literary Studies, University of Nigeria, Nsukka
Corresponding Author: onyinyechi.udoumoh@unn.edu.ng

Nigeria in recent years has witnessed worrisome increase in insecurity and mass kidnap by terrorists' gangs who threaten to kill their victims, except the payment of huge ransom by the victims' families or the government, a process which is facilitated through engaged negotiators. The present study evaluates stance and stance taking in kidnap for ransom negotiation commentaries of Mr. Turkur Mamu, a renowned negotiator of some cases of kidnap by Islamic terrorist groups in Nigeria. The study further examines the stance taking in the investigation of the Department of State Services (DSS), an arm of the Nigerian Police Force in relation to the services of Mr. Mamu, to ascertain the discursive strategies and affective elements of the texts, via the theory of linguistic Appraisal Framework. The study reveals that Mr. Mamu's negotiation commentaries unveils emotive stance through the use of mood revealing vocabularies which indicate empathy and affinity towards the terrorist's groups. This is further buttressed in the DSS affective stance that represents Mr. Mamu as an accomplice in crime with the Islamic terrorist groups.

**Key Words**: Stance and stance taking, Terrorists, Kidnap, Ransom Negotiation, Nigeria

---

**KIDNAPPING AND RANSOM PAYMENT: SOCIOECONOMIC IMPLICATION FOR THE FAMILY IN CALABAR MUNICIPAL LOCAL GOVERNMENT AREA, CROSS RIVER STATE, NIGERIA**

**Uyang, Francis Abul & Abanbeshie, Jeremiah A.**
Department of Sociology, University of Calabar, Calabar, Cross River State
Email: francisuyang@yahoo.com
Department of Continuing Education and Development Studies, University of Calabar, Calabar, Cross River State
Email: jerryabambeshie@gmail.com
*Corresponding Author: francisuyang@yahoo.com.

The study examines kidnapping and ransom payment: Socioeconomic implication for the family in Calabar Municipal Local Government Area, Cross River State, Nigeria. One null hypothesis was formulated in the study. To achieve the objective of the study, relevant data were elicited through the questionnaire from 230 randomly selected respondents. The study showed that the common causes of kidnapping are: poverty, unemployment, quick-money syndrome and moral decadence, weak law enforcement and security system, and the political economy of the Niger Delta. The results showed that there is a significant relationship between ransom-induced kidnapping and the socioeconomic well-being of the family. The study recommended, amongst other things, that poverty alleviation programmes should be directed towards addressing poverty among the poor and unemployed youths rather than politicians using the programmes as compensation for the party faithful. The programmes should be pro-poor (that is, for those it is meant for). Also, traditional and religious leaders should encourage the inculcation of moral values, contentment, respect for the sanctity of life and hospitality, communities/traditional rulers should stop rewarding people with questionable characters with chieftaincy titles.

**Keywords**: Kidnapping, random payment, socioeconomic well-being of the family, Calabar Municipal
POLITICS OF POVERTY REDUCTION IN NIGERIA: ASSESSMENT OF THE NATIONAL ECONOMIC EMPOWERMENT AND DEVELOPMENT STRATEGY (NEEDS)

1Christian Obinna Ugwu & 2Chibuike Nwoke Ndubuisi
1Peace and Conflict Studies Unit, SGS, University of Nigeria, Nsukka.
2Department of Sociology and Anthropology, University of Nigeria, Nsukka.
Email Addresses: ugwu.obinna@unn.edu.ng

Sequel to the continued exacerbation of macroeconomic contradictions and socio-political crises in its economy from the late 1970s, Nigeria has experimented with varying degrees of reform packages aimed at resolving these crises. However, these reform programmes instead of ameliorating these crises seemed to have deepened it and thus threw the economy in the throes of acute indebtedness and dependence. In 2003, the democratic government in Nigeria initiated yet another reform package proclaimed as homegrown strategies to rectify the lingering structural rigidities and bottlenecks in the economy. These reforms are based on National Economic Empowerment and Development Strategy (NEEDS)-revised version of Poverty Reduction Strategy Papers (PRSPS) of the IMF and World Bank. The study predicates it's investigation on the theory of post/neo-colonial state. This theory belongs to Marxist persuasion of political analysis. This is anchored on the fact that the theory with its analytical, illuminating and emancipatory capabilities will explain the persistent poverty situation of Nigeria, upon which we shall plan how to escape from it. The methodology is based on content analysis. The result shows that poverty rate continued to increase after many years of implementation of NEEDS. It is the position of the study that NEEDS is an offshoot of SAP and essentially shares its objective, theoretical position and strategies for achieving macroeconomic stability and economic growth. It therefore remained that the road to economic growth and development in Nigeria is still fraught with monstrous hurdle.

Keywords: Macroeconomic, Dependency, NEEDS, IMF, Post/neo-colonial State, Content analysis

STANDARDS ORGANIZATION OF NIGERIA AND CHALLENGE OF QUALITY CONTROL: INTERROGATING THE CASE OF NEOLIBERAL ECONOMIC REFORMS

Okorie Albert 1, Bitrus Micheal & Samuel N. Asogwa
Department of Political Science University of Nigeria, Nsukka
1Corresponding author's email: okorie.albert@unn.edu.ng

Post SAP era has witnessed massive importation and domestic production of substandard product into Nigeria, thus posing great challenge to regulatory agencies. Currently Standards Organization of Nigeria is losing the war against counterfeiters as peddlers of unwholesome items have conquered all markets. Recent cases of death of 84 children following intake of unwholesome teething pain relief drugs, melamine milk scandal that led to the death of 6 children and over 300,000 sickened and several incidents of collapsed buildings, roads, bridges, automobile accidents, fire outbreaks and failure of home appliances are alarming evidence that shade the magnitude of the problem. This study rely on the Structuralist Theory of the State and argues that the implantation of neoliberal economic reforms since 1980s was responsible for domestic production and influx of counterfeit products into Nigeria. Mixed methods and content analysis were adopted for data collection and analysis. Findings revealed that poverty orchestrated by the reforms initiatives whittle down the purchasing power of consumers, thus made them vulnerable to patronizing homemade and imported cheap fake products, which have grave consequence on the health and economy of Nigeria. The study recommends nationalist oriented economic reforms that will empower indigenous firms and stimulate quality production and job creation.

Keywords: Neoliberal Economic Reforms, Quality Control, Trade and Financial Liberalization, Deregulation of the Economy, Substandard Products, Counterfeiting

PERCEIVED ADEQUACY OF MATERIAL SUPPORT SYSTEMS AVAILABLE TO THE CHILDLESS OLDER ADULTS IN SOUTHEAST NIGERIA: IMPLICATION FOR SOCIAL WORKERS
Children in many developing countries, including Nigeria, are considered social and economic safety nets for their elderly parents. This perception is driven by state-sponsored welfare systems being almost non-existent, placing parents as the sole care providers for their young children and grown children as the sole care providers for their older parents. What this may mean for older people without children is that they are left with inadequate material support, which could affect their well-being and life satisfaction. This study, therefore, examines the adequacy of material support systems for childless older adults in southeast Nigeria. It aims to inform policy and social work interventions to ensure adequate support for older adults. Twelve childless older adults aged 75 and older partook in the in-depth interview. The collected data was analyzed thematically. Except for the government support system, childless older adults receive material support from the networks of family, community, and churches. However, the support available from these networks seems to be inadequate and irregular. The study recommends stronger political will by the government to ensure that the newly approved national policy on ageing benefits older adults. In addition, social workers are highly needed to ensure that other necessary programmes are established and strengthen the systems supporting older adults.

Keywords: Ageing, childless older adults, social policy, social workers, social support networks, social welfare

The inevitability of human ageing has made retirement an important phase of life and a natural regular phenomenon in the world of work. In both developed and developing societies, retirement with pension is considered a worker's right. In Nigeria, apart from the Social Security Pension Scheme, majorities of civil servant retirees do not have any other ways of securing their future during their active services. This study therefore investigated the retirement challenges and adjustment strategies among retired civil servants in Ndokwa-East L.G.A, Delta State. The study adopted cross-sectional survey research design. Simple random sampling was used to select the communities for the study while convenience and purposive sampling technique were used to select 150 retirees. The questionnaire and in-depth interviews were the instruments for data collection. The data were analyzed by the use of descriptive statistical. The results of the study revealed that Ndokwa-East civil servant retirees experience psychosocial, socio-economic, and physical challenges. The results of the study revealed that majority of Ndokwa-East civil servant retirees experienced lack of preparation towards retirement (68%), lack of knowledge in investment decisions (61%), inadequate healthcare services (56%), discrimination by the society (52%), and corruption at the Pension Board (50.6%). The adjustment strategies option includes counseling, embarking on skills acquisition training through continuous education and development of sustainable saving culture. The study, therefore, recommended that there is need for social workers to organize proper pre-retirement and post-retirement orientation programmes, and promote social policies that will help cushion the vagaries often experienced in retirement.

Keywords: Adjustment strategy, challenges, older adults, retirement, social security

Installation of Traffic Lights and the Need for Orientation of Road Users in Nsukka Urban

Kingsley O. Ilo & Olive Ilo. O

Ohabuenyi Jonas
Developments in road transportation have tremendously reduced mobility challenges and difficulties faced by humans. Invariably, management of vehicular traffic has remained one of the most challenging tasks to urban management especially in densely populated cities such as the university town of Nsukka. The increase in population and frequent road traffic mishaps within Nsukka urban have necessitated the installation of traffic lights in different locations to ease both physical and emotional stress associated with traffic congestion and accidents usually occasioned by impatient commuters within Nsukka Urban. This study, therefore, set out to investigate the effectiveness of these installed traffic lights in minimizing both traffic jams and accidents. It further examines the level of compliances by road users to the newly introduced traffic management scheme. The study adopted the qualitative research design and utilized questionnaire survey, key informant interviews, participant observation and secondary data on traffic management. Data was analyzed using descriptive statistics and qualitative thematic analysis. The study revealed that the traffic lights are not usually functional in most of the places they are installed and commuters often violate these traffic signs in most of the areas these traffic lights are functional due to poor orientation on the need to adhere strictly to the traffic signs without Traffic Control Enforcement Officers present. The study therefore recommends that Traffic Control Officers should be always available where these traffic lights are located and ensure that the installed traffic lights undergo regular maintenance.

Keywords: Traffic Light, Transportation, Traffic Control Enforcement Officers, Traffic Jams, Nsukka

SALESPERSONS QUALITY AND THEIR INFLUENCE ON SALES PERFORMANCE: EXPOSITION OF INNOSON MANUFACTURING COMPANY

Equipping human resources and sales managers with the vital information and knowledge needed for the recruitment and selection of salespersons with the required qualities to help them achieve improved sales performance is this study's main significance. This paper aims to determine salesperson product knowledge, customer knowledge, and company knowledge and their influence on salesperson performance of Innoson Motors Manufacturing Company Ltd. 131 company staff is the study's population. Adopting survey, questionnaire copies were distributed to them and out of the 131 staff, 120 were correctly filled and returned. Cronbach's alpha result of 0.790 was got in conducting the study's reliability of the instrument. Data was analyzed using simple linear regression analysis technique. Findings revealed that salesperson product knowledge has a significant positive influence on sales performance. Also, salesperson customer knowledge was found to have a significant positive influence on sales performance. Similarly, salesperson company knowledge was found to have a significant positive influence on sales performance. Thus, company managers need to adopt these findings to understand that recruiting the services of salespersons with great product, customer and company knowledge will go a long way to generating improved sales performance for the company.

Keywords: Product knowledge, customer knowledge, company knowledge, sales performance, resource based theory
Organizational Citizenship Behaviour (OCB) refers to all positive and constructive endeavours by employees that go outside the allocated function which often profits the organization. These activities are usually intangible, voluntary, not mandatory to execute, not organized nor rewarded and are aimed at improving the productivity of their colleagues, increasing high job performance and achieving the desired goals of the organization. This study aims at ascertaining the leadership style that best promotes organizational citizenship behaviours among employees in two manufacturing companies in Enugu State, Nigeria. The sample population was 600 employees of Emenite Limited and Innoson Group of companies in Enugu State, Nigeria. The questionnaire was the major instrument for data collection while qualitative data, on the other hand, were also collected through an in-depth interview (IDI) with twenty employees of the companies. The study results showed that transformational as against transactional leadership style has a significant positive impact on organizational citizenship behaviour. The results of the study also found that the leadership decisions to promote teamwork instead of individual targets encourage Organizational Citizenship Behavior in organizations. The study thus concluded that the transformational leadership style affects the organizational citizenship behaviours of the two companies.

**Keywords:** Leadership styles, transformational leadership, transactional leadership, organizational citizenship behaviour, job performance

Supervisory abuse is becoming ubiquitous in organizations. Research continues to document many deleterious consequences of such improper behavior at work. This study further extends its consequences by testing a model linking abusive supervision to job apathy through a climate of fear. This study drew on affective events theory (AET) in investigating the role that the climate of fear plays in instances where casual workers perceive abuse in commercial banks in the southeastern part of Nigeria. A three-wave and three-week time lag approach were adopted for data collection from 245 casual workers. Results from partial least squares structural equation modeling (PLS-SEM) demonstrated support for the model by showing that abusive supervision had a direct positive relationship with a climate of fear and job apathy while a climate of fear related positively to job apathy. Results also revealed that a climate of fear partially mediated the relationship between abusive supervision and job apathy. This study sheds new insights and advances the abusive supervision literature by investigating the climate of fear as the underlying mechanism. Therefore, managers can be trained to become more supportive and less abusive in order to address the problem of abusive supervision. Furthermore, casual workers are encouraged to report any abuse from their supervisor to higher authorities inside or outside their workplace.

**Keywords:** Abusive supervision, climate of fear, job apathy, casual workers, first-level manager.
The provision and implementation of electronic banking services are imperative to customers' satisfaction and commercial banks' survival. This study focused on service quality automation (SQA) and customer satisfaction in commercial banks. 329 respondents were used for the study. Multiple regression analysis was used to analyse the data to derive F-statistics values required for testing the stated hypothesis. The findings revealed that consistency (accuracy, dependability and availability), queue management (prompt service and time-saving), safety (security, privacy, trust, confidence), and quality service enjoyment (convenience, ease of use, usefulness, easy access and minimal cost) of DMBs automation all had a positive effect on customer satisfaction. It was recommended that DMBs should ensure that bank automation transactions are accurate (correct statement of account) and dependable (no absence of network, ATM dispensing new notes and not out of cash or order) at all times to customers. These will ensure customers' delight. Also, DMBs should provide fast automation for cash transfer and withdrawal; and ensure no reduction in balance without payment in electronic banking transactions to customers to guarantee customers' trust. Furthermore, they should provide customers with ease of use and easy accessibility to electronic banking transactions. Finally, DMBs should not impose excessive charges on customers above government-stipulated rates in electronic banking transactions.
Insecurity as prevalent in the school system has a devastating effect on school students' academic performance. Identifying some of the factors that constitute school insecurity and the ones that have much impact on the mathematics performance of secondary school students is worth researching. Thus, this research examined the impact of school insecurity on secondary school students' mathematics performance in the Nsukka Education Zone of Enugu State, Nigeria. Three research questions and one hypothesis guided the research. The descriptive survey design was utilized. The population consisted of 9,651 secondary students (JSS 2 = 6,327, SS 2 = 3,324) in 59 public secondary schools in the Zone. A sample of 423 (215 males and 208 females) was drawn using Taro Yamane's formula (Yamane, 1973). A simple random sampling technique by balloting was used for selecting the sampled classes. The Impact of School Insecurity Questionnaire (ISIQ) was the instrument used for the research. which has a reliability index of 0.84 utilizing Cronbach's Alpha method. Collected data were subjected to analysis using Statistical Package for the Social Sciences (SPSS) version 23. The mean and standard deviation were used to report the research questions, while the hypothesis was tested at a 0.05 level of significance using t-test statistics. Results revealed that some of the factors that constitute school insecurity have a serious impact on students' performance in mathematics. Results also revealed that differences do not exist between male and female students' mathematics performance due to school insecurity. Based on the findings, recommendations were made, one of which was that mathematics teachers should ensure the creation of a secure and friendly environment that is void of the bully, unnecessary punishment and student harassment.

**Keywords:** Academic performance, insecurity, school insecurity, secondary school students, security.
EFFECTS OF POVERTY ON STUDENTS BEHAVIOUR AND ACADEMIC ACHIEVEMENT IN PUBLIC SENIOR SECONDARY SCHOOLS IN SABONGARI LGA OF KADUNA STATE, NIGERIA

Usman Jimoh Muhammad, Safiyanu Zakari Bello and Mansur Abubakar Danjeka

Department of Islamic Studies, Federal College of Education, Zaria, Department of Economics, Federal College of Education, Zaria
E-mail: mujnar@yahoo.com

This study examined the effects of poverty on students' behavior and academic achievement in some selected public senior secondary schools in Kaduna state, Nigeria. The study employed survey design. The target population comprised of students in state owned senior secondary schools in SabonGari LGA of Kaduna State. Three hundred and eleven (311) respondents were selected using purposive sampling technique. The data was collected by means of well-structured questionnaire. Probit regression statistical method was used to analyze the data. The results showed that there was a significant relationship between poverty, students' behavior and academic achievement. It was concluded that a significant relationship existed between poverty, students' behavior and their academic performance. The study recommended that Parents should endeavor to spend much quality time with their children, which will lead to improving their low self-esteem and lifelong learning difficulties. Also, government should increase allocation of funds to provide for more amenities to facilitate learning in the schools and economic empowerment programmes should be embarked on in order to enhance parent's income to mention.

Keywords: Effects, poverty, students' behavior, academic achievement

PRISON INMATES AND EDUCATION PROGRAMS IN NIGERIA: A TASK FOR SOCIAL WORKERS

Okala A. Uche; Ijeoma B. Uche; Agatha U. Nzewuji & Agnes E. Okafor

Department of Social work, University of Nigeria, Nsukka
Department of Educational Foundations, University of Nigeria, Nsukka

Correspondence: ijeoma.uche@unn.edu.ng

Background: Correctional education is one of the rehabilitating tools offered to incarcerated individuals in correctional centres. Consequently, different correctional institutions worldwide have different forms of correctional education offered to inmates. However, much is not known about inmates' perception of the quality of education offered to them. Social workers have tasks to perform in ensuring that inmates in correctional institutions are provided with quality education.

Methodology: In-depth interviews (IDIs) involving 20 convicted inmates from Owerri correctional centre, was adopted. Thematic analysis was used in analyzing data generated for the study.

Findings: Findings show that education programs are available and very essential but the quality of the program does not go down well with the inmates. It also revealed that inmates were not allowed to decide on the type of education program to be involved in. To this end, their participation in the program is jeopardized. The findings further revealed that little or nothing is known about social workers in prison education.

Conclusion: Providing quality correctional education for the inmates is a task not only for the government and significant others but also a huge task for social workers.

Keywords: Correctional education, participation, prison education, inmates, social workers

ROLE OF EDUCATION IN GLOBAL SECURITY

Uzunma Nnenna Udenka
Doctoral Student, Faculty of Law, University of Nigeria of Nigeria, Enugu Campus
Email: nenasam_21@yahoo.com

Global security refers to measures put in place by states and international organizations to ensure mutual safety and survival. The quest for world peace remains a major concern as threat to global peace and security, such as wars, ethnic and religious conflicts and terrorism continue to mount untold pressure worldwide. Education therefore becomes the tool for global security and consequent transformation most needed at this point for harmonious co-existence and cultural synergies. Any meaningful effort at peace and
global security must stem from a fortified background of education that is pivoted towards ingraining in people the core values on which the universal culture of peace is established and the need for non-violent resolution of conflicts. Sustainable global security therefore can only be achieved when education is made a priority by both states and their institutions. When properly realized, education can be the needed global asset to fight poverty, inequality, insecurity and disease which are some of the major triggers of a restive global security system. The methodology is wholly doctrinal and utilizes the descriptive methods. The work finds that values imbibed through education fortifies an individual against falling victim to triggers or becoming an instigator of violence of any magnitude. The work further finds that non-existent and sometimes poor educational system is another major trigger of global insecurity. The paper concludes with projections for building global security with education as a sustainable tool.

Keywords: Teachers, Beliefs, Teaching Mathematics, Teaching Practices

STATUS OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs) INTEGRATION IN THE TEACHING OF PHYSICAL EDUCATION IN SECONDARY SCHOOLS IN NSUKKA URBAN

Saint Oliver Rotachukwu Ngwoke, Oliver Igwebuike Abbah, Oluchi Maryann Ngwoke, Linda Nkem Chukwurah
Department of Human Kinetics and Health Education
University of Nigeria, Nsukka
oliver.ngwoke@unn.edu.ng, 08037553891

Since the beginning of the “digital age”, technology has found its way in diverse educational settings, such as, higher education, vocational training, and schools as well as in specialized fields such as Physical Education (PE) and Sports. Its rapid growth has become one of the most important topics discussed by scholars in education. PE, has evolved as a school subject that require technology integration to foster students' learning. Efforts to nurture and facilitate technology integration in PE indicate the growth in interest on this topic over the past years. This research will be guided by four research questions aimed at investigating ICTs integration in the teaching of PE in Secondary Schools in Nsukka urban, Nsukka LGA of Enugu State, Nigeria. The target population for this study will be 43 PE teachers in both public and private schools in Nsukka urban. The entire 43 PE teachers will be used in the study, as such, there will no sampling. A structured questionnaire will be used to elicit the needed information from the PE teachers. The data collected will be analyzed using mean and
The study investigated the relationship between Non Pharmaceutical COVID-19 preventive measures and school adjustment among pupils. Correlation survey research design was adopted for the study. The study was conducted using pupils in public schools in Nsukka Local Government Education Authority, Enugu State. Three research questions and three hypotheses guided the study. The population of the study is 7,964 pupils in the 118 public primary schools in the education authority. The sample for the study comprised 380 primary school pupils determined using Taro Yamane formula (1967). A multistage sampling technique was used to draw the respondents. Two questionnaires titled “Non Pharmaceutical COVID-19 preventive measures Scale (N-PCPMS)” and “Pupils School Adjustment Inventory (PSAI)” were used for the study. “Non-Pharmaceutical COVID-19 preventive measures Scale” was developed by the researcher from research materials. “Pupils School Adjustment Inventory (PSAI)” was adopted from Adjustment Inventory for School Students by Sinha and Singh (1971). This inventory is divided into three clusters, namely: social adjustment, behavioural adjustment and academic adjustment. These instruments were subjected to validation by three experts from University of Nigeria, Nsukka and a reliability index of 0.89 and 0.88 were obtained respectively using Cronbach Alpha. Pearson's Product Moment Correlation Coefficient was used to answer the research questions while, regression analysis and regression ANOVA were used to test the hypotheses at 0.05 level of significance. The findings of the study revealed, among others, that social adjustment, academic and behaviour adjustments of primary school pupils were positively related the non-pharmaceutical measures. It is recommended among others, that primary school teachers should educate pupils on the importance of these measures and also encourage them to use these measures for their good and those of their families, so that they can adhere to these measures and adjust behaviourally, socially and academically.
is albatross to national development. Conclusively, in order to give students the self-reliance skills that will keep them off the streets and away from social crime, it was recommended that administrators of higher education institutions in Nigeria ensure that education is properly managed in the areas of resources allocation, zero tolerance for corruption, adequate provision of facilities, good leadership, and place more emphasis on vocational and technical education in the curriculum. **Keywords:** role, educational management, solution, global security issues

---

**PROCUREMENT PRACTICES AND PERFORMANCE OF TERTIARY EDUCATION INSTITUTIONS IN BAYELSA STATE, NIGERIA**

Eyo Emmanuel Essien* and Lucky Brambaifa  
Department of Marketing, Faculty of Management Sciences, University of Calabar, Calabar – Nigeria  
*Corresponding Author: ecubed2006@yahoo.com, ecubed@unical.edu.ng.

This research examined procurement practices and performance of tertiary educational institutions in Bayelsa State. Specifically, the study sought to determine the relative importance of supplier selection procedure, e-procurement approaches, buyer-supplier relationship building and sustainable procurement practices in enhancing service delivery capacity in tertiary educational institutions. Survey research design was adopted whereby primary data were obtained from 165 procurement and store/warehouse officers and administrative officers of the various institutions using a 5-point Likert scale structured questionnaire. Data were analyzed using multiples regression technique. Results indicate that buyer-supplier relationship is the most important determinant of performance in tertiary education institutions in Bayelsa State, followed by supplier selection procedure, e-procurement and sustainable procurement practices. It was concluded that that although all the explanatory variables were significantly important in enhancing performance in public tertiary institutions in Bayelsa State, buyer-supplier relationship and supplier selection procedures are relatively more important. Our study, therefore, suggested that tertiary educational institutions in Bayelsa State can increase their ratings and service delivery capacities (in terms of qualitative working and learning infrastructure) by paying greater attention to their buyer-supplier relationship and supplier selection procedures, while encouraging e-procurement and sustainable procurement practices. **Key Words:** Procurement practices: Tertiary Educational institutions; performance.

---

**ENVISIONING NATIONAL SECURITY FOR SUSTAINABLE DEVELOPMENT IN NIGERIA: THE ROLE OF SCIENCE AND TECHNOLOGY EDUCATION**

Adah Stephen Akomaye and Afufu John E  
Department of Curriculum and Instructional Technology  
Cross River University of Technology  
Corresponding author: Steveadah80@yahoo.com

Security is an imperative for every nation in the world. This is even more vital for a developing nation like Nigeria. Existing studies reveal that scientific and technological advancements in many developed nations have in no small measure helped in reshaping their internal and external security capabilities, which in turn has tremendously mitigated the impact of internal and external aggressions. Drawing from this background, this paper therefore x-rays some wanton attacks on lives and properties that reveal that Nigeria as a nation requires a transformation in her science and technology education to tackle the increasing level of insecurity which have hitherto destroyed the corporate existence of the nation. The meanings of science and technology, as well as national security are explained. The interaction of these two concepts is explored, and the implications to the Nigerian science and technology education are drawn. The paper concludes with some suggestions among which are that Nigeria government should invest, not only in science and technology education, but should also use the right policy framework to develop appropriate labour force through science and technology education. **Keywords:** National Security, Science and Technology Education, Sustainable Development.
SECURITY CHALLENGES AND EDUCATIONAL DEVELOPMENT IN NORTHWEST NIGERIA 2015-2022

Hannatu K. Ali, Mohammed Liman Murtala and Anna Yunana Akinga
Department of History and War Studies
Nigerian Defence Academy, Kaduna
mlmurtala@nda.edu.ng, 08037266816

The impact of security challenges in communities in the Northwest of Nigeria continues to be a subject of intense academic research. This is not surprising, farmer-herder conflict, and armed banditry has led to displacement, depopulation and disruption of economic, social and educational activities in the Northwest. Recently, bandits targeting of students in various schools across the Northwest has presented a growing threat to educational attainment of children in the Northwest of Nigeria. The implication is that despite efforts by international donors, government and non-governmental organisations (NGOs) to encourage children enrolment, retention and completion of school, the threat of and actual violence on schools has upended these efforts. This paper therefore seeks to identify the impact of insecurity on educational development in the Northwest states of Kaduna, Zamfara and Katsina states between 2015 and 2022. Using extant literature and primary sources such as interviews as well as the descriptive and analytic approach, the paper argues that insecurity in the Northwest has gravely affected educational development in the Northwest. The kidnapping for ransom of students have led to closure of schools especially in the rural area. Also the displacement of mass population in these states has led to upending the educational development of children in this area. The paper argues that there must be a targeted and consistent effort by government, international donor organisations and other stakeholders to address the challenges of children's enrolment into schools regardless of the areas of their dispersal as a result of displacement from the insecurity in the Northwest.

Keywords: Armed Banditry, Displacement, Educational Development, Enrolment, Security Challenges

EFFECTS OF POVERTY ON STUDENTS BEHAVIOUR AND ACADEMIC ACHIEVEMENT IN PUBLIC SENIOR SECONDARY SCHOOLS IN SABON GARI LGA OF KADUNA STATE, NIGERIA

1Usman Jimoh Muhammad, 2Safiyanu Zakari Bello and 3Mansur Abubakar Danjeka
1Department of Islamic Studies, Federal College of Education, Zaria
2Department of Economics, Federal College of Education, Zaria
E-mail: mujnar@yahoo.com
Phone Number: 08036354765 or 07053659016

This study examined the effects of poverty on students' behavior and academic achievement in some selected public senior secondary schools in Kaduna State, Nigeria. The study employed survey design. The target population comprised of students in state owned senior secondary schools in Sabon Gari LGA of Kaduna State. Three hundred and eleven (311) respondents were selected using purposive sampling technique. The data was collected by means of well-structured questionnaire. Probit regression statistical method was used to analyze the data. The results showed that there was a significant relationship between poverty, students' behaviour and academic achievement. It was concluded that a significant relationship existed between poverty, students' behavior and their academic performance. The study further recommended that Parents should endeavour to spend much quality time with their children, leading to improving their low self-esteem and lifelong learning difficulties, Government should increase allocation of funds to provide for more amenities to facilitate learning in the schools and economic empowerment programmes should be embarked on to enhance parent's income to mention a few.

Keywords: Effects, Poverty, Students Behavior, Academic Achievement

EFFECTS OF FOOD INSECURITY AND PSYCHOSOCIAL HEALTH CHALLENGES ON ACADEMIC PERFORMANCE AMONG STUDENTS OF FEDERAL COLLEGE OF EDUCATION, ZARIA – KADUNA STATE, NIGERIA

96
This study assessed food insecurity and Psychosocial Health Challenges and their associated effects on the Academic Performance among Students of Federal College of Education, Zaria – Kaduna State – Nigeria. The study employs a respondents-level survey due to the location and respondents' characteristics, which could include respondents' sex, enrollment status, years spent in school, GPAs, and kind of accommodation (e.g. hostel or off-campus) were factors that necessities the usage of this design. The target population comprised students of FCE, Zaria. Three hundred and fifteen (315) respondents were selected using a purposive sampling technique from each of the seven (7) departments in the School of Secondary, Art and Social Sciences Education, FCE Zaria, Kaduna State. The data was collected using a well-structured questionnaire. Both descriptive and Logistic regression analysis was used to analyze the data. Findings from the study revealed that students with lower GPAs have the highest percentage indicating challenges to academic success caused by food insecurity status; students experiencing food insecurity are more prone to experience anxiety which in turn affects the academic performance of the students; the more students are exposed to having depression due to food insecurity the more their academic performance is reduced. Among other things, the study suggests: At an individual level, students need to be oriented by the school authority on how to properly feed themselves with a good quality of food to attempt to reduce the negative impacts of being food insecure; where students have good psychosocial health, such as a low level of anxiety and depression in the face of food insecurity, they may be able to maintain good academic performance among others, to mention a few.

Keywords: Effects; food insecurity; psychosocial health challenge; students; academic performance.

IMPACT OF INSECURITY ON EDUCATION AND NATIONAL UNITY

Ndakwu Eric Chima¹ & Ndakwu Edith N.²
¹Department of Education Foundations, Faculty of Education, University of Nigeria, Nsukka.
²Department of Social Science Education, Faculty of Education, University of Nigeria, Nsukka.
Email: eric.ndakwu@unn.edu.ng
Email: nkyric@yahoo.com

This paper aims at investigating the impact of insecurity on Education and Nigeria's unity. This paper x-rays the causes, and origin of insecurity in Nigeria and proffer solutions to Nigeria, insecurity. Security has to do with freedom from menace or threat to a nation. The quality of peace that exists in a nation influences education. Insecurity in Nigeria has affected education (teaching and learning) a great deal. Education is the bedrock of a nation's development and advancement. The foundation of all types of progress and national unity is found in peace which is an offshoot of a sound security network. The present level of insecurity in Nigeria currently is bothersome. Nigeria's insecurity began with Niger Delta militancy to Bokoharam in Northern and Unknown Gunmen in south-Eastern Nigeria. Interviews and questionnaire data collected in the course of conducting this study revealed that insecurity has the potential of distorting all kinds of academic successes and national unity. It was also revealed that if corruption, unemployment, poor governance and injustice are not well handled, Nigeria will divide unconsciously.

Keywords: Education; insecurity; national unity; origin of insecurity; students.

IMPACT OF CORONA VIRUS PANDEMIC ON THE PSYCHOLOGICAL STATE AND ACADEMIC SUCCESS OF STUDENTS

Ndakwu, Eric Chima' and Ndakwu, Edith N.²
¹Department of Educational Foundations, University of Nigeria Nsukka
²Department of Social Science Education, University of Nigeria Nsukka
Correspondence Email: nkyric@yahoo.com

This study examines the effect of the coronavirus pandemic on the psychological state of students in south-Eastern Nigeria. Three research questions and three null hypotheses were formulated to guide the study. An ex-post facto research design was adopted to
study a sample of 303 University students who were accepted to be part of this study. One trial-tested instrument with three clusters, covering; depression, anxiety and academic success were used for data collection. Data obtained with the instrument were analyzed using mean, standard deviation and t-test. The findings revealed that the coronavirus pandemic has caused anxiety and depression in many students. It was also found that Covid-19 has a devastating effect on the psychological state and academic success of students. It was also discovered that Covid-19 has a slightly different effect on males and females. Among other things, the educational implication of this study is that a psychological state is essential for academic success. It was recommended that the coronavirus pandemic should be dealt with so that students can focus on their studies without anxiety and depression.

Keywords: Academic success; anxiety; coronavirus pandemic; depression; psychological state.

MONDAY SIT-AT-HOME INSECURITY: IMPLICATIONS FOR SUSTAINABLE TEACHING AND LEARNING IN SOUTH-EAST, NIGERIA

Nwafor, Chidinma K., Oluikpe, Esther Ngozi & *Ossai, Chidimma Rosemary
Department of Arts Education, Faculty of Education, University of Nigeria, Nsukka
Email: chidinma.nwafor@unn.edu.ng; esther.oluike@unn.edu.ng; chidimma.ossai@unn.edu.ng
*Corresponding Author: chidimma.ossai@unn.edu.ng

This paper examined Monday's sit-at-home insecurity and its implication for sustainable teaching and learning in Southeast, Nigeria. Two research questions and one hypothesis guided the study. The sample for the study was 215 English language teachers and 340 students selected from the five states that make up the Southeast zone using a simple random sampling technique. Data was collected using a 20-item structured questionnaire which was face validated by three experts from the Faculty of Education, University of Nigeria, Nsukka. The reliability of the instrument was determined using Cronbach's Alpha coefficient method and it yielded a reliability coefficient of 0.68. The research questions were answered using mean scores, standard deviation and percentages, while the hypothesis was tested using a t-test at a 0.05 level of significance. The findings of the study showed that the majority of the students and teachers are not only aware of the Monday sit-at-home order in Southeast, Nigeria but perceive a negative implication of the Monday sit-at-home on the teaching and learning of the English language as well as the quality of education in general in South-east, Nigeria. The implication of this is that students in the Southeast region may not be able to compete academically with their counterparts in other zones in both internal and external examinations since teachers do not cover their syllabi due to the Monday sit-at-home order. Based on the findings, it was recommended among others that Saturdays be adopted as a replacement for Monday classes for the time being. Also, the extension of school closing time from 2 pm to 4 pm to enable teachers to cover the syllabus and make up for Monday classes could ameliorate the problem caused by the Monday sit-at-home on English language teaching and learning. It was also recommended that Governments at all levels should intensify efforts in ensuring that the Monday sit-at-home in the South-east is completely eased.

Keywords: English language, Insecurity, Sit-at-home, Sustainable teaching and learning

STAKEHOLDERS' PERCEPTIONS ON THE NUTRITIONAL AND EDUCATIONAL IMPACTS OF THE NATIONAL HOME-GROWN SCHOOL FEEDING PROGRAMME (NHGSFP) ON PUPILS OF RURAL PUBLIC PRIMARY SCHOOLS IN EBONYI STATE, NIGERIA

Okah, Paulinus S.1, Iyiani, Christian C.2, & Aghedo, Gabriel U.1,2,3
1,2Department of Social Work, University of Nigeria, Nsukka, Enugu State, Nigeria
3Correspondence: paulinus.okah@unn.edu.ng

Over 19 million school-aged children are out of school in Nigeria as a result of major economic-related factors including poverty and lack of functional social welfare programmes geared towards their well-being and development. The Nigerian government in addition to
the already existing free and compulsory primary education policy introduced the National Home-Grown School Feeding Programme in public primary schools across the country to fight short-term hunger and improve the health and nutrition of children by providing daily nutritious meals during school hours. Our study is borne out of scarce literature examining the efficacy of the programme, especially in terms of improvement in nutrition and school attendance/academic performance of the pupils. Twenty-four participants including six pupils, food vendors, head teachers and parents respectively, were purposively selected for the study. Data were collected using in-depth interviews and were analyzed thematically. Findings revealed that the National Home-Grown School Feeding Programme has improved the academic performance of the pupils and saved them from hunger, starvation and malnutrition. However, factors such as inadequate funding and lack of involvement of child welfare professionals like social workers affect the smooth operations and efficacy of the programme. The study recommended the expansion of coverage to all primary schools in the country to ensure that every pupil, including those in rural areas, is adequately covered. We suggest the inclusion of professional social workers in awareness creation and implementation of the programme for effective and positive results.

**Keywords:** Educational impact, School feeding programme, Nutrition, Pupil, Social workers.

---

**BEYOND ROLE: THE STATUS OF ENGLISH LANGUAGE CURRICULUM IMPLEMENTATION IN SECONDARY SCHOOLS IN SECURITY-CHALLENGED ENVIRONMENTS NIGERIA**

1 N'Gozi U. Emelogu, 1N'Gozi G. Okoyeukwu
2Godswill U. Chigbu,
Corresponding Author:
godswill.chigbu@gmail.com
1Department of Arts Education, Faculty of Education, University of Nigeria, Nsukka.
2Department of English and Literary Studies, Faculty of Arts, University of Nigeria, Nsukka.

Education has a fundamental role to play in global security but the spate of insecurity in Nigeria has incapacitated education. Plateau and Borno states, among other states in Northern Nigeria, have become volatile due to terrorist activities such as banditry, farmer-herder clashes, bombing, and kidnapping. These activities lead to the loss of lives, disruption of school activities, and the destruction of school facilities, as well as keeping curriculum delivery under constant threat. This paper, therefore, examines the status of English language curriculum implementation in security-challenged environments, the case of Plateau and Borno states. The study is a mixed method of quantitative and qualitative research. The study is guided by two research questions and two specific objectives. One hundred (100) English language teachers are randomly sampled for the study. A structured questionnaire and an oral interview are used for data collection. Descriptive statistics of mean, standard deviation, and thematic analysis were used to analyze the data. The findings of the study will make very significant contributions to the discourse on insecurity and English-language curriculum implementation.

**Keywords:** Education, Insecurity, Global Security, English language, Curriculum Implementation

---

**RE-TOOLING ADULT EDUCATION FOR ACHIEVING PEACE AND SUSTAINABLE NATIONAL SECURITY IN JOS PLATEAU STATE OF NIGERIA**

Igwe Justina Ngozi, Koledoye, UzoamakaLucynda & Yusuf Linus

Department of Adult Education and Extra-Mural Studies
University of Nigeria, Nsukka
Email: ngozi.justina.igwe@unn.edu.ng; uzoamaka.koledoye@unn.edu.ng;

The study investigates the re-tooling of adult education for achieving peace and sustainable national security in the Jos Plateau State of Nigeria. The study adopted a descriptive survey design. The population of the study was 60 adult literacy instructors and 168 adult learners in all eight adult education centres in Jos Metropolis. There was no sampling as the entire population was used for the study. The instrument used for the data collection was a researcher-made questionnaire which
was made up of 10 items. The 10 items dealt with peace education. The instrument was validated by three experts from the Department of Adult Education and Extra–Mural Studies, and one from the measurement and evaluation unit-Science Education Department all in the University of Nigeria, Nsukka. The reliability of the instrument was analysed using the test-retest method outside of the area of the study. Using the Pearson moment correlation coefficient, a reliability coefficient of 0.84 was obtained. This indicates that the instrument was reliable for the study. Mean and standard deviation was used to analyse data to answer the research questions and t-test statistic was used to test the null hypotheses that guided the study. The findings revealed that re-tooling peace education in adult education programmes will help maintain peace and order. Based on the findings, the study recommended among others that government, donor agencies and individuals should assist in teaching peace education to adults and youths.

Keywords: Re-tooling, Adult education, Peace education and Sustainable National Security.

EDUCATION: A TOOL FOR NATIONAL SECURITY IN NIGERIA

*Rachael Ebiumene Nelson; Francis Attah Egu; Kiani Aaron Tamuno; Christiana Ihuoma Pepple

Languages and Communications Department, School of General Studies, Federal Polytechnic of Oil and Gas, Bonny Island, Rivers State.

*Corresponding author's email: EbiumeneNelson@gmail.com

In recent times, the international community has viewed some regions in Nigeria as volatile and turbulent in terms of peace and stability. Residents of these areas have been victims of communal, ethnic, and religious violence. With the emergence of the Boko Haram terrorist group, the situation has taken a dangerous turn, putting the nation's security at risk. The reason for this upsurge is premised on the faulty education system of the nation. Using systems theory, this paper critically examines the role of basic education in national security. According to the paper, unless Nigeria's education system is reformatted, the end of insecurity is still a long way off. The paper also advocates for the government to provide mass employment for unemployed youth as a way to address Nigeria's insecurity problem.


IMPACT OF EDUCATIONAL LEVEL ON SECURITY AWARENESS AMONG NIGERIAN UNIVERSITY STUDENTS: IMPERATIVE FOR THE INCLUSION OF SECURITY EDUCATION IN UNIVERSITY CURRICULUM

Okeke, Anulika. Mary, Aneshie-Otakpa, Valentine Obun & Orga, Anthonia Chioma

Department of Science Education, University of Nigeria, Nsukka

Corresponding author: Aneshie-Otakpa, Valentine Obun, Department of Science Education, University of Nigeria, Nsukka. Email: aneshieale@gmail.com

The paper investigated the impact of educational level on security awareness among university students. The study adopted a descriptive survey research design. Two research questions and one hypothesis guided the study. The sample for the study consisted of 244 students drawn from two universities in South East Nigeria using a purposive sampling technique. One instrument titled: students' security awareness questionnaire (SSAQ) was used to collect data. The instrument was validated by three experts. The internal consistency reliability coefficient of the instrument was obtained using the Cronbach Alpha method and the reliability coefficient was 0.81. Data collected were analyzed using mean and standard deviation to answer the research questions and ANOVA was used to test the null hypothesis at a 0.05 level of significance. Results of the study indicate that the students had a moderate level of security awareness. The results also showed that the level of security awareness among students differs by level of education. The result of the hypotheses indicated that there is a significant difference in the level of security awareness based on the level of education. Based on the findings, it was recommended that security awareness should be integrated into the curriculum of universities for all university students.

Keywords: Educational Level, Security, Awareness, University Students, Curriculum
IMPACT OF TRANSFORMATIONAL LEADERSHIP ON HUMAN RESOURCE IN SECONDARY EDUCATION: A PANACEA FOR HUMAN SECURITY CHALLENGES

Mary Chioma Aneke
Department of Educational foundations
University of Nigeria Nsukka
mary.anke@unn.edu.ng

Secondary education is the education received after primary education, and before tertiary education. Some of the objectives of secondary education in Nigeria are; to provide the child with diverse basic knowledge and skills for entrepreneurship and to offer a diversified curriculum to cater to the difference in talents disposition, opportunities, and future roles among others. Human resources and effective leadership are needed to achieve the objectives of secondary education. There is a need for effective leadership to positively influence human resources and to deal with the security challenges of the workers; play a role in employees' well-being, contribute to better health and lessen stress among others. Transformational leadership is a process in which leaders and subordinates support each other to advance to a higher level of morale and motivation in the workplace.

PERCEPTION OF THE PSYCHOLOGICAL INSECURITY OF THE SCHOOL ENVIRONMENT AND ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS IN FEDERAL CAPITAL TERRITORY (FCT) ABUJA METROPOLIS

Lilian Chijioke Ozoemena
Department of Educational foundations,
University of Nigeria, Nsukka

The purpose of the study was to determine students' perceptions of the psychological insecurity of the schools environments and their relationship with their academic achievement of secondary schools in federal capital territory (FCT) Abuja metropolis. A sample of 382 (188 males and 194 female) secondary school students selected via stratified random sampling from twenty-one (21) public senior secondary schools in federal capital territory(FCT) Abuja metropolis participated in the study. A self-develop questionnaire titled “psychological perspective of security of school environment and academic achievement questionnaire” with a Cronbach Alpha reliability of (0.71) was used for the study. Simple percentage and multiple regressions were used to analyze the data. The findings reveal that students perceived the psychological security of secondary schools environments as insecure; there are significant relationships between insecurity of the school environment and academic achievement of students. It is recommended that government should beef up security in our school like deploying well trained and equipped security personnel that will guard the school environment and students to reduce kidnapping of students from schools. Government, school administrators, and principals should fence all schools. School administrators should provide adequate security for teachers and students through good leadership and parents should train their children on important of security. Finally, school counselors should train booth principals, teachers and student on security consciousness.

Keywords: Perception, Psychological Insecurity, School Environment, Academic Achievement

EFFECT OF THE INSTRUCTIONAL MODEL ON STUDENTS' INTEREST IN THE HISTORY OF EDUCATION IN ABIA STATE COLLEGE OF EDUCATION TECHNICAL, AROCHUKWU

Opara Felicia Nnenna
Department of Educational Foundations, Faculty of Education, University of Nigeria, Nsukka
felicia.opara@unn.edu.ng; +2347037285821

The study was carried out to investigate the effect of the instructional model on students' interest in the History of Education in southeast Nigeria. The study adopted a descriptive survey research design. The study's population covered all the year one NCE students of History of Education in Abia State College of Education (T), Arochukwu. The sample size for the study was 300 students. In carrying out the study, two research questions were used. The data collection instrument was the History of Education Interest Scale (HEIS). Experts in History of Education validated the instruments. The HEIS was trial-tested to determine
the reliability using the Cronbach Alpha reliability technique, and a resulting coefficient of 0.94 was obtained. Mean score and standard deviation were used to answer the research questions. The study's results revealed that the instructional model had a higher interest mean gain. Conclusion and recommendation were made.

IMPACT OF EDUCATION IN ACHIEVING SUSTAINABLE CONTEMPORARY GLOBAL SECURITY CHALLENGES: IMPLICATION FOR NIGERIA PERSPECTIVE

Eze, Georgina Chinagorom¹; Nweke, Prince Onyemaechi² & Okengwu, Mary Chinyere³
¹Adult Education and Extra-Mural Studies, University of Nigeria, Nsukka
²Department of Educational Foundations, University of Nigeria, Nsukka
³* nweke.prince@unn.edu.ng

The study aimed to investigate the impact of education towards achieving sustainable global security issues in Nigeria. The study clarified the concept of education, global security as well as areas of emphases on contemporary global security issues in a globalized world. Two research questions were adopted to guide the study. The study used a descriptive survey design involving a sample population of 320 respondents randomly selected from South-East Nigeria. The instrument for data collection was a structured questionnaire developed by the researchers titled: "Education in Achieving Sustainable Contemporary Global Security Challenges Questionnaire (EASCGSCQ)". The instrument was face-validated by two adult educators and an expert in the Measurement and Evaluation Unit, University of Nigeria Nsukka. The internal consistency of EASCGSCQ was ascertained using Chronbach Alpha with an overall reliability estimate of 0.82. Mean scores and standard deviation were used to answer the research questions. The study's findings highlighted corruption, terrorism, organized crime, migration, weapons of mass destruction, kidnapping, hijacking, proliferation and arms control as some of the most significant global security challenges confronting the achievement of sustainable nations across the globalized world. Further findings revealed the levels of strategies and awareness adopted by educators towards achieving sustainable global security challenges in society. Based on the findings, it was recommended that governments across the globalized world should step up with strategic thinking. This should be integrated across all relevant government agencies and departments.

Keywords: Adult education, sustainability, global security, security challenges, globalization

STRATEGIC MANAGEMENT PRACTICES AS VERITABLE TOOLS FOR MAXIMUM SECURITY SYSTEM IN THE ADMINISTRATION OF SECONDARY SCHOOLS IN NIGERIA

Chioma E. Chukwuji¹ and Ogechukwu N. Onyedibe²
¹Department of Educational Foundations, University of Nigeria, Nsukka
²Department of Social Science, Imo State University
Correspondence: chioma.chukwuji@unn.edu.ng; ogechukwunonyedibe@gmail.com

The study assessed strategic management practices as veritable tools for maximum security system in the administration secondary schools in Nigeria. The study of strategic management has drawn so much attention in organizations including academic organizations. Academic researchers for some time now have delved into the area of strategic management as a way to improve and sustain organizational performance. Strategic management practices are essential tools in the administration of secondary schools with regard achievement of their visions, missions, goals and objectives. The concepts of environmental analysis, strategy formulation, strategy implementation, strategy evaluation, management and strategic practices as well as security and strategic management practices were explored and relationship between them expounded. This study concluded that maximum school security can be achieved through collective efforts of all school personnel and other stakeholders headed by the school administrator. The study recommended among others that school administrators should adopt crime prevention strategies and integrate information communication technology (ICT) and detection devices in the overall security design of their schools to ensure maximum security.

Keywords: Secondary school; School administrators; Strategic management practices; Security.
Feminism, Security and the African Male Writer: The Poetry of Dami Ajayi

Somtochukwu Janefrances Metu
Department of English and Literary Studies
University of Nigeria, Nsukka.
E-mail Address: somtochukwu.metu@unn.edu.ng
Phone Number: +2348084416290

Feminism like other “isms” has generated controversies since its inception. Amongst the issues surrounding this movement is its place in a patriarchal continent like Africa. African Literature of the middle part of the Twentieth Century demonstrated the inequality that exists between the male and female genders; the prominent place given to a man in the society and the eerie “insignificant” roles assigned to women which in an ironical sense buttress the burden placed on the shoulders of women. With African writers of the Twenty-First Century, there is a shift in the way female characters are portrayed aided by strides made by Feminism. This provides security for their well-being and assurance of their place and contributions to their society. In this instance, the aesthetics that trail the female body is viewed through the lens of a male writer. Using the Feminist Literary Theory, the poems of Dami Ajayi demonstrates the stance of feminism, the power of femininity and the beauty of the female body unburdened by Patriarchy.

Keywords: Feminism, Femininity, Inequality, Patriarchy, Security.

EDUCATION AND SECURITY IN A GLOBALIZED WORLD

Aloysius C. Obiwulu, (PhD)
Humanities Unit, School of General Studies,
University of Nigeria, Nsukka
aloysius.obiwulu@unn.edu.ng

Since the arrival of humans on the planet, they have been battling several problems. One of the significant problems that threaten human life is insecurity. Without security, there would hardly be any meaningful development and progress. In this paper, I strongly argue that the citizenry needs to be educated to be secure. Education offers the skills and tools that help in conquering many societal problems. Using the views of Plato, the paper demonstrates that education aids in achieving security because an educated human being understands better the implications and consequences of actions and may have very little time for activities that breed insecurity, namely: armed robbery, violence, kidnapping, willful homicide, theft, etc. Thus, the paper insists that the solution to security issues lies in the education of the citizens. Global statistics support this assertion, demonstrating that insecurity and crime are more among uneducated and unemployed people. In a globalized world, there are faster means of transportation and dissemination of information. Therefore, security issues in one part of the world spread quickly to other areas. In the same way, the role of education in a globalized world is of paramount importance in achieving global human security.

ROLE OF EDUCATIONAL MANAGEMENT IN PROVIDING SOLUTION TO THE GLOBAL SECURITY ISSUES: EMPIRICAL EVIDENCE FROM NIGERIA

Evelyn I. Ezepue & Prince O. Nweke, Prince
Department of Educational Foundations, University of Nigeria, Nsukka
Correspondence: evelyn.ezepue@unn.edu.ng, nwweke.prince@unn.edu.ng

The study examined the role of educational management in providing solution to the global security issues around the world, using Nigeria as empirical evidence. Two research questions were adopted to guide the study. The study used a descriptive survey design, involving a sample population of 128 security officers randomly selected from the Department of Security Affairs, University of Nigeria, Nsukka. The instrument for data collection was a structured questionnaire developed by the researcher titled: “Educational Management in Providing Solution to Global Security Issues Questionnaire (EMPSGISIQ)”. The instrument was faced validated by two Educational Administrators and an expert in Measurement and Evaluation Unit, from the University of Nigeria Nsukka. The internal consistency of EMPSGISIQ was ascertained using Chronbach Alpha and an overall reliability estimate of 0.84 was obtained. Mean scores and standard deviation
were used to answer the research questions. The findings of the study revealed that improper management of education system in term resources allocation, corruption, and poor leadership corruption is albatross to national development. Conclusively, in order to give students the self-reliance skills that will keep them off the streets and away from social crime, it was recommended that administrators of higher education institutions in Nigeria ensure that education is properly managed in the areas of resources allocation, zero tolerance for corruption, adequate provision of facilities, good leadership, and place more emphasis on vocational and technical education in the curriculum.

**Keywords**: role, educational management, solution, global security issues

---

**ACHIEVING SUSTAINABLE DEVELOPMENT GOAL THREE (GOOD HEALTH & WELLBEING) THROUGH EXTENSION EDUCATION STRATEGIES IN RURAL COMMUNITIES OF BENDE LOCAL GOVERNMENT AREA, ABIA STATE**

Onyediri C. Imo; Kingsley A. Okorie and Christian N. Olori
Department of Adult Education and Extra-Mural Studies
University of Nigeria, Nsukka
christian.olori@unn.edu.ng (corresponding author)

This study focused on achieving sustainable development goal number three through extension education strategies in rural communities of Bende Local Government Area, Abia State. The study was guided by two research questions. A descriptive survey research design was used for the study. The population of the study comprised 2058 rural dwellers. A sample of 206 was drawn using the simple random sampling technique. The instrument for data collection was the researchers' structured questionnaire titled Achieving Sustainable Development Goal number Three through Extension Education Questionnaire (ASDGEEQ), which was validated by three experts. The reliability co-efficient values of 0.85 and 0.72 were obtained using Cronbach Alpha Statistical Tool. The data collected were analyzed using the mean and standard deviation. The findings revealed that community education and nutrition education could be used in achieving sustainable development goal number three in rural communities of Bende Local Government Area, Abia State. Based on the findings, it was recommended that government and other educational bodies should strengthen community education in rural communities to promote knowledge of hygiene ethics among others.

**Keywords**: sustainable development goal; extension education; rural communities

---

**EFFECTS OF DEMONSTRATION AND LECTURE METHODS ON SENIOR SECONDARY SCHOOL STUDENTS ACHIEVEMENT IN CHEMISTRY AS EDUCATION TOOL FOR GLOBAL SECURITY**

Hope Nwoji
Department of Science Education, University of Nigeria Nsukka
Correspondence: hope.nwoji@unn.edu.ng

The study was an investigation into the effects of Demonstration and Lecture methods on Senior Secondary School Students Achievement in Chemistry as Education tool for Global Security. The purpose of study was to determine the methods used by teachers in teaching chemistry in secondary schools and also to determine the influence of student's gender on the academic achievement of senior secondary school students as Education tool for Global Security. The population of the study were Senior Secondary two (SS2) chemistry students in thirty (30) secondary schools in Nsukka Local Government Area of Enugu State (2,379 SS2 students). The sample for the study consisted of one hundred (100) SS2 chemistry students. Purposive random sampling was used to assign two schools to experimental and control groups. The design of the study was pre-test, post-test, quasi-experimental design. The area of the study was Nsukka Local Government Area of Enugu State. The instrument used for data collection was Chemistry Achievement Test (CAT). The CAT was a 20 items multiple choice objective questions with option A to D.

---

### EFFECTS OF DEMONSTRATION AND LECTURE METHODS ON SENIOR SECONDARY SCHOOL STUDENTS ACHIEVEMENT IN CHEMISTRY AS EDUCATION TOOL FOR GLOBAL SECURITY

Hope Nwoji
Department of Science Education, University of Nigeria Nsukka
Correspondence: hope.nwoji@unn.edu.ng

The study was an investigation into the effects of Demonstration and Lecture methods on Senior Secondary School Students Achievement in Chemistry as Education tool for Global Security. The purpose of study was to determine the methods used by teachers in teaching chemistry in secondary schools and also to determine the influence of student's gender on the academic achievement of senior secondary school students as Education tool for Global Security. The population of the study were Senior Secondary two (SS2) chemistry students in thirty (30) secondary schools in Nsukka Local Government Area of Enugu State (2,379 SS2 students). The sample for the study consisted of one hundred (100) SS2 chemistry students. Purposive random sampling was used to assign two schools to experimental and control groups. The design of the study was pre-test, post-test, quasi-experimental design. The area of the study was Nsukka Local Government Area of Enugu State. The instrument used for data collection was Chemistry Achievement Test (CAT). The CAT was a 20 items multiple choice objective questions with option A to D.
developed by the researcher. The instrument was validated by three experts, two from chemistry education and one from measurement and evaluation, all from Department of Science Education, University of Nigeria, Nsukka. The reliability of the CAT was determined using Kudder- Richardson Formula 21 with internal consistency reliability of 0.74. The result revealed that students taught using instructional materials (demonstration method) performed better than (students taught without instructional materials lecture method), which implied that demonstration method is more effective than lecture method. It was recommended that such methods as demonstration method with other students centred methods should be adopted by teachers as education tool for global security in student's achievement.

**Keywords:** Demonstration method, Lecture method, Student Achievement in Chemistry, Gender, Global Security.
FUNGAL PRETREATMENT OF WATER HYACINTH (EICHORNIA CRASSIPES) FOR OPTIMISED BIOGAS YIELD

Obianuju Patience Ilo1*, Beatrice O. Ojiego1, Lorretha C. Emeyeneonu2
1Department of Environmental Biotechnology and Bioconservation, National Biotechnology Development Agency Abuja
2Department of Environmental Biotechnology and Bioconservation, Bioresources Development Centre, National Biotechnology Development Agency, Owode, Ogun State
*Correspondence: uiblige@yahoo.com

There is an increased demand for economical mitigation methods for water hyacinth, having been recognised as a persistent threat to the pillars of sustainability. Several control measures, such as biological, chemical and mechanical methods, have proved either ineffective or expensive. Existing evidence suggests that water hyacinth is a sustainable substrate for biogas production; however, the structural barrier of the lignocellulosic components impedes microbial hydrolysis of the feedstock, thereby significantly limiting large-scale biogas production. The study analysed the effect of Trichoderma atroviride pretreatment on the anaerobic digestion of water hyacinth for optimised biogas yield. Anaerobic digestion of the water hyacinth process was performed at 35°C for 35 days. The relevant kinetic variables of the digestion process were predicted and analysed using a modified Gompertz model. Biogas yield from pretreated water hyacinth had a 65.48% increase to the untreated water hyacinth, thereby suggesting the pretreatment of water hyacinth enhanced the degradability of water hyacinth by breaking down the cell wall structure and facilitating its use by microorganisms. The modified Gompertz model predicted maximum methane production potential, maximum methane yield rate and lag phase of untreated and pretreated as 91.84 and 201 mL/g VS, 10.12 and 13.87 mL/day, and 6.94 and 2.46 days, respectively. The percentage error between experimental and model outcomes for untreated and pretreated were 17.96% and 4.68%, respectively, while the coefficients of determination of the model were 0.905 and 0.975, signifying imperative consistency on attained factors.

SYNERGISTIC ANTFUNGAL ACTIVITY OF COMBINATIONS OF ARTEMISIA ANNUA EXTRACT WITH FLUCONAZOLE AGAINST RESISTANT STRAINS OF CANDIDA ALBICANS

Maria I. Ngwu1, Emmanuel C. Ibezim2, Anthony A. Attama3, Damian C. Odimegwu1, Godwin I. Ngwu1, Stephen Emencheta1
1Department of Pharmaceutical Microbiology and Biotechnology, University of Nigeria, Nsukka
2Department of Pharmaceutics, University of Nigeria, Nsukka
3Department of Zoology and Environmental Biology, University of Nigeria, Nsukka
*Corresponding author: godwin.ngwu@unn.edu.ng 08035379609

Recent upsurge in candidiasis (caused by the fungus Candida albicans) especially among HIV patients and infants, and recurrent resistance to azole drugs necessitated this study. Candida albicans were isolated from patients attending three tertiary hospitals in Enugu state, Nigeria. Clinical samples of C. albicans were collected from University of Nigeria Teaching Hospital (UNTH), Ituku Ozala; Bishop Shanahan Hospital (BSH), Nsukka and Enugu State University Teaching Hospital (ESUTH), Enugu. Out of the five hundred clinical samples collected, eight genetically proven C. albicans isolates was employed for this present study. Characterization of isolate was done according to clinical laboratory institutes CLSI M27-A2 for yeasts. The interaction study was done using Agar Diffusion Method and Minimal Inhibitory Concentration (MIC). The evaluation of interaction of A. annua with the azole, fluconazole (FLU) was done using the Checkerboard technique. Result of MIC testing shows that most of the isolate were resistant to selected azoles employed in the study. The Fractional Inhibitory Concentration (FIC) index showed that certain combinations of methanol extract of Artemisia annua and FLU produced synergistic effects against the resistant C. albicans isolates. Therefore, the findings of this study showed that methanol extract of A. annua in combination with fluconazole inhibited resistant C. albicans better than fluconazole alone.

Keywords: Azole, Candida albicans, Interaction, A. annua, Synergistic, Fluconazole
THE IMPROVED EFFICIENCY IN DEGRADATION OF CRUDE OIL BY SEQUENTIAL APPLICATION OF VARIOUS MICROBIAL SPECIES IS DEPENDENT ON THE SPECIES CONSTITUTING THE CONSORTIUM

Nnabuife, Obianuju Obiajulu; Onah, Martina Chidiebere; Nnamani, Anne Amarachi; Ezeani, Chiamaka Favour; Ukwuoma, Victor Chukwuemeka; Umeh, Gertrude Obianjunwa; Onah, Grace Amarachi; Onah, Victor Chiedozie; Eze, Valentine Chimaoke; Ezechinyere, David Ikechukwu; Onyeka, Chidimma Precious.

Department of Microbiology, Faculty of Biological Sciences, University of Nigeria, Nsukka.

Corresponding author E-mail: obianuju.onyia@unn.edu.ng. Phone number: +2348038133177.

The application of microbes in the bioremediation of crude oil contaminated areas has gained several studies for improvement of outcome of the remediation process. Dominance of some species over other organisms and population shift through bioremediation process has been established. This study aimed to understand the effect of sequential application of individual microbial population of a consortium in the efficiency of bioremediation process. The various treatments of crude oil supplemented Bushnell Haas broth with Serratia marcescens strain W13 (MW320662), Pseudomonas aeruginosa strain W15(MW320658), Providencia vermicola strain W8 (MW320661) and Bacillus subtilis and namely SeqA (W13-BS-W15), SeqB (W13-W15-BS), ConC (W13, W15, BS), SeqD (W13-W8-W15), SeqE (W13-W15-W8), ConF (W13, W8, W15) were employed. The efficiency of the treatments was evaluated based on the cell growth measured as optical density (OD), emulsification index, percentage total hydrocarbon degradation (THD) using gas chromatography-mass spectrophotometry (GC-MS), drop collapse time and diameter. At the end of the 20 days incubation period, the maximum and minimum OD were obtained with SeqB (0.152) and SeqC (0.085) for treatments with BS, W13, W15 and SeqE (0.127) and SeqD (0.112) for treatments with W8, W13, W15. The result of the GC-MS showed the maximum and minimum %THD with ConC (22.20%) and SeqB (5.61%) for treatments with BS, W13, W15 and SeqE (25.15%) and ConF (13.40%) for treatments with W8, W13, W15. The combinations using BS, W13, W15 and W8, W13, W15 showed contrary trends in their efficiency of degradation, however, the similarity in the results showed that higher cell growth does not justify higher degradation efficiency. Our result showed that the individual microbial population constituting the consortium is a determinant factor on the success of sequential application method.

STUDIES ON THE GROWTH PERFORMANCE OF WEANERS PIGS FED WITH BIODEGRADED POULTRY OFFAL/CASSAVA PEELS

Onu, Ernest O., Onu, Martina C., and Anselem E. Onyimonyi

Department of Animal Science, University of Nigeria Nsukka

Department of Veterinary Physio/Pharmacology, University of Nigeria Nsukka

Corresponding Author: Onu Ernest O

Twenty-four weaner pigs made of twelve males and twelve females were used in this study to evaluate the performance of biodegraded poultry offal/ cassava peels in their diets. The study lasted 80 days. The weaner pigs were about eight weeks old with an average body weight of 9.6 kg. The pigs were randomly assigned to four treatment groups with three replicates in a completely randomized design. The biodegraded Poultry offal/Cassava peels (POCP) were formulated using poultry offal and cassava peels mixture in the ratios of 1:1 (22kg/16kg), 1:2(22kg/32kg) and 1:3(22kg/48kg) and was assigned T2, T3 and T4 respectively. At the end of three weeks of biodegradation, the pH, temperature, texture and smell of the ensiled POCP were determined and used as composite feed ingredients for T2, T3, and T4. The control diet T1 was the diet the Department of Animal Science was using. The weaner pigs were fed six percent of their mean body weight and were allowed free access to water. Data were collected on the growth performance, carcass and organ characteristics of the pigs. All data collected were subjected to analysis of variance (ANOVA) for a completely randomized design (CRD). Results showed that the effect of treatment on the growth performance of weaner pigs was not significant (P>0.05) except in feed conversion.

107
ratio and feed cost/kg weight gain where T4 was statistically (P<0.05) better than other treatment means. It was concluded that feeding weaner pigs biodegraded POCP at 1:3 ratio could help improve growth performance, feed conversion ratio and reduce cost per kg weight gain.

**Keywords:** Cassava peels, Growth, Poultry offal, Weaner pigs

**ALTERATIONS IN SERUM BIOCHEMISTRY AND OXIDATIVE STRESS MARKERS IN FOWL TYPHOID INFECTED POINT OF LAY PULLETS**

Simeon Chibuko Okafor¹, John Ikechukwu Ihedioha¹, Wilfred Sunday Ezema¹, Kennedy Foinkfu Chah¹

¹Department of Veterinary Pathology and Microbiology, Faculty of Veterinary Medicine, University of Nigeria, Nsukka, 410002, Enugu State, Nigeria

Corresponding Author: simeon.okafor@unn.edu.ng. ORCID iD: https://orcid.org/0000-0002-8509-4610

This study evaluated the alterations in some serum biochemistry and oxidative stress (OS) markers in experimental fowl typhoid (FT) infection in point of lay (POL) pullets. Fifty eighteen-week-old POL pullets were orally infected by direct inoculation into the crop with wild-type Salmonella gallinarum (10⁶ colony forming unit/ml per POL pullet) or were uninfected controls (25 POL per group). Some serum biochemistry and oxidative stress markers were determined following standard protocols. The liver, heart and kidneys were processed for histopathology. Delay in commencement and subsequent drop in egg production was observed. Serum alanine aminotransferase (ALT) and aspartate aminotransferase (AST) activities, total protein, globulin, total bilirubin, uric acid and total cholesterol levels were significantly (P < 0.05) higher while alkaline phosphatase (ALP) was significantly (P < 0.05) lower in the infected group than the controls. Significantly (P < 0.05) higher malondialdehyde (MDA), glutathione peroxidase (GPX), Superoxide dismutase (SOD) and catalase (CAT) were also recorded in the infected POL pullets compared to the controls. Serum biochemistry as well as OS markers were significantly altered in the current study and considering the significant (P < 0.05) elevation in the serum level of MDA with corresponding higher serum activities of markers with antioxidant properties (GPX, SOD and CAT), it could be deduced that the antioxidant defense mechanism of the host was activated with attendant decline in disease progression and self-recovery of infected pullets suggesting that early administration of antioxidants may reduce the pathology, mortality and production losses in field outbreaks of FT in POL pullets.

**Key words:** Fowl typhoid; Oxidative stress markers; Point of lay pullets; Salmonella gallinarum; Serum biochemistry

**ECOFRIENDLY GREEN SYNTHESIS OF SILVER NANOPARTICLES USING THREE INDIGENOUS COMBRETUM SPECIES (C. DOLICHOPETALUM, C. RACEMOSUM AND C. PLATYPTERUM)**

Egonu Sheily Nneka, Udoh Obiora Emmanuel, Isuosuo Chinyere Chichi and Adeosun Chidiebere Anastacia

Department of Plant Science and Biotechnology, Faculty of Biological Sciences, University of Nigeria, Nsukka.

Correspondence: sheily.egonu@unn.edu.ng

The field of nanoscience in recent years has witnessed growing concerns over environmental pollution and protection. This has led to increased interest in the search for alternatives to physical and chemical methods of nanoparticle synthesis due to their higher costs, toxicity and radiation levels. As an alternative, biogenic approaches to the development of nanomaterials have shown several advantages. This study investigated the synthesis of silver nanoparticles (AgNPs) using aqueous leaf extracts of Combretum dolichopetalum (CD), Combretum racemosum (CR) and Combretum platypterum (CP). Ultraviolet–visible spectroscopy analysis showed an absorbance at 440.06 nm, 461.05 nm and 447 nm respectively, corresponding to standards for AgNPs. In all cases, Scanning Electron Microscopy (SEM) analysis revealed shapes ranging from spherical to hexagonal and amorphous. The FTIR (Fourier Transform InfraRed) spectra for CD, CR and CP silver AgNPs
revealed the presence of amine, amide, alcohol, alkyne and alkene functional groups known to be responsible for reducing and stabilizing the particles. Crystalline sizes as reported from XRD (X-ray Diffraction) were 37.88nm and 22.76nm for CD-AgNPs and CR-AgNPs respectively. The antimicrobial ability of these particles were also tested against 4 bacteria; Staphylococcus aureus, Pseudomonas aeruginosa, Bacillus cereus and Escherichia coli and 2 fungi; Aspergillus flavus and Aspergillus niger. All the AgNPs showed varying and significant antimicrobial activity across all 5 concentrations tested. From the green processes adopted in this study, using mild reaction conditions and non-toxic reaction precursors as well as the results obtained, it is safe to conclude that AgNPs synthesized using plants when used in various applications are not a threat to the environment. The application of nanoparticles for medical, pharmaceutical and agricultural uses is well established.

**Keywords:** AgNPs, Combretum dolichopetalum, Combretum racemosum, Combretum platypterum, Environment, crystalline size, antimicrobial activity

---

**FATTY ACID COMPOSITION OF FISHES FROM DIFFERENT SOURCES**

*Nworah, F. N.*, *Chukwuma, I. F.*, *Nkwocha C. C.* and *Uchendu, N. O.*

1Pharmacology and Pharm-Biology Unit, Department of Biochemistry, University of Nigeria, Nsukka, Enugu State, Nigeria

*Corresponding author Email: florence.nworah@unn.edu.ng ; Tel: +234-8062120488*

Fatty acids are substances which give nourishment to the body and promote growth. These nutrients are present in varieties of foods in various amounts. This present study was undertaken in order to analyze and compare the fatty acid composition of fishes from different sources. Fishes were sourced from three different habitats/locations: River in Onitsha, Anambra state; Natural pond in Nsukka, Enugu state; and Aquarium from Aba in Abia state. The fishes from different sources were independently killed and oven-dried. In the first day of oven drying, the fishes were placed in an oven with temperature above 100 °C to enable quick drying. After the first day, the fishes were placed in an oven with temperature range of 60-70 °C for five consecutive days after which it was taken to the laboratory for GC-MS analysis to determine their fatty acid composition. This study revealed that fishes obtained from the River showed a high concentration of linolenic acid and oleic acid than that obtained from the natural pond and aquarium and low concentration of stearic acid. The fishes obtained from the aquarium contained most of the fatty acids with health benefit. However, the concentration of palmitic acid was higher in the fish from the aquarium than that from river. This could be as a result of the feed given to the fishes in the aquarium.

**Keywords:** fish, fatty acid, river, aquarium, pond

---

**ANTIBIOTIC RESISTANCE AND PLASMID PROFILES OF SEWAGE-/REFUSE-BORNE ISOLATES OF ESCHERICHIA COLI IN NSUKKA LOCAL GOVERNMENT OF ENUGU STATE**

Ugwu, Kenneth O*1,2* and Nweze, Anthony E*3*

1Department of Microbiology, University of Nigeria, Nsukka

2Natural Science Unit, School of General Studies, University of Nigeria, Nsukka

3Department of Plant Science and Biotechnology, University of Nigeria, Nsukka

Correspondence: kenneth.ugwu@unn.edu.ng

Antibiotic resistance among members of Enterobacteriaceae, continues to pose public health challenge, especially in the developing countries. Antibiogram and plasmid profiles of sewage-/refuse-borne isolates of Escherichia coli were studied for a total of 120 samples from different locations in Nsukka local government area. A total of 53 isolates of Escherichia coli were recovered. The isolates were characterized using standard microbiological methods. Each of the isolates was challenged with a panel of 10 antibiotics. Of the 87 isolates, 9.0% showed in vitro resistance to ofloxacin, 13.0% to both levofloxacin and gentamycin. This was followed by ciprofloxacin and ceftriazole, where 28.3% and 32.1% of the isolates were resistant to the antibiotics, respectively. More than 45% of the isolates were resistant to each of erythromycin, ampicillin, chloramphenicol, clindamycin and amoxicillin, with...
the highest resistance (65.1%) occurring against ampicillin. Plasmid content and profile studies of 10 randomly selected isolates showed carriage of plasmids among the multidrug resistant strains. This shows that the resistance of some of the isolates to the above antibiotics may be borne on Plasmid DNA, while the resistance in the isolate without plasmid DNA may be associated with possible mutation in their chromosomal DNA.

**Keywords:** Antibiotic resistance, Plasmid profiles, *Escherichia coli*

**LESSER-KNOWN LEAFY VEGETABLES OF SOUTHEASTERN NIGERIA (VITEX DONIANA AND ZANTHOXYLUM ZANTHOXYLOIDES): A REVIEW**

Thecla Okeahunwa AYOKA¹*, Charles Okeke NNADI²

¹University of Nigeria, Nsukka, Faculty of Physical Sciences, Department of Science Laboratory Technology (Biochemistry Unit), 410001, Enugu State, Nigeria; thecla.ayoka@unn.edu.ng. (*Corresponding author)

²University of Nigeria, Nsukka, Faculty of Pharmaceutical Sciences, Department of Pharmaceutical and Medicinal Chemistry, 410001, Enugu State, Nigeria; charles.nnadi@unn.edu.ng.

*Vitex doniana* and *Zanthoxylum zanthoxyloides* are plants grown in the Southeastern part of Nigeria. They have been used traditionally as food, medicine, teeth cleaning, and mouth washing to reduce pain. The availability of these plants has sparked a surge in interest in knowledge about their supplements and contents, including nutrients, mineral components, and bioactive chemicals, which are critical for drug discovery and development. Compounds derived from them have been used as effective pharmaceuticals throughout human history. This review is aimed at providing a comprehensive report on the chemical constituents, traditional uses, as well as biological and pharmacological activities of *Vitex doniana* and *Zanthoxylum zanthoxyloides*. Information was sourced from literature using search engines such as Google, Google Scholar, Microsoft Academic, ResearchGate, and Semantic Scholar. The plants were found to contain natural products such as alkaloids, phenolics, tannins, saponins, glycosides, steroids, proteins, carbohydrates, anthraquinones, resins, lignans, lipids, allicins, balsams, hydroxycinnamic acid, oleanolic acid, esters, norisoprenoids, anthracene, essential oils and terpenes, which seem to correlate with their antioxidant potentials. They have gained interest recently due to the presence in them of varieties of their bioactive compounds. Biological and pharmacological studies revealed that they possess antioxidant, anti-cancer, antimalarial, anti-inflammatory, antimicrobial activities, and hepatoprotective properties. In addition, the alkaloidal content of *V. doniana* and *Z. zanthoxyloides* can enhance serum biochemical parameters, repair cellular damage and fibrosis in the liver, and control hepatocyte activity.

**Keywords:** antioxidant; hepatoprotective; vegetables; *Vitex doniana; Zanthoxylum zanthoxyloides*

**DEVELOPMENT OF A HAND-HELD RESISTANCE-BASED DIGITAL WOOD MOISTURE METER FOR EFFECTIVE WOOD BIOMASS PROCESSING, STORAGE AND UTILIZATION**

Benjamin Bernard. Uzoejinwa¹*, Anthony Ositadinma. Ezeama¹, Izchukwu ThankGod Ozue², and Wilfred Ifeanyi Okonkwo¹

¹Department of Agricultural and Bioresources Engineering, University of Nigeria, Nsukka, Nigeria.

²Department of Electronic Engineering, University of Nigeria, Nsukka.

*Correspondence: benjamin.uzoejinwa@unn.edu.ng (08061668410); osita.ezeama@unn.edu.ng; izuchukwu.ozue@unn.edu.ng; wilfred.okonkwo@unn.edu.ng.

This study has demonstrated the design and development of a hand-held resistance-type digital wood moisture meter for accurate measurement of the moisture content of any wood material for effective wood processing, storage and utilization. In this study, a resistance-based wood moisture meter, which eliminates the problem associated with the look-up tables due to its novel design, and displays moisture contents in percentage directly on seven-segment display unit was designed, developed and calibrated for Mahogany, Afara, Obeche, Agba, and Apa wood;
and was tested for commercial wood species available at Nsukka, Southeast Nigeria. The novelty of this instrument is that it is easy-to-operate, portable, and field usable. Besides, it was designed such that the user can easily re-calibrate the digital meter at his level for other wood species. The developed digital moisture meter works satisfactorily for all practical purposes in the range of 0-100% of wood moisture with an accuracy of ±1%. Regression analysis conducted on the two sets of the field test results showed a strong correlation (R ranges from 0.98 to 0.99) between the predicted and the observed values for the tested wood species. The analysis of variance tests conducted on the two sets of results proved that the relationship between the measured and observed moisture contents is statistically significant (P < 0.05). This indicates the effectiveness of the meter’s calibration, and reveals that the developed digital moisture meter is reliable for both in situ and laboratory measurements of moisture contents of wood species.

**Keywords:** Development, calibration, field test, resistance-based digital meter, wood moisture measurement by resistance

---

**ANATOMICAL COMPARISON OF SOME WOODY TREE SPECIES TO DETERMINE THEIR SUITABILITY FOR PAPER AND TISSUE PRODUCTION IN THE SOUTHEASTERN NIGERIA**

Virginus Okwudili Ayogu
Department of Plant Science and Biotechnology, University of Nigeria, Nsukka

virginus.ayogu@unn.edu.ng

The rapid growth in the Nigerian population has adversely pushed the demand and cost of education so high that it can now only be afforded by the highly affluent class. The high cost of learning materials especially text and exercise books, coupled with the unavailability of raw materials for their production necessitated this research work. The major source of raw materials for paper and tissue production is fibres from woody plants. Nine tree genera namely *Antiaristoxicaria* (Moraceae), *Ficus excelsa* (Moraceae), *Daecrodes klaineana* (Burseraceae), *Canarium schweinfurthii* (Burseraceae), *Daecrodes edulis* (Burseraceae), *Erythrophleum suaveolens* (Fabaceae), *Peltophorum pterocarpm* (Fabaceae), *Pterocarpus soyauxii* (Fabaceae), from the Southeast of Nigeria were used for stem anatomical studies. Materials were collected from three ecological zones: Nsukka, Awka and ObioAkpo – Derived Savannah, Guinea Savannah and Freshwater Swamp Forest respectively. Samples were dried and Macerated using Conc. HNO3 and KClO3 in well labelled test tubes. Fibre measurement was done using a Calibrated Moticam camera attached to a Microscope. Data generated were subjected to one-way ANOVA (P ≤0.05) for multiple separations of means using SPSS software. Results when compared with *G. Arborea* as standard, showed that all except *E. Suaveolens* were suitable for paper and pulp production.

**Keywords:** Woody trees, Paper, Tissue, South Eastern Nigeria

---

**PRESSURE DEPENDENT FLOW GRADIENT OF VISCOUS INCOMPRESSIBLE FLUID AND POLAR SOLVENT IN A SINGLE STAGE SYMMETRICAL BIFURCATED CHANNEL: EXPERIMENTAL STUDY**

Chijioke A. Egbo, 1Ogisobo O. Douglas, Wosu E. Nwono, obomanu Tamunotonjo, Igber B. Ndukam

1chijioke.egbo@gmail.com, 2dgisos@yahoo.com, wosu2nv@yahoo.com, tonjo71@yahoo.com

1Department of Physics, Federal Polytechnic of Oil and Gas, Bonny, River State, Nigeria
2,3,4Department of Petroleum & Gas Engineering Technology, Federal Polytechnic of Oil and Gas, Bonny, River State, Nigeria
5Department of Petroleum & Gas Engineering Technology, Federal Polytechnic of Oil and Gas, Bonny, River State, Nigeria

The effect of geometric bifurcated system on flow of fluid samples may be greatly influenced by the angle of bifurcation or the density, capillary action etc. and other physical properties of the fluid samples. An
Experimental method was used to study the flow structure of water, diesel, peanut oil and crude oil, representing polar solvent, refined hydrocarbons, viscous fluid and unrefined hydrocarbon respectively flowing through a bifurcated channel. The bifurcated angles selected are 10°, 20°, 30°, 40°, 50° and 60°, corresponding to 5°, 10°, 15°, 20°, 25° and 30° measured from the centerline of the main channel. The fluid samples were allowed to flow through the bifurcated channels and the time taken to recover 100ml, 200ml, 300ml, 400ml and 500ml in a beaker is recorded. The bifurcated angle is resolved into vertical and horizontal components and the total length for both components obtained, as the flow velocity is computed for both lengths and the results presented. The profile of result shows that for polar solvents represented by water, the velocity gradient increases as the vertical distance increases and horizontal distance decrease correspondingly due to increasing bifurcation angle, as similar trend of result is also observed for refined hydrocarbon, unrefined hydrocarbon and for vegetable oil. For all the fluid samples representing the selected categories of fluid, the result further shows the existence of velocity difference at opposite walls of the bifurcated daughter channels. The wall at higher velocity is usually the site where the skin friction is gradually created that consequently changes the flow structure from laminar to turbulent. Finally, the experimental result confirmed that effects of bifurcation on the flow stability of fluid is more significant in viscous fluid, and the experimental results further confirmed that effects of bifurcation on the flow stability of fluid is more significant in viscous fluid. Fluid samples with different physical properties should be investigated using this experimental technic, and the impact of two-stage bifurcated system can also be investigated to ascertain the degree of stability offer by the geometric bifurcated network system. Geometric bifurcated system can be used to stabilize fluid flow in the main channel, and in cases where velocity difference at opposite walls of flow channel may be needed.

**Keywords:** Flow Stability, Flow Reynolds number, Bifurcation angle, Viscous Incompressible Fluid, Polar solvents.

---

ANALYSIS OF THE FLOW MOMENTUM FLUX OF REFINED AND UNEFFINED HYDROCARBON IN A SINGLE STAGE BIFURCATED SYSTEM

1 Egbo A. Chijioke, 2 Opuene D. Ogisobo, 3 Obomanu Tamunotonjo, 4 Anidima F. Richard, 5 Olumide M. Oladipo

1 Institute of Science Laboratory Technology
Federal Polytechnic of Oil & Gas
Bonny, Rivers State, Nigeria
chijioke.egbo@gmail.com

2, 3, 4 Department of Petroleum and Gas Engineering Technology.
Federal Polytechnic of Oil & Gas
Bonny, Rivers State, Nigeria.
2dgisos@yahoo.com, 3tonji71@yahoo.com, 4fortunejfp@yahoo.com, 5lumide1987@gmail.com

In the experimental and analytic study of the momentum flux of Newtonian fluid in the branched channels of a symmetrical bifurcated system, which was conducted after so many applications of bifurcation in engineering and technology have been identified and their significance highlighted and analyzed. Data obtained from the experimental process for both refined and unrefined hydrocarbons as were allowed to flow through pipes with a symmetrical bifurcated channels with the selected angles of 10°, 20°, 30°, 40°, 50° and 60°, were designated to flow until 100ml, 200ml, 300ml, 400ml and 500ml volume of each of the fluid samples is recovered into the beaker positioned at the ends of the bifurcated channel. Results obtained shows that the momentum flux increases as the angles of bifurcation increases, and decrease in a continuous flow situation where there is a drop in the flow pressure. Results further show that the momentum flux of the unrefined hydrocarbon which is relatively more viscous, is greater than the momentum flux observed for diesel as they are compared.

**Keyword:** Momentum Flux, Unrefined Hydrocarbon, Refined Hydrocarbon, Bifurcated Channel