



Literacy: Gateway to a World of Exploits

Biale Zua*

Tennessee State University, Nashville, TN, USA **Corresponding author:** Biale Zua, E-mail: bialezua16@gmail.com

ARTICLE INFO	ABSTRACT
Article history Received: September 02, 2020 Accepted: December 19, 2020 Published: January 31, 2021 Volume: 9 Issue: 1	The importance of literacy to the personal development of an individual and existence of any nation cannot be overemphasized. Literacy is the foundation for meaningful development of any nation. It is not a single entity but an interconnection of several fields—education, health, agriculture, and more. For example, a literate individual can have access to information relating to her career or business. However, not every individual in the society is literate enough to contribute to national development. Thus, strong literacy skills are necessary to function in
Conflicts of interest: None Funding: None	today's contemporary society. This research examines literacy across African countries with a view of determining countries with high literacy rates. Countries in sub-Saharan Africa have low literacy rates with gender and regional disparity. Therefore, sub-Saharan Africa national governments need to develop strong literacy skills in their countries to participate effectively in the globalized society.

Key words: Literacy, Sub-Saharan Africa, Lifelong Learning, National Development, Disparity

INTRODUCTION

Literacy plays an indispensable role in the attainment of the Sustainable Development Goal (SDG) 4: "Ensure inclusive and quality education for all and promote lifelong learning". This goal is targeted at ensuring literacy and numeracy for youths and adults (men and women) by the year 2030. Therefore, for African countries to attain this goal by the year 2030, then access to adult literary must be created.

This paper examines adult literacy as distinct from children's literacy across African countries. It compares adult literacy rates among African countries with a view of determining causes for disparity. Furthermore, this paper seeks to identify African countries with the highest literacy rates since literacy is distributed unevenly across nations, gender, and population.

Adult literacy is defined as the "percentage of the population aged fifteen years and over who can both read and write with understanding a short simple statement on his or her everyday life" (UNESCO Institute of Statistics, 2020). It is a binary distinction between adults who are literate and those who are illiterate. The importance of literacy to the growth and existence of any nation cannot be overemphasized. Literacy, in fact, is the foundation for the achievement of SDG4 targets. The relevance of literacy in our everyday life is recognize by the United Nations that celebrates September 8th annually as the International Literacy Day (United Nations, 2020). Traditionally, "literacy has been understood as the ability to read, write, and use arithmetic" (Srivastava, 2017). Nevertheless, literacy is a powerful tool, an extensive skill, and competence that extends beyond just reading and writing. Literacy encompasses language and culture. It is the fundamental component of the right to education (UNESCO, 2010).

The United Nations Educational, Scientific and Cultural Organization (UNESCO) defines "literacy as the ability to identify, understand, interpret, create, communicate, and compute using printed, written, and visual materials associated with varying contexts" (UNESCO, 2018). Literacy involves a continuum of learning that enables individuals to achieve their goals, develop their knowledge and potentials, and empowers them to participate fully in their community and wider society (UNESCO, 2005). As a continuum of learning, literacy is a lifelong process. The International Literacy Association (ILA) further clarifies the UNESCO definition of literacy by adding more meaning to the media of literacy as visual, audible, and digital materials across disciplines and in any context (Literacy Worldwide.org). Furthermore, literacy include numeracy, the ability to make simple arithmetic calculation (Srivastava, 2017). Therefore, to be literate means being able to use several skills to comprehend, build knowledge, and communicate ideas.

Some researchers have defined literacy as individual skills acquisition and empowerment, while other characterize literacy as a social development (Benavot, 2015). For example, some Asian countries view literacy as a process where an individual acquires language and numeracy (Govinda & Biswal, 2014). As such, literacy is mainly printbased and considered separate from its context (Govinda &

Published by Australian International Academic Centre PTY.LTD.

Copyright (c) the author(s). This is an open access article under CC BY license (https://creativecommons.org/licenses/by/4.0/) http://dx.doi.org/10.7575/aiac.ijels.v.9n.1p.96

Biswal, 2014). There is no consistent definition of literacy in Bangladesh (Mitra, 2014), and Southeastern Europe (Popovic, 2014). Inconsistent views of literacy are also recorded by government agencies and non-governmental organizations (NGOs) in Egypt and Sudan (Yousif, 2014). Some Arab government define literacy as the ability to read, write, and calculate using standard Arabic. NGOs often use a broader perspective of literacy focusing on individual empowerment, community development, income generation, and gender (UNESCO, 2010).

LITERACY AND TECHNOLOGY

The advert of technology has changed the global definition of literacy to include digital, electronic, and visual expressions (Gentry & McAdams, 2013). Technology is the most influential source of new knowledge and individual empowerment. It enables us to gather, examine, and compare information, as well as generate reports in split seconds, especially through the internet. Some people have limited technology to computers, internet, and tools powered by electricity. As stated by Wood (2003), technology is used in the industry and in everyday life for practical purposes or application to acquire scientific knowledge. Thus, technology could be used in education, information and communications, medicine, and agriculture. It could also be mechanical, electronical, and industrial. Technology is used in the following industries: manufacturing, transportation, energy and power, agriculture, and biotechnologies, and many more. All these various types of technology require specific skills and knowledge.

While technology is a tool for information gathering, there is a challenge of acquiring technological literacy that will facilitate the use of these tools. We live in an information age where literacy plays a critical role in citizens' quality of life (Macmillan & O'Neil, 2012). To be literate today requires knowledge, skills, and vocabulary in every area of life. It requires more than the ability to decode meaning from print or calculating figures. People require the ability to navigate through and understand information that affects their lives to ensure a good quality of life.

Despite the inconsistencies in rethinking literacy in the 21st century, literacy still involves reading, writing, and math. As stated by Warschauer (1999), the definition of literacy includes the economic, social, and political context. Alidou and Aitchison (2009) further clarifies this definition by concluding that each context embraces the social practices, relationships, and knowledge that enables an individual to communicate effectively in the society. Literacy is a continuous process that requires regular and sustained learning in a conducive literate environment (Alidou & Aitchison, 2009). It includes the ability to locate and select information. It involves creativity, collaboration, critical thinking, and evaluation. Contemporary definitions of literacy recognize the interrelated nature of knowledge, competence, and skills, which has result in different types of literacies (Alidou & Aitchison, 2009).

TYPES OF LITERACY

Literacy is socially embedded, and there are multiple literacies depending on the perspective and context. Each perspective requires specific knowledge, skills, and expertise. Thus, different terms, such as computer literacy, health literacy, media literacy, civil literacy, visual literacy, and critical literacy are coined to embrace specific literacies and many more (Parrilla & Stack-Cutler, 2011). Skills in each of these areas are not mutually exclusive. Hence, one may use specific computer skills to access knowledge in the medical field. This has resulted in different categories of literacy.

Computer literacy is the ability to use the capabilities of computers intelligently (Tobin, 1983). This involves the knowledge of what computers are and how they work. This includes the terminology used in the computer world. It includes the awareness of the importance of computers in society, including its global versatility.

Critical literacy requires skills needed to become an informed productive citizen, who can take an active role in one's community. As stated by Smith (2013), critical literacy involves a thorough evaluation of an information with a view of drawing an appropriate conclusion as to the suitability of the information for the required investigation.

Information literacy comprises of integrated abilities that enables an individual to discover information, understand how the information is produced and valued, and the subsequent use of the information to create new knowledge that will enable one to participate in communities of learning (Basili, 2015). Information literacy has been expanded in scope to include several literacies like digital literacy and media literacy. Digital literacy encompasses the knowledge and skills to effectively digital devices like smartphones, tablet, smartwatch, and other nontraditional sources to find, identify, evaluate, and use information from the internet. Media literacy enables an individual to create, access, analyze, and evaluate information using all forms of communication (Stambler, 2013).

Visual literacy enables an individual to negotiate, interpret, and make meaning from information presented in images, video, graphic design, or scenarios. This type of literacy is relevant because pictures can be read, and that meaning can be interpreted from the reading.

BENEFITS OF LITERACY

As already mentioned, the global importance of literacy cannot be overstressed. Literacy is beneficial to individuals, families, communities, and society at large. It creates possibilities and opportunities for better health and development. It opens doors of advancement and progress. Adult literacy is very important to the overall development of any nation as it can be used to measure the Human Development Index (HDI) such as education, life expectancy, and per capita income (Max, 2014). Policy analysts consider literacy as a population's absolute key to socio-economic development (Prettyman, 2019).

Literacy is one of the factors used in measuring education and the effectiveness of an educational system. A high literacy rate implies that the educational system can provide the population with opportunities to acquire sound literacy skills. As suggested by Jeanne (1983), literacy is dependent on instruction. Therefore, quality instruction plays a crucial role in the acquisition of literacy (Jeanne, 1983). The accumulated educational accomplishment can be used to advance intellectual growth. Educational achievement enhances social and economic development. However, high literacy

rates do not necessarily equal high quality of education. A

country with a high literacy rate may have a low quality of

education. Additionally, adult literacy rates are used to measure life expectancy, standard of living, and the HDI of any nation (Prettyman, 2019). As stated by Gilbert et al (2018) literacy is associated with life expectancy through several socioeconomic factors such as income, education, and employment. This means that people with poor literacy skills and the less educated are more likely to be unemployed. Gilbert et al (2018) further stated that unemployed people are more likely to have low incomes and poor health behaviors. These socioeconomic factors can be linked to lower life expectancy. Thus, literacy can be used to eradicate poverty and broaden participation in society. Literate individuals are more likely to be employed and earn good wages, thereby reducing poverty. Adequate wages can move individuals from one social stratum to another and improve quality of life. Thus, low literacy is connected to higher unemployment (Gilbert et al, 2018). This is because government and private agencies would employ literate individuals that will enable them to achieve the organizational goals. Illiterate individuals may be classified as unqualified, thereby leading to unemployment. Subsequently, Lind (2011) stated that poverty goes hand in hand with poor literacy skills and uses. There is also a literacy gap between the poorest and wealthiest households. Impoverish households and neighborhoods are reported to experience illiteracy.

Literacy drives sustainable development (UNESCO, 2020). It can be used to predict the quality of the future labor force as well as ensure policies for life skills for men and women (UNESCO, 2020). Literate individuals can easily access information to improve education, health, and safe-ty. Although a literacy gap exists between men and women, literate women are more economically self-reliant. Literacy empowers women to play a meaningful role in the society (UNESCO, 2020).

Literacy is a fundamental human and democratic right (Lind, 2011). Literate individuals are more likely to know their rights and can effectively use their rights to defend themselves. Conversely, the rights of illiterate individuals are likely to be violated. Their inability to read and write can prevent them from seeing for themselves that which they are entitled to and demand it. Illiteracy is a means of control. Literacy is a step away from ignorance and therefore a tool and a threat. Literacy is a springboard for achieving Education for All (EFA). Literacy is a channel to the achievement of the SDGs. The poor are empowered when they become literate. As a component of basic education and a foundation for lifelong learning, literacy is the key

to enhancing human capabilities and achieving many other rights (UNESCO, 2010).

LITERACY CHALLENGES IN AFRICA

Despite the importance of literacy to any nation, adult literacy is still a challenge in many African countries. Although, progress has been made over the years to overcome illiteracy, adult literacy is still elusive. According to an UNESCO report, sub-Saharan Africa has one of the lowest adult literacy rates in the world with a 61 percent average literacy rate (UNESCO, 2019). The challenges facing literacy in Africa can be traceable to multilingualism, colonization, and population explosion (Alexander et al, 2007).

Multilingualism has resulted in the problem of choice of an official language and national languages (Robinson, 1988). Some African countries have chosen English, French, Arabic, and other indigenous languages as their official languages. Literacy in these official languages is very crucial for citizens to keep abreast of information. Some national languages are not well developed to accommodate new technologies (Adegbija, 2004). Citizens need to connect and communicate within and outside their countries. Literacy in the country's official language will enable citizens to fully participate in the labor market, contribute to economic growth, reduce poverty, enhance diversity, and improve health in various countries. Therefore, developing literacy skills in these official languages is vital.

According to the ILA, the "ability to read, write, and communicate connects people to one another and empowers them to achieve tasks they never thought possible" (Literacy Worldwide.org). UNESCO views acquiring and improving literacy skills as a fundamental part of education. Thus, literacy and education are interrelated and sometimes overlapping. However, Basili (2011) suggests that the term "literacy" has a double meaning: both the result (status) of an educational process and an educational process.

VARIABLES ASSOCIATED WITH LITERACY IN AFRICA

Research has identified certain variables that are associated with literacy. These factors include gender, age, education, and nationality. Research has shown that there is gender inequality in literacy. Women are less literate than men (UNESCO, 2006). Twenty-seven percent of illiterate people in the world live in sub-Saharan Africa. (Shiundu, 2019). Countries such as Burkina Faso, Central African Republic, Chad, Gambia, Guinea Bissau, Mali, Niger, and Senegal are among the least literate African countries with literacy rates below 50 percent (Pariona, 2017). In 2017, statistics showed that the adult literacy rate in sub-Saharan Africa was 65 percent (UNESCO, 2018). This means that one third of the African population aged fifteen years and above could neither read nor write (Shiundu, 2018).

DISPARITY BY GENDER

The disparity in literacy rates between males and females, with females at the bottom, is well documented in the literature. This is a global phenomenon and not specific to African countries or non-African countries with low literacy rates. Women are generally less literate than men (Kim, 2018). Globally, the adult male literacy is 90 percent and adult female literacy is 82 percent (World Population Review, 2020). Two-thirds of the world's illiterate population are female (World Population Review, 2020). However, a few countries have a higher female literacy rate above male literacy rate. Although, there is an increase in global literacy rates by 17.5 percent, in the past forty years, the gender gap in literacy has decreased from 61 percent for women and 77 percent for men, yet a literacy gap remains between genders (Prettyman, 2019).

While the disparity between male and female adult literacy rates is declining globally, sub-Saharan Africa is far from closing the gap (UNESCO Institute of Statistics, 2019). Sub-Saharan Africa has the lowest level of adult female literacy at 57 percent (Wadhwa, 2020). In sub-Saharan Africa, the ratio is 76:100; there are seventy-six literate women for one-hundred adult literate men (Atilola, 2015; Beegle et al, 2016). Zonal and gender disparity are prevalent in Nigeria as shown in Table 1. The literacy gender gap across African countries is shown in Table 2.

Although available literature on adult literacy and gender disparity always shows females lagging behind males globally, some Africa countries have negated this long-established opinion. Botswana, Lesotho, and Seychelles have higher female literacy rates than males (Table 1). Botswana, a South African country, has a population of 2.3 million people in 2018 (World Bank Data, 2019) and a population density of nine people per square miles. It has a literacy rate of 88 percent (Countrymeters, 2020) with a high adult female literacy rate above males. In Botswana, 88 percent of women aged fifteen years and older are literate, compared to 86 percent of men. According to (Kann & Taylor, 1989) in Botswana, 44 percent of females were in the labor force compared to 38 percent of the males in 1986. In 2020, Botswana has 85 percent females and 77 percent males in the workforce (World Bank Data, 2020).

Lesotho is another South African country with a higher adult female literacy rate. In 2017, Lesotho had a population of 2.23 million people, with an adult literacy rate of 76 percent. Of the Lesotho population, 85 percent of all women were literate, compared to 68 percent of men. This 17 percent difference was reportedly due to high unemployment and migration because of poverty. The high adult female

Table 1. Zonal and gender differences in adult literacy

 rate in Nigeria in 2018

Zone	Female	Male			
North Central	49%	72%			
North East	31%	50%			
North West	29%	59%			
South East	79%	86%			
South West	80%	89%			
South South	79%	88%			

Source: Data adapted from Statista (2020)

literacy rate in Lesotho affected the workforce. 79 percent of females were in the workforce compared to 76 percent of males (World Bank Data, 2020).

The third African country with a female literacy rate above males is Seychelles. Seychelles is an archipelago of several islands in the Indian Ocean off the coast of East Africa. In 2019 it was the smallest African country with a population of 95,601. Seychelles' literacy rate was 95 percent, with an adult male literate population of 94 percent and an adult female literacy rate of 95 percent.

LITERACY DISPARITY ACROSS AFRICAN COUNTRIES

Developing countries of Africa have lower literacy rate. The literacy rate is unevenly distributed across the African population. While some countries have high literacy rate like Equatorial Guinea (95 percent), Libya (91 percent), Mauritius (91 percent), Sao Tome and Principe (92 percent), Seychelles (95 percent), and South Africa (95 percent), other countries like Central Africa Republic, Guinea, Mali, Niger, and South Sudan have literacy rates below 40 percent in 2018 (Amber, 2016). This means that the number of people above fifteen years old who can read and write in these countries is very low (Table 3). Factors responsible for these disparities range from the importance placed on education and literacy by the government to the type of non-formal literacy programs adopted by individual countries. This is a sharp contrast with global adult literacy rate in 2016 which was relatively high at 86 percent (UNESCO Institute of Statistics, 2017). Developed countries of the world have a 99 percent literacy rate. Consequently, higher literacy rates and smaller gender gaps have been reported for the developed nations of the world.

Niger is one of the most illiterate countries in the world with a literacy rate of 19 percent (World Population Review, 2020). The population in 2019 consists of 12,001,646 (50.28 percent) males and 11,867,977 (49.72 percent) females. Approximately 11 percent of the female population is literate, while 24 percent of the male population is literate (World Population Review, 2020). Another African country with a very low literacy rate (34 percent) is South Sudan. The population of South Sudan in 2019 was 11,144,200 (Worldometers). There is also gender disparity in South Sudan's literacy rate: nearly 40.26 percent of males are literate, while 28.86 percent of the nation's female are literate. Guinea also has a lower literacy rate (30.4 percent) than South Sudan. Guinea also has gender disparity. Over 38 percent of males are literate while fewer than 23 percent of females are literate (Worldometers, 2019).

CAUSES FOR ADULT LITERACY DISPARITY ACROSS AFRICAN COUNTRIES

While developed countries have a 99 percent literacy rate, none of the developing countries in Africa have attained this level. Only Seychelles, South Africa, and Equatorial Guinea have neared the rates of other developing countries, with literacy rates at 95 percent. As previously mentioned,

Countries	Year	Female	Male	Diff	Countries	Year	Female	Male	Diff
Algeria	2018	75%	87%	12%	Niger	2012	23%	39%	16%
Angola	2014	53%	80%	27%	Nigeria	2018	53%	71%	18%
Benin Republic	2018	31%	54%	23%	Rwanda	2018	69%	78%	9%
Botswana	2014	89%	87%	-2%	Senegal	2018	40%	75%	35%
Cabo Verde	2015	82%	92%	10%	Seychelles	2018	96%	95%	-1%
Cameroun	2018	72%	83%	11%	Sierra Leone	2018	35%	52%	17%
Central Africa Republic	2018	25%	50%	25%	Somalia	1972	4%	7%	3%
Congo	2018	75%	86%	11%	South Africa	2017	86%	88%	2%
Dem Rep of Congo	2016	66%	89%	23%	South Sudan	2018	29%	40%	11%
Egypt	2017	66%	76%	10%	Sudan	2018	56%	65%	9%
Equatorial Guinea	2014	92%	94%	2%	Tanzania	2015	73%	83%	10%
Ethiopia	2017	44%	59%	15%	Togo	2015	51%	77%	26%
Gabon	2018	83%	86%	3%	Tunisia	2014	72%	86%	14%
Ghana	2018	74%	84%	10%	Uganda	2018	71%	83%	12%
Guinea Bissau	2014	31%	62%	31%	Zambia	2018	83%	91%	8%
Kenya	2018	78%	85%	7%	Zimbabwe	2014	88%	89%	1%
Lesotho	2014	85%	68%	17%					
Liberia	2017	34%	63%	29%					
Libya	2004	78%	94%	16%					
Malawi	2015	55%	70%	15%					
Mali	2018	26%	46%	20%					
Morocco	2018	65%	83%	18%					
Mozambique	2017	50%	73%	20%					

Table 2. Gender differences in adult literacy across African countries

Source: Data adapted from UNESCO Institute for Statistics (2019)

Table 3. Adult	literacy rate	in atricar	countries
Table J. Auun	mulacy rau	/ III all ical	I COUIIIIICS

Countries	Rates	Countries	Rates	Countries	Rates	Countries	Rates
Algeria	81	Democratic Republic of Congo	63	Guinea Bissau	59	Seychelles	95
Angola	71	Egypt	73	Liberia	48	Sierra Leone	43
Benin Republic	42	Ethiopia	49	Libya	91	South Africa	95
Botswana	88	Equatorial Guinea	95	Malawi	65	South Sudan	34
Burkina Faso	41	Gabon	84	Mali	35	Sudan	60
Burundi	85	Gambia	55	Mauritius	91	Swaziland	87
Cabo Verde	88	Ghana	79	Mozambique	60	Tanzania	70
Cameroon	77	Guinea	30	Niger	19	Togo	66
Chad	40	Ghana	79	Nigeria	62	Uganda	76
Central Africa Republic	37	Guinea Bissau	59	Rwanda	73	Zambia	86
Comoros	58	Kenya	81	Sao Tome and Principe	92	Zimbabwe	88
Cote d'Ivoire	47	Lesotho (2014)	76	Senegal	57		

Source: Data adapted from World Atlas (2017), World Development Indicators (2019), and World Population Review (2020)

some countries like Niger have a literacy rate as low as 19 percent. Several factors could be responsible for this gap, such as the government's position on literacy. The government plays a significant role in the literacy rate of its country. The value placed on literacy by the government affects the participation in literacy programs, which determines

the literacy rate. If a government values literacy, it will promote literacy.

The government of Seychelles began promoting adult literacy in the 1980s with a total government expenditure on literacy in 2011 at 10.4 percent. The adult literacy program in Seychelles is organized by the Ministry of Education under the auspices of the Adult Learning and Distance Education Centre (ALDEC). The government of Seychelles also promotes literacy for learners with disabilities. The first community-based adult literacy program was launched in 1971 with the aim of providing "basic literacy skills for all citizens, out-of-school youths, and adults seeking upgrading, training, life skills, and enhanced opportunities for employment" (Seychelles Institute of Distance and Open Learning 2020).

The government of Seychelles has been fully committed to the National Adult Literacy Program whose language of instruction is Seychelles Creole, the most widely spoken indigenous language in the country. English and French languages were introduced later as language of instruction. Literacy programs are financed by the government and offered free of charge to participants. Several literacy centers are set up in district schools and district administration buildings of most regions and districts. Centers are coordinated and managed by part-time coordinators and supervised and supported by ALDEC.

Equatorial Guinea is one of the African countries with a high literacy rate. It is the only Spanish-speaking country in Africa. With a population of 1,355,986 persons in 2019, Equatorial Guinea has made steady effort to improve education and literacy over the past twenty years. The high literacy rate in Equatorial Guinea is the result of cooperation and partnership with world-renowned universities, private sector, and public sector (Republic of Equatorial Guinea, 2013). In 2015 the Ministry of Education partnered with StoneHill Education, an international education consultancy firm specialized in design and project management, to establish America University of Central Africa in the city of Oyala (Republic of Equatorial Guinea, 2015).

South Africa is another country with a 95 percent literacy rate. Some researchers argue that children's literacy is declining (Perry, 2008; Howie et al, 2017). The high literacy rate has also been contested by researchers who claim that high literacy rates are divided by gender, class, and race in relation to educational opportunities and success (Department of Higher Education & Training in South Africa, 2011). During the apartheid regime, the Bantu Education Act was promulgated in 1953. It allowed the development of basic literacy skills among Blacks, with Coloreds and Indians also having their own respective levels of education. The apartheid education offered low-quality instruction and separate schools to Black South Africans. Therefore, education for non-Whites at that time was poor. The system produced functional illiterates. Thus, McKay (2007) concluded that South Africa blacks have a low literacy rate which cannot be examined independently without reference to the apartheid regime at that time. By 2001, the census figures revealed that 4.7 million adults (16 percent of the total population) did not have any schooling, and 9.6 million (32 percent of the total population) were primary school dropouts.

Consequently, at the end of the apartheid regime in 1994, the constitution of South Africa clearly made basic education and adult basic education (ABET) a right to every citizen (Department of Higher Education & Training in South Africa, 2011). The government placed great emphasis on adult education. Several programs were designed, and legislations were passed to provide adult literacy. For example, the Multi-Year Implementation Plan (Department of Education, 1997) specifically targeted women (particularly rural dwellers), school dropouts, prisoners and former prisoner, adults with disabilities, and the unemployed. Citizens were provided special motivation and incentives to attend literacy programs. The effects of government efforts to eradicate illiteracy were widespread as historical data about literacy rates in South Africa shows a consistent increase from 2010 (Table 4).

Niger is one of the countries with a low literacy rate. Despite government effort to improve adult literacy, Niger still witnesses low adult literacy rate. Several variables such as per capita income, family background, safety, and child marriage could be responsible for the outcome of government expenditure on literacy and the success of adult literacy programs (Gupta et al, 1999). Still other variables like war, poverty, gender inequality, natural disaster, language, and population explosion can affect literacy rates of any country.

War and prolong conflict have a devasting impact on education and literacy. During war, people are more focused on safety than on literacy. War negatively affects learners, teachers, infrastructure, and the government. Countries like Cote d'Ivoire, Chad, Democratic Republic of Congo, Somalia, Liberia, and Southern Sudan with long history of instability have many illiterate adults (UNICEF Press Release, 2018). This is because during war time everything is chaotic. School buildings and other infrastructures are damaged or destroyed during war time. Qualified teachers are likely to be displaced. This state of insecurity prevents parents from sending their children, particularly their daughters, to school. Adults are more concerned with safety and the well-being of the family. Therefore, conflict is a catalyst for illiteracy.

Another variable that could negatively impact literacy is the language of instruction. For example, in Niger the language of education is French. French is not the mother tongue for most Nigeriens, who were raised to speak Hausa. Seychelles had a successful community-based adult literacy program in 1971. This was due largely to the fact that the government of Seychelles used Seychelles Creole, an indigenous language, as the medium of instruction before introducing English and French. Thus, effective communication is necessary for the delivery of literacy instruction and learning outcome.

Table 4. Historical data of South Africa literacy rate

Year	Literacy rate	Annual change
2015	94.37%	0.23%
2014	94.14%	0.41%
2012	93.73%	0.63%
2011	93.10%	0.22%
2010	92.88%	-0.02%

Source: Data adapted from World Data Atlas (2017)

CONCLUSION

Some African countries like Seychelles, South Africa, and Equatorial Guinea have exhibited high adult literacy rates above 95 percent. These countries may not have attained the United Nations' recommendation for adult literacy, but they have made commendable efforts. Also, such high levels of literacy cannot be compared to the high literacy rates of developed countries. Different countries have different measurement tools, such as the national census or survey measurement under controlled conditions (UNESCO, 2006). Specific surveys include "self-reported literacy by individuals, self-reported literacy declared by the head of the household, tested literacy from proficiency examinations, and indirect estimation or extrapolation" (Ortiz-Ospina & Beltekian, 2018). The validity of these measurement tools may be questionable, for example, some national censuses may be manipulated.

Despite the measurement tools that are used, most African countries still have low adult literacy rates when compared to developed countries. This means that a vast majority of adults in Africa, whether male or female, cannot read or write a short simple sentence about themselves. The global gender disparity in literacy is prevalent in Africa with females lagging behind. This is in conformity with the United Nations report of 2015, which showed 757 million adults in the world were illiterate; two-thirds were women (Ford, 2015).

Based on the analysis, this research suggests the following recommendations. African governments should take deliberate steps to eradicate adult illiteracy in their various countries. Literacy should be distinct from education. Smith-Greenaway (2015) found a weak correlation between educational attainment and literacy. A large proportion of African women who never attended school can read, just as some who had completed primary school could not read. Literacy should be an important objective for every country. Furthermore, if African countries really want to meet the 2030 Sustainable Development Goal 4, then access to adult literacy opportunities should be expanded to include school dropouts and those adults who have never been formally educated.

Furthermore, governments should adequately fund literacy programs. As stated by Gallagher (1993) and Mehrotra (1998) high educational attainment is associated with high public spending on education which impacts on literacy. Therefore, special budgets for literacy should be made and they should be distinct from educational budgets. Goals should be set, and efforts should be made to achieve specific literacy goals. Incentives should be given to encourage attendees, especially women, who have the lowest literacy rates in several countries.

Also, African countries should curb the rate of basic school dropouts. Policies that will enhance the successful completion of Primary and Secondary education should be formulated. Additionally, absenteeism should be viewed seriously. School dropout is a global issue. According to World Bank (2015) report, there are 58 million children who are out of school and majority of them are in developing countries. School dropout is endemic several sub-Saharan Africa countries (Adam et al, 2016). According to Ghana News Agency in 2013 there approximately ten million boys and girls who had dropped out of school. Dropout rates are even more prevalent in Angola (68 percent), Chad (72 percent), and Uganda (68 percent) where two out of three youths, who begin elementary school drop before achieving the last grade. (UNICEF, 2012).

Reasons for student dropout are not far-fetched. According to Adam, Adom, & Bediako (2016) child labor, poverty, teenage pregnancy, and distance to school are major reasons why students drop out of schools in sub-Saharan African countries. Also, corporal punishment and teachers' attitude towards their jobs and the students they teach are contributing factors of school dropouts. Sickness and death of parents are factors that lead to students dropping out of schools (Adam, Adom, & Bediako, 2016). Therefore, the root causes of why students drop out of schools should be properly addressed. The school curriculum should be revisited because some students complete their primary and secondary education without the ability to read and write at the appropriate grade level. African countries should strive to provide a quality education. These suggestions may improve adult literacy in Africa.

REFERENCES

- Adam, S., Adom, D., & Bediako, A.B. (2016). The Major Factors That Influence Basic School Dropout in Rural Ghana: The Case of Asunafo South District in the Brong Ahafo Region of Ghana. *Journal of Education and Practice*, 7, 28.
- Adegbija, E. (2004). Language Policy and Planning in Nigeria. Current Issues in Language Planning, 5(3), 181-246.
- Alexander, N.; Bamgbose, A.; Bloch, C.; Busch, B.; Coste, D.
 Edwards, V.; Fal, A.; Ndumbe III, K.; & Samassékou, A.
 (2007). Literacy and Linguistic Diversity in a Global Perspective: An Intercultural Exchange with African Countries. Strasbourg: Council of Europe Publishing.
- Alidou, H. & Aitchison, J. (2009). The State and Development of Adult Learning and Education in Sub-Saharan Africa Regional Synthesis report. UNESCO Institute for Lifelong Learning
- Atitola, O. (2016). Level of Community Mental Health Literacy in Sub-Saharan Africa: Current Studies are Limited in Number, Scope, Spread, and Cognizance of Cultural Nuances. *Nordic Journal of Psychiatry*, 69, 2, 93–101.
- Basili, C. (2015). European Network on Information Literacy. Retrieved March 13, 2020 from http://dspace-unipr. cineca.it/bitstream/1889/2699/1/Basili-Parma-2015-03. pdf
- Basili, C. (2011). A Framework for Analyzing and Comparing Information Literacy Policies in European Countries. *Library Trends*, 60, 2, 395-418.
- Beegle, L., Christiaensen, L., Dabalen, L., & Gaddis, I. (2016). Poverty in a Rising Africa. International Bank for Reconstruction and Development / The World Bank
- Benavot, A. (2015). Literacy in the 21st century: Towards a dynamic nexus of social relations. *International Re-*

view Education, 61, 273–294. https://doi.org/10.1007/ s11159-015-9463-3

- Countrymeters. (2020). Botswana Population. Retrieved Oct 25, 2020 from https://countrymeters.info/en/Botswana-#:~:text=Literacy%20of%20population,98%2C024%20 are%20illiterate.
- Department of Higher Education & Training in South Africa. (2011). Public Post-School Options Information Pack for the Class of 2010 (and those Persons of Earlier Classes who are not in Education, Training or Employment). Retrieved March 30, 2020 from http://www. careerhelp.org.za/download_files/post_school_options_ info_pack20110330.pdf
- Ford, L. (2015). Two-thirds of World's Illiterate Adults are Women, report finds. Retrieve April 6, 2020 from https:// www.theguardian.com/global-development/2015/ oct/20/two-thirds-of-worlds-illiterate-adults-are-women-report-finds
- Gallagher, M. (1993). A Public Choice Theory of Budget: Implications for Education in less Developed Countries. *Comparative Education Review*, 37, 2, 90-106
- Gentry, J., & McAdams, L. (2013). Digital Story Expressions: Blending Best Practices
- in Literacy and Technology with Middle School Students. In Proceedings of Society for Information Technology & Teacher Education International Conference 2013 (pp. 4253-4257). Chesapeake, VA: AACE. Retrieved November 4, 2020 from http://www.editlib.org/p/48794.
- Ghana News Agency (2013). Over half of the world's 58million school dropouts are in Africa. Retrieved April 10, 2020.
- Gilbert, L.; Teravainen, A., Clark, C. & Shaw, S. (2018). Literacy and Life Expectancy. Retrieved March 15, 2020 from http://cdn-literacytrust-production.s3.amazonaws. com/media/documents/National_Literacy_Trust_-_Literacy and life expectancy report.pdf
- Govinda, R., & Biswal, K. (2014). Literacy Policies in South, West, and Central Asia. In Regional Perspectives on Literacy Policies, Strategies and Financing. Emerging Trends in Adult Literacy. Paris: UNESCO.
- Gupta, S., Verhoeven, M., & Tiongson, E. (1999). Does Higher Government Spending buy Better Results in Education and health Care? A Working Paper of the International Monetary Fund. Retrieve November 4, 2020 from https://www.imf.org/external/pubs/ft/wp/1999/ wp9921.pdf
- Howie, S.J., Combrinck, C., Tshele, M., Roux, K., McLeod Palane, N. & Mokoena, G.M. (2017). PIRLS 2016 Progress in International Reading Literacy Study 2016 Grade
 5 Benchmark Participation: South African Children's Reading Literacy Achievement. Pretoria: Centre for Evaluation and Assessment.
- International Literacy Association. (1996). Why Literacy? Retrieved Feb 3, 2020 from https://www.literacyworldwide.org/about-us/why-literacy
- Jeanne, C. S. (1983). Stages of Reading Development. New York: McGraw Hill.
- Kann, U. & Taylor, D. C. (1989). Adult Literacy Rate in Botswana. Botswana Notes and Records. 20, 135-141.

- Kim, S. (2018). Literacy skills gaps: A Cross-Level Analysis on International and Intergenerational Variations. *International Review of Education*, 64, 85-110.
- Lind, A. & UNESCO-IIEP, (2011). Literacy for All: Making a Difference. Retrieved Feb 12, 2020 from http://lst-iiep. iiep-unesco.org/cgi-bin/wwwi32
- Literacy Rate by Country 2020. Retrieved March 15, 2020 from https://worldpopulationreview.com/countries/literacy-rate-by-country/
- Macmillan, L & O'Neil, M. (2012). Teaching about Frederick Douglass: A Resource Guide for Teachers of Cultural Diversity. (30-44).
- Max, R. (2014). Human Development Index (HDI) In OurWorldInData.org. Retrieved March 15, 2020 from https://ourworldindata.org/human-development-index
- McKay, V. (2007). Adult Basic Education and Training in South Africa. Retrieved March 30, 2020. http://ncsall. net/fileadmin/resources/ann_rev/rall_v7_ch9.pdf
- Mehrotra, S. (1998). Education for All: Policy Lessons from High Achieving Countries. UNICEF Staff Working Papers, Evaluation, Policy, and Planning Series No EPP-EVL-98-005 (New York: UNICEF)
- Mitra, A. (2014). Coalition and Partnership in Adult Literacy and Non-Formal Education: Experiences from Bangladesh, India, Nepal, and Pakistan. In Regional Perspective of Literacy Policies, Strategies, and Financing. Emerging Trends in Adult Education. Paris: UNESCO
- Ortiz-Ospina, E. & Beltkian, D. (2018). Measurement Today. Retrieved from https://ourworldindata.org/how-is-literacy-measured
- Parrilla, R.K. & Stack-Cutler, H. (2011). Literacy and Reading Behavior. In B. B. Brown, & M. J. Prinstein (Eds.), *Encyclopedia of Adolescence*, 1, 203-211.
- Pariona, A. (2017). The 10 Most Literate Countries of Africa. In World Atlas. Retrieved Feb 13, 2020 from https:// www.worldatlas.com/articles/the-10-most-literatecountries-of-africa.html
- Perry, K. (2008). Primary School Literacy in Southern Africa: African Perspectives. *Comparative Education*, 44, 1, 57-73.
- Popovic, K. (2014). Regional Perspective on Literacies. Adult Literacy Supply and Demand in South Eastern Europe. In Regional Perspective of Literacy Policies, Strategies, and Financing. Emerging Trends in Adult Education. Paris: UNESCO
- Prettyman, J. (2019). The Literacy Gender Gap. Retrieved March 13, 2020 from https://www.vitalvoices.org/2019/09/ international-literacy-day-the-literacy-gender-gap/
- Republic of Equatorial Guinea. (2013; 2015). Equatorial Guinea Ranked Second in Literacy in Africa by African Economist Magazine. Retrieved Oct 24, 2020 from https://www.prnewswire.com/news-releases/equatorial-guinea-ranked-second-in-literacy-in-africa-by-african-economist-magazine-215141261.html
- Robinson, D. (1988). Language Policy and Planning. Retrieved January 6, 2021 from www.eric.ed.gov.
- Seychelles Institute of Distance and Open Learning (2020). Retrieved Oct 24, 2020 from http://www.sidol.edu.sc/

- Shiundu, A. (2018). More Must Happen, accessed Feb 12, 2020 from https://www.dandc.eu/en/article/literacy-
- Smith, L. (2013). Towards a Model of Critical Information Literacy Instruction for the Development of Political Agency. *Journal of Information Literacy* 7, No. 2, 15–32.
- Smith-Greenaway, E. (2015). Educational Attainment and Adult Literacy: A Descriptive Account of 31 Sub-Saharan Africa Countries, Retrieved April 7, 2020 from https://pubmed.ncbi.nlm.nih.gov/27147903/
- South Africa Literacy Rate Historical Data (2017). Retrieved March 30, 2020 from https://www.macrotrends. net/countries/ZAF/south-africa/literacy-rate
- Srivastava, N. (2017). Literate Schools. Retrieve Oct 23, 2020 from https://medium.com/literate-schools/literacy-in-mathematics-aac1611197e2
- Stambler, L. G. (2013). Media Literacy. Developed for the Pier Institute: Global Youth in the Digital Age Retrieved Oct 21, 2020 from https://namle.net/publications/media-literacy-definitions/
- Tobin, C. (1983). Developing Computer Literacy. *The Arithmetic Teacher* 30, 6, 60, 22-23.
- UNESCO (2019). Fact Sheet-Sub Saharan Africa. Retrieved Jan 16, 2020 from https://en.unesco.org/gem-report/ sites/gem-report/files/fact_sheet_ssa.pdf
- UNESCO (2010). Achieving Gender Equality, Women's Empowerment and Strengthening Development Cooperation. Retrieved Oct 23, 2020 from https://www. un.org/en/ecosoc/docs/pdfs/10-50143_(e)_(desa)dialogues_ecosoc_achieving_gender_equality_women_ empowerment.pdf
- UNESCO (2006). Literacy 2006. Background Papers for the Education for All Global Monitoring Report 2006, Literacy for Life. Retrieved Oct 25, 2020 from https:// en.unesco.org/gem-report/report/2006/literacy-life
- UNESCO (2005). Aspects of Literacy Assessment: Topics and issues from the UNESCO Expert Meeting, 10 -12 June 2003. Retrieved Oct 25, 2020 http://www.unesco. org/new/en/communication-and-information/media-
- UNESCO Institute for Statistics (2019). Retrieved March 7, 2020 from https://data.worldbank.org/indicator/ SE.ADT.LITR.FE.ZS?locations=SS
- UNESCO Institute of Statistics (2017). Retrieved Oct 25, 2020 from http://uis.unesco.org/sites/default/files/

documents/fs45-literacy-rates-continue-rise-generation-to-next-en-2017_0.pdf

- UNICEF (2012). All Children in School by 2015-Global Initiative on Out-of-School Children. Retrieved Oct 23, 2020 from https://unesdoc.unesco.org/ark:/48223/ pf0000228081
- UNICEF Press Release (2018). 3 in 10 young people in conflict or disaster-stricken countries are illiterate – UNICEF. Retrieve March 31, 2020 from https://www. unicef.org/media/media 102519.html
- United Nations (2020). International Literacy Day 8 September. Retrieved Feb 12, 2020 from https://www.s/ literacy-day
- Wadhwa, D. (2019). More Men than Women are Literate. Retrieved March 13, 2020 from https://blogs.worldbank.org/opendata/more-men-women-are-literate
- What Is Technology? Definition & Types. (2016). Retrieved March 21, 2020 from https://study.com/academy/lesson/ what-is-technology-definition-types.html.
- World Bank (2015). Millennium Development Goals: Achieve Universal Primary Education by 2015. Retrieved on April 10, 2020 from http://www.worldbank. org/mdgs/education.html
- World Bank Data (2020). Retrieved March 23, 2020 from https://data.worldbank.org/indicator/SL.TLF.CACT. MA.ZS?locations=BW
- World Bank Data (2019). Retrieved March 23, 2020 from https://data.worldbank.org/indicator/SL.TLF.CACT. MA.ZS?locations=BW
- World Health Organization: Adult Literacy Rate %. Retrieved March 14, 2020 from https://www.who.int/data/ gho/indicator-metadata-registry/imr-details/3200#:~:text=Definition%3A,to%20make%20simple%20arithmetic%20calculations
- Worldometers. (2019). South Sudan Population. Retrieved Feb 15, 2020 from https://www.worldometers.info/ world-population/south-sudan-population/
- Yousif, A. A. (2014). Adult Literacy and Adult Education in Arab States: Bahrain, Egypt, Omar, Saudi Arabia, Sudan, Syria, and Yemen. In Regional Perspective of Literacy Policies, Strategies, and Financing. Emerging Trends in Adult Education. Paris: UNESCO