



Effect of Education on Socio-economic Security of Individuals in Central Equatoria State, South Sudan

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Abstract

A 5-month study was conducted to investigate the effect of education on the economic wellbeing of individuals in Central Equatoria State South Sudan. Key Informants' Interviews were administered to 52 respondents using questionnaires. Desk reviews and observations were also undertaken. Moreover, theoretical framework, empirical and two models of regression analyses show that educated individuals, having access to quality education throughout primary secondary and tertiary/university levels are more likely to earn rewarding income. Post-secondary education improves the economic status of both individuals and households. The government of South Sudan is urged to review and update educational policies focusing on education quality. Relevance of education system is needed to change contexts of life and enhance the national needs for sustainable development of socio-economic security of individuals in South Sudan.

Keywords: education attainment, income, economic wellbeing, South Sudan

1. Introduction

Education is generally recognized as one of the key determinants of socio-economic security and wellbeing worldwide ^[1]. The correlation between education attainment and increased individual earnings has been widely documented ^[2]. Evidence has shown that education attainment enhances the employability, productivity and income earning capacity of individuals ^[3] The impact of educational attainment on socio-economic indicators has been shown to vary by education and income levels, and other variables ^[4].

One of the significant indicators of economic wellbeing is the change in the occupational pattern in favour of education ability. The belief that education and ability lead to substantial economic success is not easily challenged ^[3]. Indeed, a few individuals even pause to reflect on the feature, nature and reliability of the causal relations. With educated persons moving forward all around them, how many individuals can take the time and effort to question the pace of events ^[3]. Nonetheless, the implied importance of education for poverty reduction, and thus economic wellbeing, demands that such an inquiry is made.

No or a few studies have been carried out in South Sudan to justify that a high level of schooling is associated with higher individual earnings. That more years of education do lead to higher income and lack of education or ability serves as an important cause of poverty, because illiteracy of a person, has significant impact on individual income ^[3].

The purpose of this study was to explore the effect of education on the socio-economic security of individuals in Central Equatoria State (CES), South Sudan.

2. Materials and Methods

2.1 Study Area

A 5-month study was carried out in a number of national public institutions and private sectors in Juba - Central Equatoria State South Sudan.

2.2 Sample Size

A sample size of 52 (fifty-two) respondents including different type of occupations representing public and private institutions.

2.3 Sampling Design

A cross sectional pragmatic qualitative research was used ^[5] in a randomized sample of 25 to 68 aged respondents using convenient sampling techniques. Key Informant Interviews (KIIs) using semi-structure questionnaire were undertaken with public and private institutions. A qualitative research that generates a general explanation of a process, an action, or an interaction shaped by the views of a large number of participants was designed ^[6]. This study is exploratory in nature, the mixing of criteria for participation and maximum variation produced data that are seemingly information-rich ^[7].

2.4 Data Collection, Management and Analysis

Both qualitative and quantitative data were undertaken using KIIs through semi-structure questionnaire. Secondary sources were consulted from academic books, peer reviewed journals, relevant articles, records and reports as well as webpages. These data included education and income particulars; correlation between education level, income level and employment/occupation. The grounded theory approach of open coding, axial coding, and selective coding was used ^[7]. Empirical models that examines the correlation between education ability and economic welfare from frequent cross-sectional data perspective were used. Statistical Packages for Social Sciences (SPSS) version IBM 17, 18, and 19 was used ^[8]. STATA Data Analysis including correlation and regression and statistical software were also used to examine data patterns. A level of a significant difference was at $P < 0.05$.

2.5 Ethical Approval

Ethical considerations for conducting this study and the

consent of respondents were obtained.

3. Results

Empirical and regression analyses showed that empirical

functions, by education level had a significant correlation between education attained and individual income and economic wellbeing as depicted in Tables 1 and 2.

Table 1: Education type of respondents in public and private sectors in Juba, Central Equatoria State, South Sudan.

Level of Education	Frequency	Percentage (%)	Cumulative (%)
None	3	5.8	5.8
Primary	9	17.3	23.1
Secondary	10	19.2	42.3
Higher Education	30	57.7	100
Total	52	100	

Table 2: Income Distributions across Educational Levels in public and private sectors in Juba, Central Equatoria State, South Sudan.

Overall Income	Mean	Standard Error	95% Conf. Interval	
None	1,960	521.1526	913.7426	3006.257
Primary	2,483.333	684.2474	1109.649	3857.017
Secondary	7,726.9	1792.677	4127.951	11325.85
Higher Education	10,927.81	398.833	8119.525	13736.07

Table 3: Age of respondents in public and private sectors in Juba, Central Equatoria State, South Sudan.

Age Group (in years)	Frequency	Percentage (%)	Cumulative (%)
25 – 35	28	53.9	53.9
36 – 46	10	19.2	73.1
47 – 57	6	11.5	84.6
58 – 68	8	15.4	100
Total	52	100	

Demographic overview based on the age of respondents showed that the majority (53.9%) were under age group of 25 – 35 (Table 3).

Regression analysis showed a significant difference ($P < 0.05$) in support for preponderant evident that correlated between level of education attained and income. Moreover, the results indicated that the income levels compared

between public and private sectors are variant and that an assessment of the individual income by institution type revealed that someone employed in the private sector earns (13,674.29) compared to the public sector employee (5959.389) as shown in Table 4. This is substantiated by Model 1 regression of income against years of education and type of institution (Table 5).

Table 4: Average income by institution in Juba, Central Equatoria State, South Sudan.

Overall Income	Mean	Standard Error	95% Conf. Interval	
Public	5959.389	864.5627	4223.707	7695.071
Private	13674.69	2102.808	9453.123	17896.25

Model 2 tests revealed that the relationship between years of education and income was statistically significant (Table 6).

The positive effects of the said variables still hold as with individual economic wellbeing concern.

Table 5: Regression of Income against Years of Education and Type of Institution in Juba, Central Equatoria State, South Sudan.

Source	SS	df	MS	Number of obs=52 F (2, 49) =25.01
Model	1.3448e+09	2	672413106	Prob > F = 0.0000
Residual	1.3176e+09	49	26889390	R-squared=0.5051 Adj R-squared=0.4849
Total	2.6624e+09	51	52204045.5	Root MSE= 5185.5

Income	Coef.	Std. Err	t	P> t	[95% Conf. Interval]	
Years of education	652.6513	129.2646	5.05	0.000	392.8844	912.4183

Institution	Coef.	Std. Err	t	P> t	[95% Conf. Interval]	
Private	8318.095	1562.616	5.32	0.000	5177.9	11458.29
- Cons	-2434.432	1873.71	-1.30	0.200	-6199.794	1330.929

Table 6: Regression of Income against Educational Institution in Juba, Central Equatoria State, South Sudan.

Source	SS	df	MS	No of observation = 52 F (4, 47) =11.74
Model	1.3309e+09	4	332721087	Prob > F = 0.0000
Residual	1.3315e+09	47	28330254.8	R-squared = 0.4999 Adj R-squared = 0.4573
Total	2.6624e+09	51	52204045.5	Root MSE = 5322.6

Income	Coef.	Std. Err	t	P> t	[95% Conf. Interval]	
Education						
Primary	1423.768	3553.063	0.40	0.690	-5724.072	8571.608
Secondary	4416.248	3514.365	1.26	0.215	-2653.743	11486.24
Higher	9508.061	3224.849	2.95	0.005	3020.501	15995.62

Institution						
Private	8103.913	1635.686	4.95	0.000	4813.336	11394.49
- Cons	-741.3043	3121.008	-0.24	0.813	-6199.794	5537.355

4. Discussion

Evidence has shown that education indicators in South Sudan are among the poorest worldwide. Females and rural communities are particularly the most disadvantaged. Moreover, inequality between urban and rural areas exists in countries where the adult population has the lowest amount of education. This is evidenced in Burkina Faso, Mali and Niger where regional inequality is 33%, 19.4%, and 21.3%, respectively [9].

Historically, colonial policies, and later politicization of education policy and ideological battles between successive governments and political groups, were partly responsible for marked inequalities in educational attainment in South Sudan. Most attention to the value of schooling focuses on the economic returns to different levels of school attainment for individuals. Educational attainment is positively associated with individual/household economic wellbeing. However, such an attainment of wellbeing seems to be challenging to define [10], but a sustainability to human wellbeing and betterment can be developed [11]. Several studies showed that more schooling is associated with higher individual earnings. Conversely, illiteracy of a person or an individual could culminate to significant impact on individual income [3].

This study shows that a positive correlation between education level and individual income exists [12, 13]. Moreover, education was reported as a vital tool for continued human existence and growth of any nation [14]. However, expanding school attainment revealed no guarantee for better economic conditions unless quality of education is attained [15]. A study in CES showed that the higher the quality of teacher the higher would be the level of internal efficiency for quality education [16].

Traditionally, analyses of economic wellbeing have focused on a single dimension of household economic resources. In many developed countries, such studies have generally used income data to reflect the relative frequency with which data on income are available and also that for many households, income is the most important economic resource for meeting everyday living expenses [17].

The conviction that more education leads to higher income finds extensive support in statistical data. The simple correlation between educational attainment and income is very strong and consistent: More years of education do lead to higher income. Hence, there is an impressive foundation to the belief that education pays. Evidence shows that education increases person’s capability and therewith an individual’s income-earning prospective. However, it was argued that the least educated would bring the least amount of human capital to the labour market and therefore receive the least income appears obvious [3].

The weight of accumulated evidence on correlation between education and income reinforces the belief that inadequate education is a major cause of individual’s poverty. In much

of Africa, those living in rural areas experience more poverty and less access to health care and education [18]. This is in line with the findings of a study carried out in 24 African countries that had revealed the standards of living in rural areas almost universally remain behind the urban areas [19]. This explains that education has a tremendous effect on socio-economic security of individuals.

5. Conclusion

Post-secondary education improves the economic status of both individual and household. Educational attainment and cognitive skills of persons are powerfully correlated with individual earnings, distribution of income, and economic growth of the community. Educational quality may greatly contribute to productivity and competitiveness of a person, hence, leading to greater economic development. Lack of education serves as an important cause of poverty. The Government of South Sudan is urged to review and update educational policies that promote human capital development by pioneering skilled-mix training through learning with doing and focusing on education quality for sustainable development of socio-economic security of individuals in South Sudan.

6. Acknowledgements

The University of Juba is greatly indebted for encouragement and technical backstopping. Moreover, I am grateful to all the respondents in both public and private institutions for amicable cooperation in the field work.

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