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Impact of Rural-Urban Digital Divide on Women's Access to Educational Opportunities in Oye Ekiti, Nigeria

Florence Bolajoko ADENIYI (Ph.D)[1] & Oluwatosin Emmanuel AKINSUROJU[1*]

[1]Department of Educational Management and Business Studies,
Faculty of Education, Federal University, Oye-Ekiti, Ekiti State, Nigeria

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ABSTRACT

The increasing relevance of digital technology in education has heightened concerns about unequal access among women in rural and urban communities in Nigeria. This study examines the impact of the rural–urban digital divide on women's access to educational opportunities in Oye Local Government Area of Ekiti State. Using a descriptive survey design, data were collected from 960 women across six selected communities through the Women's Digital Access and Education Questionnaire (W-DAEQ). Findings revealed significant disparities in digital access, with rural women reporting low access (M = 1.77) compared to urban women who demonstrated higher access levels (M = 2.45). Digital inequality was also found to strongly influence educational participation, as rural women had limited access to online learning platforms, e-libraries, and other digital resources (M = 1.38), while urban women recorded greater access (M = 2.51). Major barriers identified among rural women included low digital literacy, poor network connectivity, unstable electricity, and high costs of data and devices. The study further showed that digital skills training, improved ICT infrastructure, affordable internet, and reliable electricity were considered key interventions for addressing these challenges. The study recommended the need for targeted policies and community-based strategies to bridge the digital gap and promote equitable access to education for women in rural areas.

Keywords: Digital divide, women's educational access, rural–urban inequality, digital inclusion

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1 INTRODUCTION

Digital technology has become a crucial driver of socioeconomic development in the 21st century, particularly in improving access to essential services such as healthcare and education. Across the globe, digital tools and platforms are revolutionizing how individuals learn, access medical services, and engage with public and private institutions (World Bank, 2016). However, the benefits of this digital transformation have not been equitably distributed, as a persistent gender gap in digital access continues to disadvantage women. Globally, around 65% of women use the internet compared to 70% of men, creating a gap of about 244 million fewer women online. This digital gender divide is especially pronounced in low- and middle-income countries (LMICs), where women are 19% less likely than men to use mobile internet, which represented approximately 310 million fewer female users. Smartphone ownership, a key gateway to digital participation, also reflects this inequality, with women 17% less likely than men to own smartphones, thereby limiting their access to digital education, healthcare, and financial services (ITU, 2023; World Bank, 2024).

Despite the increasing importance of digital access in today's society, notable disparities persist between rural and urban areas in Oye Local government area of Ekiti State in terms of internet connectivity and access to digital tools. Women in rural communities face compounded challenges stemming from cultural norms, economic hardship, and infrastructural deficiencies, which hinder their ability to benefit from digital educational services. Consequently, many rural women experience restricted participation in online learning opportunities. While urban women can attend virtual classes, and professionals online, their rural counterparts remain largely excluded, relying on outdated or unavailable services. This imbalance undermines equitable development and the overall quality of life for women across Ekiti State. Against this backdrop, this study investigates the impact of the digital divide on women's access to educational opportunities in Oye Local government area of Ekiti State, with the aim of identifying practical and policy-driven strategies to bridge this gap.

The main objective of this study is to explore the impact of the rural-urban digital divide on women's access to educational opportunities in Oye Local government area of Ekiti State. The specific objectives are to examine the extent of digital access among women in rural and urban areas of Ekiti State; Investigate how digital inequality affects women's access to educational resources and opportunities; Identify the key challenges women face in utilizing digital technologies in rural areas, and propose policy and community-based interventions to bridge the digital gap between rural and urban women. The following research questions were raised to guide the study: What is the level of digital access available to women in rural versus urban areas of Oye Local government area of Ekiti State? What impact does digital inequality has on women's access to educational resources and opportunities in Oye Local government area of Ekiti State? What are the major barriers preventing rural women from utilizing digital technologies to access educational opportunities in Oye Local government area of Ekiti State? and, What strategies can be adopted to bridge the rural-urban digital divide for women in Oye Local government area of Ekiti State?

2 LITERATURE REVIEW

Furthermore, significant disparities exist between urban and rural populations worldwide: about 83% of urban residents have internet access, while only 48% of rural residents do, and mobile internet use in rural areas is 54% lower than in urban regions (ITU, 2024; Viamo, 2024; LinkedIn, 2024; The Guardian, 2025). This rural-urban divide disproportionately affects women, especially in developing regions, where poor infrastructure, limited digital literacy, and affordability issues persist. Approximately 37% of women globally lack the skills or access needed to use digital technology effectively, and about 45% of women entrepreneurs in developing countries experience irregular internet connectivity, underscoring the economic and infrastructural barriers that continue to perpetuate digital inequality, as presented in Table 1.

Table 1: Global Statistics on Women's Digital Access

Indicator	Statistic	Details	Source
Global internet Usage (2023)	Women: 65% Men: 70%	244 million more men online than women	ITU, 2023
Mobile Internet Usage in LMICS	19% gender gap	319 million fewer women use mobile internet	World Bank, 2024
Smartphone Ownership Gap	17% less among women	Women globally are less likely to own smartphones	World Bank, 2024
Urban vs, Rural Internet Usage (2024)	Urban: 83% Rural: 48%	1.8 billion of 2.6 billion offline live in rural areas	ITU, 2024
Rural Mobile Internet Usage Gap	54% less than Urban	Rural communities lag significantly behind in mobile internet usage	Viamo, 2024
Access to Women Entrepreneurs	45% lack regular access	High costs and weak infrastructure are main barriers	The Guardian, 2025
Digital Literacy Gap	37% of Women digitally excluded	Due to lack of access or digital skills	Linkedin, 2024

Source: Authors' Design, 2025

In many developing nations, including Nigeria, a persistent digital divide separates urban centers from rural communities, disproportionately marginalizing women and limiting their empowerment, access to information, and contribution to the Sustainable Development Goals (UNESCO, 2022). Recent data from *Business Day Newspaper* (2024) show that although 88% of Nigerian women own mobile phones, only 32% own smartphones compared to 51% of men, and just 33% use mobile internet compared to 52% of men, restricting their access to digital education and healthcare. Urban women remain more connected than their rural counterparts, with internet access of 83% versus 48%, while poor electricity supply in rural areas—only 30.4% access—further limits device usage (ITU, 2024; Freedom House, 2023; Ekundayo & Akinsuroju**,** 2022). Among adolescent girls, only 37% own mobile phones compared to 77% of boys, revealing early gender disparities, and in Northern Nigeria, over half of men reportedly prevent their wives from using the internet (LSE Africa Blog, 2023). Lagos State, however, stands out with the highest female internet access at 65.7%, underscoring the deep regional and gender-based inequalities in Nigeria's digital landscape.

In Nigeria, socio-cultural, infrastructural, and economic factors collectively shape the extent of women's access to digital technology, particularly in rural areas. Traditional gender roles and cultural norms often prioritize men's access to information and communication technologies (ICTs), thereby limiting women's digital autonomy. In conservative regions such as Northern Nigeria, cultural and religious beliefs further restrict women's mobility and online participation, with reports indicating that over 50% of men actively prevent their wives from accessing the internet (Akinsuroju (2025) and LSE Africa Blog, 2023). Limited digital literacy among rural women, influenced by lower educational attainment and gendered perceptions of technology, also constrains their ability to utilize digital tools for learning and healthcare services (BusinessDay, 2024).

Infrastructural challenges reinforce this divide, as urban centers in Nigeria benefit from stronger telecommunications networks, more reliable electricity, and better access to digital services, whereas rural communities face persistent deficits. Akinsuroju (2024) and Freedom House (2023) reports that while 91.4% of urban Nigerians have access to electricity, only 30.4% of rural residents do, severely restricting women's ability to use and charge digital devices. Poor internet infrastructure in rural areas also makes connectivity costly and unreliable, further discouraging digital participation (ITU, 2024). Economically, affordability remains a key determinant of access—urban women are more likely to engage in formal employment and afford data services, while rural women, often involved in low-income agricultural or informal activities, struggle with limited disposable income for digital engagement (World Bank, 2024). Consequently, women in rural areas are 19% less likely than men to use mobile internet in low- and middle-income countries like Nigeria (GSMA, 2023). These intersecting socio-cultural, infrastructural, and economic barriers deepen the digital divide between rural and urban women, limiting equitable participation in the digital age.

Despite Ekiti State's reputation for educational excellence and high literacy rates, a clear rural-urban digital divide persists. Urban areas enjoy improved internet access, mobile technology, and e-governance systems, while rural communities face poor ICT infrastructure, low digital literacy, and limited access to affordable devices (National Bureau of Statistics, 2021). Studies by Afolayan (2018), Ibrahim and Adu (2020), and Oyelaran-Oyeyinka and Adeya (2004) reveal that rural women encounter barriers such as poverty, low education, cultural restrictions, unreliable electricity, and weak internet connectivity, limiting their access to digital learning and healthcare. This exclusion leads to delayed medical care, poor maternal health outcomes, and restricted educational and economic opportunities (Akinsuroju (2023); Okereke et al., 2020; UN Women, 2021; UNICEF, 2020). Consequently, the divide reinforces gender inequality and hinders progress toward SDGs 3 and 4, underscoring the need to ensure equitable digital access for women across Oye Local government area of Ekiti State.

3 METHODOLOGY

This study adopted a descriptive survey research design, which is suitable for obtaining first-hand information on the prevalence, distribution, and interrelationships among variables within a population. The design enabled the researcher to gather data on women's digital access, and educational engagement through the use of structured questionnaires. As emphasized by Nwankwo and Emunemu (2015), the purpose of a descriptive survey is to summarize respondents' opinions, attitudes, and behaviors in quantifiable terms such as percentages and proportions. This design was appropriate because it involved a large and diverse population and sought to examine the relationship between digital access and women's participation in education without manipulating any variables.

The population of the study comprised all women residing in both rural and urban areas in Oye Local Government area of Ekiti State, Nigeria. A multistage sampling technique was employed to ensure representativeness. At the first stage, six communities—three rural (Itaji, Ilefon, and Imojo) and three urban (Ilupeju, Oye, and Ayede) were purposively selected. At the second stage, 24 wards (four from each selected communities) were chosen through simple random sampling. In the final stage, 960 eligible women were drawn through convenience sampling to ensure inclusion across different socio-economic and educational backgrounds. The main research instrument, the Women's Digital Access, and Education Questionnaire (W-DAEQ), was developed to collect data across several domains, including digital access, educational participation, and barriers to inclusion. The instrument consisted of Likert-scale items, multiple-choice questions, and open-ended responses to generate both quantitative and qualitative data.

To ensure content validity, the instrument was reviewed by experts in educational management, and ICT, confirming its alignment with the study's objectives. A pilot test involving 40 women outside

the study sample established the reliability of the instrument, yielding a Cronbach's alpha coefficient of 0.79, which was considered acceptable. The questionnaire was administered by the researcher and two trained assistants across selected communities, with oral translations provided in Yoruba where necessary to enhance comprehension. Ethical standards of voluntary participation, anonymity, and confidentiality were upheld. Data were analyzed using descriptive statistics such as frequency counts, percentages, means, and standard deviations. A benchmark mean of 2.5 was adopted for interpretation, with values below 2.5 categorized as low and those of 2.5 and above as high.

4 DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 DATA ANALYSIS

The demographic profile of the women who participated in the study is presented in the table below and subsequently analyzed

Table 4.1.1 Demographic Profile of the Respondents

Variables		Frequency	
Items	**Category**	**N = 960**	**Percent**
	15-24	339	35.3
Age (Years)	25-34	281	29.3
	35-44	222	23.1
	45-49	118	12.3
	Married	675	70.3
Marital Status	Widowed	193	20.1
	Divorced	92	9.6
	No formal Education	126	13.1
Educational Level	Primary Education	271	28.2
	Secondary Education	307	32.0
	Tertiary Education	256	26.7
	Farming	397	41.4
	Trading	211	22.0
Occupation	Civil/Public Service	286	29.8
	Student	17	1.8
	Artisan/Skilled Work	49	5.0
Place of Resident	Rural Area	480	50.0
	Urban Area	480	50.0

Source: Fieldwork (2025)

The demographic profile of the respondents (N = 960) reveals that most participants are within the 15–24 years age group (35.3%), followed by those aged 25–34 years (29.3%) and 35–44 years (23.1%), while only 12.3% fall within the 45–49 years range, indicating a relatively youthful sample. A majority of the respondents are married (70.3%), with 20.1% widowed and 9.6% divorced, suggesting that most participants are in stable marital relationships. In terms of education, 13.1% have no formal education, 28.2% completed primary school, 32.0% attained secondary education, and 26.7% have

tertiary qualifications, showing that most possess at least basic education. Occupationally, farming is the dominant activity (41.4%), followed by civil/public service (29.8%) and trading (22.0%), while artisans/skilled workers (5.0%) and students (1.8%) form the smallest groups, reflecting a largely agrarian and public-service-oriented population. The sample is evenly divided between rural (50.0%) and urban (50.0%) residents, ensuring balanced geographical representation.

Answers to research Questions

RQ 1: What is the level of digital access available to women in rural versus urban areas of Oye Local government area of Ekiti State?

Table 1: Level of Digital Access available to Women in Rural and Urban areas

Variable	High	Moderate	Low	Mean	Decision
Rural (N = 480)	92 19.2%	183 38.1%	205 42.7%	1.77	Low
Urban (N = 480)	276 57.5%	145 30.2%	59 12.3%	2.45	High

Note: Mean responses ranges from 0 – 2.49 = Low Access; 2.50 and above = High Access.

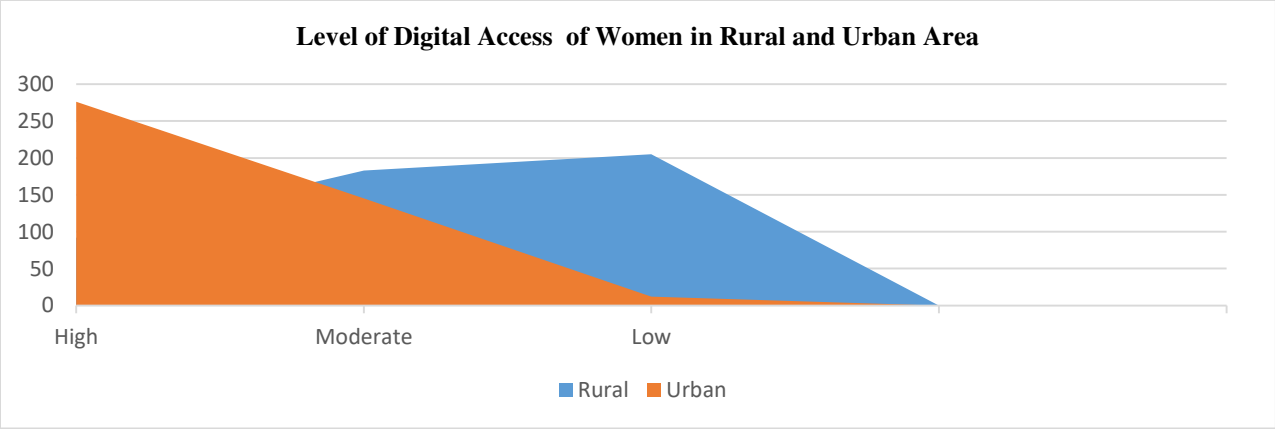

Figure 1: Graph Indicating the Level of Digital Access of Women in Rural and Urban Area

The findings from Table 1 and Figure 1 show clear disparities in digital access between women in rural and urban areas in Oye Local government area of Ekiti State. Among rural women, only 19.2% reported high digital access, 38.1% had moderate access, and 42.7% experienced low access, resulting in a mean score of 1.77, categorized as low. In contrast, 57.5% of urban women reported high access, 30.2% moderate access, and just 12.3% low access, yielding a mean score of 2.45, which reflects a high level of digital access. These results indicate that urban women enjoy significantly greater access to digital technologies such as smartphones, internet connectivity, and ICT facilities, suggesting that geographical location is a major determinant of digital access in Oye Local government area of Ekiti State.

RQ 2: What impact does digital inequality has on women's access to educational resources and opportunities in Oye Local government area of Ekiti State?

Table 2: Impact of Digital Inequality on Women's Access to Educational Resources and Opportunities

Variable	High	Moderate	Low	Mean	Decision
Rural (N = 480)	38 7.9%	106 22.1%	336 70.0%	1.38	Low
Urban (N = 480)	298 62.1%	127 26.5%	55 11.4%	2.51	High

Note: Mean responses ranges from 0 – 2.49 = Low Impact; 2.50 and above = High Impact.

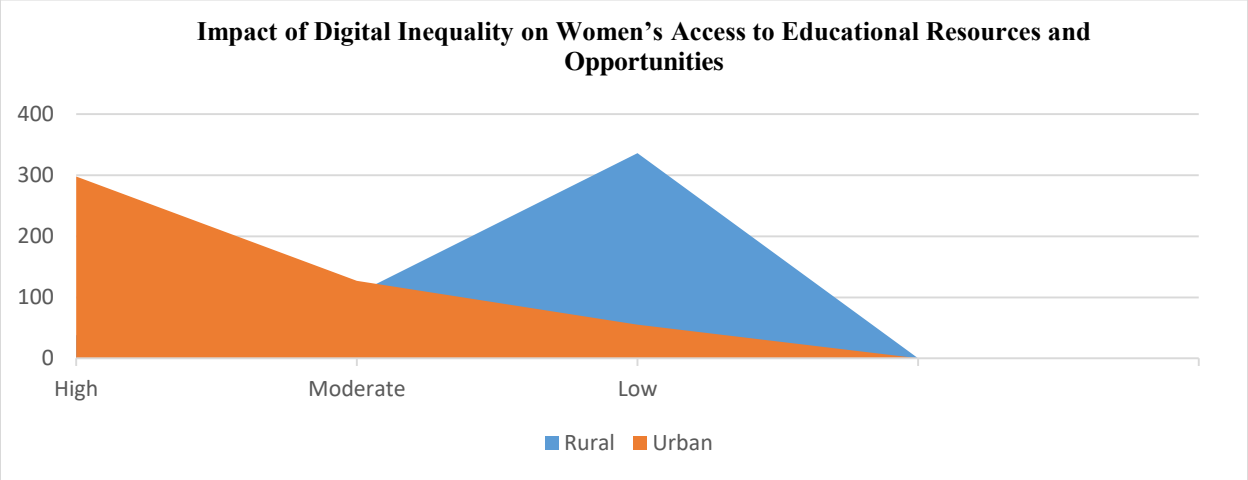

Figure 2: Graph Indicating the Impact of Digital Inequality on Women's Access to Educational Resources and Opportunities

Table 2 and Figure 3 reveal that digital inequality significantly influences women's access to education in Oye Local Government Area of Ekiti State. Among rural women, only 7.9% reported high access to educational resources, while 70.0% experienced low access, resulting in a mean score of 1.38, categorized as low. In contrast, 62.1% of urban women reported high access and only 11.4% low access, with a mean score of 2.51, indicating high access. These findings highlight that rural women have limited access to digital technologies essential for online learning, e-libraries, and educational networking, whereas their urban counterparts benefit from greater digital connectivity and enhanced educational opportunities.

RQ 3: What are the major barriers preventing rural and urban women from utilizing digital technologies to access healthcare services and educational opportunities in Oye Local Government Area of Ekiti state?

Table 3: Comparative findings of major barriers preventing rural and urban women from utilizing digital technologies to educational opportunities in Oye Local Government Area of Ekiti state

Rank (Rural)	Barrier	Mean	Severity	Rank (Urban)	Barrier	Mean	Severity
1	Low Digital Literacy	2.60	High	1	Electricity Instability	2.13	High
2	Poor Network Connectivity	2.54	High	2	High Cost of Data/Devices	2.09	Moderate
3	Electricity Instability	2.52	High	3	Low Digital Literacy	2.05	Moderate
4	High Cost of Data/Devices	2.49	Moderate	4	Poor Network Connectivity	1.98	Moderate
5	Cultural/Religious Restrictions	2.27	Moderate	5	Cultural/Religious Restrictions	1.81	Low

Note: Mean responses ranges from 0 – 2.49 = Low; 2.50 and above = High

Table 3 highlights the key barriers limiting rural and urban women's use of digital technologies for accessing educational opportunities in Oye Local Government Area of Ekiti State, revealing notable differences in both type and intensity. Among rural women, the most critical barriers include low digital literacy (M = 2.60), poor network connectivity (M = 2.54), and electricity instability (M = 2.52), all rated as high constraints, while the high cost of data and devices (M = 2.49) and cultural or religious restrictions (M = 2.27) are moderate barriers. In contrast, urban women reported electricity instability (M = 2.13) as their highest challenge, followed by the high cost of data and devices (M = 2.09) and low digital literacy (M = 2.05) as moderate barriers, with poor connectivity (M = 1.98) and cultural or religious limitations (M = 1.81) posing lesser constraints. These findings underscore a pronounced rural–urban digital divide, where rural women encounter multiple high-level barriers stemming from infrastructural deficits, limited digital skills, and economic hardship, whereas urban women experience fewer and less severe challenges, mainly related to electricity and affordability.

RQ 4: What strategies can be adopted to bridge the rural-urban digital divide for women in Oye Local Government Area of Ekiti State?

Table 4: Strategies adopted to bridge the rural-urban digital divide for women in Oye Local Government Area of Ekiti State

Strategy	Area	High	Moderate	Low	Mean	Decision
Digital Literacy and Skills Training	Rural	352 (73.3%)	98 (20.4%)	30 (6.3%)	2.67	High
	Urban	298 (62.1%)	142 (29.6%)	40 (8.3%)	2.54	High
Affordable Internet and Devices	Rural	311 (64.8%)	122 (25.4%)	47 (9.8%)	2.55	High
	Urban	286 (59.6%)	138 (28.8%)	56 (11.6%)	2.48	High
Improved Network Infrastructure	Rural	326 (67.9%)	114 (23.8%)	40 (8.3%)	2.60	High
	Urban	244 (50.8%)	169 (35.2%)	67 (14.0%)	2.37	Moderate
Reliable Electricity Supply	Rural	301 (62.7%)	128 (26.7%)	51 (10.6%)	2.52	High
	Urban	254 (52.9%)	163 (34.0%)	63 (13.1%)	2.40	Moderate
Community Awareness and Advocacy	Rural	287 (59.8%)	141 (29.4%)	52 (10.8%)	2.49	High
	Urban	264 (55.0%)	152 (31.7%)	64 (13.3%)	2.42	Moderate

Mean responses ranges from 0 – 2.49 = Low; 2.50 and above = High.

Table 4 reveals that although all five strategies were considered important in addressing the rural–urban digital divide among women, their perceived levels of effectiveness varied between rural and urban respondents. Among rural women, digital literacy and skills training emerged as the most significant strategy (M = 2.67), followed by improved network infrastructure (M = 2.60) and affordable internet and devices (M = 2.55). Additionally, reliable electricity (M = 2.52) and community awareness or advocacy (M = 2.49) were also rated highly. In urban area, women prioritized digital literacy and skills training (M = 2.54) and affordable internet and devices (M = 2.48) as their top strategies, followed closely by improved electricity supply (M = 2.40). These findings suggest that in rural area, empowering women with practical digital skills and improving technological infrastructure are essential strategies for reducing digital inequality, supported by social awareness and community engagement. Although urban women enjoy better digital access, challenges related to affordability and unstable electricity still limit their sustained digital participation.

5 SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

5.1 Summary of Findings

The findings from the study reveal a significant disparity in digital access between women in urban and rural areas of Oye Local Government Area, Ekiti State. Urban women were found to enjoy greater access to digital technologies such as smartphones, internet connectivity, and ICT facilities, indicating that geographical location plays a crucial role in determining digital access. This finding aligns with Ajao and Osabohien (2021), who observed that infrastructural concentration and socioeconomic advantages in urban areas facilitate digital inclusion, while rural areas remain underserved. The results also corroborate World Bank (2020) reports that highlight the urban bias in technological investment and connectivity across developing nations, including Nigeria.

The study further revealed that rural women have limited access to digital tools necessary for online learning, e-libraries, and educational networking, whereas urban women benefit from improved connectivity and greater educational opportunities. This disparity underscores the widening digital gender divide, as documented by UNESCO (2019), which emphasized that rural women are doubly disadvantaged by gender and geography resulting in reduced access to educational and economic empowerment opportunities. Similarly, Adesina and Oyedele (2022) found that women in rural Nigeria are often constrained by low income, inadequate ICT facilities, and minimal exposure to digital literacy programs, limiting their participation in online education and e-commerce initiatives.

The findings also underscore a pronounced rural–urban digital divide, where rural women face multiple high-level barriers stemming from infrastructural deficits, limited digital skills, and economic hardship, while urban women experience fewer and less severe challenges, mainly related to electricity instability and affordability. This is consistent with Okeke and Nwosu (2020), who asserted that inadequate infrastructure, particularly poor internet penetration and erratic electricity supply remains a fundamental cause of digital exclusion in Nigeria's rural regions. Moreover, Gurumurthy and Chami (2021) highlighted that socioeconomic inequalities and limited technological literacy among rural populations perpetuate digital marginalization, especially for women.

From a policy and practical perspective, the findings suggest that empowering rural women with digital skills and improving technological infrastructure are essential strategies for bridging digital inequality. These should be complemented by community-based awareness programs and partnerships with local organizations to promote digital literacy and inclusion. The implication is that digital access must be approached not merely as a technological issue but as a social and economic development imperative. Supporting this, International Telecommunication Union (ITU, 2022) emphasized that digital equity can only be achieved through inclusive policies that address infrastructural, educational, and gender-specific barriers simultaneously.

5.2 Conclusion

The findings of this study reveal that geographical location plays a crucial role in determining women's access to digital technologies in Oye Local Government Area of Ekiti State, with urban women enjoying greater access to smartphones, internet connectivity, and ICT facilities, while rural women face significant challenges arising from infrastructural deficits, limited digital literacy, and economic hardship. This pronounced rural–urban digital divide restricts rural women's participation in online learning, e-libraries, and educational networking, thereby widening existing social and economic inequalities. To bridge this gap, it is essential to strengthen digital infrastructure, promote affordable internet access, and implement gender-responsive digital literacy programs that empower rural women with practical skills for effective digital engagement. Although urban women have relatively better digital access, affordability issues and unstable electricity still hinder their sustained participation. Therefore, fostering equitable digital inclusion through targeted policies, community-based interventions, and infrastructural investments is imperative for achieving Sustainable Development Goals (SDGs) 4, 5, and 9, which emphasize quality education, gender equality, and innovation through resilient infrastructure, thereby positioning digital empowerment as both a developmental and social justice imperative.

5.3 Recommendations

Based on the findings, the following recommendations were made:

- **i.** The government and private sector should expand ICT infrastructure in rural areas to ensure reliable internet connectivity and reduce the rural–urban digital gap.
- **ii.** Digital literacy programmes should be established to equip rural women with practical skills for education, entrepreneurship, and effective technology use.
- **iii.** Affordable access initiatives, such as subsidized data plans and low-cost smartphones, should be introduced to make digital participation accessible to all women.
- **iv.** Public–Private Partnerships (PPPs) should be strengthened to fund and sustain digital inclusion and empowerment projects in underserved communities.
- **v.** Community awareness campaigns should be organized to promote the importance of digital participation among rural women through local associations and civil groups.
- **vi.** Renewable energy solutions, especially solar-powered ICT centres, should be implemented to overcome electricity challenges in rural areas.
- **vii.** The government should formulate and enforce gender-sensitive ICT policies that prioritize women's digital inclusion in national development plans.
- **viii.** Continuous monitoring and evaluation systems should be established to assess the impact and sustainability of digital inclusion programs across communities.

6 REFERENCES

[1] Adesina, O. & Oyedele, T. (2022). Gendered access to digital technologies in rural Nigeria: Barriers and prospects for women empowerment. *Journal of African Development Studies, 18*(2), 45-59.

[2] Adewuyi, O. P. (2021). Electricity instability and internet affordability: Challenges of digital participation in Nigerian urban centres. *International Journal of Technology and Society, 7*(1), 33–47.

[3] Afolayan, F. F. (2018). Digital inclusion and rural development in Nigeria: Challenges and prospects. *Nigerian Journal of Communication, 15*(1), 122–134.

[4] Ajao, A. & Osabohien, R. (2021). Urban–rural differentials in digital inclusion and socioeconomic development in Nigeria. *African Journal of Economic Policy, 28*(1), 105–123.

[5] Akinsuroju, O. E. (2025). Evaluating the effectiveness of UNESCO's educational planning models in promoting cultural diversity in Nigerian schools. *Cultural Odyssey: 20 Years of Implementation of UNESCO's 2005 Convention in Nigeria, 5*(1), 229-240.
[6] Akinsuroju, O. E., Olofin, T. B., Togunloju, T., Bankole V. M. & Oladapo, O. B. (2024). Revolutionizing education in Nigeria: Leveraging artificial intelligence (AI) for innovative leadership and policy development. *Nigerian Journal of Educational Administration and Planning (NJEAP), 24*(3), 237-258.
[7] Akinsuroju, O. E. (2023). Educational planning in Nigeria. *Bolupe Awe (Ed) Fundamental Concepts of Educational Management,* 168-193.
[8] Business Day Nigeria. (2024). 2 in 3 Nigerian women missing out on mobile internet boom. https://businessday.ng/technology/article/2-in-3-nigerian-women-missing-out-on-mobile-internet-boom/ accessed on 22/04/2025.
[9] Ekundayo, H. T. & Akinsuroju**,** O. E. (2022). Policy implementation of universal basic education programme in rural and urban Nigeria: Evaluation on teachers' development, provision and maintenance of physical resources. *Merit Research Journal of Education and Review, 10*(10), 163-172.
[10] Freedom House (2023). Freedom on the net 2023: Nigeria. https://freedomhouse.org/country/nigeria/freedom-net/2023 accessed on 21/04/2025.
[11] GSMA (2023). The mobile gender gap report. https://www.gsma.com/r/mobilegender-gap/ 21/04/2025.
[12] Gurumurthy, A. & Chami, N. (2021). Digital justice: A feminist agenda for the digital economy. IT for Change. *Journal of Educational Administration, 11*(2), 120-128.
[13] Ibrahim, R. & Adu, K. (2020). Barriers to digital inclusion in rural communities in Nigeria. *Journal of African Development Studies, 12*(2), 98–110.
[14] International Telecommunication Union (2024). Global internet access statistics. https://www.itu.int/en/mediacentre/Pages/PR-2024-11-27-facts-and-figures.aspx accessed on 21/04/2025.
[15] International Telecommunication Union (2023). The Gender Digital Divide Report 2023. https://www.itu.int/itu-d/reports/statistics/2023/10/10/ff23-the-gender-digital-divide accessed on 21/04/2025.
[16] International Telecommunication Union (2022). Measuring digital development: Facts and figures 2022. *Geneva: ITU Publications,* 45-52.
[17] LinkedIn Pulse. (2024). Closing the gender digital divide: Women and access to technology. https://www.linkedin.com/pulse/closing-gender-digital-divide-women-access-technology accessed on 21/04/2025.
[18] London School of Economics Africa Blog (LSE Africa). (2023). Women Remain Excluded from the Internet in Nigeria. https://blogs.lse.ac.uk/africaatlse/2023/06/16/women-remain-excluded-from-the-internet-in-nigeria/ accessed on 21/04/2025.
[19] National Bureau of Statistics (2021). ICT access and usage survey report in Nigeria. Abuja: NBS.
[20] Okeke, C. & Nwosu, P. (2020). Bridging the rural–urban digital divide in Nigeria: Infrastructural and policy perspectives. *African Journal of Information Systems, 12*(3), 189–205.
[21] Okereke, M. (2020). Maternal health service utilization and digital access in rural Nigeria. *African Journal of Reproductive Health, 24*(3), 52–63.
[22] Oyelaran-Oyeyinka, B. & Adeya, C. N. (2004). Internet access in Africa: Empirical evidence from Kenya and Nigeria. *Telematics and Informatics, 21*(1), 67–81.
[23] The Guardian. (2025). Female entrepreneurs and internet access in developing countries. https://www.theguardian.com/global-development/2025/mar/20/cost-data-developing-world-

digital-women-in-business-report-female-entrepreneurs-internet-access accessed on 21/04/2025.
[24] UNESCO (2022). Gender and the digital divide: A global perspective. *Paris: UNESCO Publishing,* 75-81.
[25] UNESCO (2019). I'd blush if I could: Closing gender divides in digital skills through education. *United Nations Educational, Scientific and Cultural Organization.*
[26] UNICEF. (2020). COVID-19 and digital learning: Unequal opportunities in education. *New York: UNICEF,* 102-113.
[27] UN Women (2021). Closing the gender digital divide in Africa. *New York: UN Women,* 56-71.
[28] Viamo (2024). Digital Divide and Women. https://viamo.io/viamo-platform/digital-divide-women
[29] World Bank (2016). World development report 2016: Digital dividends. *Washington, DC: World Bank,* 85-101.
[30] World Bank (2024). Bridging the Gender Gap in Digital Access: Mobile Internet Usage in LMICs. https://documents1.worldbank.org/curated/en/099022924054584089/pdf/P1805721f6ca4402c1905b12c4337f89bb8.pdf accessed on 21/04/2025.
[31] World Bank (2020). World development report 2020: Trading for development in the age of global value chains. *Washington, DC: World Bank Publications,* 31-33.

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