

**DETERMINANTS OF ECONOMIC CRISES, MENTAL HEALTH OUTCOME
AND SCHOOL ENGAGEMENT AMONG CHILDREN IN PRIMARY SCHOOLS
IN IGBO-EZE NORTH LOCAL GOVERNMENT AREA, ENUGU STATE**

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Abstract

This study examines the relationship between economic crises and mental health outcomes and school engagement among children in Igbo-Eze North Local Government Area. Two research questions and two corresponding null hypotheses were used in the study. Correlation survey research design was employed in the study. The population of the study comprised 3672 primary school children in Igbo-Eze North Local Government Area of Enugu State. A total number of 348 primary 5 school children participated in the study. Researchers developed questionnaire “titled the Economic Crises and Mental Health Questionnaire” was used. The internal consistency of the instrument was obtained using Cronbach Alpha and reliability estimate of 0.87 was obtained. Data collected were analyzed using linear regression. The results of the findings indicated a significant strong negative correlation between economic crises and mental health outcomes and a significant moderate negative relationship between economic crises and children’s school engagement. It was recommended among others that Government should reintroduce free school meal programs to support children from low-income families. Subsidized school materials and financial aid can reduce dropout rates and encourage continued participation in school. Also, school psychology and counseling units should be established at primary schools where children can talk about their worries in a safe and supportive environment.

Keywords: Economic crises, mental health, children, school engagement

Introduction

Economic crises have left millions of children struggling with more than just financial hardship all over the world. This support a saying that a hungry mind cannot learn, and a troubled heart cannot dream. A good number of children face silent battles of stress, anxiety, and depression that go unnoticed. In rural communities, where poverty is deep-rooted, children may not only be deprived of basic necessities but also of the emotional stability needed to thrive (Odejide, Atowoju & Agboola, 2024). Nigeria, like many other developing nations, struggles to provide assistance to individuals affected by social and economic adversity (Ewetan & Urhie, 2014). Mental health is gaining global attention due to its profound impact on how individuals feel, function, and interact with others. It is widely recognized as a key factor influencing both economic stability and overall human well-being worldwide (Søvold, Naslund, Kousoulis, Saxena, Qoronfleh, Grobler & Münter, 2021).

The right to mental health is fundamental. When a person is in a state of mental health, they are able to see their own potential, manage everyday stressors, perform efficiently, and contribute to their community (Silverman, Hanrahan, Bharathy, Gordon & Johnson, 2015). The American Psychiatric Association (APA) (2020), states that mental health includes social, psychological, and emotional well-being. According to Jackson and Haslam (2022), mental health encompasses more than only the lack of mental illnesses and it is experienced differently by each individual on a complex continuum. It encompasses the existence of good emotions, psychological functioning, and social well-being. In this study, mental health refers to a condition of mental well-being that helps

children achieve their potential, manage life's stressors, learn and work effectively and contribute to their community. However, when children are exposed to economic problems like deprivation, poverty, violence, and financial crises may also make people more susceptible to mental health issues. Economic crisis could be said to be a sharp decline in economic activity. This condition arises when an economy is experiencing financial instability, which frequently leads to a period of negative activity measured by its GDP rate (Hubrich & Tetlow, 2015). When there is a notable drop in economic activity that lasts longer than a few months, the economy is considered depressed or in crises. Economic crises could result in food insecurity, housing instability, and unemployment rates (Ugwoke, Onyishi, & Okeke, 2021), which is on the rise in many developing nations, indicating the effect of economic downturns on mental health. Crises in economy may be caused by political or security factors, such as how theft affects oil production (Stanley & Baghebo, 2024), how disputes between farmers and herdsmen affect agricultural productivity nationwide (Innocent, Christian & Onuigbo, 2017; Onianwa, 2021), and how Boko Haram activities affects agricultural output and commerce (David, Asuelime & Onapajo, 2015). These circumstances might have led to less money coming into the government and less money being invested in the economy. Report from the National Bureau of Statistics showed that Nigeria's GDP shrank by 6.1% in the second quarter of 2020, the biggest decline in almost a decade, (Arowosaiye, 2022). The ongoing devaluation of the local currency (Naira) in relation to the US dollar (USD), foreign economic causes, and the policy changes last year regarding the termination of the fuel subsidy were all led to these economic shocks (Jesuola, 2024; Balogun, 2025).

A number of researches have documented significant levels of acute food insecurity brought on by financial difficulties. Reports from the National Bureau of Statistics (NBS) indicated that the price of beans increased by 282 percent in October 2024 compared to the same time in 2023 (Ogbanje & Nyiatagher, 2024). In a similar vein, local rice prices have increased by 153% since October of the previous year (Ojo, Animoku & Ojo, 2019). According to studies, the number of individuals who are expected to face food insecurity is expected to jump by an alarming 80 percent, from 1 million during the peak of the 2024 lean season to 1.8 million during the same period in 2025 (Al Sharjabi, Al Jawaldeh, Hassan & Dureab, 2024); Oyelaran-Oyeyinka & Abejirin, 2024). Nearly 800,000 pregnant and lactating mothers and 5.4 million children from various regions of the nation are at danger of acute malnutrition (Ntim, 2021; Jafari, 2020; Ogbu, 2016) including people living in Igbo-Eze North LGA. Of them, 1.8 million children may suffer from Severe Acute Malnutrition (SAM) and need life-saving nutrition therapy (Lelijveld, 2016). At the heart of the food insecurity dilemma are children, who may suffer permanent physical and cognitive harm or even pass away (Nettle, Andrews & Bateson, 2017). Research has indicated that decreased family incomes have a negative impact on children's mental health outcomes (Milligan & Stabile, 2011). Additionally, this volatility may have a detrimental effect on children's development (Agberotimi, Akinsola, Oguntayo & Olaseni, 2020; Kalil, 2013), which may result in low self-esteem, decreased in academic performance, depression, and health problems (McLloyd, 2013).

In addition, living and working conditions have significantly deteriorated in nations that may have been affected mostly by the recent recession, which began in 2015, particularly in Nigeria (Kida, Liberty, Alhassan & Alade, 2019). Study has shown that economic crises have a major impact on people's health and well-being, (Frasquilho, de Matos, Gaspar & de Almeida, 2016). Further repercussions of economic crises include a surge in anxiety, depression, and low school performance, especially among children

(Ridley, Rao, Schilbach & Patel, 2020). Although the effect of economic crises could be felt at any point in life, they may be more harmful especially when experienced during developmental stages, notably childhood (Bask, Haapakorva, Gissler & Ristikari, 2021). Financial problems for instance, could negatively impact a child's health and increase their chance of developing mental health issues (Golberstein, Gonzales & Meara, 2019). Children who experience the effect of economic hardship may be developing adverse health issues and outcomes (Golberstein, Gonzales & Meara, 2019). In support, Henriques, and Brilha, (2017) stated that these children are more likely to suffer injury, exploitation, or unfavorable consequences because of their socioeconomic status or demographic conditions, such as poverty. According to Evans and Kim (2013), children exposed to chronic economic hardship exhibit higher levels of cortisol (a stress hormone), leading to emotional dysregulation and mental health issues. Furthermore, studies from Sub-Saharan Africa indicate that children in low-income households experience higher levels of psychological distress (Patel et al., 2018), as financial constraints limit access to nutritious food, proper healthcare, and safe living environments. Furthermore, United Nations High Commissioner for Refugees (UNHCR) stated that children who are exposed to risk factors, such as financial insecurity becomes less able to cope with adverse situations compared to others in society (UNHCR, 2020; Crisp, 2020). However, this paper focuses mainly on children below the age of 13 in rural part of Igbo-Eze North Local Government Area, Enugu state, Nigeria. It is expected that children should have access to the tools and support networks they need to keep their mental health at its best, regardless of their financial situation. This covers a stable family environment, good healthcare, emotional support, and education. The WHO's Mental Health Action Plan (2013–2030) has called for integrating mental health into universal health coverage (Saxena & Setoya, 2014). In such a scenario, children can develop resilience, build healthy relationships, and reach their full potential without the burden of economic hardship affecting their mental well-being. Some countries have implemented unemployment benefits, housing subsidies, and mental health hotlines during economic crises. The Nigerian government has also funded the Poverty Alleviation Programme, sharing palliatives to warn about the impact of fuel subsidy removal, among other aids (Okereke, Emenekwe, Nnamani, Onyeneke, & Amadi, 2024; Mohammed, Bukar & Kawi, 2025).

However, children who live in economically distressed areas may frequently encounter a variety of difficulties that have a detrimental effect on their mental health. Similarly, Björklund and Salvanes (2011) and Ridley, Rao, Schilbach and Patel (2020) found that economic hardship negatively impacts cognitive development and school performance, particularly in communities where government support for education is weak. In Nigeria, studies have shown that poverty contributes to low school attendance, lack of concentration in class, and increased dropout rates (Ene, 2019). Poverty, food insecurity, and restricted access to healthcare and education are all consequences of economic instability (Eurosurveillance Editorial Team, 2020). Children, especially those in rural areas are at greater risk of experiencing higher levels of stress, anxiety, and depression as a result of these unfavorable circumstances. Studies have indicated that financial crises reduce school engagement by limiting access to educational resources and increasing the likelihood of absenteeism (UNICEF, 2021). According to Duncan and Magnuson (2011), children from economically disadvantaged backgrounds are more likely to experience disruptions in learning, as they may be forced into labor or household responsibilities to support their families. Children's mental health and long-term development are hampered by unmet emotional demands that are frequently caused by a

lack of social support networks and financial means (Barnes, Donovan, Wilson, Chatwin, Davies, Potokar, & Gunnell, 2017). Despite growing awareness of the link between economic crises and mental health, mental health issues still receive little funding, especially in economically distressed nations like Nigeria. Lack of awareness and public stigma discourage people from getting mental health services and seeking assistance. There is not enough localized research to comprehend the unique mental health requirements and assistance for children in rural areas experiencing economic crises. Accordingly, the researchers looked into the connection between children's mental health in rural areas and economic crises in an effort to close this gap.

Research Questions

The following research questions guided the study

1. What is the relationship between economic crises and mental health outcome among children in Igbo-Eze North LGA?
2. What is the relationship between economic crises and academic engagement among children in Igbo-Eze North LGA?

Hypotheses

The following null hypotheses guided the study.

H0₁: The relationship between economic crises and mental health among children in Igbo-Eze North LGA is not significant.

H0₂: There is no significant relationship between economic crises and academic engagement of children in Igbo-Eze North LGA

Methods

This study employed a correlation research design. The population of the study comprised 3672 children in primary school in Igbo-Eze North Local Government Area of Enugu state. 20 schools from most interior part of the Local Government Area were purposively selected. Equally, primary 5 pupils were selected. The choice of primary 5 was that they can respond to the item statement. All the pupils in primary 5 in the 20 selected primary school totaling 348 (135 males and 213 females) participated in the study. Permission was obtained from school authorities and class teachers before conducting the study. Parents/guardian's consent was obtained before participation. They were assured of confidentiality of their responses and information given is strictly for research purposes. Participation was voluntary, and children had right to withdraw at any time. The questionnaires were distributed during class hours by their class teachers, with clear instructions provided by the researcher or the research assistants. Children were given enough time to complete the questionnaire independently. Researchers were available to provide assistance if the participants need help understanding any part of the questionnaire. Completed questionnaires were collected immediately to maintain confidentiality. A researcher developed instrument titled "Economic Crises and Mental Health Questionnaire for children" was in the study for data collection. The questionnaire is a 34- item instrument with section A and B. the instrument tends to measure the impact of economic crises on mental health of the children. Section A contains demographic information. Section B is made up of three clusters including economic crises, mental health and school engagement. Each cluster contains 4 items rated on a 4-point likert scale 1 = Never, 2 = Sometimes, 3 = Often, 4 = Always. The maximum score is 80 while the minimum score is 20. Higher scores in economic crises and mental health and school engagement indicate greater mental health challenges while low score suggest a stronger well-being. Results can be categorized as Low, Moderate, or High risk for mental health challenges. In that

case, a score of 20-30 indicates a strong mental health, a score of 31- 50 indicate moderate mental health while a score of 51 and above suggest a greater risk of mental health. The instrument was validated by experts from the Faculty of Education, University of Nigeria, Nsukka and was trail tested. The internal consistency of the instrument was obtained using Cronbach and the overall reliability estimate of 0.87 was obtained. Data collected were analyzed using linear regression.

Results

Regression result in table 1 showed that there is a strong negative relationship between economic crises and children's mental health ($r = -.682$). The coefficient of determination is ($r^2 = 0.463$). This means that 46.5% of the variation in mental health is explained by economic crises while other factors apart from economic crises account for the remaining 53.5%. This suggests that economic crises have a substantial impact on mental health.

| Model Summary | | | | |
|--|--------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | -.682 ^a | .465 | .463 | 4.95658 |
| a. Predictors: (Constant), Economic crises | | | | |

In table 2, linear regression tested the relationship between economic crises and mental health among school children. The result of the findings showed that there is a significant negative relationship between economic crises and mental health among school children ($t = 17.354$; $P = .000$). This means that the relationship is statistically significant. Thus, the null hypothesis which states that there is no significant relationship between economic crises and mental health among children is rejected.

| Coefficients ^a | | | | | |
|---------------------------|----------------|-----------------------------|---------------------------|------|--------|
| Model | | Unstandardized Coefficients | Standardized Coefficients | T | Sig. |
| | | B | Std. Error | Beta | |
| 1 | (Constant) | 5.135 | 1.441 | | 3.563 |
| | Economiccrises | .921 | .053 | .682 | 17.354 |

a. Dependent Variable: Mentalhealth

Regression result in table 3 showed that there is a moderate negative relationship between economic crises and children's school engagement ($r = -.353$). This means that as economic crises increase, school engagement decreases. The coefficient of determination is ($r^2 = 0.125$). This means that 12.5% of the variation in school engagement is explained by economic crises while other factors at play account for the remaining 87.5%. This suggests that economic crises have a substantial impact on school engagement.

| Model Summary | | | | |
|---------------|--------------------|----------|-------------------|----------------------------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1 | -.353 ^a | .125 | .122 | 2.56466 |

a. Predictors: (Constant), Economiccrises

In table 4, linear regression tested the relationship between economic crises and school engagement among school children. The result of the findings showed that there is a significant negative relationship between economic crises and school engagement among school children ($t= 7.032$; $P= .000$). This means that the relationship is statistically significant, suggesting that the effect is unlikely due to chance. Thus, the null hypothesis that there is no significant relationship between economic crises and academic engagement of children is rejected.

| Coefficients ^a | | | | | | |
|---------------------------|----------------|-----------------------------|------------|--------------------------|--------|------|
| Model | | Unstandardized Coefficients | | Standardized Coefficient | T | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 13.000 | .746 | | 17.430 | .000 |
| | Economiccrises | .193 | .027 | .353 | 7.032 | .000 |

a. Dependent Variable: SCHOOLENGAGEMENT

Discussion

The regression analysis revealed significant negative relationships in both cases, indicating that worsening economic conditions negatively affect children's well-being and school participation. The results align with previous research demonstrating that economic downturns contribute to increased stress, anxiety, depression, and other psychological challenges in children. Studies have showed that financial stressors disrupt family stability, increase parental stress, and limit access to healthcare, all of which negatively impact children's mental well-being (Milligan & Stabile, 2011; Kalil, 2013; Barnes, Donovan, Wilson, Chatwin, Davies, Potokar, ... & Gunnell, 2017; Agberotimi, Akinsola, Oguntayo & Olaseni, 2020). The findings is also in line with the findings of study conducted by Evans and Kim (2013) which showed that children exposed to chronic economic hardship exhibit higher levels of cortisol (a stress hormone), leading to emotional dysregulation and mental health issues. Furthermore, the finding of the study agrees with the finding of the study conducted by Patel et al., (2018) which showed that children in low-income households experience higher levels of psychological distress, as financial constraints limit access to nutritious food, proper healthcare, and safe living environments (Ogbu, 2016; Lelijveld, 2016; Jafari, 2020; Ntim, 2021). This suggests that economic hardship is a major determinant of children's psychological well-being in Igbo-Eze North LGA

These findings also align with previous studies indicating that financial crises reduce school engagement by limiting access to educational resources and increasing the likelihood of absenteeism (UNICEF, 2021). According to Duncan and Magnuson (2011), children from economically disadvantaged backgrounds are more likely to experience disruptions in learning, as they may be forced into labor or household responsibilities to

support their families. In support, Odejide, Atowaju and Agboola, (2024) in their study explained that in rural communities, where poverty is deep-rooted, children may not only be deprived of basic necessities but also of the emotional stability needed to thrive. Similarly, McLoyd (2013) and Ridley, Rao, Schilbach and Patel (2020) found that economic hardship negatively impacts cognitive development and school performance, particularly in communities where government support for education is weak (Eurosurveillance Editorial Team, 2020). In Nigeria, studies have shown that poverty contributes to low school attendance, lack of concentration in class, and increased dropout rates (Ene, 2019). This suggests that financial hardship has a meaningful impact on children's participation in school, even if other factors play a more dominant role. These results align with findings from Yoshikawa et al. (2012), which show that economic stressors tend to manifest more immediately in children's psychological well-being, whereas school engagement is influenced by additional social and institutional factors. For instance, some children may continue attending school despite financial hardship due to government support programs, teacher motivation, or parental encouragement, but their mental well-being may still decline.

Conclusion

This study highlights the significant impact of economic crises on children's mental well-being, particularly in rural communities. High stress, anxiety, and depression levels were observed among children whose families struggled to meet basic needs. These findings emphasize the need for targeted interventions to mitigate the long-term effects of financial hardship on children's mental health and academic success. The practical implications of the findings of this study for school counselors and psychologists is that they should offer their psychological supports needed to help students navigate economic instability to help students navigate the effect of economic instability. Future studies should investigate other factors influencing school engagement, such as teacher quality, home environment, and social support. It is recommended that schools should integrate psychosocial support programs to help children cope with economic stress. Free school meal programs should be expanded to support children from low-income families. Subsidized school materials and financial aid can reduce dropout rates and encourage continued participation in school.

REFERENCES

- Agberotimi, S. F., Akinsola, O. S., Oguntayo, R., & Olaseni, A. O. (2020). Interactions between socioeconomic status and mental health outcomes in the Nigerian context amid COVID-19 pandemic: a comparative study. *Frontiers in psychology, 11*, 559819.
- Al Sharjabi, S. J., Al Jawaldeh, A., Hassan, O. E. H., & Dureab, F. (2024). Understanding the Food and Nutrition Insecurity Drivers in Some Emergency-Affected Countries in the Eastern Mediterranean Region from 2020 to 2024. *Nutrients, 16*(22), 3853.
- Alloh, F. T., Regmi, P., Onche, I., van Teijlingen, E., & Trenoweth, S. (2018). Mental health in low-and middle income countries (LMICs): going beyond the need for funding. *Health Prospect: Journal of Public Health, 17*(1), 12-17.
- American Psychiatric Association. (2020). *The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia*. American Psychiatric Association Publishing.
- Arowosaiye, Y. I. (2022). Repositioning the Nigerian economy in the COVID-19 era and beyond. *NIU Journal of Social Sciences, 8*(1), 15-25.

- Balogun, E. D. (2025). The short-term effects of gasoline price subsidy removal in Nigeria: an analysis of the economic and social Impacts. Accessed from <https://mp.ra.ub.uni-muenchen.de/id/eprint/123659>
- Barnes, M. C., Donovan, J. L., Wilson, C., Chatwin, J., Davies, R., Potokar, J., ... & Gunnell, D. (2017). Seeking help in times of economic hardship: access, experiences of services and unmet need. *BMC psychiatry*, 17, 1-14.
- Bask, M., Haapakorva, P., Gissler, M., & Ristikari, T. (2021). Growing up in economic hardship: The relationship between childhood social assistance reciprocity and early adulthood obstacles. *International Journal of Social Welfare*, 30(2), 130-139.
- Björklund, A., & Salvanes, K. G. (2011). Education and family background: Mechanisms and policies. *Handbook of the Economics of Education*, 3, 201-247.
- Crisp, J. (2020). UNHCR at 70: an uncertain future for the international refugee regime. *Global Governance: A Review of Multilateralism and International Organizations*, 26(3), 359-368.
- David, O. J., Asuelime, L. E., & Onapajo, H. (2015). *Boko Haram: The socio-economic drivers*. Switzerland: Springer International Publishing.
- Eurosurveillance Editorial Team. (2020). Note from the editors: World Health Organization declares novel corona virus (2019-nCoV) sixth public health emergency of international concern. *Eurosurveillance*, 25(5), 200131e.
- Evans, G. W., & Kim, P. (2013). Childhood poverty, chronic stress, and young adult working memory: The protective role of self-regulatory capacity. **Developmental Science**, 16(5), 688-695.
- Ewetan, O. O., & Urhie, E. (2014). Insecurity and socio-economic development in Nigeria. *Journal of sustainable development studies*, 5(1).
- Frasquilho, D., de Matos, M. G., Gaspar, T., & de Almeida, J. C. (2016). Young people's well-being and the economic crisis: How does parental unemployment and family wealth affect the downturn experience?. *Children and Youth Services Review*, 69, 219-222.
- Golberstein, E., Gonzales, G., & Meara, E. (2019). How do economic downturns affect the mental health of children? Evidence from the National Health Interview Survey. *Health economics*, 28(8), 955-970.
- Hubrich, K., & Tetlow, R. J. (2015). Financial stress and economic dynamics: The transmission of crises. *Journal of Monetary Economics*, 70, 100-115.
- Innocent, E. O., Christian, U., & Onuigbo, R. A. (2017). Economic effects of Fulani Herdsmen-Farmers Clashes in Nigeria. *Specialty Journal of Politics and Law*, 2(1-2017), 1-11.
- Jackson, H. J., & Haslam, N. (2022). Ill-defined: Concepts of mental health and illness are becoming broader, looser, and more benign. *Australasian Psychiatry*, 30(4), 490-493.
- Jafari, M. (2020). Review of Proposed Strategies to Improve Nutrition in Different Communities. *Progress in Chemical and Biochemical Research*, 5, 77.
- Jesuola, G. D. (2024). *Impact of the Nigerian Government's Fuel Subsidy Removal: Data Analysis and Suggestions* (Master's thesis, Texas A&M University-Kingsville).
- Kalil, A. (2013). Effects of the great recession on child development. *The ANNALS of the American Academy of Political and Social Science*, 650(1), 232-250.
- Kida, M. I., Liberty, S., Alhassan, A., & Alade, A. S. (2019). An analysis of Nigerian recession. *Management Studies and Economic Systems*, 4(1), 19-28.

- Lelijveld, N. J. M. (2016). *Long-term effects of severe acute malnutrition on growth, body composition, and function; a prospective cohort study in Malawi* (Doctoral dissertation, UCL (University College London)).
- McLoyd, V. C. (2013). The impact of poverty and low socioeconomic status on the socioemotional functioning of African-American children and adolescents: Mediating effects. In *Social and emotional adjustment and family relations in ethnic minority families* (pp. 7-34). Routledge.
- Milligan, K., & Stabile, M. (2011). Do child tax benefits affect the well-being of children? Evidence from Canadian child benefits expansions. *American Economic Journal: Economic Policy*, 3(3), 175-205.
- Mohammed, B., Bukar, H. B., & Kawi, A. L. (2025). Contribution of federal government palliative distribution programmes and poverty reduction among households in Borno state, Nigeria. An assessment. *International Journal of Public Policy and Administrative Studies*, 12(5):66-80
- Nettle, D., Andrews, C., & Bateson, M. (2017). Food insecurity as a driver of obesity in humans: The insurance hypothesis. *Behavioral and Brain Sciences*, 40, e105.
- Ntim, N. S. (2021). *Household food insecurity and sociodemographic determinants of malnutrition among children (6-59 months old) in tamale south in the northern region of ghana* (Doctoral dissertation).
- Ogbanje, C. E., & Nyiatagher, Z. T. (2024). Impact of financial development and cash crop export growth in Nigeria: implications for the emerging export 35 redefined policy. *Nigerian Journal of Agriculture and Agricultural Technology*, 4(4B), 147-163.
- Ogbu, C. G. (2016). *Dietary habits and nutritional status of upper primary school children in public schools in urban slum communities in Ibadan North West Local Government Area* (Doctoral dissertation).
- Ojo, A. O., Animoku, O. M., & Ojo, M. A. (2019). Households' consumption willingness for locally processed rice in Kogi State, Nigeria. *Agricultural Science and Technology*, 11 (2), 177 - 183
- Okereke, C., Emenekwe, C., Nnamani, U. A., Onyeneke, R., & Amadi, M. (2024). *Nigeria's fossil fuel subsidy reforms: The welfare effects on households*. ODI Report.
- Oyelaran-Oyeyinka, B., & Abejirin, O. (2024). *From Reversal of Fortune to Economic Resurgence: Industrialization and Leadership in Asia's Prosperity and Nigeria's Regress*. Anthem Press.
- Patel, V., Saxena, S., Lund, C., et al. (2018). The Lancet Commission on global mental health and sustainable development. *The Lancet*, 392(10157), 1553-1598.
- Ridley, M., Rao, G., Schilbach, F., & Patel, V. (2020). Poverty, depression, and anxiety: Causal evidence and mechanisms. *Science*, 370(6522), eaay0214.
- Saxena, S., & Setoya, Y. (2014). World Health Organization's Comprehensive Mental Health Action Plan 2013–2020. *Psychiatry and Clinical Neurosciences*, 68(8), 585–586. <https://doi.org/10.1111/pcn.12207>
- Silverman, B. G., Hanrahan, N., Bharathy, G., Gordon, K., & Johnson, D. (2015). A systems approach to healthcare: agent-based modeling, community mental health, and population well-being. *Artificial intelligence in medicine*, 63(2), 61-71.
- Søvdal, L. E., Naslund, J. A., Kousoulis, A. A., Saxena, S., Qoronfleh, M. W., Grobler, C., & Münter, L. (2021). Prioritizing the mental health and well-being of healthcare

- workers: an urgent global public health priority. *Frontiers in public health*, 9, 679397.
- Stanley, U. K., & Baghebo, M. Poverty and Security Situation in Nigeria.
- Ugwoke, M., Onyishi, I., & Okeke, A. (2021). COVID-19 pandemic and mental health in Nigeria: Implications for policy and practice. *Journal of Health Psychology*, 26(10), 1345-1357.
- UNHCR. (2020). Global trends: Forced displacement in 2019. Geneva: UNHCR.
- UNICEF (2021). The impact of COVID-19 on children's education. UNICEF Reports
- World Health Organization (WHO, 2013). Mental health action plan 2013–2030. Geneva: WHO.
- Yoshikawa, H., Aber, J. L., & Beardslee, W. R. (2012). The effects of poverty on children's mental, emotional, and behavioral health. *American Psychologist*, 67(4), 272.