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Advocacy of AI skills acquisition a panacea for youth unemployment in South-South Nigeria

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Abstract

Advocating AI Skills Acquisition as a Solution for Youth Unemployment in Nigeria's South-South Region" investigates the feasibility of incorporating AI skills education to address the pressing issue of youth unemployment. This study explores youth awareness, interest, and willingness to engage in AI skill acquisition using a mixed-methods approach that includes surveys with unique features such as AI mentor circles and micro-credential programs. The findings show a strong interest in AI education, notably through micro-credential courses and AI mentorship networks. These novel ideas provide interesting opportunities for increasing employment and encouraging entrepreneurship. The study emphasizes the necessity of synchronizing policies and educational initiatives to harness the power of AI in reducing young unemployment and supporting long-term economic growth in the South-South region of Nigeria.

Keywords: *youth unemployment, AI skills acquired, early career modeling, decent jobs, AI mentorship networks, self-reliance, micro-credential courses*

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1.0 Introduction

The world is witnessing a major shift in technology and its application in difficult terrain. This ranges from artificial intelligence (AI) to machine learning and robotics. AI, in particular, has become a pervasive technology that is being used across industries, from agriculture to healthcare. Yet, there are still those who remain on the sidelines of this revolution, unable to reap the same benefits due to lack of access or resources. This is especially true for youth populations in developing countries such as South-south Nigeria, where unemployment rates are high and the acquisition of AI skills is yet to be advocated for. The lack of jobs has led to an increase in crime and violence, as well as a decline in the quality of life for many people. The government has been working to create more jobs, but the process is slow. In the meantime, advocacy groups have been promoting the acquisition of skills that can help youth find employment. Of such advocacy skills, there are the green revolution program, the school-to-land program and skill acquisition program, the youth employment and vocational skill development scheme of NDE, the small-scale industrial and graduate farmer program of NDE, and the national open apprenticeship scheme. According to (Idoko, 2021)[1] [1], various skill acquisition programs were initiated and implemented by governments and the private sector to meet the challenges confronting the youth, but the government's efforts appear defeated due to the increased rate of youth unemployment. There are not many youths working in AI firms in Africa, globally, or in AI-related fields. It is well known that decision-makers "drive the change and alter the drive." The decision-making process in any organization is highly influenced by the personalities and professionalism of the decision-makers. Because there are not enough qualified and skilled young experts in sensitive AI domains, the most crucial roles are always filled by foreign experts. This underrepresentation of qualified youth professionals is a major challenge. To increase enrolment in AI professional fields while increasing productivity and independence, it is critical to overcome the significant barriers that youths face in employment decisions and skill development. It's crucial to address early career placement, increased unemployment, and a lack of professionalism. The majority of youths are educationally under-resourced even with their first-degree certificates at hand therefore face the risk of decent jobs and self-

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reliance due to their lack of relevant skills. Most youths are thus denied flexible work arrangements, mentorship opportunities, and access to networking and professional development resources. To address these gaps, we intend to use South-South Nigeria as a case study to investigate the advocacy of AI skills acquisition as a panacea for addressing this major gap. This research focuses on the acquisition of advocacy and AI skills for youths in Nigeria.

1.1 Statement of the problem

"Youth unemployment in Nigeria's South-South region is a pressing socioeconomic challenge, hampered by traditional industry reliance and a lack of skill alignment with changing job market demands." Despite the potential of Artificial Intelligence (AI) as a driver of economic growth and job creation, there remains a skills gap among young people. This disparity not only worsens unemployment rates but also limits the region's capacity to tap into developing technical industries and diversify its economy. To address this issue, a systematic advocacy effort is needed to promote AI skill acquisition as a viable alternative for empowering young, encouraging entrepreneurship, and driving long-term economic development. To change the living conditions and mentality of youths from total dependence on menial jobs and employment in basic government parastatals and sectors to a productive economy that will enhance viable skills, decent job placement, and social protection for self-reliance and job creators.

2.0 Literature Review

The unemployment rate is defined as the total unemployed labor force percentage of the total labor force. The youth unemployment rate is the unemployed labor force in the age group of 15 to 24 years and is taken as a percentage of the labor force of that age group. In recent years, Nigeria has been experiencing a high rate of unemployment among youth above 24 to 35 years, especially in the South-South region. The lack of jobs has led to an increase in crime and violence, as well as a decline in the quality of life for many people. (Ajufo, 2013) [2]. The government has been working to create more jobs, but the process is slow. In the meantime, advocacy groups such as the National Directorate of Employment (NDE) have been promoting the acquisition of skills that can help youths find employment, (Ohize, 2009) [3]. Despite all the efforts by the government to reduce unemployment, there is rather a geometric increase from 16.18% in

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2018 to 34% in 2023. (Doku, 2019) [4]. The fast population growth, rural-to-urban migration, and lack of employable skills and experience among youths are the primary responsibility of youth unemployment. (Hällsten, *et al*., 2017) [5], (Casson, 1979) [6]. (Okon, Ojoko, *et al*., 2021) [7] discovered the unavailability of population data in GIS format at enumeration resolution, remains a challenge to obtaining accurate data on unemployed youth in a socially excluded community. One way to address the issue of youth unemployment is to advocate for the acquisition of AI skills (Kufre, Ofonime & Faithpraise, 2022) [8] on the development of a social networked management system with a Secured Deep-Link Access Mechanism. AI is a growing field with a lot of potential, which is estimated to contribute $15.7 trillion to the global economy by 2030. In Nigeria, AI application is found in predicting crime, improving agricultural productivity, and providing healthcare services. With the right training, youths in South-South Nigeria especially women can acquire these skills and use them to find employment. (Idika, Faithpraise et al., 2023) [9]. By teaching these skills to young people, they can help reduce unemployment rates and improve the quality of life for everyone in the region.

Our research objectives are to assess the level of awareness among the youth in the South-South region of Nigeria regarding the concept of Artificial Intelligence (AI) and their perceptions of its relevance to the job market.

To evaluate the interest and willingness of the youth to engage in AI skills acquisition as a means to enhance their employability and contribute to economic growth in the region.

To explore and analyze innovative approaches, such as AI skill micro-credential programs and AI mentor circles, that are perceived as effective solutions for addressing youth unemployment in the South-South region.

To examine the potential policy implications and challenges associated with advocating AI skills acquisition as a solution for alleviating youth unemployment, considering both educational and industry perspectives.

Based on the objectives, the following research questions were model

To what extent are the youth in the South-South region of Nigeria aware of the concept of Artificial Intelligence (AI) and its relevance to the job market?

What is the level of interest among the youth in acquiring AI skills to enhance their

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employability and contribute to economic growth in the region?

What innovative approaches, such as AI skill micro-credential programs and AI mentor circles, are perceived as effective solutions for addressing youth unemployment in the region?

What are the potential policy implications and challenges associated with advocating AI skills acquisition as a means to alleviate youth unemployment in the South-South region?

3.0 Methodology

Global trends in AI education reflect the growing recognition of its potential to address unemployment challenges. By integrating these innovative approaches into the survey design, the research not only gathers data on participants' perceptions and preferences but also offers them an opportunity to engage actively in the AI skills acquisition process. (Clement, Ozuomba & Faithpraise, 2020) [10] used an artificial neural network (ANN) to model and forecast the peak load demand in the Uyo metropolis using temperature, population, and GDP as the explanatory variables. So likely such methods will be applied in this model. AI mentor circles and AI skill micro-credentials are proposed vehicles for fostering community engagement, skill enhancement, and a proactive approach to addressing youth unemployment through AI education and the development of e-learning resources (Faithpraise, Ekanem & Ezekiel, 2023) [11]. As in the application of the Covid-19 vaccination acceptability survey, (Faithpraise *et al*., 2022) [12] and the zonal evaluation for siting a solar power plant in Cross River State, (Faithpraise & Edohoeket, 2019) [13] a mixed method approach was applied in the investigation and analysis. This approach involves integrating both quantitative and qualitative data collection and analysis methods to provide a more comprehensive and nuanced understanding of the phenomenon under investigation. A structured online survey was designed to collect quantitative data. The survey consisted of close-ended questions to assess youth awareness, interest, and perceptions regarding AI skills acquisition. Participants were asked to rate their level of agreement on a scale, answer multiple-choice questions, and provide demographic information. Qualitative data was collected through semi-structured interviews conducted with a selected subset of survey participants. These interviews aimed to capture in-depth narratives, allowing participants to elaborate on their responses and

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share personal experiences, aspirations, and concerns related to AI skills acquisition. The participants for this survey were selected using a purposive sampling approach, which involves intentionally selecting individuals who meet specific criteria relevant to the research objectives listed above. the criteria for participant selection includes the ages of 18 and 35, focusing on the youth demographic that is most affected by unemployment challenges. Participants were primarily residents of the South-South region of Nigeria, where youth unemployment is a significant concern as shown in Fig. 1.

Fig.1. South -South region of Nigeria.

Efforts were made to ensure diversity in terms of gender, educational background, and socioeconomic status to capture a representative sample of the youth population. Participants were individuals who indicated a level of interest in AI skills acquisition based on the initial survey responses. The selected participants 1350 were invited to complete the quantitative survey, and from this pool, a subset was invited to participate in the qualitative interviews. The interviews provided a platform for participants to express the detail points in greater detail and offer insights that quantitative data alone might not capture.

3.1. Research plan

The survey research design was used in this study. The problem of youth Unemployment in Nigeria's South-South Region is a social problem that necessitates direct responses from the target population in the six states that make up the region; thus, the researchers went to the field to ascertain the target population's direct response to the subject under study.

3.2. The study/data type population

The study's population consists of the entire literate youths in the six states of the South-South region of Nigeria. The information gathered from the respondents is primary data. It is primary data because the researchers gathered it themselves.

The sampling technique used in a mixed and simple random sampling technique is probability sampling, which gives every unit

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of the population equal chances of being selected (Arua, 1997) [14]. It is one of the most widely used methods of sampling. Hence, the sample for the study was thrown open to all the literate unemployed youths within the age range of 18-35 years, and data was obtained from them through the use of questionnaires.

3.3. The sample sizes

Using questionnaires, we randomly selected a sample of one thousand two hundred and ten (1210) respondents from the six states. Table I shows how the samples were distributed across the states in the South-South region- Nigeria.

Table 1 sample size distribution

S/N	States	Respondents	proportion	%
	Akwa			
1	Ibom	200	0.165	16.5
2	Bayelsa	200	0.165	16.5
	Cross			
3	River	210	0.174	17.4
4	Delta	200	0.165	16.5
5	Edo	200	0.165	16.5
6	Rivers	200	0.165	16.5
	Total:	1210	1	100

Table 1 shows the sample size distribution among the six states in the region under investigation. All other states except Cross River had 16.5% representation while Cross River had 17.4% of the sample size.

3.4. Research instrument

The researcher created a questionnaire based on the AI skill acquisition acceptability index and its associated challenges in the South-South region using a mixed and simple random sampling technique. Out of a total of thirteen thousand hundred fifty (13150) questionnaires sent out to the six states, one thousand two hundred and ten (1210) were filled correctly and returned. Our sample size for the study was determined by the number returned.

3.5. Method of Data Analysis

We analyze the data using both descriptive and inferential statistics. In descriptive analysis, we use frequency distribution tables, pie charts, proportions, and percentages to analyze data. In inferential statistics, we use Chi-square and contingency tables to test some of the hypotheses stated in this study.

The Chi-square is given in equation (1) as:

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$$\chi^2_{cal} = \sum_{i=1}^{n}\sum_{j=1}^{m}\frac{(0_{ij} - E_{ij})^2}{E_{ij}} \sim \chi^2_{(c-1)(r-1)}\alpha \quad (1)$$

Where

O_{ij} = observed values; E_{ij} = expected values; c and r are number of columns and rows respectively; α = the level of significance; cal = calculated; $\chi 2$ the Chi-square test statistic.

E_{ij} is computed as follows:

$$E_{ij} = \frac{R_i \times C_j}{n} \quad (2)$$

where

E_{ij} is the expected value; R_i is the row total and C_j is the column total and n is the grand total.

3.6. Research questions

This study aims at providing answers to the following five research questions:

1. Are the responses of respondents to the AI skill acquisition and youth unemployment independent of their gender?
2. Does AI skill acquisition prevent youth unemployment?
3. Are AI skill micro-credentials, short-term courses offering specific AI skills trusted for maximum impact on youth unemployment?
4 Are you interested in enrolling in AI skill micro-credential programs as a way of reducing youth unemployment?
5. Are you interested in participating in AI challenges focused on addressing local social and environmental issues that will reduce youth unemployment?

3.7. Test of Hypothesis

a. Hypothesis (1)

Ho: Responses to AI skill acquisition and youth unemployment are dependent on gender.

H1: Responses to AI skill acquisition and youth unemployment are independent of gender.

b. Hypothesis (2)

Ho: AI skill acquisition does not Prevent youth unemployment.

H1: AI skill acquisition Prevents youth unemployment.

c. Hypothesis (3)

Ho: AI skill micro-credentials, short-term courses offering specific AI skills are not to be trusted for maximum impact on youth unemployment.

H1: AI skill micro-credentials, short-term courses offering specific AI skills are to be

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trusted for maximum impact on youth unemployment.

d. Hypothesis (4)

Ho: enrolling in AI skill micro-credential programs, sensitization, and publicity will not reduce youth unemployment.

H1: enrolling in AI skill micro-credential programs, sensitization and publicity will reduce youth unemployment.

e. Hypothesis (5)

Ho: Participating in AI challenges focused on addressing local social and environmental issues will not equip youth with basic needed skills

H1: Participating in AI challenges focused on addressing local social and environmental issues will equip youth with basic needed skills

4.0 DATA PRESENTATION AND ANALYSIS

Tables II to IV show descriptive analysis of the sample data, while in Tables V to IX, each alphabet represents a scale of response. Here we have five scales, where "A" represents strongly agree; "B" represents agree; "C" represents strongly disagree; "D" represents disagree; and "E" represents undecided. These tables are called "contingency tables," with the observations in each cell.

A. Descriptive Analysis

Table I, above, shows the proportion, and percentage, of each state by the respondents. Cross River state has the highest representation with 17.40%, followed by the rest of the states with 16.50%, respectively. See Table I for more details.

Category	unemployed	Skilled Employed	Menial jobs	Total	Proportion	%
First graduate	366	21	31	418	0.346	34.60
Postgraduate	113	0	145	258	0.213	21.30
PGD/Master	52	82	130	264	0.218	21.80
PhD	8	246	16.	270	0.223	22.30
Total	539	349	322	1210	1	100

TABLE II. EDUCATION QUALIFICATION OF RESPONDENTS

From Table II, first graduate holders are observed to form the bulk of the respondents, contributing 34.60% of the sample. This is

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expected because the youth form a major population in the states compared to other categories of respondents

TABLE III. SEX AND OCCUPATION OF RESPONDENTS

Sex /Occupation	unemployed	Skilled Employed	Menial jobs	Total	Proportion	%
Male	379	131	123	633	0.523	52.30
Female	304	149	124	577	0.477	47.70
Total	683	280	247	1210	1	100

From Table III, more male respondents (52.30%) were observed while the females constituted 47.70% of the sample drawn for the study

TABLE IV. PERCEPTION ON AI SKILL ACQUISITION AND YOUTH UNEMPLOYMENT

From Table IV, only 38% of the sample size has acquired AI skills, while 62% of the sample has not acquired the skills due to their perception of the lack of awareness and publicity, hence the poor AI skill acquisition level among the youth whether unemployed, skilled employed and those doing menial jobs. From the descriptive statistical analysis, we cannot make any generalizations because the analysis is restricted to the sample data under consideration.

To make a reasonable conclusion from this study, inferential statistics were used to test the proposed hypothesis and make a generalized conclusion that cut across the entire population.

B. Inferential Analysis

Using “equations (1) and (2)”, the following were computed:

I have acquired AI skills	unemployed	Skilled Employed	Menial jobs	Total	Proportion	%
Yes	165	139	155	460	0.380	38.0
No	461	163	136	750	0.620	62.0

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TABLE V. RESPONSES TO AI SKILL ACQUISITION ARE INDEPENDENT OF GENDER

Respondents	**A**	**B**	**C**	**D**	**E**	**TOTAL**
unemployed	183 (175)	119 (108)	114 (117)	77 (74)	4 (23)	497
Skilled workers	88 (128)	56 (78)	106 (85)	72 (54)	40 (17)	362
Menial job workers	156 (124)	87 (76)	65 (8)	30 (52)	13 (17)	351
Total	**427**	**262**	**285**	**179**	**57**	**1210**

$$\chi^2_{cal} = \sum_{i=1}^{n}\sum_{j=1}^{m}\frac{(0_{ij} - E_{ij})^2}{E_{ij}}$$

$$\chi^2 = \frac{(183-175)^2}{175} + \frac{(119-108)^2}{108} + \frac{(114-117)^2}{117} + \ldots + \frac{(13-17)^2}{17}$$

$$\chi^2_{cal} = 102.39$$

$$\chi^2_{(c-1)(r-1)}\alpha = \chi^2_8(0.05) = 15.51$$

Decision

Reject Ho: if $\chi^2_{cal} > \chi^2\alpha$ and accept if otherwise

Answer to Research Question (1)

Since the value of $\chi^2_{cal} = 102.39 > \chi^2_\alpha = 15.51$,

We reject Ho: and accept H1: and conclude that responses to the AI skill acquisition and youth unemployment by the respondents are independent of their gender (sex) sustained

TABLE VI. RELEVANT AI SKILL ACQUISITION PREVENTS YOUTH UNEMPLOYMENT

Respon dents	**A**	**B**	**C**	**D**	**E**	**TOTAL**
Unempl oyed	231 (223)	194 (161)	29 (53)	24 (37)	18 (22)	496
Skilled workers	135 (163)	103 (118)	56 (39)	40 (27)	28 (16)	362
Menial Job workers	178 (158)	96 (114)	44 (38)	26 (26)	8 (16)	352
Total	**544**	**393**	**129**	**90**	**54**	**1210**

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$$\chi^2 = \frac{(231-223)^2}{223} + \frac{(194-161)^2}{161} + \frac{(29-53)^2}{53} + \ldots + \frac{(8-16)^2}{16}$$

$$\chi^2_{cal} = 62.92$$

$$\chi^2_{(c-1)(r-1)}\alpha = \chi^2_8(0.05) = 15.51$$

Decision

Reject Ho: if χ 2 cal > χ 2α and accept if otherwise

Answer to Research Question (3)

Respondents	**A**	**B**	**C**	**D**	**E**	**TOTAL**
unemployed	253 (247)	165 (169)	46 (48)	22 (22)	10 (11)	496
Skilled workers	167 (180)	107 (123)	48 (35)	28 (16)	12 (8)	362
Menial job workers	183 (175)	139 (120)	22 (34)	4 (16)	4 (8)	352
Total	**603**	**411**	**116**	**54**	**26**	**1210**

Decision

Reject Ho: if χ 2 cal > χ 2α and accept if otherwise

Answer to Research Question (2)

Since the value of χ 2 cal = 92.62 > χ 2 α = 51.15

Ho: is rejected and H1: is accepted. Acquiring relevant AI skills will prevents youth unemployment concluded.

Since the value of χ 2 cal = 88.37 > χ 2 α = 51.15,

we reject Ho: and accept H1: AI skill micro-credentials, short-term courses offering specific AI skills are to be trusted for maximum impact on youth unemployment.

TABLE VII. AI SKILL MICRO-CREDENTIALS, SHORT-TERM COURSES OFFERING SPECIFIC AI SKILLS ARE TO BE TRUSTED FOR MAXIMUM IMPACT ON YOUTH UNEMPLOYMENT

$$\chi^2 = \frac{(253-247)^2}{247} + \frac{(165-169)^2}{169} + \frac{(46-48)^2}{48} + \ldots + \frac{(4-8)^2}{8}$$

$$\chi^2_{cal} = 37.88$$

$$\chi^2_{(c-1)(r-1)}\alpha = \chi^2_8(0.05) = 15.51$$

TABLE VIII. ENROLLING IN AI SKILL MICRO-CREDENTIAL PROGRAMS, SENSITIZATION AND PUBLICITY WILL REDUCE YOUTH UNEMPLOYMENT

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Respondents	A	B	C	D	E	TOTAL
unemployed	290 (269)	141 (157)	33 (39)	20 (23)	12 (8)	496
Skilled workers	167 (197)	111 (114)	44 (28)	32 (17)	8 (6)	362
Menial job workers	200 (191)	130 (111)	17 (27)	5 (17)	0 (6)	352
Total	**657**	**382**	**94**	**57**	**20**	**1210**

$$\chi^2 = \frac{(290-269)^2}{269} + \frac{(141-157)^2}{157} + \frac{(33-39)^2}{39} + \ldots + \frac{(0-6)^2}{6}$$

$$\chi^2_{cal} = 71.56$$

$$\chi^2_{(c-1)(r-1)}\alpha = \chi^2_8(0.05) = 15.51$$

Decision

Reject Ho: if χ 2 cal > χ 2α and accept if otherwise

Answer to Research Question (4)

Since the value of χ 2 cal = 56.71 > χ 2 α = 51.15,

TABLE IX. PARTICIPATING IN AI CHALLENGES FOCUSED ON ADDRESSING LOCAL SOCIAL AND ENVIRONMENTAL ISSUE WILL EQUIP YOUTH WITH BASIC NEEDED SKILLS TO SOLVE UNEMPLOYMENT ISSUES

Respondents	A	B	C	D	E	TOTAL
unemployed	183 (189)	161 (165)	32 (49)	19 (26)	101 (63)	496
Skilled workers	127 (141)	111 (120)	48 (36)	32 (19)	44 (46)	362
Menial job workers	161 (137)	130 (117)	39 (35)	13 (19)	9 (45)	352
Total	**471**	**402**	**119**	**64**	**154**	**1210**

H0: rejected and H1: accepted. Conclusion: enrolling in AI skill micro-credential programs, sensitization and publicity will reduce youth unemployment proven.

$$\chi^2 = \frac{(183-193)^2}{193} + \frac{(161-165)^2}{165} + \frac{(32-49)^2}{49} + \ldots + \frac{(9-45)^2}{45}$$

$$\chi^2_{cal} = 83.17$$

$$\chi^2_{(c-1)(r-1)}\alpha = \chi^2_8(0.05) = 15.51$$

Decision

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Reject Ho: if χ 2 cal > χ 2α and accept if otherwise

Answer to Research Question (5)

Since the value of χ 2 cal = 17.83 > χ 2 α = 51.15, H0: rejected and H1: accepted. Participating in AI challenges focused on addressing local social and environmental issue will equip youth with basic needed skills to solve unemployment issues sustained.

5.0. RESULTS AND DISCUSSION

Descriptive and inferential analyses were performed in this study. According to the descriptive analysis in Table II and Figure 1, Cross River has the highest representation, with 17.40%, followed by the rest of the five states, with 16.50%, and, respectively, According to Table II, first-degree holders constitute the majority of respondents, accounting for 34.60% of the sample, and so on. In Table III, males outnumbered females by 52.30% of the sample size, while females constituted 47.70%. Finally, we can see from Table IV that 62% of the sample did not acquire relevant AI skills due to their negative perception of the lack of available professionals and awareness of the relevant skills to be acquired and, as a result, the low level of AI professionals. Only 38% had acquired some skills from government-organized vocational training programs because they understood and believed that not being skilled as a graduate was dangerous and inconveniencing to obtaining decent jobs. The five hypotheses were tested based on the inferential analysis and answered the five research questions formulated in this study. There were strong indications from the analysis that respondents' responses to relevant AI skill acquisition and youth unemployment are independent of their gender (sex); that relevant AI skill acquisition can prevent unemployment; that AI skill micro-credentials, short-term courses offering specific AI skills, are to be trusted for maximum impact on youth unemployment; that enrolling in AI skill micro-credential programs, sensitization, and publicity will reduce youth unemployment; and, finally, that participating in AI challenges focused on addressing local social and environmental issues will equip youth with the needed skills to solve unemployment. We can make broad generalizations based on our findings for the entire population of unemployed youths in the South-South region and Nigeria at large.

6.0. Conclusion

According to the findings of this study, young people believe that AI skills are meant for specific people who studied computer science

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or a related field as a discipline and that AI skills can only be acquired abroad, as such high skills can only be guaranteed to people living in international communities. They believe acquiring such skills can help them become professionals, gain decent jobs, and be employers of labor. As such, they believe AI skills can prevent the prevalent unemployment rate in the region. They have displayed a positive perception of AI skill acquisition, which they believe can help them solve the major issues of gaining professional jobs and becoming employers of laborers. They also believe that there is a lack of AI skill advocacy programs to create awareness, sensitization, and publicity on the benefits and relevant skills and how to acquire them within a short interval. Finally, people believe that participating in AI challenges focused on addressing local social and environmental issues will equip youth with the basic skills needed to solve unemployment issues, hence a solution to youth unemployment.

7.0 Conflict of Interest

There is no conflict of interest with the author and co-authors.

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9.0. References

1. Idoko, cletus & usman, 2021. Skill acquisition and youth empowerment in Nigeria. G.J.C.M.P. 3 (1), 51-54 ISSN: 2319 – 7285.

2. Ajufo, B., 2013. Challenges of youth unemployment in Nigeria: Effective career guidance as a panacea. African Research Review. 7. 10.4314/afrrev.v7i1.21.

3. Ohize, E., & Adamu M. J., 2009. Case study of youth empowerment scheme of Niger State, Nigeria in poverty alleviation. AU Journal of Technology, 13 (1), 47-52.

4. Doku, D. T., Acacio-Claro, P. J., Koivusilta, L., & Rimpelä, A.,2019. Health and socioeconomic circumstances over three generations as predictors of youth unemployment trajectories. European Journal of Public Health, 29 (3), 517–523.

@2023 International Council for Education Research and Training
ISSN: 2959-1376
2023, Vol. 02, Issue 04, 190-206
DOI: https://doi.org/10.59231/SARI7634

5. Hällsten, M., Edling, C., & Rydgren, J., 2017. Social capital, friendship networks, and youth unemployment. Social Science Research, 61, 234–250

6. Casson, M., 1979. Theories of youth unemployment. In: youth unemployment. Palgrave Macmillan, London. https://doi.org/10.1007/978-1-349-16120-1_4

7. Okon, I. E., Ojoko, T. I. T., Faithpraise, F. O., Otosi F. B., 2021. Measurement of Accessibility to Job Locations in the Socially Excluded Areas of Calabar Metropolis, South-South Nigeria. Review Of International Geographical Education ISSN: 2146-0353, 11 (9), SPRING.

8. Okon K. E, Ofonime D. O., Faithpraise F. O., 2022. Development of MVC-based social networked journal management system with secured deep-link access mechanism. Journal of Multidisciplinary Engineering Science and Technology (JMEST). 9 (12). ISSN: 2458-9403

9. Idika, D. O., Faithpraise, F. O., Okeke, S. U., Anakwue, L. A., 2023. Perception of women participation in digital education research for sustainable social adjustment in Calabar urban, Nigeria: implication on educational peace and security. Edumania-An International Multidisciplinary Journal @2023 International Council for Education Research and Training 2023, Vol. 01, Issue 02, 108-137 ISSN: 2960-0006

10. Clement E, Ozuomba S, Faithpraise F. O., 2020. Modelling and forecasting peak load demand in uyo metropolis using artificial neural network technique. Journal of Multidisciplinary Engineering Science and Technology (JMEST). 7 (3), ISSN: 2458-9403

11. Faithpraise F. O., Ekanem M. S., Udoidiong G. E., 2023. Development of web application for ontology-based e-learning system. International Multilingual Journal of Science and Technology (IMJST). 8 (3), ISSN: 2528-9810

12. Faithpraise F. O., Otosi F. B., Enang A. U., Obisung E. O., Effiong E. J., Emmanuel I., 2022. Covid-19

@2023 International Council for Education Research and Training
ISSN: 2959-1376
2023, Vol. 02, Issue 04, 190-206
DOI: https://doi.org/10.59231/SARI7634

vaccination acceptability survey among staff and students in Nigerian Universities (2022) ***2022 IEEE NIGERCON*** IEEE Xplore. 978-1-6654-7978-3/22/ ©2022 IEEE

13. Faithpraise F. O., Edohoeket S. T., 2019. Zonal evaluation for siting a solar power plant in Cross River State, Nigeria. Global Journal of Pure and Applied Sciences 25 (1) e-ISSN: 2992-4464 print ISSN: 1118-0579

14. Arua, A. I., Chukwu, W. I. E., Okafor F. C. O., and Ugwuowo F. I.,1997. Fundamentals of statistics for higher education, Nsukka Nigeria, Fijac Academic Press, pp 133.

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