

**LINKING DIMENSIONS OF ADULT LITERACY EDUCATION TO POVERTY
REDUCTION IN RURAL COMMUNITIES: A DESCRIPTIVE SURVEY
APPROACH IN CROSS RIVER STATE, NIGERIA**

OKON GLORY JAMES

E-Mail: gokon004@gmail.com

GSM: 08037028238

ERIM COSTLY MANYO

E-Mail: ayumonor@gmail.com

GSM: 08073831646

EDOHO GLORY EMMANUEL

E-Mail: gloryedoho80@gmail.com

GSM: 08063986887

OJONG ROSE AYIBA

E-Mail: roseojong@yahoo.com

GSM: 08056317014

Department of Adult and Continuing Education
University of Calabar

Abstract

Studies have examined the association between adult literacy education and poverty reduction in Cross River State. However, most of the studies focused on adult literacy education and poverty reduction holistically without explaining how the different forms of adult literacy education can contribute to the different dimensions of poverty reduction. To bridge this gap in the literature, the present study used the descriptive approach to describe the relationship between each dimension of adult literacy education and each dimension of poverty reduction in rural communities in Cross River State. The population of the study comprised all adults in rural communities in Cross River State. Purposive sampling was applied in selecting 300 adults from six rural communities in the State as the sample for this study. A self-structured questionnaire titled "Adult Literacy Education and Poverty Reduction Questionnaire (ALEPROQ)" was used as the instrument for data collection. The questionnaire had acceptable item-level and scale-level content validity indices (CVIs). Reliability was determined using the Cronbach alpha approach for internal consistency. Descriptive statistics was used to answer the research questions while Multiple Linear Regression analysis was used to test the hypothesis at a .05 level of significance. Results indicate that the extent of poverty reduction in rural communities in Cross River State is low. It was also apparent from the result that the extent of adult literacy education delivery in rural communities in the State is also low. The analysis further indicated that formal adult literacy education, non-formal adult literacy education and informal adult literacy education significantly contributed to poverty reduction in rural communities in Cross River State. The study has practical implications for the Government of Cross River State to establish adult education centres in rural communities in the State, strengthen all types of non-formal adult education programmes, and develop models to enhance the use of cultural events and mass media to improve the literacy levels of rural people in the State. These measures will improve the level of poverty reduction and enhance communication.

Keywords: Poverty reduction, Adult education, Literacy education, Rural communities

DOI: <https://doie.org/10.50390/NCAEJ.2026391758>

Introduction

Poverty reduction has become a critical agenda in global community development efforts. The concern for poverty reduction in community development emerging discourse is premised on the fact that the environmental, economic and political activities of people have a considerable impact on the well-being of every individual in society, and everyone can also contribute to the growth and development of society if adequately empowered (Fallah Shayan, Mohabbati-Kalejahi, Alavi & Zahed, 2022; Liu, Yu & Wang, 2015). Research has indicated that no society can attain any sustainable progress or development when parts of the population are psychologically, technologically, socially, culturally, politically, and economically impoverished (Azunu & Mensah, 2019). This made the United Nations declare that an urgent reduction of environmental, political, social, cultural, and economic challenges facing the world was needed to ensure an egalitarian society where social justice prevails for all categories of persons and where every citizen has the right to wellbeing and healthy living, has equal access to the resources of the nation, and is given adequate opportunity to participate in the environmental, socio-economic and political activities of the society (Alamu, 2017).

In Nigeria, reports indicate that the Federal Government of Nigeria launched a poverty reduction scheme in 1999 that aimed at reducing unemployment and increasing income accruing to Nigerians including such schemes as the National Accelerated Food Production (NAFP), Family Support Scheme, Family Economic Advancement Scheme (FEAP) 1999), Poverty Eradication Scheme (PES), government Donor Agencies, United Nation Children Funds, Based Natural Resource Management Scheme, Community Based Poverty reduction scheme, international fund for agricultural development and Directorate for food and rural infrastructural development scheme (Corral, Díaz, Monagas & García, 2017). All these schemes were efforts to reduce poverty in the country. Unfortunately, poverty reduction appears not to be maximally achieved in Nigeria as a greater part of the Nigerian population is living in abject poverty. Ette (2017) noted that poor people have remained the perpetual victim of Nigeria's failing statehood, which is a resultant effect of the uncivilized social, economic, political and religious practices of Nigerian society. Adejoh (2015) also added that in Nigeria, limited access to political, economic and social power has deepened the vulnerability of the poor and their all-round marginalization in the society.

Poverty is multifaceted and includes the multitude of lack and deprivations that poor people are subjected to in their lives daily, which include disease and poor health conditions, illiteracy and lack of access to education, appalling living conditions, lack of access to economic opportunity, disempowerment, underemployment, vulnerability to violence, and exposure to hazardous environmental conditions (Bununu, 2020; Christian & Ahortor, 2013; OPHI 2019; Singh & Chudasama, 2020). Thus, poverty reduction is linked to all aspects of life and covers 12 out of the seventeen sustainable development goals (SDGs) including no poverty (goal 1), zero hunger (goal 2), good health and well-being (goal 3), quality education (goal 4), gender equality (goal 5), clean water and sanitation (goal 6), affordable and clean energy (goal 7), decent work and economic growth (goal 8), industry, innovation and infrastructure (goal 9), reduced inequality (goal 10), sustainable cities and communities (goal 11), and responsible consumption and production (goal 12) (Alamu, 2017). Therefore, poverty reduction is a multi-faceted concept that cuts across the economic, social, political, and cultural life of the people and depicts the extent to which people are empowered in all aspects of their lives (Eteng, Opara & Adie, 2021).

Poverty is a multidimensional problem that goes beyond economics to include, among other things, social, political, and cultural issues and thus an effort to reduce poverty must address the economic, social, political and cultural issues surrounding poor people (Alkire, Roche, Ballon, Foster, Santos & Seth, 2015). It is argued that the rural dwellers cannot experience tangible poverty reduction until such needs like portable water, good roads, quality and affordable healthcare and education, security of life and property, rural electrification, and credit facility, that can create and ensure sustenance of improved quality of life are provided (Nwambuko, Nnaeto & Nwobi, 2023). Poverty reduction is the process of empowering people to maximize their economic, social, political and cultural potential (Gunartha & Utama, 2020). This means that poverty reduction can be measured from economic empowerment, social empowerment, political empowerment, and cultural empowerment. Economic empowerment is the capacity to access economic and social resources, take full part in economic activities, and have the power to make economic decisions without undue interference (Besnier, Hlabana, Kotzias, Beck, Sieu, & Muthengi, 2024; Shoukat, Abdullah, Qamri & Ghauri, 2023). Social empowerment revolves around enabling individuals or communities to take control of their social experiences and exercise independence when making choices that affect their overall well-being (Kuteesa, Akpuokwe & Udeh, 2024). Similarly, political empowerment is achieved when rural people can participate in and influence the policy reform process that affects their lives (Besnier, 2023; Mechkova, Dahlum & Petrarca, 2024). Research has also argued that when rural people can successfully take part in cultural activities, maintain cultural values, and are involved in cultural improvement, it means they are culturally empowered (Su, Wall, Ma, Notarianni & Wang, 2023).

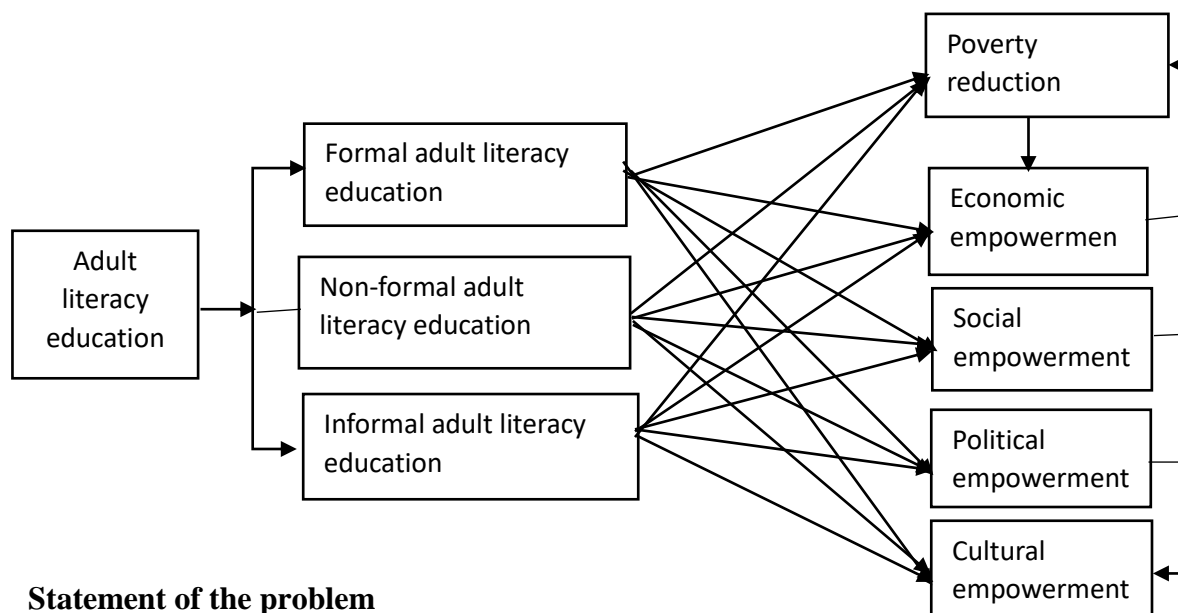
However, adult literacy education has been a feasible model of empowering rural people to maximize their economic, political, social, and cultural potentials. Research has shown that literacy and essential skills (LES) are the foundational skills that enable an individual to interpret information, make decisions, and solve problems in personal, work, and community life (Windisch, 2015). Scholars have also argued that evidence demonstrates that literacy upgrading can lead to not only enhanced skills but also improved vocational performance, increased employability of people, higher earnings, and longer-term job retention (Gyarmati, Leckie, Dowie, Palameta, Hui, Dunn & Hébert, 2014). Nwafor and Agi (2013) argued that adult literacy education is meant to help local people by providing functional literacy and continuing education for adults and youths who have never had the advantage of formal education or did not complete primary education. Research has indicated that adult literacy education can be formal, informal and non-formal (Eze, 2021, Ihejirika, 2012; Olaye & Onajite, 2015). While formal adult literacy education is delivered in the formal school system, non-informal occurs outside the formal school system and includes a wide range of educational initiatives in the community, ranging from home-based learning to government schemes and community initiatives (Mok, 2011). The informal aspect of adult literacy education covers all learning that adults acquire outside the formal and non-formal setting specifically through interaction with things within their immediate environment (Sulkunen, Nissinen & Malin, 2021).

Studies have established the link between adult literacy education and poverty reduction for instance, Ihejirika (2023) carried out a study on the utilization of adult and non-formal education programmes in combating rural poverty in Nigeria and found that the incidence of rural poverty in Nigeria is attributed to lack of adequate education/illiteracy, subsistence farming, protracted illness due to inadequate medical care services, lack of employment

opportunities, and failure of government to provide basic social amenities. Aluvisia (2016) in addition to establishing the association between participation in adult literacy programmes and rural poverty in their study, also observed that distance to learning Centre, impact of adult literacy programmes in learners' daily lives, knowledge and skills acquired and social interactions affected participation in the programmes. Scholars (Fute, Wan, Oubibi & Bulugu, 2023) found a strong linkage between adult literacy programme and poverty reduction in local communities for a focus on formal and non-formal literacy programmes. Non-formal adult literacy programmes were seen to have reduced the level of poverty in rural communities in Ghana (Williams 2024). In Cross River State, the association between non-formal education programmes and poverty reduction among youths was established in a study by Akpama, Esang, Asor & Osang (2011). These empirical discoveries are not different from the findings of Adetuyi (2016) who also established the effect of participation in adult literacy programmes and poverty reduction. A study by Nnodim and Johnwest (2022) did not deviate from previous findings as they discovered a strong influence of adult literacy education on poverty reduction and community development.

There seem to be inadequate studies addressing formal adult literacy and informal adult literacy education in relation to poverty reduction in rural communities in Nigeria. Much emphasis seems to be placed on non-formal adult education in literature. The influence of formal adult education and poverty reduction was researched in Burkina Faso (Niankara & Traoret, 2019). Most studies in Nigeria look at adult education holistically. For instance, Ekpo, Umoh and Udoaka (2024) associated adult literacy education with poverty reduction without specifying which of the adult education influenced poverty reduction in rural communities. Leah, Aidelokhai and Nmadu (2024) also measured the effect of adult and non-formal education on poverty reduction which gives a limited understanding of which of the adult literacy education programmes can have the highest effect on poverty reduction among rural communities. Williams (2024) looked at adult and non-formal education as determinants of poverty reduction but failed to highlight which of the adult literacy programmes associated significantly with poverty reduction among local people. These gaps have necessitated the present research.

This research is premised on the Human capital theory proposed in 1961 by Schultz which holds that the quality and quantity of education people receive determines their level of productivity in all areas of life. The theory assumes that human capital is an investment in the future, more training leads to better work skills, educational institutions play a central role in the development of human capital, training enhances employability, and training can compensate for skills shortages. It means that the extent to which adults in rural communities in Cross River State have opportunities to access education can enhance the level to which they are empowered in their communities to use their full economic, social, political, and cultural potential and opportunities to their advantage and the development of their communities. Based on the principles of human capital theory, the relationship between adult literacy education is conceptualized in the conceptual model in Figure 1 below:



Statement of the problem

Poverty reduction in any society is maximized when the quality of life and well-being of the people including improved income and access to clean water and sanitation is achieved, when men and women have equal access to political, economic, social and environmental opportunities, when male and female children from all socio-economic backgrounds have equal educational opportunities and when there is the reduction in maternal mortality in communities through adequate access to healthcare services. Regrettably, the level of poverty in Cross River State especially among rural communities seems to be alarming. Many families cannot afford three square meals a day, while some cannot afford clean water or pay for healthcare services. There is an increasing trend of unwanted pregnancies and school dropouts among female teens in secondary schools. There is a high level of gender inequality in the State, and a good number of women are suffering all kinds of social injustice due to barbaric socio-cultural practices.

There have been intensive efforts to reduce rural poverty in Nigeria such as the Conditional Cash Transfer scheme, the provision of improved fertilizers and seedlings to farmers, and the establishment of an Agricultural Loan Scheme for rural farmers, the poverty level of rural farmers. Unfortunately, these efforts seem not to yield adequate fruits in Cross River State as a good number of people, especially community dwellers, are living in poverty. Though several studies have established the fact that adult literacy education has implications on the level of poverty in rural communities, there seem to be inadequate studies linking the different forms of adult literacy education to the different dimensions of poverty reduction in rural communities in Cross River State. This gap in literature prompted the present research to adopt a descriptive approach in examining the association between different dimensions of adult literacy education (formal, non-formal, and informal) with the different dimensions of poverty reduction (economic empowerment, social empowerment and cultural empowerment) in Cross River State.

Purpose of the study

The general objective of the study was to examine the relationship between adult literacy education and poverty reduction in rural communities in Cross River State. Specifically, the study sought to find out:

1. The extent of poverty reduction in rural communities in Cross River State
2. The extent of adult education delivery in rural communities in Cross River State
3. The contribution of adult literacy education to poverty reduction in rural communities in Cross River State

Research questions

The following research questions were raised to direct the study:

1. What is the extent of poverty reduction in rural communities in Cross River State?
2. What is the adult literacy education delivery in rural communities in Cross River State?

Research hypotheses

One hypothesis was formulated to direct the study:

1. Adult literacy education does not have any significant contributions to poverty reduction in rural communities in Cross River State.

Methodology

The study adopted the positivist research philosophical stance which is based on objective observation or measurement of the phenomenon under survey to provide objective estimates of the constructs in the variables studied quantitatively. Thus, this philosophical stance allowed the researcher to determine the extent of poverty reduction, the extent to which adult literacy education is delivered, and the contributions of different dimensions of adult literacy education to poverty reduction in rural communities in Cross River State. Following this philosophical foundation, the research design used for this study was the descriptive survey design. This design allowed for the quantitative description of the extent of poverty reduction in rural communities in Cross River State, the extent of adult literacy education delivery in the State, and the contributions of different dimensions of adult literacy education to poverty reduction in rural communities in Cross River State. The population of the study comprised all adults in rural communities including males and females in Cross River State. Purposive sampling was applied in selecting the sample. This allowed the researcher to select adults across selected communities who have participated in one form of formal, non-formal and non-formal adult literacy education in the communities. In all, 300 participants were involved in the study. These were taken from six rural communities (two each) in each of the three Senatorial District of the State.

The study examined three measures: the extent of poverty reduction in rural communities in Cross River State, the extent of adult literacy education delivery in rural communities in Cross River State, and the contributions of adult literacy education to poverty reduction in rural communities in Cross River State. The researcher developed a self-structured

questionnaire titled “Adult Literary Education and Poverty Reduction Questionnaire (ALEPRQ)” due to the unavailability of previously developed instruments in this study context. The questionnaire used a modified four-point Likert scale of Very High Extent (VHE), High Extent (HE), Low Extent (LE), and Very Low Extent (VLE). The instrument was validated by 4 experts to determine the Content Validity Index (CVI) of the scale and items. Each item was rated by the 4 experts for clarity and relevance on a scale ranging from one to four. The Item Level Content Validity Index (I-CVI) for the questionnaire ranged from 0.89 to 0.95 for relevance and 0.86 to 0.99 for clarity, while the Scale Content Validity Index (S-CVI) was 0.93 for relevance and 0.95 for clarity. To standardize the items further, the instrument underwent a reliability test using the Cronbach Alpha reliability method. The internal consistency of the items was ascertained using 20 respondents who were not part of the study sample, and the instrument was found to be reliable with an r-value of 0.83.

Procedure for data collection and analysis

Copies of the questionnaire were administered to the respondents with the support of 5 research assistants who were recruited for the data collection exercise. The instrument was administered to 300 participants from the six selected communities in the State. All the participants took part in the study voluntarily and were free to quit the exercise at any point. 253 copies of questionnaire out of the 300 administered were recovered. The copies of the questionnaire which were not retrieved or wrongly ticked were treated as attrition in the study. Descriptive statistics (mean, and standard deviation) were used to answer the research questions. The decision rule was based on the criterion mean of 2.50. Thus, mean scores of items below 2.50 were regarded as Low Extent, while those above 2.50 were regarded as High Extent. The hypothesis was tested at a .05 level of significance using Multiple Regression analysis.

Results

Research question one

What is the extent of poverty reduction in rural communities in Cross River State? The answer to this research question is presented in Table 1.

Table 1: Mean and standard deviation of the responses regarding the extent of extent of poverty reduction in rural communities in Cross River State

S/N	Items	\bar{X}	SD	Decision
	Economic Empowerment			
1	Having access to grants for my business	2.43	.667	Low Extent
2	Living an improved condition of life	2.00	.334	Low Extent
3	Having no problems paying for my accommodation	2.33	.447	Low Extent
4	Having the ability to expand business	2.01	.569	High Extent
5	Having access to clean water	2.21	.617	Low Extent
6	Having an adequate electricity supply	2.06	.782	Low Extent
	Social Empowerment			
7	Taking part in settling disputes in the community	2.47	.592	Low Extent
8	Taking part in training other people on issues of maternal health in the community	2.35	.447	Low Extent
9	Having the power to speak against uncivilized traditional practices in the community	2.52	.602	High Extent
10	Attending community meetings regularly	2.57	.486	High Extent

11	Having the necessary support to pursue your goals and ambitions in the community	2.20	.611	Low Extent
12	Taking part in encouraging people to participate in immunization programmes	2.50	.872	High Extent
	Political Empowerment			
13	Representing the community in political party	2.34	.538	Low Extent
14	Engaging in political discussions or activities in the community	2.50	.681	Low Extent
15	Holding political office in your ward	2.22	.412	Low Extent
16	Having equal access to political opportunities as those in townships	2.10	.612	Low Extent
17	Being selected for political appointment	2.24	.709	Low Extent
18	Attending political meetings regularly in the community	2.59	.917	High Extent
	Cultural Empowerment			
19	Participating fully in traditional cultural events or celebrations in the community	2.51	.720	High Extent
20	Taking part in activities that promote the cultural heritage of the community	2.50	.684	High Extent
21	Being bold enough to always speak your language outside your community	2.51	.571	High Extent
22	Having the ability to lead cultural groups in the community	2.43	.710	Low Extent
23	Having the ability to promote your culture anywhere	2.47	.651	Low Extent
24	Being always bold enough to go out during cultural activities	2.57	.732	High Extent
	Average means and Std. Deviation	2.46	.647	Low Extent

Criterion mean= 2.50

The result of the analysis in Table 1 shows that all the items except items 4, 9, 10, 12, 18, 19, 20, 21, and 24 have mean scores below the criterion mean of 2.50. Given that the average mean and standard deviation are 2.46 and 0.647, there is a high degree of acceptance among the respondents that the extent of poverty reduction in rural communities in Cross River State is low. Though the result indicates that rural community dwellers in Cross River State were bold to defend their culture which indicates that they are culturally empowered, they are economically, socially, and politically poor. This implies that the extent to which poverty has been reduced in rural communities in Cross River State is low. It means that people in rural communities in Cross River State have not been adequately empowered to maximize their economic, political, social, and cultural potential in the State.

Research question two

What is the adult literacy education delivery in rural communities in Cross River State? The answer to this research question is presented in Table 2.

Table 2: Mean and standard deviation of the responses regarding the extent of adult literacy education delivery in rural communities in Cross River State

S/N	Items	X	SD	Decision
	Formal adult literacy education			

1	Sponsoring disadvantaged adults to attend the evening schools in the community	2.24	.451	Low Extent
2	Availability of a functional adult education programme in schools in the community	2.33	.512	Low Extent
3	Opportunities for adults to attend circular schools in the community	2.28	.398	Low Extent
4	Availability of scholarships for adults attending formal schooling in the community	2.47	.411	Low Extent
5	Availability of adult education centres in the community Non-formal adult literacy education	2.43	.550	Low Extent
6	Availability of skills acquisition centers for adults	2.46	.280	Low Extent
7	Availability of Agric extension services in the community	2.52	.341	High Extent
8	Participation in Apprenticeship programmes	2.50	.403	High Extent
9	Availability of health training programmes for adults	2.53	.372	High Extent
10	Community involvement in entrepreneurship programmes Informal adult literacy education	2.42	.439	Low Extent
11	Encouraging adults to read informative books/magazines	2.44	.338	Low Extent
12	Mobilizing people to listen to didactic radio programmes	2.53	.291	High Extent
13	Using cultural events to enlighten community people	2.50	.520	High Extent
14	Encouraging people to learn their family trades	2.37	.463	Low Extent
15	Encouraging community people to learn from social media	2.51	.386	High Extent
Average means and Std. Deviation		2.43	.410	Low Extent
<i>Criterion mean= 2.50</i>				

The result of the analysis in Table 1 shows that all the items except items 7, 8, 9, 12, 13, and 15 have mean scores below the criterion mean of 2.50. Given that the average mean and standard deviation are 2.43 and 0.410, there is a high degree of acceptance among the respondents that the extent of adult literacy education delivery in rural communities in Cross River State is low. Though the result indicates that non-formal adult literacy education opportunities for adults were higher in the communities than other forms of adult literacy education programmes, the overall scores indicates that adult literacy education programmes are not properly organized in the State. This means that adult literacy education is not effectively delivered in rural communities in Cross River State.

Research hypothesis

Adult literacy education does not have any significant contribution to poverty reduction in rural communities in Cross River State. The result is presented in Table 3 and Table 4.

Table 3: Summary of multiple regression analysis of the joint effect of adult literacy education on poverty reduction in rural communities in Cross River State

Model	Sum of squares	Df	Mean square	F-ratio	p-level	R	R ²	Adj R ²	S.E
Regression	63139.682	3	12627.936	416.959	.000 ^b	.892 ^a	.796	.794	5.503
Residual	16142.318	249	30.286						
Total	79282.000	552							
Model	Sum of squares	Df	Mean square	F ratio	p-level	R	R ²	Adj R ²	S.E

PRRCee	squares									
Regression	3553.745	3	710.749	471.885	.000 ^b	.903 ^a	.816	.814	1.227	
Residual	802.800	249	1.506							
Total	4356.545	552								
Model	Sum	of	Df	Mean square	F ratio	p-level	R	R ²	Adj R ²	S.E
PRRCse	squares									
Regression	5006.451	3	1001.290	340.263	.000 ^b	.873 ^a	.761	.759	1.715	
Residual	1568.458	249	2.943							
Total	5849.949	552								
Model	Sum	of	Df	Mean square	F ratio	p-level	R	R ²	Adj R ²	S.E
PRRCpe	squares									
Regression	4638.476	3	927.695	576.005	.000 ^b	.919 ^a	.844	.842	1.269	
Residual	858.433	249	1.611							
Total	5496.909	552								
Model	Sum	of	Df	Mean square	F ratio	p-level	R	R ²	Adj R ²	S.E
PRRCce	squares									
Regression	3440.223	3	688.045	203.928	.000 ^b	.810 ^a	.657	.653	1.837	
Residual	1798.322	249	3.374							
Total	5238.545	552								

- Criterion variables: Poverty reduction in rural communities in Cross River State (Poverty reduction in Rural Communities generally (PRRCg), Poverty reduction in Rural Communities in terms of economic empowerment (PRRCee), Poverty reduction in Rural Communities in terms of social empowerment (PRRCse), Poverty reduction in Rural Communities in terms of political empowerment (PRRCpe), and Poverty reduction in Rural Communities in terms of cultural empowerment (PRRCce)
- Predictors: (Constant), formal adult literacy education, non-formal adult literacy education, and informal adult literacy education

Table 4: Relative contributions (Regression weights) of the dimensions of adult literacy education to different dimensions of poverty reduction in rural communities in Cross River State

Variables	Models	B	Std. Error	Beta	t	p-value	Rank
(Constant)	PRRCg	82.944	3.950		20.999	.000	
Formal adult literacy education		.149	.296	.041	.502	.616	
Non-formal adult literacy education		.923	.406	.615	17.045	.000	Strongest
Informal adult literacy education		-3.171	.288	.578	10.994	.000	
(Constant)	PRRCee	24.572	.881		27.896	.000	
Formal adult literacy education		.178	.066	.208	2.703	.007	
Non-formal adult literacy education		.976	.091	.584	21.810	.000	Strongest
Informal adult literacy education		.926	.064	.494	-14.398	.000	
(Constant)	PRRCse	18.965	1.231		15.403	.000	
Formal adult literacy education		.113	.092	.107	1.220	.223	
Non-formal adult literacy education		.863	.127	.544	14.712	.000	Strongest
Informal adult literacy education		.494	.090	.475	5.496	.000	
(Constant)	PRRCpe	20.096	.911		22.063	.000	
Formal adult literacy education		.244	.068	.254	3.577	.000	
Non-formal adult literacy education		.824	.094	.617	19.475	.000	Strongest
Informal adult literacy education		.449	.067	.472	6.746	.000	
(Constant)	PRRCce	19.311	1.318		14.648	.000	
Formal adult literacy education		.459	.099	.288	4.643	.000	
Non-formal adult literacy education		.261	.136	.353	9.299	.000	
Informal adult literacy education		.302	.096	.503	13.524	.000	Strongest

- a. Criterion variables: Poverty reduction in rural communities in Cross River State (Poverty reduction in Rural Communities generally (PRRCg), Poverty reduction in Rural Communities in terms of economic empowerment (PRRCee), Poverty reduction in Rural Communities in terms of social empowerment (PRRCse), Poverty reduction in Rural Communities in terms of political empowerment (PRRCpe), and Poverty reduction in Rural Communities in terms of cultural empowerment (PRRCce)
- b. Predictors: (Constant), formal adult literacy education, non-formal adult literacy education, and informal adult literacy education

Discussion of the findings

The analysis of the research questions indicates that both the extent of poverty reduction in rural communities in Cross River State and the extent of adult literacy education delivery in rural communities in Cross River State are low. This implies that the low extent at which rural people are empowered to use their full economic, social, political and cultural potential is low. It also implies extent to which adults who may not have gotten ample opportunities to access quality formal education at their youthful ages, are given opportunities to learn literacy skills in different aspects of lives is low in rural communities in the State. This result implies the poor delivery of adult education in the communities have implications on the level of poverty reduction observed in the communities. This supports the argument of some scholars who stated that literacy upgrading can lead to not only enhanced skills but also improved vocational performance, increased employability of people, higher earnings, and longer-term job retention (Gyarmati, Leckie, Dowie, Palameta, Hui, Dunn & Hébert, 2014). The result realized in this research agrees with position Nwafor and Agi (2013) who argued that adult literacy education is meant to help local people by providing functional literacy and continuing education for adults and youths who have never had the advantage of formal education or did not complete primary education. This means that poverty reduction is not maximized in rural communities in Cross River State because adult literacy education has not also been properly designed and delivered to the people.

The above finding was also established by the result of the hypothesis which established that adult literacy education is potent in predicting the changes in poverty reduction in rural communities in Cross River State. This is not different from empirical discoveries of Ihejirika (2023) who studies the utilization of adult and non-formal education programmes in combating rural poverty in Nigeria and found that the incidence of rural poverty in Nigeria was attributed to lack of adequate education/illiteracy, subsistence farming, protracted illness due to inadequate medical care services, lack of employment opportunities, and failure of government to provide basic social amenities. This finding is in tandem with that of Fute, Wan, Oubibi and Bulugu (2023) who found a strong linkage between adult literacy programme and poverty reduction in local communities for a focus on formal and non-formal literacy programmes. In the same direction as the present finding, Adetuyi (2016) also established the effect of participation in adult literacy programmes and poverty reduction. The present result affirms that of Nnodim and Johnwest (2022) who discovered a strong influence of adult literacy education on poverty reduction and community development. This implies that there is a strong association between the extent of delivery of adult literacy education and poverty reduction in rural communities in Cross River State.

The analysis also indicated that the different dimensions of adult literacy education (formal, non-formal, and informal) predicted the different dimensions of poverty reduction (economic empowerment, social empowerment, political empowerment, and cultural empowerment).

The analysis indicates that non-formal adult literacy education is more potent than other forms of adult literacy education in predicting the variance in economic empowerment, social empowerment, and political empowerment, while informal adult literacy education has the highest contribution to the variance in cultural empowerment in the communities. This result may be attributed to the fact that attention is given to non-formal education as a model of community development than other forms of adult education practices. It may also be that the development in tourism in Cross River State has made people more knowledgeable about how to promote their cultural heritage to their own advantage in their localities. The findings of this research support the principles and assumptions of the Human Theory by Schultz that as people receive more education, the more they can empower both themselves and their immediate environment which is their communities.

Conclusion

Based on the result of the study, it is concluded that adult literacy education programmes such as formal literacy education programme, non-formal adult literacy education programme, and informal adult literacy education programme can determine the extent of economic empowerment, social empowerment and cultural empowerment in rural communities in Cross River State. It is also concluded that it will be difficult to achieve poverty reduction effectively in rural communities in the State when adult literacy education programmes are not well-designed and implemented in local communities in the State.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Cross River State government should establish and fund adult basic education centres in all rural communities in the State to give those who could not attend formal education at a young age opportunity to acquire learning that can improve their lives.
2. It is recommended that Government should develop as many non-formal education programmes as possible in rural communities in the State to help the local people acquire literacy in different aspects of their endeavours.
3. Government of Cross River State should use traditional institutions, social media and cultural events as models to develop the potential of rural dwellers in the State as these measures will boost the level of poverty reduction in rural communities in the State.

References

- Adetuyi, C. A. (2016). Insight into the forms of adult literacy education programme as agents of transformation in Nigerian democratic society in terms of equity and poverty reduction. *International Journal of English Language and Linguistics Research*, **4** (6): 11-22.
- Akpama, S. I., Esang, O. U., Asor, L. J., & Osang, W. O. (2011). Non-formal education programmes and poverty reduction among young adults in Southern Senatorial District, Cross River State, Nigeria. *Journal of Educational and Developmental Psychology*, **1** (1): 154-161.
- Alamu, O. (2017). Sustainable development goals in Nigeria: What role for Nigeria's indigenous languages. *European Journal of Research and Reflection in Educational Sciences*, **5** (4): 35-49.

- Azunu, R., & Mensah, J. K. (2019). Local economic development and poverty reduction in developing societies: The experience of the ILO decent work project in Ghana. *Local Economy*, **34** (5): 405-420.
- Besnier, E. (2023). Women's political empowerment and child health in the sustainable development era: A global empirical analysis (1990–2016). *Global Public Health*, **18** (1): 184- 215.
- Besnier, E., Hlabana, T., Kotzias, V., Beck, K., Sieu, C., & Muthengi, K. (2024). Exploring economic empowerment and gender issues in Lesotho's child grants programme: a qualitative study. *Health Policy and Planning*, **39** (2): 95-117.
- Corral, S., Díaz, A. S., Monagas, M. D. C., & García, E. C. (2017). Agricultural policies and their impact on poverty reduction in developing countries: Lessons learned from three water basins in Cape Verde. *Sustainability*, **9** (10): 1841.
- Ekpo, M. E., Umoh, U. E., & Udoaka, S. P. (2024). Adult education and entrepreneurial sustainable development in Nigeria: A study of Akwa Ibom State agency for adult and non-formal education. *Covenant Journal of Entrepreneurship*, **8** (1): 44-54.
- Eze, O. M. (2021). Implication of mass literacy, adult and non-formal education in achieving Success in Nigeria. Atlantis Press.
- Fallah Shayan, N., Mohabbati-Kalejahi, N., Alavi, S., & Zahed, M. A. (2022). Sustainable development goals (SDGs) as a framework for corporate social responsibility <https://doi.org/10.3390/su14031222>
- Fute, A., Wan, X. L., Oubibi, M., & Bulugu, J. B. (2023). Adult literacy education and reduction of poverty in Tanzania: a review of policies and their implementation. *Journal of Education*, **203** (4): 931-938.
- Ihejirika, J. C. (2012). Utilization of adult and non-formal education programmes in combating rural poverty in Nigeria. *World Journal of Education*, **2** (3): 25-31.
- Kuteesa, K. N., Akpuokwe, C. U., & Udeh, C. A. (2024). Gender equity in education: addressing challenges and promoting opportunities for social empowerment. *International Journal of Applied Research in Social Sciences*, **6** (4): 631-641.
- Leah, Y. J., Aidelokhai, D. I., & Nmadu, T. (2024). A review of the effects of women literacy and poverty reduction on sustainable development in Nigeria. *Gusau Journal of Sociology*, **4** (2): 246-259.
- Liu, Q. Q., Yu, M., & Wang, X. L. (2015). Poverty reduction within the framework of SDGs and Post-2015 development agenda. *Advances in Climate Change Research*, **6** (1): 67-73.
- Mechkova, V., Dahlum, S., & Petrarca, C. S. (2024). Women's political representation, good governance and human development. *Governance*, **37** (1): 19-38.
- Mensah, J. (2019). Sustainable development: Meaning, history, principles, pillars, and implications for human action: 1653531. <https://doi.org/10.1080/23311886.2019.1653531>
- Mok, O. N. A. (2011). Non-formal learning: Clarification of the concept and its application in music learning. *Australian Journal of Music Education*, **1**: 11-15.
- Niankara, I., & Traoret, R. I. (2019). Formal education and the contemporaneous dynamics of literacy, labour market participation and poverty reduction in Burkina Faso. *International Journal of Education Economics and Development*, **10** (2): 148-172.
- Nnodim, A. U., & Johnwest, E. K. (2022). Influence of Adult and non-formal education on poverty reduction among rural women in Ndoni Local Government Area, Rivers State. *International Journal of Educational Benchmark (IJEB)*, eISSN, 2489-0170.

- Nwafor, N. H., & Agi, C. W. (2013). Adult literacy and the need for post-adult literacy institution in Nigeria. *Mediterranean Journal of Social Sciences*, **4** (4): 469-474.
- Olaye, M. E., & Onajite, F. O. (2015). Adult and non-formal education: An imperative for human capacity development and attainment of sustainable livelihoods in Anambra state. *African Research Review*, **9** (3): 34-49.
- Shoukat, A., Abdullah, M., Qamri, G. M., & Ghauri, T. A. (2023). Breaking barriers, building bridges: Economic freedom and women's empowerment. *iRASD Journal of Economics*, **5** (2): 377-391.
- Su, M. M., Wall, G., Ma, J., Notarianni, M., & Wang, S. (2023). Empowerment of women through cultural tourism: perspectives of Hui minority embroiderers in Ningxia, China. In *Theoretical Advancement in Social Impacts Assessment of Tourism Research*, **4** (9): 99-120.
- Sulkunen, S., Nissinen, K., & Malin, A. (2021). The role of informal learning in adults' literacy proficiency. *European Journal for Research on the Education and Learning of Adults*, **12** (2): 207-222.
- Williams, E. D. (2024). Assessment of government involvement in adult literacy programmes in Opobo/Nkoro Local Government Area of River State. *African Journal of Information, Economics and Management Research*, **2** (2): 40-55.