ASSESSMENT OF DIGITAL COMPETENCES OF NOT IN EMPLOYMENT, EDUCATION OR TRAINING (NEET) YOUTH IN SELECTED RURAL COMMUNITIES OF ANAMBRA STATE, NIGERIA

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Abstract
The study was conducted to assess the digital competences of the youth not in employment, education, or training (NEET) in selected rural communities of Anambra state. The study adopted cross sectional design on a target population of all NEET youth in the rural communities of Anambra state whereby multistage sampling was used to select 240 NEET youths aged between 15-29 years from12 ward units in 6 local government areas of the state. A structured questionnaire with sections on the socio-economic factors of the NEET youth, an adapted European Union framework for measuring digital competences and factors of rural communities that influenced level of digital competences of these entities was used to elicit information for the study. The emanating data were analyzed using frequency, percentage, mean, 4-point nominal scale, chi-square, ranking and Cramer's V. The findings of the work about the socio-economic characteristics of the youth were that 65 percent were female, 77.92 percent were still single while 72.5 percent were aged between 22-29 years. Majority (62.50 percent) of these youths' annual income ranged from ₦0 to ₦200,000. Digital competences (knowledge, skill and attitude) of these youth in relation to communication and collaboration as well as safety components were found to be high. Statistically, these NEET youth in rural communities showed 50 percent in low competences in the items of composition for information of data literacy,75 percent low competences on digital content creation and problem solving. Age, gender, educational level, income and mental status were found to be significant factors ($p<0.05$) that influenced the level of NEET youths' digital competences in the study area. Additionally, considering the calculated Cramer's V coefficients of the NEET youths selected socio-economic factors, the effect size was very strong for income and gender whereas educational level, age and marital status showed strong associative effects. The high cost of initial acquisition of digital tools, digital infrastructure deficit, limited internet bandwidth, unavailable job opportunities for digital experts in the community and the high cost of acquiring digital training were highly ranked (over 70 percent) factors in the rural communities of Anambra state that affected digital competences of these youth. NEET youths in rural communities of Anambra state, nonetheless, have digital competences that embody some knowledge, skill and attitudes across the 5 components of the DigComp 2.2 framework. Finally, the need to incentivize digital skill training, ICT companies' commitment to providing digital skills for youths as part of their Community Social Responsibility (CSR) while encouraging self-help for digital provisions (such as off-grid energy source) by communities as well as gender sensitivity and inclusion in digital skills programming were important recommendations from the study.

Keywords: Assessment, Digital Competence, Rural Communities, Youth

Introduction

The increasingly digitized world has provided the need for continued knowledge, skills and attitude required for daily survival, education and functioning in the world of work. Digital competence and literacy is key to inclusive youth citizenship, education, employment and development (European Union EU, 2022; Manuela, 2016; Adesugba & Mavrotas, 2016). Abundance of literature exist on different conceptions and definitions on digital competence, which often is not properly delineated, and referred in other instances as digital literacy or digital skill. Evidently, it has been observed particularly that digital literacy is most commonly interchanged with digital competence (Spante *et al* 2018). The European Union (EU) Digital competence framework for citizens referred to as DigComp 2.2 comprehensively conceptualized digital competence as a combination of knowledge, skills and attitudes in five areas: information and data literacy; communication and collaboration; digital content creation; safety; and problem solving (EU, 2022). Organization for Economic Cooperation and Development OECD (2019) conceptualizes skills for a digital world as a holistic set of skills for a digital society, and skills for a digital world of work and learning in a digital environment. According to United Nations Educational, Scientific and Cultural Organization UNESCO (2018), digital literacy is the ability to access, manage, understand, integrate, communicate, evaluate and create information safely

and appropriately through digital technologies for employment, decent jobs and entrepreneurship. It includes competences that are variously referred to as computer literacy, ICT literacy, information literacy and media literacy. There is a growing consensus to forge a common understanding of these formulated definitions, nonetheless, what you have embedded in all these, are those required knowledge, skills and attitudes for functioning in an ICT eco-system. In this paper, these terms shall also be interchangeably used, without losing focus on digital competence that is the operational term in the work.

In Nigeria, about 53.40 percent of youth population is unemployed (National Bureau of Statistics NBS, 2022). This scary figure is in spite of several initiatives of governments to create jobs for youth. The global unemployment rate for adult is put at 4.3 percent and youth 13 percent (International Labor Organization ILO, 2018), while young people are three times more unsuccessful when seeking employment (UNESCO, 2015). The youth bulge and severe unemployment in Nigeria suggests the need to provide skills for youths in areas with potential for job creation and solution to our developmental challenges. In Anambra state, the government is currently implementing a youth digital competence program known as Anambra Digital Tribe(ADT) through her Ministry of Youth Development.

The Sustainable Development Goals (SDG 8.6) has made NEET a tool to measure youth unemployment in labor market (United Nations, 2015). NEETs include most of the young unemployed, excluding a small group of young who are both unemployed and in education (ILO, 2018). NEET rate is a broader concept encompassing all young people who are for whatsoever reasons not studying or working for pay or profit. It is consequently larger, as well as more heterogeneous group than the unemployed (O'Higgins *et al,* 2023). Decreasing this rate can be achieved both by increasing entry into employment and increasing participation in education and training. Globally, there is a concern about the growing number of young people who are neither in employment, education or training. In 2020, it was reported that more than one in five (22.4 percent) young people aged between 15-24 years were neither in employment, education or training, two out of every three of these NEETs (67.5 percent) are young women, who thus outnumber men two to one. Also, whereas one in seven (14 percent) of young men are NEET, for young women the figure is closer to one in three (31.2 percent) (International Labor Organization-Swedish International Development Cooperation Agency ILO-SIDA, 2019). These scenarios call for concern and need for knowledge and new insights as to how to promote competences and skills that could be valuable for youth employment, education and training in our country. Young people who are neither in employment nor in education or training are at the risk of becoming socially excluded if effective actions are not taken urgently. They would virtually remain at income below the poverty-line and consequently lack capacities for improving their economic conditions. The ability to use technologies in professional and academic circles as well as the necessary cautions will increasingly become essential for a successful career(Butcher,2014).

Another dimension of the problem is the existence and persistence of a digital divide. Rural areas continue to face digital inequality compared to urban areas (Velaga *et al,* 2012). The SDG4 captures the global aim to ensure inclusive and equitable quality education and promotion of life-long learning opportunities for all (United Nations, 2015). As at 2022, 82 percent of people living in urban areas across the world were using the internet, which was 1.8 times higher than the percentage of internet users in rural areas (International Telecommunication Union (ITU), 2022). Rural divide is the type of digital divide to those living and working in rural and remote areas since the lower rates for data access for these citizens place them at disadvantage when compared to their metropolitan counterparts. For these citizens, the problems of missing infrastructure, incentive and computer literacy, a factor leading to digital divide are bigger and more difficult to solve (Garafalakis & Koskeris, 2020). The structural rigidities in rural communities come up as critical element not only to digital inclusion but to employability, education and training of citizens. Several studies show the desire of these inhabitants for digital technologies but are often hampered by infrastructure, digital skills and literacy, social exclusion and poverty, access to internet and cheap devices (Uneze, Egor & Otaokpukpu, 2024; Jongebloed et al, 2024). At the instance of this problem comes also a need to empirically ascertain peculiar digital competences of NEET youth residing in these rural communities and then isolate those hindering factors that would necessitate policy actioning for the desired digital literacy. The influence of digital skills at promoting rural labor force employment is widely confirmed by several studies (Zhu & Li 2022; Mou, Diao & Huo 2021; Lissitsa & Chachashvili-Bolotin 2019; Manuela 2016). Essentially though, these digital competences and their proficiency levels as they relate specifically to NEET youth in rural communities have not been fully characterized and understood. It is in the light of the foregoing, that this paper broadly aims to assess the

digital competences of youth not in employment, education or training in rural communities of Anambra state, Nigeria. The specific objectives of the study are to:

1. Find out the socio-economic characteristics of NEET youth in rural communities of Anambra state
2. Determine the digital competences of NEET youth in rural communities
3. Identify the challenges of the rural communities that have hindered the advancement of digital skills among NEET youth

Research Questions

1. What are the socio-economic characteristics of NEET youth in rural communities of Anambra state?
2. What digital competences are possessed by NEET youth in rural communities of Anambra state?
3. What difficulties in rural communities are responsible for hindering digital competences of NEET youth resident in these areas?

Research Hypothesis

H0: There is no significant influence of rural NEET youths` socio-economic characteristics on their digital competences

The findings of this study would help in formulating appropriate policies necessary for scaling digital literacy and specifically help in remediating or bridging the rural digital divide. Further, it would help to improve the employability of youth in rural areas when such policies are properly actioned.

Methodology

The study was conducted in Anambra State. The state lies within the tropical rainforest zone of South Eastern Nigeria. Anambra State is situated between latitudes 5^0 32' and 6^0 45' N and longitude 6^0 43' and 7^0 22' E. It has an estimated land area of 4,865Sq km with a population of 4,177828 people (National Population Commission NPC, 2006). The state is comprised of 21 local government areas (LGAs) that are grouped into 3 senatorial constituencies of Anambra south, Anambra central and Anambra North. The population density of the state is 860/km^2 and her Human Development Index (HDI) in 2022 was 0.662, classified as medium and being ranked 3rd out of the 36 states. Anambra is equally placed 6th amongst the other states with a GDP of ₦5.14 trillion (BudgIT, 2022). The state's unemployment of 13.1percent is one of the lowest in Nigeria (National Bureau of Statistics NBS, 2020)

A cross sectional research design was employed in this work. In selecting the sample of the study, a multistage sampling technique was adopted. First, two local government area chapters of National Youth Council of Nigeria (NYCN) were purposively selected from each of the 3 senatorial districts of Anambra state. This came to a total of 6 LGA chapters of NYCN, thereafter, two ward units of the association were then randomly selected, bringing it to a total of 12 ward units of NYCN. Further, 20 NEET youths aged between 15-29years were then selected through a simple random sampling technique from each of the 12 sampled ward units. The eventual sample size of the study came to 240 NEET youths in 12 ward units of NYCN. The adapted age of 15-29 years followed the current national youth policy description of youth (Federal Republic of Nigeria FRN, 2019). The distribution of the sample is shown in Table 1.

Table 1: Distribution of sample size of the study

NYCN ward units	LGA chapter	Senatorial district	Number of NEET youths
Nimo III (ward17)	Njikoka	Anambra Central	20
Nawfia II (ward 4)	Njikoka	Anambra Central	20
Okpuno (ward 9)	Awka South	Anambra Central	20
Mbaukwu (ward 13)	Awka South	Anambra Central	20
Ogbunike I (ward 12)	Oyi	Anambra North	20
Umunya I (ward 14)	Oyi	Anambra North	20
Okpoko (ward 11)	Oyi	Anambra North	20
Atani I (ward3)	Ogbaru	Anambra North	20
Ezira (ward 5)	Orumba South	Anambra South	20
Nawfija (ward 8)	Orumba South	Anambra South	20
Amichi I (ward 2)	Nnewi South	Anambra South	20
Amichi III (ward 4)	Nnewi South	Anambra South	20
Total			**240**

Source: own elaboration

The data were collected using a structured questionnaire, divided into 3 sections (A-C). Section A sought information about the NEET youths' background and socio-economic conditions regarding age, educational level, gender, income and marital status. It further raised questions on how these socio-economic factors are associated with their digital competences. Section B adapted the updated version of EU digital competence framework for citizens (DigComp 2.2). This framework was modified inoder to extract information from subjects regarding their extent of agreement on the stated competences over a 4-point rating scale of very high (4), high (3), low (2) and very low (1). The framework embodies digital competences conceived around knowledge, skills and attitudes in 5 areas: information and data literacy; communication and collaboration; content creation; safety; and problem solving. In all, there are 20 items in this framework for measuring the 5 digital competence components. Finally, section C composed of 7 difficulty factors of rural communities that hinder digital literacy of NEET youths, to which they were expected to tick in multiple responses as the factors apply to them. Cronbach's alpha was used to determine the reliability or internal consistency of the set of items regarding various concepts in the questionnaire. The calculated coefficient was 0.89, signifying that the instrument is of high reliability.

Both descriptive and inferential statistics were used to analyze data from the study. The descriptive analytical tools of frequency, percentages and ranking were used to analyze data on socio-economic characteristics of NEET youth as well as their multiple responses on the factors of rural communities that hindered digital competences. A 4-point scale was used to evaluate the respondents' digital competences in the 5 components of DigComp 2.2 reflecting the extent of performance from Very high (VH) – 4points; High (H) – 3points; Low (L) – 2 points; and Very low (VL) – 1 point. The means of these responses were calculated with their interval and range. The 4 ranges for interpreting these means were determined as 0.99 – 1.00 for very low, 1.01-1.99 for low, 2.00 – 2.99 for high and 3.00 – 4.00 for very high (Chua & Yunus, 2020). The inferential statistics used were Chi-square and Cramer's V. Chi-square was used to measure the statistical significance of the association of socio-economic factors of the NEET youth and their digital competences. Cramer's V was then used to ascertain the effect size of the statistically significant association between these individuals' socio-economic factors and their digital competences. The Chi-square test statistic $\times^2$was mathematically determined as:

$\times^2 = \sum[(O_i-E_i)^2/E_i]$

Where Oi = Observed frequency

Ei= Expected frequency

Degree of freedom = (r-1) (c-1) for independence test and (no of categories-1) degree of freedom for goodness of fit test while r is the number of rows and c is the number of columns.

Cramer's V was mathematically determined as:

$V = \sqrt{\times^2/n.(c-1)}$

Where n= sample size and c= min(m,n) is the minimum of the number of rows m and column in the contingency table. The following approach was used to interpret the Cramer's V coefficient, $V\epsilon$[0.25; 1.00]: very strong association, $V\epsilon$[0.15; 0.25]: strong association, $V\epsilon$[0.10; 0.15]: moderate association, $V\epsilon$[0.05; 0.10]: weak association, $V\epsilon$[0; 0.05]: very weak association (Akoglu, 2018).

Results and Discussion

Research Question1

What are the socio-economic characteristics of NEET youth in rural communities of Anambra state?

Table 2: Selected socio-economic characteristics of NEET youth in rural communities of Anambra state

Factor	Frequency (N=240)	Percentage
Age (years)		
15 – 21	66	27.5
22 -29	174	72.5
Gender		
Male	84	35.0
Female	156	65.0
Educational level		
No formal Education	36	15.0
Primary Education	85	35.4
Secondary Education	67	27.9
Tertiary Education	52	21.7
Marital status		
Single	187	77.9
Married	53	22.1
Income/year(₦)		
0 - 100,000	52	21.7
100,001 - 200,000	98	40.8
200,001 – 300,000	55	22.9
>300,000	35	14.6

Source: field survey, 2024

The summary of selected socio-economic characteristics of NEET youth in rural communities of Anambra state is shown in Table 2. This summary showed that 72.5 percent of this group belong to the age bracket of 22-29years, while 27.5 percent were aged between 15-21years. The result signifies that majority of this group should have completed their education or training if they were so involved in any of these. These entities are by their ages prepared for the world of work, if they were in labor force. The higher percentage of this group belonging to the age range of 21-29years is unfortunately, consistent with the current reality of high youth unemployment in Nigeria (NBS, 2022). In fact, this scenario is often occasioned by the absence of requisite digital skills of the youth to function in the now competitive job market. In considering the factor of gender, there is a predominance of females among the NEET youth in the study area. The result showed that 65 percent were female while male constitute 35 percent of these entities. This may be directly explained by the reason that females make up the greater percentage of the Nigerian population. Nonetheless, the result of greater percentage of females equally agrees with reports of some development agencies that relate to NEET (OECD 2023; ILO/SIDA 2019). Majority of the youth were single (77.9 percent) while those who are married stood at 22.1percent. Arguably, if the income status of these NEET youth, where 62.5 percent earn between ₦0 – ₦200,000 per annum is considered, the constraining factor of poor earning power could influence why majority have currently remained single. Income and educational level generally are important considerations that would enhance digital literacy and effective functioning of citizens in the society.

Research Question 2

What digital competences are possessed by NEET youth in rural communities of Anambra state?

Digital competences of NEET youth following the DigComp2.2 across the 5 component areas of information and data literacy; communication and collaboration; digital content creation; problem solving; and safety are shown in Table 3, Table 4, Table 5, Table 6 and Table 7 respectively.

Table 3: Competence on information and data literacy

S/N	Factor	VH	H	L	VL	Mean
1	I can articulate information needs	31	28	103	78	1.94*
2	I can locate and retrieve data, information and content	62	88	56	34	2.74**
3	I can judge the relevance of the source and its content	23	33	112	66	2.08**
4	I can store, manage and organize digital data, information and content	18	62	122	38	1.86*

*low competence [mean 1.00-1.99] **high competence [mean 2.00-2.99]
Source: field survey, 2024

In Table 3, for competence on information and data literacy, NEET youth showed high competence in areas of data information location and retrieval as well as the ability to judge relevance of the source and content of data and information. Their competences on articulating information need; storing, managing and organizing data, information and content were low [mean between 1.00-1.99]. Statistically, this result meant that the NEET youth in rural communities had high competences [mean between 2.00-2.99] in 50 percent of the needed knowledge, skill and attitude in this component area. The mean of 1.86 in item 4, suggests that these youth have low-skill on basic issues around data storage, management and organization.

Table 4: Competence on communication and collaboration

S/N	Factor	VH	H	L	VL	Mean
1	I can interact, communicate and collaborate through digital technologies	34	87	82	40	2.47**
2	I respect and use appropriate communication in the internet (Netiquette)	60	77	83	20	2.74**
3	I participate in society through public and private digital services and participatory citizenship	82	79	53	66	2.90**
4	I manage my digital presence, identity and reputation	66	77	59	38	2.71**

**high competence [mean 2.00-2.99]
Source: field survey, 2024

In Table 4, all the 4 items that are descriptive of competence on communication and collaboration were found to be high [mean between 2.00-2.99]. The result of this category showed that NEET youth in rural communities participate in societal activities through interaction, communication, collaboration with digital technologies while observing appropriate use of language and respect. The preponderance of social media use such as Meta, Instagram, WhatsApp and Telegram among the youth generally explains these high competences. Nonetheless, the location of these entities in rural communities did not constrain their knowledge, skill and attitude in communication and collaboration using digital technologies. Several previous studies had equally identified high rate in the use digital gadgets for social media communication and social relationships among the youth (Zanic, Miletic & Milak 2023; Livingstone 2014). Therefore, digital competences of NEET youth regarding online communication and collaboration in respect to tools such as mobile phones, emails, video conferencing are high in the virtual space.

Table 5: Competence on digital content creation

S/N	Factor	VH	H	L	VL	Mean
1	I can create and edit digital content	16	33	122	69	1.98*
2	I can improve and integrate information and content into existing body of knowledge	21	40	86	93	1.95*
3	I understand how copyright and license are to be applied	33	17	88	102	1.92*
4	I know how to give understandable instruction for a computer system	31	43	87	29	2.53**

*low competence [mean 1.00-1.99] **high competence [mean 2.00-2.99]
Source: field survey, 2024

Findings from Table 5, regarding the category of digital content creation among youth in rural communities showed that 75 percent of the knowledge and skill areas were low [mean between 1.00-1.99]. However, only the knowledge on how to give instruction to computer system was found to be high [mean between 2.00-2.99]. This indicates that NEET youth in rural areas have challenge in their competences at creating digital content, ability to improve and integrate information and content, along with understanding how copyright and license were to be applied. Items 1and 2 in this component with means of 1.98 and 1.95 respectively brings the need to focus on improving writing and editing skills of these youth residing in rural communities. Surprisingly, as important as copyright and license is, in property right, the youth had low [mean between 1.00-1.99] understanding at it. This situation portends a great danger, particularly when infringement and guarding intellectual rights and are concerned. Moreover, digital content creation has become an important skill for functioning in contemporary labor market. The implication here is that many of the NEET youth may have been unemployed because of this skill deficiency.

Table 6: Competence on safety

S/N	Factor	VH	H	L	VL	Mean
1	I can protect devices, content, personal data and privacy in digital environment	53	106	67	14	2.83**
2	I can protect physical and physiological health	18	77	82	63	2.20**
3	I am aware of digital technologies for social well-being and social inclusion	62	122	38	18	2.95**
4	I am aware of environmental impact of digital technologies and their use	55	88	76	21	2.74**

**high competence [mean 2.00-2.99]
Source: field survey, 2024

The result of all the items on this category of digital competence of NEET youth on Safety is shown in Table 6. All the 4 items in this category were found to be of high levels of competences [means between 2.00-2.99]. These according to their descending order of means were: awareness of digital technologies for social well-being (2.94); ability to protect devices, content, personal data and privacy (2.83); awareness of environmental impacts of digital technologies and their use (2.74); and ability to protect physical and physiological health (2.20). The high levels in safety competences of NEET is considered important, given the growing need to guard personal data and privacy in the digital ecosystem. These skills and knowledge on security around digital technologies are valuable for the labor market transitioning of the youth as well as in e-commerce, mobile financial transaction and social media spaces. Also, the findings in this category, relate

to the importance of cybersecurity in the digital world. Globally, the incidences of cyberattacks and threats are notable in areas of malware, phishing and ransomware. The findings agree with a study at the university of Majmah, Saudi Arabia, where young students were found to be much aware of security tools, phishing, encryption, browser safety, social networking and other related knowledge (Alharbi & Tassaddiq, 2021). In contrast to this, some studies had identified the lack of skill in cybersecurity of digital networks among citizens, particularly of those in developing countries (Kabiru et al 2023; Onyema et al 2021).

Table 7: Competence on problem solving

S/N	Factor	VH	H	L	VL	Mean
1	I can identify needs and problems	32	32	142	34	2.26**
2	I can resolve conceptual problems and problem situations in digital environment	15	30	83	92	1.95*
3	I can use digital tools to innovate process and products	18	52	52	118	1.88*
4	I keep up to date with digital evolution	27	15	92	96	1.92 *

*low competence [mean 1.00-1.99] **high competence [mean 2.00-2.99]
Source: field survey, 2024

Table 7, shows results from respondents on items that relate to the problem-solving category of the digital competence framework. Item 1, on the ability to identify need and problem with mean of 2.26, was the only factor that showed up in high competence. This means NEET youth had only the skill to use the internet to find information needs and problems without necessarily knowing how to use software to resolve problems as seen from the mean of 1.95 on item 2. The mean of 1.88 in item 3, signifies low competence of NEET youths in this skill. This youth also had a low-level competence regarding their ability to keep up to date with digital evolution (mean of 1.92). Statistically, these entities had an overall 70 percent low competence in problem solving category of the framework.

Research Question 3

What difficulties in rural communities influence the level of digital competences NEET youth?

Table 8: Difficulties in rural communities that affect digital competences of NEET youth

S/N	Factor	Frequency (N=240)	Percentage
1.	Dearth of ICT/digital training centers and industry vendors	153	63.75
2.	Absence of skilled manpower for facilitating knowledge transfer in digital technologies	158	65.83
3.	High cost of initial acquisition of digital tools	213	88.75**
4.	Internet connectivity (bandwidth) limitation	202	84.17**
5.	Digital infrastructure deficit	205	85.42**
6.	High cost of acquiring relevant digital skills	186	77.50**
7.	Lack of available job opportunities for digital youth experts	198	82.50**

** Responses over 70 percent (multiple responses)
Source: field survey, 2024

From Table 8, high cost of digital tools (88.75 percent), digital infrastructure deficit (85.42percent), internet bandwidth limitation (84.17 percent), lack of digital job opportunities for digital youth experts (82.50 percent) and high cost of acquiring relevant digital skills (77.50 percent) were dominant factors in the rural communities that had limited digital competences of NEET youths. The lack of income earning sources among these youth was a pre-condition for their inabilities to acquire necessary digital tools and skills. Uneze, Egor & Otaokpukpu (2024) in a study on factors affecting digitalization by rice farmers in Anambra state, equally identified infrastructure access deficiency, internet connectivity limitation and high cost of digital tools as significant technological factors.

Research Hypothesis

HO: There is no significant influence of rural NEET youths` socio-economic characteristics on their digital competences

Table 9: Chi-square test of rural NEET youths selected socio-economic factors that are associated with their digital competences

Factor	Chi-square (X^2)	Probability (p)	Cramer's V
Age	7.50	0.0062*	0.1768
Gender	15.23	0.000095*	0.2519
Educational level	13.48	0.00024*	0.2370
Income	16.06	0.000061*	0.2587
Marital status	6.89	0.0087*	0.1694

Test at 0.05 level of significance *p<0.05

Source: field survey, 2024

The result above is on how NEET youths' digital competences are associated with Age, Gender, Educational level, Income and Marital status as elected socio-economic factors of the youth. All the 5 socio-economic factors of the NEET youth were significantly associated with their digital competences at 5% level of significance (p<0.05). The Cramer's V as shown depicts how strong each of these associations exist. Income and Gender with Cramer's V of 0.2587 and 0.2519 had very strong associative effect $V\epsilon$[0.15; 0.25] whereas Educational level, Age and Marital status with coefficients of Cramer's V of 0.237, 0.1768 and 0.1694 respectively showed strong association $V\epsilon$[0.10; 0.15], with digital competences of NEET youth. The role of income in supporting digital competence is very explainable, particularly given that this group of youth does not have a livelihood source that could enhance their purchasing capacity for digital tools, bandwidth and required trainings. This is consistent with the finding in Table 1, where 62.5 percent of the NEET youth had income of between ₦0 –₦200,000 per year. Consequently, the implication of this scenario is the attendant low levels of digital competences of NEET youths in rural communities. In agreement with this finding, Braun, Nisser & Merten (2020) in their work found that the level of digital skills of students were dependent on educational background, age, gender and country.

Conclusion

This study on digital competences of NEET youth in rural areas recognizes that there are many and even specific sector and industry digital skills along their frameworks for assessment. However, the DigComp2.2 framework was used because of its robustness to majorly define, measure and assess digital competence while also noting the fact of its pervasive adoption in a broader scope for those digital skills needed for global labor market. The findings of the study offer clarity on the state of the NEET youths' digital competences in rural communities of Anambra state. Again, the result of the work may have been limited by the sample size utilized in the study but its validity is not discounted. NEET youths in rural communities of Anambra state, nonetheless, have digital competences that embody some knowledge, skill and attitudes across the 5 components of the DigComp 2.2 framework. The socio-economic factors of NEET youths highlighted in the study provided a strong basis in understanding various endogenous factors of these rural communities that hamper digital skill development. Importantly, the low-income status and gender of these NEET youths were critical difficulties to acquiring and accessing required digital skills and tools. Nonetheless, as much as the majority of these NEET youth may have had education at up to secondary school level, education also remains a factor for enhancing digital competence of the group.

Recommendations

The following important recommendations emerged from various findings of this work:

1. There is a deliberate need for government, community-based organizations, philanthropic organizations and donor agencies to incentivize and subsidize youth-targeted digital skills training in rural communities.
2. ICT companies, National Communications Commission (NCC), National Information Technology Development Agency(NITA) etc. should as part of their Community Social Responsibility (CSR), need to promote specific job skills for youth that would prepare them for the digital labor market and effective societal functioning.

3. Rural communities in their self-help development projects should promote off- grid power systems and renewable energy (such as solar) as steps to ameliorate infrastructure deficit for digitalization.
4. Anambra state government should ensure gender inclusion in promoting digital skill training and development schemes.
5. Schools at various levels in the state and job training centers should be up to date in digital skills/technologies while ensuring that their programs promote user friendly systems and applications.
6. There is need for the government in the state to mine relevant data and statistics of NEETs for effective planning and right policy intervention in her digital sector.
7. Researchers in the academia are encouraged to heighten studies in the domain of NEET youth in order to provide more evidence-based findings for policies geared at tackling youth bulge and unemployment.

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