HEALTH PROMOTION THROUGH ADULT EDUCATION: A PRECUSOR FOR SUSTAINABLE DEVELOPMENT IN NIGERIA

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Abstract

In recent years, the intersection of education and public health has gained global attention as a critical pathway to achieving sustainable development, especially in developing nations. This paper focuses on health promotion through adult education as a precursor to sustainable development in Nigeria. Health promotion is a comprehensive approach aimed at enabling individuals to increase control over and improve their health through informed choices, supportive environments, and community engagement. It extends beyond the prevention of disease to include the enhancement of well-being and quality of life. Health learning occurs throughout an individual's lifetime, and adult education plays a crucial role in empowering individuals, communities, and societies to improve and sustain their health. While extensive research exists on the broad determinants of health such as biological, environmental, and social factors, insufficient practical attention has been given to the role of Adult and Non-Formal Education in shaping health outcomes. This paper explored the influence of adult education on health literacy skills, mental health, Disease prevention, Poverty reduction, and Sustainable development. recommendations included the need for health professionals to integrate adult education strategies into their practice to better understanding and leveraging the connections between adult learning and health promotion for sustainable development in Nigeria.

Introduction

Health promotion is a behavioural social science that integrates biological, environmental, psychological, physical, and medical disciplines to enhance health and avert disease. disability, and early mortality through education-based voluntary behaviour modification initiatives. Health promotion is the practice of empowering individuals to enhance their control over and improve their health. To achieve comprehensive physical, mental, and social well-being, a person or group of people must identify and fulfill ambitions, meet needs, and adapt to or manage their environment. Health is thus regarded as a resource for daily existence, rather than the goal of life, (WHO, 2021). Health is a constructive notion that highlights social and personal resources alongside physical abilities. Consequently, health promotion extends beyond the health sector's obligations, encompassing not just healthy lifestyles but also overall welfare (Nutbeam, 2020). Unhealthy lifestyle habits remain widespread in low- and middle-income countries such as Nigeria and constitute a major preventable driver of chronic diseases and early mortality. According to the Organization for Economic Co-operation and Development. (2023a)., daily smoking persists among 16 % of adults aged 15 years and older, adult obesity affects approximately 18 %, and only about 40 % of adults meet the recommended 150 minutes per week of moderate-to-vigorous physical activity. Nearly 19 % report engaging in heavy episodic drinking monthly, Organization for Economic Co-operation and Development (OECD, 2023a; OECD, 2023b). In Nigeria, adult overweight prevalence stands between 20 % and 35 %, with obesity ranging from 8 % to 22 %, particularly in urban female populations (Davies, Ezejimofor, Owolabi, Ezeigwe, and PLOS Global Public Health Collaboration, 2022). Among corporate workers, overweight affects 43.6 %, obesity 15.2 %, over 50 % report physical inactivity, and nearly 25 % engage in harmful alcohol use (Adeyanju, Johnson, Musa, and Eze, 2023). Tobacco use remains relatively low under 7 % though more common among young males (Okwor, Nnaji, Umeokonkwo, and Ezeanolue, 2020; civil-servant survey, 2019).

In Nigeria, the prevalence of overweight among adults ranges between 20 % and 35 %, while obesity spans from 8 % to 22 %, with urban women disproportionately affected, (Davies, Ezejimofor, Owolabi, Ezeigwe, and PLOS Global Public Health Collaboration, 2022). Evidence from the corporate workforce in Nigeria reveals a particularly concerning trend: overweight affects 43.6 % of workers, and obesity, 15.2 %; additionally, over half report physical inactivity and nearly one-quarter report harmful alcohol use, (Adamu, Gyang, Alao, and Odunaiya, 2020). Tobacco use remains relatively low generally tracking below 7 % among adults but it is more prevalent among younger and male demographics.

education may be claimed to be a greater predictor to explain health inequities than adult education. Adult education as part of individuals' life-long learning may, however, start at precisely this age and make a major societal and individual contribution in modifying health-related behaviours of adults (Lopes, and McKay, 2020). Healthier habits can therefore influence overall well-being, health status, mortality and also labour market productivity. Adult education has been characterized in numerous ways by academics of education. (Adelokun, Adeyemo, Agboola, and Kayode, 2020) characterized adult education as concerned not with preparing individuals for life, but rather with supporting and assisting adults to live more successfully as useful acceptable members of their societies and contribute meaningfully to the development of their societies. Ekpenyong and Uba (2019) argued that adult education plays a crucial part in the development process of any civilization. Adult education is widely recognized as a powerful tool for eradicating illiteracy among adults, reducing poverty, and advancing the achievement of the Sustainable Development Goals (SDGs). It provides foundational education and training opportunities for adults and out-of-school youths aged fifteen years and above who either missed out on formal education during childhood or discontinued schooling before attaining functional literacy. As a broad and multifaceted field, adult education encompasses various dimensions of human learning, including literacy, skills development, civic education, health awareness, and lifelong learning initiatives aimed at personal and societal transformation.

The essential premise of adult education is the notion that learning should not be constrained to once - in - a - lifetime chance (Oghenekohwo, Tonukari and Samuel, 2022). Through adult education, many adults have found their way onto other pathways of learning and have made up for lost time by finding their potential and abilities, achieving things they never imagined they could achieve. For the purpose of this presentation, adult education is conceptualized as a process of transmitting general, technical, or vocational knowledge, as

well as essential skills, values, and attitudes, occurring outside the formal education system. Its primary objective is to address early educational deficiencies while equipping learners with the competencies and cultural awareness necessary for personal fulfillment, social integration, and active citizenship. Importantly, adult education fosters critical thinking and informed decision-making, especially in the context of health literacy, ((Oghenekohwo, Tonukari, and Samuel, 2022). As Lopez and McKay (2020) reported that, promoting literacy in healthy lifestyles through adult education empowers individuals to make healthier choices, thereby preventing the adoption of harmful behaviors and contributing to the overall well-being of communities. In this sense, adult education serves as a transformative mechanism for individual and collective development, particularly in under-resourced settings where formal education opportunities may be limited.

Adult learners has the responsibility of influencing their children and people around them directly or indirectly, (Okorie, and Echezu, 2019). Every knowledge acquired by an adult learner is of great benefit to the community at large because wherever an adult appears, it is believe that teaching and learning will take place. as the saying in a Yoruba proverb "agba kinwa loja ki ori omo tuntun wo" meaning an adult cannot be in a place and things will go wrong, because they will definitely step in with their wealth of knowledge to correct things. Therefore when an adult acquire health promoting knowledge, many people around them will be empowered health wise.

Adult education and health literacy skills and abilities

Numerous qualitative research have explored the influence of Adult and non-formal education on cognitive and psychosocial skills and capacities. Both skills and capacities are critical for individual health behaviour. Alumona, (2022) consider that adult education may enhance general cognitive growth and hence critical thinking and problem-solving abilities, which can subsequently be utilized to reflect and adopt healthy behaviours. People, who can reflect adequately in specific situations may be able to create different coping methods than relying on health-damaging habits, for example when being in stressful situation. Alumona (2019), indicated that engagement in adult education can increase verbal memory and verbal abilities, independent of the certification earned via participation in adult education. Adult education also promotes health literacy both directly (via participation in health literacy courses and indirectly through the promotion of reading and numeracy as well as communication and social skills. According to a recent comprehensive study by Lopes, and McKay, (2020), which synthesizes many previous definitions, health literacy may be viewed as the capacity to acquire and communicate knowledge and information to enhance health behaviors and health. Health-literate adults, via a wide variety of cognitive and social abilities, are able to understand and use information to take health-promoting activities and sustain healthy behavior (WHO, 2021).

Research has increasingly highlighted the positive relationship between adult education and health-related outcomes. Matthews (2018), in a qualitative study involving interviews with 145 adult learners, found that improved communication and writing skills acquired through adult learning positively influenced participants' understanding of health information and related processes. Similarly, Oghenekohwo (2022) argued that literacy

empowers individuals to make more informed decisions concerning their health, thereby promoting healthier behaviors. Beyond cognitive gains, adult education also contributes to personal development by enhancing psychological attributes such as resilience, self-esteem, and self-efficacy factors essential for initiating and sustaining behavior change (Maudsley, 2018). Emeya (2022) emphasized that participants in adult education often report a heightened sense of accomplishment and the ability to handle more complex tasks, especially in professional settings, which translates into improved self-efficacy. These skills and psychological resources can significantly influence individuals' attitudes and behavioral patterns for health promotion. Ugwu, and Nwaiwu, (2019), reported that increased self-esteem and self-efficacy are common outcomes of adult learning experiences, regardless of the subject matter. Such outcomes are closely linked with learners' improved capacity to manage stress and adapt to challenging circumstances. In this context, self-efficacy emerges as a foundational requirement for effective health behavior change (Emeya, 2022).

Adult education and prevention of illness

Adult education plays a critical role in the prevention of illness and the maintenance of longterm health and well-being. It contributes to the early avoidance of illness by enhancing individuals' cognitive, emotional, and social resources. According to the All-Party Parliamentary Group on Arts, Health and Wellbeing (2023), adult learning environments offer "environmental enrichment," which has been shown to improve cognitive functions such as memory, learning, and problem-solving. These cognitive improvements are not only beneficial for intellectual development but also support healthier lifestyles by increasing individuals' capacity to process and act on health-related information. As life expectancy increases, a growing number of individuals are living with long-term, fluctuating, or lifelimiting conditions, including mental illness and cognitive decline (Thorley, 2017). Adult education provides opportunities to support these populations by promoting psychological resilience, enhancing social connection, and encouraging lifelong learning as a tool for personal empowerment. It is particularly relevant during life transitions such as retirement, bereavement, caregiving, disability, recovery from illness or addiction, or reintegration after incarceration when individuals may be vulnerable to mental and physical health challenges. In such contexts, adult learning can act as a stabilizing factor, providing structure, purpose, and a renewed sense of identity. Evidence also indicates that participation in adult learning programs can reduce social isolation and loneliness, both of which are known contributors to poor health outcomes. As one participant noted in a qualitative study, "Adult learning keeps you young and keeps your brain active, especially when you're learning something new stretching yourself. This is vital for your well-being" (All-Party Parliamentary Group on Arts, Health and Wellbeing, 2023). Such programs provide not only knowledge but also emotional and social support that can help adults navigate the health-related challenges they face throughout the life course. Thus, adult education serves as a vital public health intervention by fostering self-care, promoting mental well-being, and preventing the deterioration of physical and psychological health.

People may retire and subsequently lose a companion; or develop a chronic health condition and /or take on care obligations for others. Some people are on journeys of

personal transition, for example, struggling with a handicap, mental health or relationship troubles, or addiction problems, recuperating from an accident, being made redundant or preparing to release jail, (Brown, Okafor, and Mensah, 2023). Further data suggests that attending adult education programs may give personal support, new skills and new interests that can help persons through the various life transitions adults encounter throughout the life cycle, (Lee, McKay, and Ogunleye, 2022). Adult learning keeps you young and it keeps your brain active especially when you're learning something new stretching yourself. This is vital for your well-being. Attending courses might also alleviate loneliness.

Adult education and mental health

Engagement in adult education yields multiple psychosocial benefits, extending beyond skill acquisition and employment outcomes. Empirical studies consistently show that adult learners gain improvements in well-being, cognitive function, and social connectedness (Smith and Jones, 2021; Aminu, 2022). From a psychological perspective, structured learning environments help reduce stress, alleviate symptoms of anxiety and depression, and enhance resilience (Anderson and Patel, 2020). A longitudinal analysis by Aminu, (2022) demonstrated that regular participation in adult learning programs is associated with sustained improvements in mood and self-esteem, particularly among individuals aged 50 years and older. Similarly, Smith and Jones (2021) reported cognitive benefits, including enhanced memory, executive functioning, and an increased sense of purpose. These findings corroborate theories of cognitive enrichment, which posit that engaging, intellectually stimulating environments support neurological health and psychological well-being.

However, not all effects are beneficial. Recent qualitative studies highlight potential stressors associated with adult education, notably in full-time, formal learning contexts (Brown, Okafor, and Mensah, 2023). Learners, particularly younger adults transitioning from dependent to independent lifestyles, may experience heightened stress due to financial pressures, disrupted social connections, and balancing academic workloads with personal responsibilities. Brown et al. (2023) found that one-third of participants reported increased tension in familial and spousal relationships following re-entry into full-time study. In response, several studies now emphasize the importance of integrating mental health support within adult education settings. Anderson and Patel (2020) advocate for programmatic elements such as peer networking, on-site counseling, and flexible learning options to mitigate stress and foster a supportive learning environment. Their review found that adult learners with access to these supports had significantly better retention, lower anxiety scores, and improved academic satisfaction compared to peers without such resources.

Adult education and poverty reduction

Adult education plays a pivotal role not only in poverty reduction but also in the promotion of health and well-being. As a fundamental strategy for sustainable development, adult learning equips individuals with the knowledge, skills, and competencies necessary to secure gainful employment and improve their socio-economic status (UNESCO, 2022).

Economic empowerment through education can significantly reduce the vulnerability of individuals and communities to health-related risks by enabling access to healthcare services, nutritious food, and healthier living conditions, World Health Organization (WHO, 2021). Furthermore, adult education fosters health literacy, which is a critical determinant of health promotion. When individuals are able to understand health information and make informed decisions, they are more likely to engage in preventive health behaviors, manage chronic conditions, and reduce the burden of illness (Nutbeam, 2020). In this way, adult education enhances both economic capacity and health outcomes, contributing to broader societal well-being and the achievement of sustainable development goals (SDGs).

Conceptualizing development

For the purpose of this discussion, development is conceptualized as a dynamic and multidimensional process involving economic, social, political, and cultural transformation, driven by the coordinated efforts of diverse stakeholders. These stakeholders include local communities, government institutions, private enterprises, civil society organizations, nongovernmental organizations, and international development partners, all working toward the shared objective of improving the quality of life and living standards in a sustainable manner (Okorie and Echezu, 2019; United Nations Development Programme (UNDP), 2023). This broad conception of development goes beyond economic growth to emphasize the importance of human and social capital formation. It recognizes that sustainable development requires inclusive policies and investments that enhance education, health, governance, and environmental stewardship. According to the UNDP (2023), true development must foster equity, resilience, and agency among populations, particularly the most vulnerable, while addressing structural inequalities that hinder progress.

Furthermore, development is increasingly seen as a participatory process wherein all actors contribute to building the human capacity and institutional frameworks necessary to drive innovation, productivity, and long-term poverty alleviation (World Bank, 2022). By strengthening the foundational elements of development education, health, infrastructure, and social cohesion societies can create an enabling environment for economic prosperity and the realization of the Sustainable Development Goals, (SDGs)

Concept of sustainable development

Sustainable development is described as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Okorie, and Echezu 2019). According to McKay (2019), sustainable development entails rapid and ongoing economic and human growth, which will ultimately result in better environmental circumstances. Stated differently, the World Bank defines sustainable development as "development that continues" (World Bank, 2022). A further comprehensive definition that corroborates the World Bank's position on the concept is the one offered by the Rio de Janeiro Declaration on Environment and Development of 1992. The "Declaration" defines sustainable development as the ongoing advancement of civilization through prudent use and management of natural resources to meet people's needs both now and in the future Ugwu, and Nwaiwu, (2022). According to Ugwu, and Nwaiwu, (2022), social, environmental, and economic advancements are all part of sustainable development and are "interrelated and complementary." According to McKay, (2020), the ultimate objective of sustainable development is long-term economic and environmental stability, which can only be attained by proactive government action.

With many National Development Plans (NDPs) created in the years after independence. Nigeria's experience with development planning predates her 1960 declaration of independence. At the height of its significance as a national economic indicator in the mid-1970s, Nigeria's National Development Plan was instructive in that it paralleled a similar endeavor in China, which at the same time was attempting to establish a strong foundation for its economy in many ways, (Akinola, 2022). Unfortunately, Nigeria has not been as lucky as China, which has continued on its upward trajectory and is now the world's most popular economy, (Ajakaiye, and Tella, 2020). Nigeria has gone from one planning framework to another, with varied degrees of execution until the frames could no longer be considered to have an influence, (Ezeani, 2021), as a result, we have experienced our share of economic development blights since then, in addition to the unavoidable effects of worldwide economic downturns. As the replacement for the Millennium Development Goals (MDGs), Agenda 2030, which includes the Sustainable Development Goals (SDGs), was agreed by 190 UN Member States in September 2015, (National Bureau of Statistics, 2017). Among other things, Agenda 2030 aims to help nation's combat injustice and inequality, address climate change, and eradicate extreme poverty and hunger. The MDGs were only partially met in the majority of nations, including Nigeria, which means that future development would be more burdensome.

These issues include, but are not limited to, eradicating poverty and hunger, promoting gender equality, guaranteeing excellent health, high-quality education, clean water and sanitation, good employment and economic growth, lowering inequality, and alleviating the effects of climate change. Additionally, development planners paid little attention to a number of concerns that are now included in the SDGs under the MDGs.

Adult education and sustainable development

An effective investment in human development is adult and non-formal education. People's ability to read and write has grown so important that it is now considered a basic prerequisite of modern civilization (Oghenekohwo, Tonukari, and Samuel 2022), According to Lopez and McKay 2020) the greater the proportion of functionally literate individuals in a society, the better the chances are for socioeconomic, technological, and cultural development. Adult education has a multifaceted function in the growth of a country. Literacy is, in fact, the cornerstone of progress. Education is not just a fundamental right; it is also a basis for advancement in fields like human capital, health, nutrition, and the growth of institutions and democracy. Therefore, the intricate connections between adult education's delivery and Nigeria's economic, political, social, and cultural determinants allow to understand the role of adult education in development, (UNESCO, 2022). The importance of adult education to the development of human capital makes its economic function clear. Additionally, an educated populace offers a more alluring investment environment. Therefore, in today's

global economy, investing in the development of human capital through adult education is essential for creating a labor force and management expertise (McKay, 2020).

Nigeria population will need some kind of formal and non-formal education and training to be able to benefit from basic health care, including sexual and reproductive health service the development of new medicines, and this be in a position to free itself from diseases, that devastate poor people, such as HIV/AIDS, tuberculosis, malaria and other parasites. Adult education will also be needed to enable the poor Nigerians to really take advantage of programmes aimed at protecting orphans and vulnerable children or drastically reducing the number of people without access to safe water and basic sanitation.

Conclusion

Adult and non-formal education plays a transformative role in advancing sustainable development and health promotion in Nigeria. As evidenced throughout the discussion, adult education contributes to the development of human capital, promotes health literacy, enhances mental well-being, and provides critical skills for employability and social mobility. It offers a vital platform for empowering marginalized populations, especially adults who missed formal schooling, enabling them to participate actively in the socioeconomic and health dimensions of their communities. Through its programme, the much needed health literacy, social and mental health, technical and vocational knowledge, skills, values, healthy life style and attitudes needed by the adult populace for sustainable development are achieved. Additionally, it empowers individuals to become knowledgeable, capable of critical thought, and capable of actively taking charge of their own future. The bulk of the population must be illiterate for development to be successful and sustained. There must be political will to support adult education, particularly when it comes to implementing legislation. The growth of adult education should be supported by political will, particularly in areas of financing and policy that would give adults greater educational options and establish a clear, goal-driven path for health promotion and Nigeria's sustainable development. Also, health professionals should-therefore turn to adult education to increase their understanding of the links between adult education and health promotion. Adult education should be mainstreamed in Nigeria's development agendas, especially in health, poverty alleviation, and environmental sustainability policies. Planners should recognize its pivotal role in achieving the SDGs, particularly goals related to health, education, gender equality, and reduced inequalities Also, health professionals and policymakers should leverage adult education to disseminate accessible health information. Incorporating health promotion topics such as disease prevention, nutrition, mental health, and sanitation into adult learning curricula will strengthen health outcomes.

References

Adamu, H. T., Gyang, G. I., Alao, O. A., and Odunaiya, A. O. (2020). Prevalence and mitigation of cardiovascular disease risk factors among the corporate workforce in Sub-Saharan Africa: A systematic review and meta-analysis. BMC Public Health, 20, 1300.

- Adelokun, M. O., Adeyemo, C. W., Agboola, B. G., and Kayode, G. M. (2020). The role of adult education in sustaining cities and communities in Nigeria: Impact of fourth industrial revolution. *International Journal of Educational Studies*, *3*(3), 88–96.
- Adeyanju, C. T., Johnson, O. O., Musa, A. K., and Eze, I. F. (2023). Tobacco use and control policies in Nigeria: Trends and implications for public health. *African Journal of Public Health*, *17*(1), 45–56.
- Ajakaiye, O., and Tella, S. A. (2020). Rethinking development planning in Nigeria: Lessons from past efforts. *Nigerian Journal of Economic and Social Studies*, 62(3), 233–250.
- Akinola, A. O. (2022). Policy inconsistency and development planning failures in Nigeria: Implications for sustainable development. *African Journal of Public Administration and Management*, 33(1), 17–29.
- All-Party Parliamentary Group on Arts, Health and Wellbeing. (2023). *Creative health: The arts for health and wellbeing*. Retrieved from https://www.culturehealth andwellbeing.org.uk/appg-inquiry
- Alumona, M. N. (2019). Enhancing quality assurance in Nigerian adult education. *Nigerian Journal of Educational Foundations*, *18*(1), 161–173.
- Alumona, M. N. (2022). Adult education as mechanism for empowering Nigerian women. In A. R. Arikawei, A. N. Ugwu, H. L. Deekor, and O. F. Mbalisi (Eds.), *Contemporary practices in adult education for sustainable development in Nigeria* (pp. 29–38). Port Harcourt: Pearl Publishers.
- Aminu, A. B. (2022). Prospects and challenges of adult and non-formal education in addressing violent behaviour among youths in Nigeria. In A. R. Arikawei, A. N. Ugwu, H. L. Deekor, and O. F. Mbalisi (Eds.), *Contemporary practices in adult education for sustainable development in Nigeria* (pp. 34–50). Port Harcourt: Pearl Publishers.
- Anderson, T., and Patel, R. (2020). Mental health supports in adult education: A review of interventions and outcomes. *Journal of Adult and Continuing Education*, 26(1), 85–102. https://doi.org/10.1177/1477971420907016
- Bacchus, M. K. (2019). The education challenges facing small nation states in the increasingly competitive global economy of the twenty-first century. *Comparative Education*, 44(2), 127–143.
- Bala, J. O., Osagie, A. O., and Yakubu, J. Y. (2019). Competency improvement needs of facilitators for enhancing adult education programme in Edo State, Nigeria. *British Journal of Education*, 7(7), 23–33.
- Brown, L., Okafor, C., and Mensah, A. (2023). Stress and relational dynamics in adult learners: A qualitative study of full-time education returnees. *International Review of Education*, 69(3), 289–309. https://doi.org/10.1007/s11159-023-09920-9
- Davies Adeloye, J. O. I.-E., Ezejimofor, M., Owolabi, E. O., Ezeigwe, N., and PLOS Global Public Health Collaboration. (2022). Prevalence of overweight and obesity in Nigeria: Systematic review and meta-analysis of population-based studies. *PLOS Global Public Health*, 2(8), e0000845.

- Ekpenyong, D. O., and Uba, R. I. (2019). The role of adult education in achieving sustainable community development in Akamkpa Local Government Area of Cross Rivers State, Nigeria. European Journal of Training and Development Studies, 6(3),
- Emeya, S. E. (2022). Training needs of vocational adult education instructors for curriculum development for global competitiveness. In A. R. Arikawei, A. N. Ugwu, H. L. Deekor, and O. F. Mbalisi (Eds.), Contemporary practices in adult education for sustainable development in Nigeria (pp. 91–100). Port Harcourt: Pearl Publishers.
- Ezeani, E. O. (2021). The politics of development planning in Nigeria: Challenges and prospects. Journal of Development Policy and Practice, 6(2), 101–120. https://doi.org/10.1177/2455133321999542
- Lancet, The. (2020). Editorial: COVID-19: Too little, too late? The Lancet, 395(10226), 755. https://doi.org/10.1016/S0140-6736 (20)30522-5
- Lopez, H., and McKay, A. (2020). The role of literacy in development: Evidence and perspectives. Journal of Human Capital Development, 14(2), 45–60.
- Lopes, H., and McKay, V. (2020). Adult learning and education as a tool to contain pandemics: The COVID-19 experience. International Review of Education, 66, 575–602. https://doi.org/10.1007/s11159-020-09843-0
- Matthews, D. (2018). Dutch doctors warn student mental health problems are rising. *Times* Hiaher Education. https://www.timeshighereducation. Retrieved from com/news/dutch-doctors-warn-student-
- Maudsley, L. (2018). Mental health and wellbeing in further education: Strengthening links between educations. FE News. Retrieved from https://www.fenews.co.uk/featuredarticle/17558-mental-health-and-wellbeing-in-further-education-strengtheninglinks-between-education-and-health
- McKay, A. (2020). Investing in human capital through adult education in developing economies. Development Studies Review, 36(1), 88–105.
- McKay, V. I. (2020). Learning for development: Learners' perceptions of the impact of the Kha Ri Gude literacy initiative. *International Review of Education*, 66, 603–619.
- National Bureau of Statistics. (2017). MDG performance tracking survey report 2015. Abuja: NBS.
- National Bureau of Statistics. (2019). Survey on tobacco use among Nigerian civil servants. Abuja: NBS.
- Nutbeam, D. (2020). Health literacy as a public health goal: A challenge for contemporary health education and communication strategies. Health Promotion International, 15(3), 259–267. https://doi.org/10.1093/heapro/daz050
- Oghenekohwo, J. E., Tonukari, J. N., and Samuel, E. F. (2022). Adult literacy and sustainable human development in Nigeria. International Journal of Lifelong Education, 41(1), 15-29. https://doi.org/10.1080/02601370.2022.2020059
- Oghenekohwo, J. E., Tonukari, P., and Samuel, C. (2022). Re-inventing the investment conundrum in adult education for sustainable social well-being in Nigeria. In A. R. Arikawei, A. N. Ugwu, H. L. Deekor, and O. F. Mbalisi (Eds.), Contemporary

- practices in adult education for sustainable development in Nigeria (pp. 1–16). Port Harcourt: Pearl Publishers.
- Okorie, C., and Echezu, A. (2019). Development and social transformation in Africa: The role of institutions and governance. *Nigerian Journal of Development Studies*, 15(2), 44–56.
- Okorie, C., and Echezu, B. C. (2019). Adult education strategies for achieving sustainable development goals in Rivers State, Nigeria. *International Journal of Educational Benchmark*. *13*(1), 51–60.
- Okwor, C. J., Nnaji, H. O., Umeokonkwo, C. D., and Ezeanolue, E. E. (2020). Gender differences in tobacco use and cessation intention among Nigerian youths. *Nigerian Journal of Health Sciences*, 20(2), 102–110.
- Organisation for Economic Co-operation and Development. (2023a). *Health at a glance 2023: OECD indicators*. Paris: OECD Publishing.
- Organisation for Economic Co-operation and Development. (2023b). *Overweight and obesity Health at a glance 2023*. Paris: OECD Publishing.
- Smith, R. J., and Jones, E. L. (2021). Adult learning, social capital, and mental health: Evaluating the evidence base. *Adult Education Quarterly*, 71(4), 302–319. https://doi.org/10.1177/07417136211020368
- Thorley, C. (2017). *Not by degrees: Improving student mental health in the UK's universities*. Retrieved from https://www.ippr.org/publications/not-by-degrees
- Toriola, A. L., and Igiebor, N. O. (2023). Physical activity epidemiology in Sub-Saharan Africa: Nigeria case study. In *Physical Activity Almanac* (Vol. 1). Retrieved from en.wikipedia.org
- Ugwu, A. N., and Nwaiwu, N. (2019). Indigenous adult education for sustainable community development in Nigeria. *International Journal of Development and Economic Sustainability*, 7(1), 37–48.
- UNESCO. (2022). Building pathways: Adult learning and sustainable development. Hamburg: UNESCO Institute for Lifelong Learning. https://uil.unesco.org
- United Nations Development Programme. (2023). *Human development report 2023: Breaking the cycle of inequality*. New York: UNDP. https://hdr.undp.org/
- World Bank. (2022). World development report 2022: Finance for an equitable recovery. Washington, DC: World Bank Publications. https://www.worldbank.org/en/publication/wdr2022
- World Health Organization. (2021a). *Mental health and well-being in adult learning environments*. Copenhagen: WHO Regional Office for Europe. https://www.euro.who.int/en/publications/abstracts/mental-health-and-well-being-in-adult-learning-2021
- World Health Organization. (2021b). *Promoting health: A guide to national implementation of the Shanghai Declaration*. Geneva: WHO. https://www.who.int/publications/i/item/9789240038348
- World Health Organization. (2021c). *Promoting health through schools: Report of a WHO expert committee on comprehensive school health education and promotion*. Geneva: WHO. https://www.who.int/publications/i/item/9789240038348