



GENDER DIGITAL DIVIDE IN AFRICAN COUNTRIES: ADVANCING ADULT EDUCATION FOR THE NIGERIAN WOMAN SITUATION

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Abstract

All over the world, the inclusion of women at all levels of governance to promote sustainable development has become crucial and a global concern. Hence, bridging gaps, breaking barriers and promoting equality have become significant areas of study. Gender digital gap and the feminization of poverty reinforce inequality and are evident in developing countries and economies such as Nigeria. Adult functional literacy programmes have been regarded as instrumental in the provision of basic skills required to function effectively in these respects in our societies. This paper therefore looks at gender digital gap in recourse to digital technologies and access to digital devices strongly reflecting the Nigerian situation. It analyses poverty and its implications on women's dis-empowerment; and justifies the potential of adult education through skill acquisition and literacy programmes in bridging the gender digital gap and facilitating women's economic empowerment. Suggestions that engenders the exploration of adult education programmes like functional digital literacy, vocational skill acquisition and the potential power intentional community engagement yields in facilitating women education towards economic empowerment and reducing the existing gap were made.

Keywords: Adult education, Gender digital gap, gender inequality, feminization of poverty, gender digital gap,

1.0 Introduction

Women's inclusion at all levels and fields have become a global concern across countries worldwide especially where sustainable development is desired. There is a visible fact that there is unequal treatment in the society; and the obvious unequal access to the resources jointly created by women and their male counterpart is apparent in all areas especially in developing nations thus calling for efforts that are governmental and non-governmental to address this. Development partners

contributions has continued but there is seems to be no commensurate result with the efforts invested. In contemporary times, the use of digital technologies has taken a vantage position in accessing information. The unequal position created between women and their male counterparts is also evident in the access to these digital technologies and their usage. This cannot be out rightly separated from the unequal access to economic power that gives the men advantage over the women; the perception of women that breeds insecurity



in creating and using online content thereby facilitating a concerned gap between men and women in these areas.

Conceptualizing Gender Inequality

Gender is the socially established and socialized roles that are passed from one generation to another covertly or overtly. It is taught and indoctrinated by all the agents of socialization starting from the family. The disparity in the way women and men are seen are enshrined in this; the society whether implicitly or explicitly promotes and sustains inequality through patriarchal nuances and beliefs set as rules and expected standards of behavior between men and women. According to the United Nations **on Gender Equality (2023) gender is stated as the** legal, social and cultural situations in which sex and/or gender determine different rights and dignity for women and men, which are reflected in their unequal access to or enjoyment of rights, as well as the assumption of stereotyped social and cultural roles. United Nations Development Programme on inequality states that Gender inequality is not perpetuated exclusively through differential access to and control over material resources. Gender norms and stereotypes reinforce gendered identities and constrain the behavior of women and men in ways that lead to inequality. Gender inequality pervades every fabrics of the society and is evident in every level and fields of human endeavor. Jacobsen and Forste (2021) states that there are several loses that gender inequality brings; and is an enormous challenge to development the world over. Jackson (2018) reiterates that gender inequality have been extraordinarily diverse and wide spread. Women and men are being made unequal in every conceivable way in endless circumstances, both immediate and enduring, by both objective criteria and subjective experience.

Whether in developing or the developing countries, there seems to be a shade of inequality but the inequality among men and women in developing countries has become alarming. Jacobsen and Forste (2021) succinctly put it that gender inequality can be in economic, social, political and demographic dimensions; and that while many of the costs of gender inequality are ultimately born by particular individuals, they can also be calculated at a society, or even worldwide level. If individuals of different genders are not given equal opportunity to develop their potential, then societies forego the increased level of output and ultimately wellbeing that would derive from their higher productivity. If societies do not invest equally in educating and training men and women; do not give them equal opportunities to engage in more productive forms of work, and do not give them equal opportunities to advance to more productive positions over time, then the societies do not harness the full potential of their members. Gender inequality could be regarded as the exclusive preserve of the developing countries.

Feminization of Poverty

When women are poor, their rights are infringed and they are open to a lot of ills that could be ordinarily averted. The Poverty women face are not self made but societal constraints are huge contributors. O'Peters (2023) posit that the concept feminization of poverty meant three distinct things– Women compared to men have a higher incidence of poverty. Women's poverty is more severe than men's and– Over time, the incidence of poverty among women is increasing compared to men's. Gupta (2018) show that the responsibilities of women and the challenges they face within poor households and communities are different from those of men. Persistent



gender inequality and differences in women's and men's roles greatly influence the causes, experiences and consequences of women's poverty. The term "feminization of poverty" was first used by Diana Pearce in 1976 following her observation among women in America. She observed that two thirds of the poor were women over the age of 16 and an increasingly large number were from the economically disadvantaged groups. Women and economic development are at the core of the discourse on feminization of poverty. One of the prevalent factors that unequivocally reinforce the unequal treatment of women and men is that women's economic independence has not received a foothold like that of their men counterpart thus women are regarded as the poorest of the poor in the world. Developing countries records a huge difference in the disparity that exists in the economic advantage men has over women in all the sectors of the economy. Men have too much power and women too much work (Piven, 2020). Veeran (2020) asserts that poverty is a national and an international social impediment because women tend to be most vulnerable to poverty. The high increase in the level of poverty indices between women and men is an indication for the feminization of poverty. Huge disparities ranging from undervaluing women's work whether paid or unpaid; unequal pay at the work place; unequal access to economic facilities and opportunities enjoyed by men based on the discrimination of gender are few of the enhancers and facilitators. Moolmam (2025) suggests that programs to eliminate or alleviate poverty require attention to gender inequality and women's human rights.

Gender Digital Divide

The power of the web is in its universality; and access by everyone regardless of

disability or gender is an essential aspect. Sarah (2021) wrote that The term digital divide or the digital split, is a social issue referring to the differing amount of information between those who have access to the Internet (specially broadband access) and those who do not have access. It also refers to the differences in resources and capabilities to access and effectively utilize Information and Communication Technology for development that exist within and between countries, regions, sectors and socioeconomic groups. World Bank, (2020) on Gender Digital Divide state that the digital divide, or technology gap, is the difference between groups with access to technology and the internet and those without. It posits that girls and women often have less or no access to technology and the internet compared to boys and men. Particularly in developing countries, girls and women struggle to afford technology and internet access.

The concept of digital divide refers to the gap between those who have access to ICT such as telephones, computers, internet and related services and to those without. The term is used in an international or global level and within a country or region or other reference entity such as income, gender, age and educational level (Ani, 2007; World Bank, 2020). O'Peters (2023) define the digital divide as " differences in the use of, and access to, information and communication technology (ICT) tools, and particularly the internet " mentioning that the accessibility to ICT is greater in rich countries than the poor ones. According to Kularski (2022) the digital divide is composed of a skill gap and a gap of physical access to Information Technology (IT) and the two gaps often contribute to each other in circular causation. Without access to technology, it is difficult to



develop technical skill and it is redundant to have access to technology without first having the skill to utilize it". Gender digital divide is also often conceptualized as the gap between those who have access to vital Information and Communication Technology (ICT) resources and those who do not. Norris (2018) described the digital divide as shorthand for any and every disparity within the online community, including access between developed and developing nations, the rich and poor, and men and women within those nations. She further describes the digital divide as a democratic divide between those who do and do not use the panoply of digital resources to engage, mobilise and participate in public life. According to Antonio and Tuffley (2024) on Norris's definition, which differentiates ICT access on the basis of "haves" and "have-nots", has evolved and the digital divide has become a complex phenomenon that can be understood in a myriad of ways. Van-Dijk and Hacker (2020) assert that the idea that access to digital resources is a multi-faceted phenomenon consisting of four factors that work to regulate access; psychological, material, skills and usage. What began as a simple concept of there being "haves" and "have-nots" in the digital world, has evolved into a finer-grain conceptual framework. Psychological access is where the user has little interest in gaining access, or has negative attitudes towards computers. Material access relates to not having the physical infrastructure. Skills access is where a person does not have the digital literacy skills to be effective on-line and usage access is where a person does not have the time or opportunity to access digital information, regardless of their skill level. The four factors outlined directly relates to the situation in the developing countries.

Digital divide reflects the disparity in access which also exists between groups of people within the same country, as well as between men and women (gender digital divide). Factors influencing digital divide include one or more social or cultural identifiers, such as income, education and literacy levels, race, ethnicity and gender ([Eneh and Owo, 2023](#)). People use ICTs for even simpler purposes, including business, social activities, sports, blog, conference telephone discussion, fun, among others. ICTs have become widespread and are powerful tools for social and economic development. They help people access, store, share, transfer and apply information to human endeavors. They have the potential to improve the delivery of services, increase productivity, raise living standards, transform economies and develop opportunities, as they may exist in education, governance, environmental and health management, financial services and the private sector. They can influence or redress the imbalances in society by the way they are designed, produced and used and may widen and deepen the gap between the information haves and have-not as economies have become more and more information-based Moolman (2025) explain that digital divide is the gap in access to or compliance with ICTs or information. Gender disparity affects the female input in socio-economic development in Nigeria. The ratio of women participation in economic pursuit is very slim, as reflected in the great disparity in employment ratio, participation in politics and access to facilities (bank loans, land and property).

Research conducted lay credence to the impact of gender digital divide at all levels; the worldwide web foundation in 2016 states that the Sustainable Development Goals (SDGs) provides a landmark opportunity for



countries to close the gender digital divide. When UN member states committed to the SDGs, they pledged to achieve universal affordable internet access by 2020 (SDG target 9.c); ensure equal access to basic services [and] appropriate new technology for all women and men (SDG target 1.4); and Implement policies to empower women through technology (SDG target 5.b). Beyond these important targets, access to information and communication technology (ICT) is also critical to achieving other SDGs, such as: achieving quality education (Goal 4), creating decent work and economic growth (Goal 8) and reducing inequalities (Goal 10). However, urgent action is needed to harness the power of ICTs to achieve the SDGs, and to put women at the forefront of sustainable development. World leaders, including the G20 and SMART Africa, have identified the gender digital divide as a major roadblock to women's economic empowerment and participation in the digital economy. The foundation's research finding show that extreme gender inequalities exist in internet access, digital skills, and online rights across developing countries. In particular recourse to developing countries which are nations with a lower living standard and a low Human Development Index (HDI) relative to other countries; cities, including Lagos, Nairobi, Jakarta and Bogotá, women are [50% less likely than men to be online](#), and 30-50% less likely than men in the same communities to use the internet for economic and political empowerment. The root causes of this difference are high costs, lack of digital know-how, scarcity of content that is relevant and empowering for women, and barriers to women speaking freely and privately online.

In addition, researchers who have attempted to measure the gender digital divide in six

francophone countries in West Arica (Benin, Burkina, Faso, Cameroon, Mali, Mauritania, and Senegal) found no gender gap in connectivity or usage among young women educated to secondary school level and beyond. (World Bank, 2020) This seems to indicate that education is a powerful tool in combating the gender gap in Internet access and use. However, it is well documented that women face challenges in gaining access to education at all ages because of a lack of time to attend school, familial and household duties and socio-cultural norms that give a low priority to education. As such, without careful planning, it is likely that ICTs will exacerbate differences between men and women as diffusion and use of ICTs and their benefits tend to follow existing contours of income and economic divides, with the poor being further marginalised or excluded. Tuffley (2024).

According to Moolman, (2025) the gender digital divide is one of the most significant inequalities amplified by the digital revolution. Of the few studies that have sought to address Internet use specifically, most have found that women in developing countries are significantly less likely to use the Internet than men. Women are estimated to constitute 25% or less of Internet users in Africa, 22% in Asia, 38% in Latin America, and a mere 6% in the Middle East. Less than 10% of Internet users in Guinea and Djibouti are women, less than 20% in Nepal and less than 25% in India. Only 20% of Internet users in Greece are women and slightly more than 25% in Portugal. In Africa (where the gender digital divide is thought to be the widest), in 11 of the 13 countries, more men than women use the Internet. In one of the most technologically advanced countries, Kenya, 21% of men and 11% of women (in the population sample used for this study) had used the Internet in



August 2008. African women are also less literate: In Kenya, 77.2% of men compared to 68% of women. Fewer women are actively working or studying—81.4% of Kenyan men and 49.9% of women—and women generally have less income. While 29.8% of Kenyan men belong to the top 25% income group of the country, only 6% of women do. Controlling for these three variables (literacy, actively working or studying and belonging to the top income group) the gender digital divide disappears in most African countries. The results of this study suggest that the discrimination women face in many aspects of social life—employment, literacy and income—replicate the inequalities in ICT usage. In a study by Ono and Zavodny (2020), a strong correlation was observed between digital inequalities in computer and Internet use and pre-existing inequalities. A higher GEM score (which indicates more gender equality), for example, is negatively associated with a gender gap in computer use and, inversely, gender inequality at the societal level is closely associated with a gender gap in computer use at home. This suggests that “pre-existing measures of economic and social inequality are reasonable predictors of inequality in IT usage”

In a recent study undertaken by Intel, in which 2200 women and girls from India, Egypt, Mexico and Uganda took part, it was found that 25% of women in developing nations lacked Internet access and this figure was as high as 45% in Sub-Saharan Africa. The report highlights the stubborn gap in women’s access to the Internet in Africa, but also in the Middle East and other developing parts of the world. According to Elizabeth Weingarten, there are two critical factors that influence whether or not women can access the Internet: availability and

affordability. As such, one of the recommendations outlined in the Intel report was for policymakers and technology companies to make the Internet more accessible and affordable on mobile phones. It is estimated that, in developing nations, an Internet connection can cost up to 40% of annual per capita income, compared to just 1.7% of per capita Gross Net Income in wealthier nations. It is sufficient to support the Plan International World Review (2020) that, while these barriers apply to both genders, they hinder women more than men because other cultural obstacles compound the problem. Internet cafes, for example, are an easy way to access the Internet but they are often impractical for women who cannot leave home for religious and cultural reasons, and/or because they are intimidating for women due to low technological expertise and their belief that they are socially unwelcome. The inequalities for Nigerians in accessing the Internet and the World Wide Web, the lack of knowledge of search engines, poor Internet connection quality, limited proficiency in English, and the diversity of socio-economic levels contribute to the gender digital divide (Ani, , 2007). This indeed reflects strongly the situation that depicts the gender digital divide forms in Nigeria. Eke (2021) stated a huge number of the Nigerian population are incapable to read and write because of lack of education. The population has women having the highest percentage of those who cannot read or write. The Nigerian government thus must make efforts which must not focus only on providing infrastructures but on developing the e-literacy skills and knowledge needed to use, maintain, and further develop those technologies. Eke (2021) on a study conducted on Yewa and Ido communities in Nigeria revealed that The problem of low



income and the relative high cost of computers, limited Internet accessibility, slow Internet speed, lack of computer knowledge within Yewa and Ido communities are limiting factors for the general population. The perception expressed by the participants was that computers and access to the Internet are for the Nigerian affluent. The apparent digital divide in Yewa and Ido communities is characteristic of divide between the rich and poor, the illiterate and educated, and urban and rural in Nigeria. Although Nigeria has made great strides during the past decade in mobile communication with smart phones and other smart mobile devices, broadband Internet penetration as grown at a slower pace and even more so in rural areas. The challenges of closing the digital divide in the rural communities of Yewa and Ido is multifaceted and will require cooperation of community, state, and national leaders in Nigeria.

Bridging the Gender Digital Divide: Adult Education in Perspective

Adult education has a potential for liberation, emancipation and empowerment. It is the education intended and designed for those considered as adult in their societies. The multi varied nature and essence of its programmes makes and gives validity to its potential ability for the economic empowerment of women and for bridging the gender digital gap that pervades the developing countries. Functional literacy describes those approaches to [literacy](#) which stresses the acquisition of appropriate verbal, cognitive, and computational skills to accomplish practical ends in culturally specific settings. Adult functional literacy programmes for women will give them exposure required to acquire digital skills and also help to access information from digital technologies that can enhance their

economic empowerment. Skill acquisition programme with appropriate funding opportunities will economically empower women to be financially independent and make choices on the acquisition of relevant digital technologies. This dual role of adult education programmes makes it a veritable tool and channel of empowerment for women and in ensuring that the widened gap in access is equally addressed.

According to Ferrant., William, Büchner, et.al. (2024) education of persons who have lost the opportunity to access formal education is important such that all forms of inequalities can be addressed whether as they are emerging such as the the forms in digital literacy and access. Adult education is critical for this to be achieved through the various programmes like digital literacy. In addition, Bernard-Skala (2019) wrote that the potential of adult education and its programmes are not adequately prioritized and its potential at bridging the gender digital divide not maximized. For the Nigerian case, it is not gainsay that every adult female has the capacity to build skills and competence required through dedicated community engagements of such women in dedicated programmes in such a way that programmes organized for women at all levels are targeted towards inclusive participation in usage and access to devices that engenders bridging the existing gender digital divide existing

Conclusion

Using adult functional literacy and vocational skill acquisition programmes for the dual purposes in this discourse requires intentional planning, implementation and concerted efforts through funding from governmental and development partners at all levels. This enhances access to digital devices and use that can be used to build skills and then fosters use that facilitates the



growth of economic independence. Women who are able to use technological platforms have the opportunity to access platforms required for digital marketing to boost sales and grow their earning potential and power while the gaps continues to close till eventually closes.

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