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Online Learning Accessibility for Children with Disabilities in Rural Uganda: Lessons from COVID-19 Wave 1&2 Lockdown

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ABSTRACT

This qualitative study examines the factors influencing access to online learning for disabled students enrolled in secondary school by school closure amid Coronavirus (COVID-19 wave 1& 2) lockdown in rural Uganda. Students with various disabilities were interviewed and their parents and caretakers to find their experience with online learning in the rural Kalungu district. The findings reveal that online learning cannot produce desired results in underdeveloped countries like Uganda, where most disabled students are unable to access the internet and data due to monetary and technical issues. Negative attitudes on disability and lack of support by parents and caretakers continue to pose challenges—the voices of disabled children matter. The study recommends online learning for disabled children and urges the government and its stakeholders to organize refresher courses for teachers in both government and private schools to enable them to cope with the 21st century of ICT.

KEYWORDS: Online Learning, Accessibility, Children with Disabilities, Rural Uganda

INTRODUCTION

Disability is not a new or rare phenomenon in Uganda society. As of 2014, one in every twenty-five persons in the country has some form of disability (Uganda National Household Survey, 2014). This trend does not appear to be changing, as the latest statistics show that 12.4% of Uganda's population lives with some form of disability. So, it does not surprise that the Uganda government and several humanitarian agencies have spent many resources on ensuring a better society for the disabled, where they can live a whole and fruitful life.

In 2017, the government of Uganda, through the Ministry of ICT and National Guidance (MoICT & NG), formulated an Information and Communications Technology (ICT) for Disability Policy in the year 2017 aimed at enhancing service provision through the use of ICT and improving the lives of persons with disabilities (the Republic of Uganda, 2017). The policy guides the development and supply of accessible ICTs in Uganda. This intervention was a direct result of the realization (on the part of the government)

that people with disabilities are lagging in accessing services and are disproportionately denied access to ICT services and the advantages it provides.

THE PROBLEM

The gap between the able-bodied and disabled access to infrastructure and other services was further widened by the Covid-19 pandemic and the resultant lockdowns. All learning institutions (from primary up to University) were shut down, and learning continued virtually. The sudden shift to the online space is particularly worrying for disabled people. The 2017 Information and Communications Technology (ICT) for Disability Policy aimed to address the ICT gap between the abled and disabled and the covid-19 restrictions and the resultant changes in society. This study, therefore, seeks to understand how accessible online learning is for school-age disabled children.

STATUS OF EDUCATION FOR CHILDREN WITH DISABILITIES IN UGANDA

Education is a right for every child irrespective of disability status, given its

multiple benefits, including preparing children for future life challenges (UNCRPD, 2020; UNCRC, 1989). Children need to have quality education irrespective of whether they live in an urban or remote setting. Although Uganda has a policy on the education of children with special needs, it is essential to understand the schooling status of disabled children, especially during this COVID-19 era when some schools have adopted online learning.

A report presented by the Uganda Bureau of Statistics at the World Population Day Celebrations on 11th July 2020 reflects that Uganda's population is projected at 41.6 million people and set to more than a 47million by July 2021(UN, 2021). This rise comes with likely consequences.

In addition, out of 7.3 million households in Uganda, 5,475,000 are in rural areas (UBOS, 2021). The population is dominated by the 15-24 year age group while 0-14 years is the majority. Uganda has an estimated number of 2,027,148 children with disabilities (Male=1,052,000 Female=974,488) (MOGLSD, 2016). Some of these children cannot attend school, while others fail to transit from one level to another (Marcia and Paula, 2010). Some disabled children work hard and excel in their academic life. For instance, in the recent release of the Uganda Primary Leaving Examinations UPE), it was noted that out of 749,761 candidates, there were 1,599 (M=752, F=847) learners with special needs of various categories (the blind, the deaf, the physical hand capped and the dyslexics) among others.

All categories of children had those that scored first grades except the deaf category. Partially blind children, those needing extra time and the people with dyslexia and those needing transcribers excelled. It does not mean that such children are not faced with challenges as they study. Instead, they chose to persevere with the support of their teachers, parents and communities.

Of the above special needs candidates registered, 20 were absent and did not sit for their 2020 PLE (Ministry of Education and Sports, 2021). It is disturbing to note that primary school enrollment is high, but the completion rate is low. For instance, statistics show that in 2013, a total of 1,875,553 enrolled to start primary one by the end of primary

seven in 2020, only 736,942 completed primary seven. Thus, the number of pupils that dropped out before completing primary seven was 1,138,611. These are the majority. To make matters worse, only 300,000 students complete the Uganda Certificate of Education (UCE), and only 100,000 students complete the Uganda Advanced Certificate of Education (UACE) annually (Ministry of Education and Sports, 2021). Although there is a lack of precise disaggregated data on the dropout rate for children with special needs, this indicates their low school completion rate given the intolerable challenges they experience.

Schooling of children with disabilities in Uganda is conducted through a) special schools that cater for children with disabilities b) mainstream schooling depending on options available in the school to support the child through inclusive education. Integrated education has been encouraged since 1997 when Uganda Introduced Universal Education at the primary and secondary school levels. Thus, children with special needs are enrolled in various schools in Uganda (Susanne & Sally, 2002). All these schools closed in March 2020 with the coronavirus outbreak, and some of them have utilized online media and social media tools such as zoom, WhatsApp, Google to ensure continued interaction and education during the pandemic (Kaur, 2020).

Although the use of online learning is not a new phenomenon, nor is it a new practice in Uganda, very little is written about its efficacy and effects (Muhammad & Kainat, 2020; McPherson & Bacow, 2015). The online learning practice has intensified in wave two lockdowns compared to wave one despite being expensive. Schools have specifically targeted semi-candidate classes. Students with disabilities are expected to comply with this trend. Families seem to respond differently depending on their situation. Susanne and Sally, 2002 assert that so often, the unique needs of children in the classroom setting are not met. Thus, one wonders the fate of disabled children concerning online learning with the COVID-19 Monster and a likelihood of wave 3.

As of 27th July 2021, there have been 92,795 confirmed cases and 677 active cases

(COVID-19 Response Info Hub, Uganda). These cases are exclusive of those in homes and cannot reach health facilities. This paint a picture that possibly there are more lockdowns ahead in case of failure to adhere to Standard Operating Procedures (SOPs).

POLICY FRAMEWORK ON EDUCATION FOR CHILDREN WITH DISABILITIES IN UGANDA

Uganda is bound by the Human Rights Treaties such as the UN Convention on Rights of Persons with Disabilities (2020) prohibits exclusion from educational opportunities based on disability, socioeconomic status and sex. Similarly, several other international instruments guard against discrimination in education, namely, the convention on the Rights of the Child (1989), the Universal Declaration of Human Rights (1946), UNESCO Convention against Discrimination in Education (1960). Uganda ratified the United Nations Convention on the Rights of Persons with Disabilities (2008).

The country is a signatory to additional international agreements that provide for learners with disabilities, such as the 1994 Salamanca Statement and Framework for Action on Special Needs Education. The instrument emphasizes the right for children to participate in quality education that is meaningful to everyone; the right for children with temporary and permanent needs for educational adjustments to attend school; the right of all children to attend school in their home communities in inclusive classes as well as the right of all children to participate in a child-centred education (Ministry of Education and Sports, 2021).

The Constitution of Uganda (1995) and The Persons with Disabilities Act (1996) are critical instruments. In addition, Uganda's education system is also characterized by Universal Primary Education (UPE, 1997); Universal Secondary Education (USE, 1998), to which disabled children are beneficiaries. In order to meet these obligations, the Ministry of Education in Uganda has a distinct department in charge of special needs education.

Despite all these instruments in place, multiple numbers of disabled children continue to miss out on education, especially

during the COVID-19 era, because they cannot access the education system through the use of ICT.

WHO ARE CHILDREN WITH DISABILITIES SHARING THEIR EXPERIENCE ON ACCESSIBILITY TO ONLINE LEARNING?

Generally, children with disabilities are the least visible among vulnerable children. This study singles out those most affected by the introduction of online learning during coronavirus wave 1&2 lockdown, as indicated in table 1.

Table 1: Category of Disabled Children Faced with Online Learning Challenges during Waves 1&2

- Children with difficulty seeing even with glasses
- Albino children
- Epileptic children
- Children with difficulty walking (Physically disabled children)
- Children with difficulty hearing even with hearing aid (deaf children)
- Children with difficulty in communication (dumb children)
- Children with difficulty hearing and talking (deaf- dumb children)
- Children with a disability to hear and see (deaf-blind)
- The little persons
- Children with a combination of two or more of the above

Source: Adopted from Washington Group Short Set (WGSS)

Although disability is experienced differently depending on the social norms of a given society, this study looks at the environment in which children with disabilities live, hindering them from accessing education through online learning.

THEORETICAL FRAMEWORK

The social model of disability and the critical disability theory (1937) provide a theoretical framework for this study. The social model provides for the realization of a right to education for disabled people and a theoretical understanding of disability from a socio-political perspective. It seeks to explain

the relationship between people with disabilities and their ability to participate and contribute to society (Oliver, 2009). The theory emerged in the UK during the political activism of disabled people in the 1970s.

The Union of Physically Impaired People Against Impairment (UPIAS) argued that disability is imposed on disabled people by society as an oppressive and discriminating institutional structure (UPIAS 1976). Based on this new understanding of disability, scholars like Michael Oliver, who was influenced by Marxist sociology, developed the social model. In this ideology, disability is understood as an inability to contribute to or participate in society due to economic, social and cultural limitations imposed on the disabled by society (Barnes & Mercer 2010).

The social model argues for removing a disabling environment to ensure equal participation for people living with disabilities (Oliver, 2009). In general, the social model of disability hypothesizes that impairment and disability are different. Disability is both social oppression and social construction and is culturally produced and structured, while impairment is not. The theory suggests that people are made disabled by society and that impairment should not hinder their participation in society and access to opportunities.

Because of this, the right to participate in online education programs for the impaired requires an inclusive approach to online learning, which involves producing equal opportunity of access to online learning regardless of one's disability (Reiser, 2012). To ensure that everyone achieves equality, factors that cause inaccessibility to online learning and discrimination against disabled students should be addressed. Juxtaposing the social model of disability with inclusive online learning in education for the disabled, it can be deduced that disabled students are excluded from online learning in education not because of their disabilities but because of the current home and community environment that cannot take care of the students' needs. Therefore, for true inclusiveness in online learning, families, communities, and schools need to be reformed so that they can respond positively

to the varied needs of disabled students. This will enhance their full participation in online learning for multiple benefits.

In addition, while exploring children's experiences, we built upon the argument that "disability is not fundamentally a question of medicine or health, nor is it just an issue of sensitivity and compassion; rather, it is a question of politics and power (lessness), power over, and power to" (Devlin & Pothier, 2006). This standpoint thus challenged the 'traditional' able-bodied supremacy and the oppression that arises from restricting economic and social benefits to persons with disabilities, which are then redistributed as privileges to be negotiated (Oliver & Barnes, 1993; Rioux & Frazee, 1999).

While working with the critical disability theory, we moved away from the individual pathology of disability (based on the biomedical model) and beyond liberalism towards a social-political relationship. This enabled the development of a political and structural analysis of the exclusionary practices that disempower and marginalize disabled students by revealing their challenges, opportunities, implications and effects, and recommendations to improve their access to online learning.

It is mesmerizing to note that the critical theory according to Hosking (2008) adopts a version of the social model centred on principles explicitly that:

- (a) The attitudinal, physical and institutional barriers cause social disadvantages experienced by disabled individuals thus, failure to meet their desires
- (b) Disability reflects a complex connection between impairment, response to impairment by the person, as well as the social environment and
- (c) Disability is a social construct not the inescapable consequence of the impairment (Hosking, 2008).

The COVID-19 pandemic has brought to light challenges faced by disabled students in accessing online learning as a majority of the interventions by the government of Uganda has not taken into consideration the limitations imposed on disabled students, especially by their families and communities.

Students with disabilities have arguably been more affected by the pandemic and its resultant lockdowns in both waves 1 & 2. This model helps us understand the need to reform online learning and the education system, in general, to ensure a more inclusive approach as the education system is obliged to advance due to the pandemic.

METHODOLOGY

The study employed a qualitative approach of In-depth Interview. During the COVID-19 lockdown with no register, snowball sampling was used to recruit a convenience sample of 42 disabled children in the Kalungu District of Uganda. Factors affecting children's access to online learning were assessed through individual in-depth interviews using an interview guide. Children were aged between 13 and 18 with different impairments, with different levels of family household income and were enrolled in secondary school at the time of wave one lockdown.

Parents and caretakers of the children were purposively selected and interviewed. These gave written consent to participate in the study. Adult consent was received on behalf of children that could not assent to participate by themselves while children that could do so assented on their own. In the Local council area, one chairpersons and community volunteers aided the process. The COVID-19 Standard Operating Procedures such as hand washing, sanitizing and social distancing were strictly followed during data collection. Significant themes and quotes were selected to explain and show relevant themes. Identified themes were discussed and checked with the participants in follow up conversations conducted on the phone.

FINDINGS

First, the findings reveal that most disabled children are unable to access online learning. Their reasons vary from one individual to another, even among children that have similar forms of disability.

Internet network connectivity is a problem in the rural setting and worse during the afternoon hours, as reported by the study participants. Connecting to lessons in the morning hours when the network could be stable between 8:00 am-12:00 noon was an

option for many, but this did not mean success with connectivity to all study participants. Others referred to it as just trying, and by luck, if it works, one can study that day.

Furthermore, from the findings, Albino students expressed how the challenge with eyesight deters them from using phones or computers for a more extended period, even in instances where they could afford to have access. They preferred that a friend or caretaker/ parent help read the material as they listened to the teacher. As expressed, this was a good approach but time-consuming for the second party. More so, many albino students needed magnifiers, caps, sunscreen lotion as some would take the option of moving to friends in the neighbouring homes to find smartphones and access online learning, but these items are unaffordable for their families. The findings showed that some respondents suffering from albinism could not move far away from home due to heightened fear of abduction and victimization due to their condition. These fear stemmed from the belief that people with albinism have some spiritual power that can unlock untold riches if harvested (through ritual killing). So, they fear being captured along the way.

The findings reveal that disability comes with an extra cost if any disabled student is to benefit from online learning, yet some families were found not in a position to afford assistive devices like hearing aids for the deaf and sign language interpreters. Some families expressed that they are poor and can only afford basic needs relating to the entire family, such as food and not catering to individual needs. Thus, some students with hearing impairment whose schools had online lessons missed studying during the lockdown. Others had their assistive devices spoilt earlier before the lockdown, and their families are just planning to replace them after the covid-19 Monster is out of the picture.

One parent of a seventeen-year deaf student voiced:

- *A well-wisher gave my daughter an assistive device. These spoilt seven months ago. The school has been giving her what she uses in a classroom, but the*

device is kept at school. When coronavirus started and the lockdown was initiated, she had no more access.

The findings also show that online learning is costly for families of disabled children, as explained by one guardian of a male student with hearing impairment:

- *I have been paying UGX 10,000 (Ten thousand shillings) every week as fees at school, then my son uploads about UGX 3,000 per day. As a parent to a disabled child, I am more financially constrained than my counterparts with non-disabled children. This is so stressful and traumatizing for me. It is also likely to result in post COVID sickness on my side. It is hard to get this money, yet I also buy books and pens. I thought that online learning was a short time measure when the lockdown started. I have chosen to have my son stop learning on the phone.*

In addition, findings show that some disabled students were unlikely to continue with lessons during the lockdown without parents providing the necessary devices such as smartphones. A few students with physical impairment were found not possessing any device despite being in semi-candidate and candidate classes. They continue to read notes from their teachers as they pray for school reopening.

Noteworthy, some of the students needed wheelchairs to move quickly to their colleagues who had smartphones. In most cases, their fellow students were non-disabled and from middle-income families that could afford to buy a smartphone for children in the home to share but did not mind much sharing with the disabled students. However, even when this was a possibility, the transport was a hindering factor. Their guardians were unwilling to transport them daily to their friends due to fear of contracting covid-19. Others see it as an opportunity to rest during school closure and resume daily transportation when schools open.

A fifteen-year-old senior- four girl with a physical disability shared:

- *Last week, my twelve-year-old brother went rolling me on a bicycle to go to my friend's home because she has a smartphone. This is a one-kilometre journey. I was a heavy mass for my brother, and he went sweating. On the way, we knocked a pawpaw tree, and up to today, my knees are still paining. I have given up until school opens again.*

Although the government seems to have put effort and trained teachers for different forms of disabilities, findings reveal that some students are not interested in continuing with school. Even when a well-wisher provides a smartphone, there is poor concentration.

One parent of a 17-year deaf-blind girl explained:

- *My daughter has been advised to go to her friend who has a smartphone in the neighbourhood and study with him. She only went there twice during the first lockdown and had not gone during wave two. Instead, she keeps demanding a braille machine. I do not have money.*

The findings reveal that social stigma and prejudice discourage parents from providing their disabled children with gadgets and logistics necessary for online learning. For instance, none of the minor persons and the deaf-blind interviewed was aware of lessons going on through online learning. None of them had a smartphone, nor did any of them have access to the computer.

Noteworthy, out of the few students interviewed, more boys than girls had access to smartphones. The majority of these were physical disabilities. Parents, friends and relatives provided moderate, intelligent phones. Some parents and caretakers agree to gender discrimination and prefer to buy smartphones for male students with disabilities instead of girls because the boys do not get money wasted as they will study to the end. Some parents felt it was a waste of additional resources to buy a smartphone for a girl who will get married soon, even before completing school. Although some families

advised their children to share the smartphone and access online classes, girls were inclined to engage more in household chores that they could manage rather than accessing online learning all the time. Thus, their pattern of access to online engagement was inconsistent.

The findings further revealed that parents made some salient mistakes during wave one lockdown. In female-headed households, the feeling that the children have matured and no need to waste more time and resources such as data into studying were frequently stated. The perceptions of parents of children with disabilities and their difficulties in helping their disabled children are also exposed. A parent of a 16-year-old deaf girl explained:

- *During wave 1, my daughter appeared young. Now she is bigger than me and much taller. One might think she is over 20 years. She does not fit to be in lower secondary school. There is no need to waste resources. Let her keep home.*

The findings revealed that the learning environment at school is much different from that at home. The majority of the study participants expressed how they found it difficult to concentrate in a home environment where they were interrupted by fellow siblings listening to the radio. Others were disrupted by parents sending them to do some household chores. One seventeen-year-old girl of short stature explained:

- *My Auntie always tells me in the middle of the lesson to go and buy salt or onions, wash plates or cups, and send me for any activity, especially when it is close to lunchtime when she needs to hurry with cooking food. Also, many children come to play with my fellow siblings, and they make much noise. This is the most distressing.*

Students who shared smartphones to study found it more frustrating when the school teachers gave weekly Google classroom work. It meant more cost in terms of data and time to do this individual work amid the challenge of charging phones that was done a distance

away from where there was electricity. In the initial stages, some students did not know how to create personal email addresses and had to panic finding those who knew how to do so. This was another service at a cost that frustrated some of their guardians. To make matters worse, the installation of zoom was yet another cost. Beginning to operate a smartphone was trial and error for many study participants.

DISCUSSION OF RESULTS

The finding that most of the disabled students interviewed did not have access to online learning during covid-19 lockdown affirms the trend of access to online learning in Uganda, not only in the rural where the majority of Uganda's population also live in an urban setting. In a study conducted in low developed countries such as Pakistan, where digital and distance learning were made compulsory, some scholars assert that online learning cannot achieve results where students cannot access the internet due to monetary and technical issues (Muhammad & Kainat, 2020). This relates to Uganda, as indicated in the findings. Many schools cannot afford to implement online learning, while those that try to do so are constrained by resources and cannot deliver effectively. Parents and guardians also find it hard to meet the necessary costs, such as buying smartphones and computers for the students and data bundles that are expensive.

Moreover, some parents in the rural setting earn very little income while others do not earn during this lockdown period because they have no access to markets for their surplus produce. Scholars such as Clever assert that lack of financial instability is prevalent during crises; thus, access to resources is vital (Clever, 2017). It partly explains the low completion rate of disabled students significantly worse during a crisis. This view is associated with the findings of some scholars that have tried to explore the challenges of online learning during pandemics and suggested that students' voices are significant (Mailizar et al., 2020; Muhammad & Kainat, 2020).

Findings also divulge the multiplicity of factors hindering children with disabilities from accessing online learning. These factors

are found to have an interconnection. Traditional beliefs and practices over persons with disabilities significantly affect children's access to online learning. This includes the fear of being grabbed and taken to witch doctors for sacrifice; thus, the academic, social and security status of children with disabilities, especially albinos, remains at stake. Sam and Jon assert that people with albinism in Africa are often murdered and injured; thus, they need to confront this challenge (Sam and Jon, 2018).

Moreover, this has a lot to do with lowering the self-esteem of disabled children. As portrayed by the findings, other factors such as poverty are not surprising. The Uganda Bureau of Statistics, through the National Household Survey report of 2019/2020, affirms that poverty in Uganda is at 20% and more pronounced in remote settings (Uganda Bureau of Statistics, 2021)

The finding that online learning is costly and frustrating for families of disabled children is unquestionable; moreover, it is also found to be quite costly for families with moderate income, some of which are based in an urban setting and can earn either daily or monthly income (Clever, 2017). The fate of students with disabilities in a remote setting is not surprising as many of these are from poor households earning seasonally from the farming output. Bannink et al. (2020) agree that poverty is widespread among families of disabled children. It should be noted that the cost of smartphones in Uganda continues to be expensive given the shutdown of business internationally. As well, data is not anywhere near to being free in Uganda.

Although the learning environment is key to the learning process, it is not pumping knowledge to disabled students through online channels. Now the bedrooms and sitting rooms have become a classroom for online learning. Providing this kind of environment for a child with a disability is more challenging, especially for hearing impairment. As helpers of the learning process, one wonders how the reorganization of the rooms is being done to turn them into classrooms to make life much easier for the disabled child to cope and learn.

The general attitude of society on disabled children is reflected when some parents and guardians decide to ensure access to smartphones by their none disabled children, especially boys and inclining girls, to engage actively in household chores as these are expected to marry any time. This is demotivating. Scholars such as Kristensen et al. assert a negative attitude toward disabled children in their community, partly explaining limited parental support (Kristensen et al., 2006). It also affirms the stigma associated with disability (Moyi, 2012; Kristensen et al., 2006). These are pretty demotivating factors, yet online learning can be more effective when there are motivational factors, as affirmed by some scholars (Lambert & Schuck, 2020; Hartnett, 2016).

Students that had an opportunity to have access to online learning used intelligent phones provided by friends relatives and borrowed or shared from the neighbourhood. None of the interviewed students owned or accessed a computer for online learning during the lockdown. It could imply that people that used a computer in their lifetime have done so through the schools if they are lucky that their schools own computers. Moreover, this is further explained in the National Household Survey Report, 2019/2020, where only 2% of the population in Uganda own computers while 74% own phones. The latter is not necessarily intelligent phones, thus the limited access to online learning, especially disabled students. There is no doubt that access to smartphones may be mainly by individuals in an urban setting instead of the rural setting where this study was conducted. Noteworthy, internet usage is at 83% in Uganda, mainly for social networking (Uganda Bureau of Statistics, 2021). Most disabled children are from low-income families. It is slightly fulfilling that at least a few interviewed have access to online learning. It should be noted that some of the students access online learning by sharing gadgets with colleagues from the neighbourhood that happen to possess one.

Furthermore, it is most likely that the few disabled children engaged in online learning are getting used to learning on a tablet and may find listening to teachers a bit boring but may have to cope with the routine again.

In addition, sharing smartphones with their non-disabled counterparts during online learning is advantageous to disabled students. Among the many pros is the fact that there are higher chances of disabled children gaining confidence and increasing self-esteem as they continue to interact with their non-disabled counterparts. Maureen et al. (2002) assert that social acceptance of disabled children boosts their self-esteem. They are also likely to become more alert, and when given an opportunity, they go far to deliver on assignments.

CONCLUSION

COVID-19 has impacted learning for disabled children across the globe, especially in this 21st century of ICT, where many schools, including those in rural areas, are trying to adopt online learning. Also, children with disabilities face significant obstacles to online learning because this is entirely a different learning experience for them. In addition, a strong interconnectedness of the factors affecting accessibility to online learning is evidence ranging from economic, social and environmental. Limited resources, high cost of online learning requirements, negative community perceptions over children with disabilities and lack of parental support were pronounced. Therefore, it can be deduced that education is a human need and a struggle for disabled children who managed to have access to online learning in such a rural setting.

There are hard lessons gained in terms of educating disabled children in the 21st century, which require consideration by parents and guardians and stakeholders interested in the plight of children, especially the education sector. A multidimensional approach is also required in addressing the needs and promoting the rights of children with disabilities if they are to meet their educational goals and aspirations. The need to redefine education and what it means for disabled children and their caregivers cannot be underestimated. There is no more comprehensive education as usual. Education is required to enrich learning for disabled children. It can also be concluded that resilient character is vital. Disabled children, their parents and caretakers can be resilient by building on what they have at hand, as evidenced by their creativity amid the many

hindrances. The spirit of sharing resources such as smartphones shows how the human spirit is more resilient and overcomes challenges together.

The acquisition of life skills is vital to strike a balance. Thus the education of disabled children is also for character building, formation and looking ahead!

RECOMMENDATIONS

- The government needs to build infrastructure and reduce the cost of data charges that are too high. This strategy will see more students' access online learning and its benefits, especially in cases of crisis such as COVID-19. It will also reduce parents' anxiety, resulting in health-related complications.
- Facilitating access to online education during crises will highly support the inclusion and integration of disabled children in many ways.
- It is vital to improving the identification of children with different disabilities, especially in a rural setting, for better planning and service provision.
- Addressing attitudinal barriers through community awareness programmes on disability cannot be underestimated. Community members need to appreciate disability and improve relations with disabled persons.
- In order to support online learning for disabled children, the government and its stakeholders need to organize refresher courses for teachers in both government and private schools to enable them to cope with this 21st century of ICT. The focus could be on teaching-learning methods and supporting disabled children with various special needs to engage better in online learning.
- The creation of a barrier-free environment such as providing transport and wheelchairs to ease movement and assistive devices like braille would aid many disabled students to access education through online learning.

- Representation of parents of children with disabilities on the school management committee must be made mandatory. These will be better positioned to engage in education planning and suggest better ways of benefiting children with disabilities.
- Parents of disabled children must be encouraged to be proud of their children. This will increase the self-esteem of children and come with other multiple benefits, including improved academic

performance and increasing the school completion rate for disabled children.

FUTURE WORK:

We hope to explore the effects and efficacy of online learning on disabled children in rural Uganda during the COVID-19 lockdown.

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Technological and Environmental Impacts of COVID-19 in Nigeria: A Philosophical Appraisal

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ABSTRACT

Pandemics impact the entire ecosystem and challenge human ingenuity to provide technological innovations; to assist humans in overcoming them. This paper aims to resolve the following questions that bring out the impacts of Corona Virus pandemics on Nigerian society. The study specifically focuses on providing answers to these questions: What are the impacts of COVID 19 on the technological environment of Nigeria? Specifically, how did COVID 19 impact health technology? What are the impacts of COVID 19 on the Nigerian environment? This paper adopts the philosophical method of research. Accordingly, facts are presented, analysed, critically examined, justified and commended. The thrust of this paper hinges on the backlash of doctored underdevelopment in the face of global pandemic challenges. The researcher believes that the negative impacts of COVID 19 on technology and the environment in Nigeria can be a saving grace for the nation's redemption from technological underdevelopment and total environmental disaster.

KEYWORDS: Technology, Environment, Impact, COVID-19, Philosophy

INTRODUCTION

A philosophical appraisal of the technological and environmental impacts of the COVID 19 pandemic in Nigeria promises a good insight into understanding the place of technology and environment in Nigeria's development index vis-à-vis the state of public health. Renewable energy technology and a clean environment are two essential indicators of high life expectancy, reduction of high mortality rate and control of epidemics. The slight worry is that Nigerian society is still steeped in the use of non-renewable sources of energy. They include dams, carbon monoxide emitting generators, high carbon dioxide emitting cars and vehicles, gas flaring, oil spillage, and destruction of aquatic habitats.

The net effect of non-renewable energy sources weighs down on the environment. It can be felt in air pollution, water pollution, river pollution and destruction of all aquatic life. Other effects include physical environmental pollution of land that make land infertile, bush burning and forest clearing that inaugurates desertification and displaces animals, insects, birds, and other

organic microorganisms that form part of the ecosystem. These negative impacts of industrial technology on the environment also foster epidemic outbreaks that can become viral and mutate into a pandemic. The displacement of birds and other organisms has been implicated in some studies as being the cause of the Avian Flu pandemic. It is not out of place to also hold that bats have been implicated as carriers of coronavirus.

The displacement of bats through bush clearing and urbanisation results in bats relocating to build its nests in the ceilings of human homes and trees around them. It poses a potential threat to the transfer of coronavirus to the human species. The ecosystem is a chain connection of all organisms according to their hierarchy of existence. One level of species depends on the lower level of species for their food and survival. An epidemic outbreak occurs when there is a jump in the order of hierarchy in the food chain. If, for example, termites are healthy carriers of a virus, birds with enzymes that kill such viruses in termites can eat the termites without any health hazards. However, humans, not having the enzymes in birds,

cannot eat termites without contacting the virus.

The point is that any form of disruption of the environment is a disruption of the ecosystem food supply chain that threatens epidemic and subsequent pandemic outbreak. The case of Nigeria is serious because Nigeria is still at the level of industrial technology. The transition to digital technology is slow and painfully unpredictable. Thus, the possibility of Nigerian society breaking away from the negative correlation between technology, environment and pandemics is not insight. There is hope that technological and environmental challenges from pandemics such as COVID-19 or other crises. It becomes a wake-up call to global standards and best practices in public health delivery and caution to abet unwholesome practices and policies that endanger the Nigerian environment and promote non-renewable energy sources and technologically based pollution.

CONCEPTUAL FRAMEWORK

The concept of technology drives by two words: *Techne* and *logos*. *Techne* means skill and tools for making crafts (Lindell and Scott, 1968, p.1785). *Logy* is a suffix that means the study of a thing. Etymologically considered, the concept of technology means the study of skill, craft and tools of making craft. Plato conceives of *techne* as art (Plato, 1999, pBk.1, P.9). Aristotle believes that *techne* is episteme, knowledge for praxis distinct from theoretical or scientific knowledge (Wolff, 2008, p.341). Plato and Aristotle's conception of *techne* appears to have some disparity. *Techne* as art is a special gift of creativity to some people, but it can also be learnt since it applies almost every aspect of work.

There is *techne* for speech, for writing, for music, for sports and even for research. It means that *whosoever* can learn the art of *techne* wants to learn. Aristotle believes that *techne* is a special kind of practical knowledge. He believes that this knowledge is reserved for those with the right reason (*logos*), proper disposition (*hexis*), and exemplary virtue (*Arete*). The application of virtue ethics in technical productions is paramount for Aristotle, such that the technician produces the image in his soul (*eidos*) in truth (*Alethia*). In Aristotle,

technology that is not in the service of virtue, health, and life is false technology. Bunge conceives technology in these words:

Technology is the branch of knowledge concerned with designing artefacts and processes and normalising and planning human action. Traditional technology is based on technics or craftsmanship. It was based on trial and error: while modern technology is based on research (Bunge, 2003, p.289).

The understanding of technology establishes foundations for the application of technology to resolve human problems. The technology produces artefacts and processes for planning human action. Human action can be channelled towards resolving health issues like fighting pandemics, developing vaccines, and handling the dead bodies of COVID 19 victims. Others include handling goods and services in a lockdown, diagnostics processes, contact tracing, support systems and technological environment for other social essential services such as food delivery, education, and information decimation. This concept of technology is pro-technology in terms of handling pandemics.

Hickman defines technology as, "the invention, development of tools and other artefacts, brought to bear on raw materials and intermediate stock parts with a view to the resolution of perceived problems" (Hickman, 2001, p.12). The position of Hickman underlines the fact that technology itself is environmentally dependent. It is the raw materials available within an environment, the peculiarities of the region's problems, and technological environments such as energy, water, support systems, security, and policies that guarantee the development of any technology. Thus, the technology needed to fight COVID 19 pandemic need not be borrowed or imported. There are essential imperatives that determine the functionality of a piece of technology within an environment. Hickman's view raises a serious challenge to Nigeria and the African technological environment as a sine-qua-non for the evolvment of any technology to combat pandemics such as COVID 19 and future exigencies.

Nichols sees technology as “the branch of knowledge that deals with the creation and use of technical means and their interrelation with life, society and the environment” (Nichols, 2001, p.1950). Nichols's conception of technology stresses the dimension of inter-connectivity of technology products, environment and life. No piece of technology stands in isolation. There are chains of relationships inherent in technology products. These chains of relationships make it possible to develop the Internet of Things (IoT) technology. It is believed that the technology of the Internet of Things is the technology within it. The Internet of Things supports, to a large extent, all the other technologies involved in combatting COVID 19 Pandemics across the globe. Its deficiency in Nigeria or underutilisation exposed the most technological backwardness of Nigeria.

A second concept that demands to be conceptualised within the framework of this paper is the word, ‘environment’. It is from the French word: *environ* and means surrounding. It is akin to the words: Habitat, ecosystem or conditions under which a living organism is found. It can also be used to designate a region of the globe, a nation, a geographical entity, a physical state, a psychological state or a social construct. World Health Organization (W.H.O.) defines the environment in these terms: “the environment is all the physical, chemical and biological factors external to the human host and all related behaviours, excluding the natural environment that cannot reasonably be modified” (www.who.int>publication.>preventingdisease).

Here, WHO makes a distinction in the understanding environment: Physical, biological, psychological and social environment. There are modifiable and non-modifiable environments. WHO further defines a modifiable environment as “that environment by which the environmental impact on health can be measured. These include air, soil, water, and pollution with chemicals or biological agents” (www.who.int>methods.>modifenv).

The worry is that environmental pollution in Nigeria is very high and has been

compromising the health of citizens for so long. The use of non-renewable sources of energy and non-adherent government policies by oil companies put the Nigerian environment at risk. Thus, the polluted environment is a ready-made receptor for epidemics and pandemics like COVID 19.

COVID 19 pandemic is a concept that needs to be explained as well. First, COVID 19 is the outbreak of an epidemic that surfaced in 2019 in the Chinese city of Wuhan. COVID 19 is an abridged nomenclature. The virus is from Corona (crown) head types of viruses like SARS and EBOLA. It is called New Corona Virus 2. This highly dreaded virus can bind within the human blood tissue and reproduce itself. This power of self-generation within human blood tissue makes it invincible for easy eradication.

COVID 19 is a disease. Every disease can be described as an epidemic when restricted to a particular area or region. It becomes a pandemic (pan—all and demic- disease) when it spreads across the North and South of the globe. World Health Organization describes COVID 19 as a pandemic. What are the intrinsic constituents of a disease that can make it to be qualified as a pandemic? Pandemic refers to an epidemic occurring over an extensive area, crossing international boundaries, and usually affecting several people (Porta, 2014). Porta's definition focuses on the spread area as the bases for a disease to be described as a pandemic. The word affecting several people is ambiguous because it can affect people without causing death. Hence, this definition has some pinch of salt.

Pandemics are determined by the geographical coverage area rather than by the high mortality rate occasioned by the disease outbreak. Pandemics for better understanding are contrasted with endemic diseases. The latter refers to the diseases commonly found within some communities or regions of the globe, and such diseases have been largely contained by the population's immune system (Madhav, Oppenheim, Gallivan, Malembakam, Rabin, and Wolfe, 2005).

World Health Organization rendered the classical definition of the Influenza pandemic in 2009: A pandemic is an epidemic occurring

worldwide or over a vast area, crossing international boundaries and usually affecting many people. (WHO, 2011). A disease can be classified into three steps: 1. Epidemic 2. Endemic 3. Pandemic. The point of debate is that the World Health Organization's classical definition of a pandemic is lame. It focuses worldwide and says nothing about severity, morbidity and high mortality rate. This shortfall is partly the reason behind the director of WHO, Tedros Ghebreyesus, delay in calling novel coronavirus a pandemic. This scenario calls attention to the need to review the classical definition of a pandemic. Philosophically considered, a classical definition must have three elements:

1. Genus: Family of words
2. Differentia: Individuation character of the concept being defined
3. Telos: The end, goal or purpose of the concept being defined

Accordingly, a pandemic is an epidemic that spreads across the Northern and Southern hemispheres of the globe, causing simultaneous severe impacts on all facets of society, severe morbidity and high mortality toll on the population. The catchy words of impact are severe, morbidity and mortality. Worthy of note is that pandemics like COVID 19 impacted not just the human population but the environment, other species, and visible and invisible beings. The need to classify the disease as a pandemic states that, it cannot be defeated without global cooperation. The implication is that there is a need to share intelligence, research and technology if the world aims at overcoming COVID 19 pandemic.

TECHNOLOGY, ENVIRONMENT, AND COVID 19 PANDEMIC IN NIGERIA

Nigeria, as a developing nation, has not successfully transitioned from the third tool-based industrial revolution to the fourth industrial revolution of cutting edge digital technology. The primary source of energy generation is still largely non-renewable, anti-environment, and health-compromising. The automobiles in use are still used cars and trucks from Europe and America that do not comply with international best practices of carbon level emission. Non-renewable and unsustainable technology in Nigeria is part of

the problem of causes of health crises. It predisposes the Nigerian population to disease infection by compromising the immune system. Technology is still part of the solution in the fight against the COVID 19 Pandemic. The emphasis should be on appropriate technology.

Vlneis, Khan, Vlaadeven, and Vermaelen were tight to hold that environment is most probably the origin of pandemics. This truth resonates in Nigeria's environment. Gas flaring in oil fields and oil spillage still poisons aquatic life. Some multinational oil companies denigrate ethical best practices of responsibility to the environment and health of their host communities. Swamps and slums abound across Nigeria and serve as breeding grounds for mosquitoes and other bacteria.

Soma Shah's position that human infiltration into the space of animals and other species is the cause of pandemic outbreaks among humans is worthy of commendation. Bushing burning is still an accepted practice for bushing clearing during the farming season. The practice destroys the natural habitat of most species and endangers the species' existence, as each species has an ontological reason for existence. Furthermore, it plays an irreplaceable role in the ecosystem. Animal hunting for food is still widely practised. Thus, the disappearance of species and transfer of microbes to humans is expected. The picture being painted is that there is a negative correlation between technology and the environment in COVID 19 pandemic in Nigeria.

COVID 19 impacted much on nutrition as an environmental factor in Nigeria. There has been a consistent shift from the traditional diet of organic food to eating of process food. This change in nutrition has also ushered in a high outbreak of diseases such as cancer, stroke, and diabetes. These pre-conditions predispose patients to infection during pandemic outbreaks. That is why a more significant population of Nigerians are at risk of the COVID 19 pandemic outbreak.

According to Price-Smith, War and ecological change act as disease amplifiers. Nigerians have been at war with Boko Haram, Herdsmen and Bandits insurgence. The stress

and trauma of displaced populations who live as internally displaced persons (IDP) predispose the population to COVID 19 infection. The inhalation of chemicals from firearms and other ammunition can compromise their immune system. Worthy of note is the erosion menace ravaging most parts of Nigeria and other ecological change as desertification, river and land pollution. These can act as a catalyst to fuel the spread of new coronavirus.

The prevalent condition of technological backwardness and environmental degradation allude to the fact that there is a negative correlation concerning prevention, control, treatment and management of the COVID 19 pandemic in Nigeria. The implication is that with the reduction of the immune system due to environmental crises in Nigeria, it can be rightly predicted that COVID 19 pandemic infections will be high. The open-market environment, crowded, no social distance, and money exchange endanger infection of the Nigerian population. Experience has shown that with the imposition of lockdown across the Nigerian nation, there was a slowdown of human activity and human impact on the environment. There was a reduction in mosquito breeding in the urban areas. Air pollution and physical pollution of the environment reduced drastically.

The technological impact of COVID 19 in Nigeria is high. There is little or no technological environment. It refers to the imperatives that make the operations of any piece of technology possible. The technological environment involves uninterrupted power supply, technological artefacts and devices, homogenous technology objects, support systems and experts. Without a technological environment, it is challenging to develop or adopt any piece of technology to find a cure for COVID 19 and manage or control its spread. Without a doubt, National Center for Disease Control (NCDC) made use of mobile phones for contact tracing and tracking to trace calls and know where a COVID 19 patient has been and who has been with the patient. Other developed nations mainly donated ventilators used. Nigeria does have tech companies and does not produce ventilators. In the same vein, test kits were donated from outside of Nigeria.

Moreover, some were bought by states that needed them. Nigeria does not produce Corona Virus test kits. The line of drugs for managing the New Corona Virus are also products of international pharmaceutical companies in Nigeria. These drugs include Chloroquine, Azithromycin, pain reliever, and Vitamin C 1000 mg. This line of drugs soon became out of stock leading to the importation of the said drugs. Surgical masks and overall dress for health workers, masks and hand sanitisers mainly were imported, though some masks and local hand sanitisers were produced.

The impact of technology is felt concerning social media. With the lockdown and restriction of movements, people relied on social media to communicate. With the population demand for the use of social media simultaneously, the quality of network services declined in most areas. Most health institutions are not registered with Google and do not subscribe to web and I.P.O. The lack of such provisions makes it hard for the professionals to access information on best practices for managing COVID 19 pandemic. The technological impact of COVID 19 in Nigeria is felt in the lack of production and provision of personal protective equipment (P.P.E.). Nigeria lost many medical professionals to COVID 19 due to technological backwardness. In many technologically developed nations, the technology of Artificial Intelligence (A.I.) and Robotic Technology (R.T.) as drones were deployed in the supply chain service to make much-needed goods available to areas in short supply of basic requirements for effective response to COVID 19. Instead, people on essential services broke the policies on lockdown, facemask and social distancing to make up for deficits in the supply chain.

The technological deficits of the Nigerian nation were exposed concerning Information Technology (I.T.). With the lockdown occasioned by COVID 19 pandemic, there was increased dependence on Information Technology. Mobile service providers, Internet APP developers, social media providers, and bloggers enjoyed increased product demand. Unfortunately, the large population of Nigeria forms more consumers than inventors and producers. Thus average low-income earners

spend more to service communication demands of the pandemic, while the multinational digital companies gain. In addition, the quality of the network does not cover all parts of the Nigerian nation. The portion of Nigerian citizens that travelled to the villages were out of network zones. They cannot make calls or participate in online meetings, lectures, and conferences. In this case, the technological divide between urban and rural dwellers is widespread and significantly impacted during COVID 19 pandemic.

THEORETICAL FRAMEWORK

This aspect of this research is to review theoretical efforts made by researchers to resolve the problems concerning the impact of technology, environment and pandemics generally and to tailor it down to the COVID 19 pandemic impact on Nigeria. It is important because the impact of COVID 19 on Nigeria cannot be discussed in isolation since pandemics require global cooperation.

What is the origin of Pandemics? Soma Shah, Pandemics, (2017) theorises that "the paradigm of invasion or microbial xenophobia" often fails to explain why a microbe that's existed for ages turns into a pandemic-causing pathogen. The crux of her argument is that the idea that pathogens are attacking humans from animals may be a reversed invasion paradigm, in which case humans are the ones invading animal space. Human activities towards the natural and physical environment like deforestation, housing crises, hunting of animals for food and economic reasons are possible causes of pandemics. Soma Shah calls for a paradigm in the mode of thinking about pandemics. Environmental degradation as physical pollution turns the environment into a breeding ground for bacteria and transfer of bacteria through human-slum interaction.

Humans renegade environmental and animal rights, creating room for the transfer of pandemic causing pathogens. Animals do not ask to be adopted as pets. Humans invade animal rights for freedom and adopt animals for pets. It is humans who break the sexual gap installed in the hierarchy of beings. Humans sexually abuse animals without the consent of animals in the process and contact

with pathogens that can cause pandemics. Human domineering attitude towards the natural environment is behind the origin of pandemics.

In his book, *The Question Concerning Technology* (1977), Heidegger puts forward a metaphysical theory of technology. The question of what is technology does not give a proper answer. Technology is not the human product as the production of a thing. It is merely an anthropological conception of technology. Technology is not just the application of the technique to resolve human problems. It is a merely instrumental concept of technology. The totality of technological devices is not technology. The search to understand the technology needs to reframe the question of the essence of technology?

The path to resolving this question brings out Heidegger's metaphysics of technology. Heidegger discusses the thinking modes that underlay human domination of the natural environment through technology. With modern technology, humans relate with the environment in the mode of thinking of *challenging-Forth*, *Standing-Reserve* and *Enframing*. In the way of thinking of *challenging-Forth*, humans relate to the natural environment with an attitude of stretching out energy from the environment.

Heidegger uses the example of a dam. The river's natural flow is obstructed when humans build dams as an energy source. It can endanger aquatic habitats, increase water levels, erosion, and flooding. Dams are non-sustainable sources of energy capable of endangering the transfer of pathogens from their natural environment to human beings, causing epidemics and possible pandemics. In the mode of *challenging -forth*, nature is forced to yield its resources even when they are not for immediate use. Modern technology maximally exploits nature to yield maximum energy at minimum expenses (Heidegger, 1977, p.15). *Standing-Reserve* is a mode of thinking about nature humans harness energy for immediate and future use. Thus energy will have to be held in reserve outside of its natural habitat, which constitutes a possible danger to humans, other beings and the environment.

Heidegger captures the impact of technology on the environment in the word *Enframing (Gestell)*. In his words: “enframing means that way of revealing what holds sway in the essence of modern technology and which is itself nothing technological” (Heidegger, 1977, p.20). Enframing is a mode of thinking in which technology, in its totalitarian character, conditions humans, other beings and society at large. This dangerous power of technology reduces humans to be like every other object of nature. Heidegger believes that Enframing is the essence of technology. Enframing is behind the new binary conception of the world as technology and other beings with humans as part of other beings. Enframing is all about enslaving humans such that humans are short-changed for objects.

In an interview with Signal Samuel, Sonia discussed the impact of technology and the environment on pandemics. The exploitation of new habitats by humans causes pandemics. Human developmental activities like road construction, new cities, mining, large scale farming, and oil exploration have displaced wild animals' natural habitat. It has caused wildlife extinction and forced other animals and birds to seek shelter in the ceiling of human houses and around the human physical environment. In such a shared environment, microbes can quickly transfer, even accidentally and unintentionally.

Housing problems occasioned by low socioeconomic status contribute to the environmental impact of pandemics. Housing problems in developing nations like Africa and Nigeria contribute to the origin and spread of pandemics as humans are forced to live in slums, under bridges and in parks. These exposures create room for the transfer of microbes to humans. Attention has been drawn to nutritional problems as environmental factors that impact on origin and spread of pandemics. Unhygienic animal rearing habits, meat production, abattoir, food production, and food supply chain make bacteria infection of humans easy and possible pandemic inevitable.

Price-Smith (2001), in his work on *The Health of the Nations: Infectious Diseases, Environmental Change, and Their Effects on National Security and Development*, argues

that environmental energy generation underlies massive climatic change, which in turn affects human health security and creates economic and political crises and states and nations. He suggests that funds and structures should be implemented to coordinate a healthier and more equitable form of development. In addition, he recommends that a course on the Political Economy of diseases should be introduced in higher education as part of the Political Science Course.

Price-Smith (2009), in another work titled: *Contagion and Chaos: Disease, Ecology, and National Security in the Eve of Globalization*, postulates that infectious disease poses a danger to national security. The impacts depend on lethal, spread, fear, and economic crises. He added that warfare and ecological change determine the spread of diseases and act as *disease amplifiers*. Price-Smith posits that globalisation and ecology change accelerate the spread of diseases but not initiate them. The position differs from Shah, who holds that ecology change is the underlying cause of diseases and pandemics.

Tilma and Clark, in their work on *Global Diets, Link Environment Sustainability, and Human Health*, argue that income and urbanisation cause a shift in diet paradigm from organic diets to inorganic diets such as refined sugar, refined fats, and oils and meats. The production of these inorganic foods causes an increase in emission of greenhouse gas, leads to the clearing of bushes and causes the extinction of species. In addition, the production of inorganic or processed diets leads to health crises such as diabetes II, coronary heart diseases, and chronic non-communicable disease. The way out is to revert to the traditional diet paradigm.

It must be noted that processed food is a product of technology and reduces the human immune system to fight diseases. Vineis, Khan, Vlaaderen, and Vermeulen (2009), in their work on *New Research Technologies, Environment and Causes of Diseases*, postulate that chronic diseases are likely to have an environmental origin. Environmental risks have been elusive in epidemiological studies. They maintain that genetic and environmental exposures cause diseases and

attribute genetic exposures to new research technologies.

Elavarasan and Pugazhendhi (2020), in work titled: *Restructured Society and Environment: A Review on Potential Technological Strategies to Control the COVID 19 Pandemic*, The central focus of the study was to uncover the hidden roles of technologies that helped in the control of pandemics. The researchers noted the following technologies: Information Computer Technology, Artificial Intelligence technologies, sensors, remotes, testing kits, diagnostic machines and treatments, and bridging supply chain problems. These technologies help in the control of the spread of COVID 19 pandemics. Other technologies that help support society work from home technology systems such as e-learning, tracking technologies, robotic technologies and drone technologies.

DISCUSSIONS AND ISSUES

The first problem to be addressed is the impact of COVID 19 on technology in Nigeria? The technological demands needed to cope with the challenges of COVID 19 raise serious questions about the place of technology in the Nigerian project. What are the technological products of Nigeria? It is worrisome that a nation with more than six universities of technology ministry of science and technology both at federal and state levels, after sixty years of its existence, cannot boost technological products to solve her local problems and export in order to increase its gross domestic products (G.D.P.). The situation becomes more disheartening in the face of the annual budget for the science and technology ministry and universities. It could have been expected that during COVID 19, Nigeria should have handed out locally produced laptops to teachers and students across education levels to ease the cost-effectiveness of working from home and online education.

Communication and network issues could have been resolved by inviting national tech companies to consider reducing tariffs and boosting network and other services for efficient and effective service delivery. Local production of mobile phones could have reduced the prices and increased the population of citizens with mobile phones for

communion and communication during the total lockdown. Most Nigerian citizens, for reasons of low income, cannot buy or maintain a mobile phone. The luxury of imploring advanced technology of Artificial Intelligence as robots and drones for service delivery in the face of bane on the flight was not applicable in Nigeria. The problem is not that Nigerian intellectuals lack technology sense but the failure of leadership to give technology a pride of place in the problem-solving leadership model. With the confiscation of autonomy of universities, limitations and control of self-governance of institutions, cancellation of research grants, poor infrastructure, unequipped laboratories and analogue libraries, Nigeria is very far from technological advancement to face the challenges of COVID 19.

In addition, government policies and the business environment make it difficult for Multinational Tech Companies to invest in Nigeria. The net result is that Multinational Tech Companies just open customer service outlets to support the percentage of Nigerian citizens using their products. It is another way of confirming that Africa and Nigeria, in particular, form a market. Nigeria is a foreign market. She is a market and benefits only Value Added Tax (V.A.T.) and import duty for foreign goods coming into the country, while foreign tech companies make their gains in abundance.

The second problem is how did COVID 19 impacts health technology? COVID 19 impacted Nigeria's Biotechnology departments, Health delivery, Pharmaceutical technology and medical laboratory technology. The impact of COVID 19 on health technology is a corollary of real impacts on technology as a whole. This problem is interconnected. Poor health technology predicts low-quality drugs, faulty medical laboratory results and poor medical outcomes. The sorry situation of Nigeria is the sight of a vast facility tagged medical centre but empty of required cutting edge medical technology devices and in some instances lack of support personnel. The situation of health centres is more pathetic. Some have dilapidated buildings with little or no equipment for caring for patients. With this background, COVID 19 overwhelmed medical personnel, medical technology,

medical laboratories and drug production companies. The available medical personnel could not match the number of infected people. Thus, much medical personnel were stressed and stretched beyond their stress threshold.

The reason was a lack of supporting effective technologies to complement human medical personnel. In the case of technologically advanced nations, robots were developed to help in checking the temperature of patients and screening patients for COVID 19 infection. Nigeria does not have the technology to produce test kits that can provide data on the infected population to aid in planning quarantine, drugs, food, ventilators, and the possibility of managing death rates. The race to develop a vaccine to treat COVID 19 eluded Nigeria. There are no quarantine centres built even after the experience of Ebola and Serious Acute respiratory syndrome (SARS). Nigeria does not have pharmaceutical companies or technology for drug production. Pharmaceutical companies are privately owned or jointly owned by individuals and foreign companies. These pharmaceutical companies detect for the market.

Nigeria further imports drugs and faces massive importation of adulterated drugs. The reason behind Nigeria's backwardness in medical technology is not far-fetched. The religious divide between Christianity and Islam is a factor of reckoning. Adherents of Islam and indeed Arabs do not believe in Western education. Thus, developing Western education to the point of training technologies and pharmaceutical tech companies is an illusion. In addition, Muslims do not trust Western drugs unless produced by Arab nations. On the contrary, Christians believe in Western education and use Western drugs. More often than not, drugs allowed into the country have the imprint of Arabic writings and symbols.

The third question is: What are the impacts of COVID 19 on the Nigerian environment? The relationship between COVID 19 and the environment seems to be an open secret. It is assumed that Corona Virus does not survive in a high-temperature environment. What has not been resolved is the relationship between

the New Corona Virus and the environment's temperature. The New Corona Virus defies high Nigerian temperatures. The significant impacts of COVID 19 on Nigeria's environment are in the areas of reduction of environmental pollution and reduction of pressure on the physical environment due to human activity. With the total lockdown, there was silence and the elimination of noise.

Cars and utility vehicles were on the road. There was no emission of carbon monoxide, no blaring of horns, and no sirens from police and government entourage. The atmosphere for meditation and deep thinking was restored, and exploitation of the environment was reduced. Every work in construction and building was suspended. Forest clearing and displacement of animals in their natural habitat were put on hold. Urinating along the streets and defecating in some instances that increased the breeding of mosquitoes came to a temporary halt as many people travelled back to the rural communities. With the fear that the Corona Virus came from eating animals or bush meat, the hunting of animals for food and business stopped. Nigeria is an oil-producing nation. The Southern part of Nigeria suffers untold environmental pollution, especially the Niger Delta areas. In these areas, there is water pollution, destruction of aquatic habitat, gas flaring that pollutes the air, destruction of land fertility, and reduction of quality of life and life expectancy of the people. COVID 19 prompted the suspension of crude extraction and many other activities.

There is a correlation between environmental pollution and epidemic outbreak. Pope Francis (2015: 26) captured this correlation in these words:

The earth's resources are also being plundered because of short-sighted approaches to the economy, commerce and production. The loss of forests and woodlands entails the loss of species which may constitute significant resources in the future, not only for food but also for curing disease and other uses. Different species contain genes that could be essential for meeting human needs and regulating environmental problems.

The rural population accounts for up to sixty per cent of the Nigerian population. Moreover, this number of people depends on firewood for cooking. It means deforestation for purposes of energy generation for cooking. The implication is the displacement of species that use the forest for habitat. The plants could serve as shields for land against the heat of the sun and the force of the rains. The plants could also serve as windbreakers and purify the environment by purifying the oxygen humans inhale. The displacement of species can lead to their extinction. COVID 19 impact on Nigeria is a call to preserve the environment.

Apart from deforestation, Oil spillage destroys land fertility and food production, forcing people to depend more for nutrition on processed food that lacks enough nutrients to build a robust immune system. Exposing a deficient immune system to any bacteria is an invitation to infection.

COVID 19 poses a challenge to caring for the environment. Power generation in Nigeria is mainly through gasoline or diesel generators and plants. These generate noise and carbon monoxide. Carbon monoxide is a killer gas on inhalation, among reports of families dying because of carbon monoxide produced by their generator. The challenge is to evolve renewable sources of energy like generation power from air, solar energy and waste burning. Building dams across flowing waters is counter-productive. It obstructs the flow of a river, destroys aquatic life, causes overflowing of riverbanks and challenges nature to standing-reserve in the language of Martin Heidegger. Overflowing of riverbanks leads to further environmental degradation as an erosion menace.

CONCLUSION

The technological and environmental impacts of COVID 19 in Nigeria are challenging forth on Nigeria to update in technological advancement that cares for the environment. It is a clarion call for individuals, private sector and public sector, government and policymakers to co-operate and work together with multinational oil companies operating in

Nigeria to address environmental problems and technological solutions to Nigerian problems. These challenges demand a change of mode of thinking. Nigerians in general and the Nigerian government in particular need to harken to Martin Heidegger's voice on the need to overcome *challenging-forth* attitudes to nature, hoarding nature's resources as *standing-reserve* and *enframing*. Nature is to be cared for and to be wrestled with in order to exhaust her resources. Challenging nature to yield her resources for hoarding and selfish purposes is why there is technological backwardness and environmental degradation. Nigerians need to overcome enframing. Technology enframes whatever it lays hold on.

Nigerians have been enframed into a marketplace and consumerist for technology companies. This grid hold encapsulates the thought process. Nigeria's government and citizens are satisfied with buying brands of other nations: phones, television, machines, pins, electric generators, fuel, cars, and computers. Here lies the enframing that a nation cannot think outside the box to develop its brands in line with its environment and for the common good of its citizens. This inability for self-evaluation is why Nigeria depended on charity from other nations to control and manage COVID 19 pandemic.

RECOMMENDATIONS

To achieve this and surmount the challenges, there is a need to address the question of the source of energy, from unsustainable and non-renewable sources to sustainable and renewable sources. It is when Nigeria has an uninterrupted power supply that overcomes technological and environmental crises in the face of future pandemics. It can be possible. There is a need to phase out the use of generators and plants for power generation. Nigeria should set up and empower policy enforcers to drive foreign and local oil producing companies to be faithful to the memorandum of understanding between the companies. Moreover, host communities to clear oil spillage and rebuild and provide host communities with necessities of life such as light, water and shelter.

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COVID 19 and Cyber Insecurities: Prevalence, Causes and the Way Forward

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ABSTRACT

The global COVID 19 pandemic outbreak spread fear and uncertainties around the globe, but it, however, provided a near-perfect condition for cybercrime, and cybercriminals exploited this vulnerability. Hence, the research became imperative with the increasing cases of cybercrime attacks on digital citizens. The research adopted a cross-sectional survey research approach, where a descriptive study was embarked upon to identify the state of cyber security in Nigeria during the COVID 19 pandemic lockdowns. The study investigated using structured questionnaires administered online via the Google forms platform, the prevalence and patterns of cyber insecurities, and strategies to be adopted in curbing these insecurities. One hundred fifty respondents were sampled, and the study results were analysed using descriptive statistics. The study revealed prevalent nefarious activities by cybercriminals during the study, and these cyber-attacks occurred often. The study further showed that Facebook, WhatsApp and Instagram were the most used platform for these attacks. Ponzi schemes, Phishing attacks, click frauds and hacking of accounts were the most prevalent attacks regimens observed by the study. The cyber-attacks exploited the poor awareness of citizens on basic cyber hygiene best practices, poor dissemination of information by the government and donor agencies, and poor investigation of crimes. The attacks mostly mimicked aid programs by the government, civil societies and donor agencies. The study suggests an increase in user education and awareness and proper investigation and prosecution of cybercrimes as ways of mitigating against these menaces.

KEYWORDS: COVID-19, Cyber Insecurities, Cybercrimes, Impact, Cybersecurity

INTRODUCTION

The world in 2020 experienced a halt orchestrated by a dangerous virus COVID 19 that besieged the globe. It started like a costly joke but culminated into widespread fear, panic and confusion as no one was prepared for what it brought with it. In a twinkling of an eye, streets were vacated, allies became lonely, and the hospitals became overwhelmed with the rising cases of infections as death tolls surged. In such a state of panic and desolation, people scrambled for information on how to stay safe and relief materials to cushion the harsh effects of total lockdowns imposed by the governments. In the face of the increasing fiasco, several agencies, benevolent individuals and even the government started rolling out palliative programs and packages to cushion the effects on citizens. Hospitals overwhelmed began to run out of medical supplies and were searching for suppliers as the whole world was under the same siege.

The widespread fear, uncertainty and quest for survival created a perfect situation for cybercriminals to siege vulnerable people. Cybercriminals usually look for vulnerabilities to exploit, and the situation created by the COVID 19 Pandemic was not any different. Cyberspace became laden with phishing attempts, malicious links, social engineering attacks, to mention a few. When the world was in great panic, cybercriminals saw the perfect situation to unleash on people whose guards were already down due to the ravaging pandemic.

With the COVID 19 pandemic breaking out in late 2019 and spreading across the world in early 2020, lockdowns were imposed as a means of curtailing the spread of the virus. This caused widespread panic among citizens as the lockdown came with pay cuts, job losses and wanton lack. In Nigeria, online users began to experience many cyber-attacks

in the guise of relief and aid towards ameliorating the lockdown effects. Web phishing attempts, Ponzi schemes, social engineering, and click frauds were beginning to become familiar sights. The Nigerian cyberspace began to assume an insecure state as cybercriminals exploited the vulnerability of online users.

In the light of the preceding, a descriptive study was embarked upon to ascertain the state of cyber security in Nigeria at the time, with the aim of the research being to analyse the state of cyber security during the global COVID 19 pandemic with particular reference to the Nigerian state. To achieve the aim, the following specific objectives aided the research;

1. Identification of the state of cyber security during the period of the pandemic.
2. Identification of the cybercrime patterns that were prevalent within the period of the pandemic
3. Identification of measures to curb the spread of cyber insecurities in the face of a global pandemic

REVIEW OF RELATED LITERATURE

Cybersecurity uses policies, hardware, software and people in a multidisciplinary approach to mitigate against the occurrence of cybercrimes and fashion out strategies to recover from and minimise the impact of cybercrimes if they eventually occur. It involves a combination of policies, security protocols, actions, an array of support tools, training regimes, best practices, quality assurance and a total of technologies used to protect the organisation or individual cyber environment and Assets. The Assets protected include all connected devices, human factors, the support infrastructure and the information transmitted. Other valuable assets include Applications, services and the communication channel as well. According to Korff (N.d), cybersecurity works towards attaining the security of the assets of organisations and individuals from threats in a rapidly evolving threat landscape.

The importance of cybersecurity cannot be overemphasised and should be a critical discussion among all levels of government and management. This is because the rapid

evolution of the cybercrime attack landscape threatens individual, organisational, national and international security. The need to declare cyber threats as national emergencies is not negotiated.

Cybercriminals have always been profiled to exploit trending issues to wreak havoc on unsuspecting citizens (WHO, 2021). It, however, is not out of place to start experiencing a surging increase in phishing emails and messages and even proliferation of spread of malicious links, to mention but a few. The scams are because humans naturally try to seek solace and succour in the face of crisis, creating a perfect vulnerability for criminals to exploit.

Cybercrime exploit changes in situations, like a change in government policy, the launch of new products, and the outbreak of crises like war, pandemic, or even natural disasters. The fear, uncertainty and poor access to information at these times are the top vulnerabilities exploited. Such times as during the outbreak of Ebola and SARS are examples of similar situations exploited by cybercriminals as they exploit the COVID 19 pandemic. These situations create a perfect opportunity for web phishing attacks, as they craft their emails to mimic relevant authorities. In a state of panic, the vulnerable public may not decipher these illegitimate emails and the propensity to fall victims is very high.

The COVID 19 pandemic, with its resulting imposed physical distancing, led to the proliferation of online activities as schools, churches and work activities moved to cyberspace. According to the Council of Europe (2020), the crisis forced people to rely on digital systems and the internet to work, shop, and disseminate information to reduce the impacts of the imposed physical distancing. This reliance created vulnerabilities that were exploited by malicious cybercriminals to their advantage. Situational crime prevention approaches crime reduction and focuses on situations fuelling crime. Eck and Clark (2019) suggest that situational crime prevention focuses on the criminal acts and their settings and pays less attention to the offender's characteristics. Situational crime prevention does not evaluate the criminal's

tendencies to commit a crime but looks at the enabling environments encouraging the crimes.

The situational crime school of thought proponents submit that criminals take to crime based on the seemingly favourable and available opportunities. They further stated that situational factors could encourage and motivate criminals to commit crimes, and addressing these factors can reduce the crime rates. Situational crime prevention has proven effective in handling trivial, standard and grave crimes. Situational crime prevention approaches crime reduction and focuses on situations fuelling crime. The pandemic period thus provides a suitable situation for cybercrimes and attacks. The surge in cybercrimes with the spread of the pandemic creates an avenue and a perfect situation for cybercriminals to perpetrate crimes. Against this backdrop, it can be stated that if the vulnerabilities orchestrated by the COVID 19 situation are checked, the crimes could be checked.

Weerth (2020) submits an increase in cases of cyberattacks that are bouncing off the COVID 19 pandemic, these attacks target organisations and individuals in such attacks as phishing attacks, ransomware, malware, among others. Criminals try to scam relatives of sick people, hospitals seeking medical supplies and personal protection equipment, and even individuals seeking aids and palliatives from the government and donor agencies. Malicious links to water holing sites abound; the attacks are one too many, and victims keep falling to these attacks.

UNODC (2020) stated that with restrictions to physical congregations and movements, there is a geometric increase in the number of online transactions, with several eCommerce platforms launched. Cybercriminals have also infiltrated the eCommerce landscape with malicious and dangerous platforms. These raise vulnerabilities as cybercriminals leverage search engine optimisation to make these malicious platforms point to the first call. Unsuspecting victims visit these danger zones, and they end up giving away sensitive credentials to cybercriminals.

The Central Bank of Nigeria (2020) opined that cyber-criminals are taking advantage of the current "COVID-19" pandemic to defraud citizens, steal sensitive information, or gain unauthorised access to computers or mobile devices using various techniques. Some of the cyber-criminal activities using the COVID-19 pandemic as outlined include Phishing campaigns in which cyber-criminals send out emails claiming to be from health organisations such as the Nigerian Center for Disease Control (NCDC) or the World Health Organization (WHO). Those emails may contain a link that, if clicked, steals login credentials or other confidential information from the victim's computer or mobile device. Cyber-criminals have also been sending messages via social media or emails asking people to click on links to register to get their COVID-19 relief packages from the government or other organisations. They use this to get confidential information from unwary victims. Relief package scams also come in the form of phone calls asking people to provide their banking details to receive relief packages.

The rate of exploiting the helplessness of citizens with increased uncertainty orchestrated by COVID 19 remains alarming. In an August 2020 report, Interpol submitted that after research lasting four months between January and April 2020, the result showed that about 907,000 spam messages, 737 incidents related to the malware and 48,000 malicious URLs – all related to COVID-19 – were detected by one of INTERPOL's private sector partners. Distributed denial of service attacks, Phishing, malware infestation and misinformation (fake news) were prevalently plaguing cyberspace with regards to the COVID 19 insurgency. The report, however, predicted that Future primary areas of concern included vulnerabilities caused by increased deployment of remote work, widespread COVID 19 themed phishing emails, especially when a COVID-19 vaccination becomes available, email compromises and finally, a spike in network intrusion and cyberattacks to steal data.

RESEARCH METHODOLOGY

The study adopted a quantitative research methodology in which a field survey was

conducted between April and June 2020 to decipher the state of cybersecurity during the period of the COVID 19 pandemic induced lockdown in Nigeria. The research followed a descriptive research methodology where an online survey was carried out—the population of the study comprised about 27 million social media users in Nigeria. However, 150 respondents were purposively sampled, bringing the sample size for the study to 150 participants.

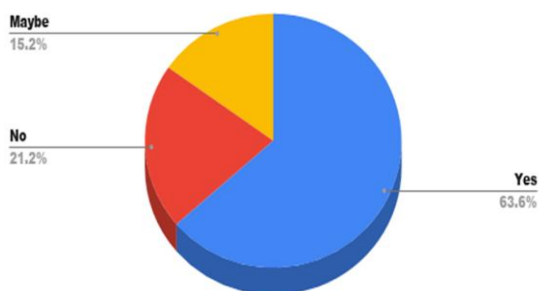
The instrument for data collection was an online questionnaire prepared and distributed using the Google forms platform. The instrument was validated via a pilot study on a group of 10 respondents selected from the Faculty of Natural and Applied Sciences of the Spiritan University, Nneochi, with a rubric to analyse the quality/coherence, clarity, and usefulness of the content of the instrument. Exploratory factorial analysis was used to analyse the instrument's reliability, internal validity, and scale validation. The result of the pilot study validated the instrument as a valuable tool to collect data for the study. Survey responses were analysed using descriptive statistics.

RESULTS AND DISCUSSION

The results from the research are discussed below:

Figure 1: Notification of existence of cyber insecurities

Notification of forms of cyber insecurities during the COVID 19 pandemic period



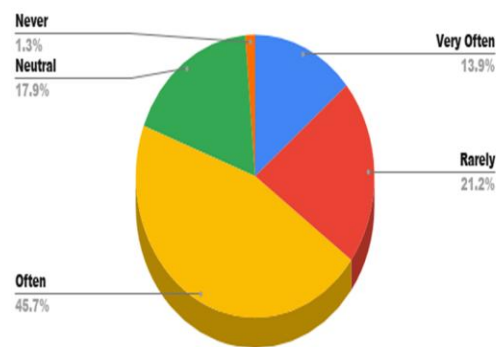
The study, in its attempt to identify if respondents witnessed any form of cyber-criminal activities during the period of the COVID 19 lockdown in Nigeria, discovered via responses provided by the sampled respondents that; 63.6% of the sampled

respondents answered in the affirmative that they noticed several attempts made by cybercriminals to defraud people within the period. Furthermore, 21.2% stated they did not notice any form of criminal activities going on, while 15.2% were neutral and indecisive as to if they did notice such activities or not.

The result showed that a good majority of the respondents gave insight into the existence of these nefarious attempts and indicated that cyberspace was grossly unsafe with fraudulent attempts by cybercriminals to exploit the helplessness and vulnerability of the citizens to their advantage.

Figure 2: Frequency of Cybercrime attempts

Frequency of coming across fraudulent attempts by cyber criminals within the COVID 19 Pandemic Period



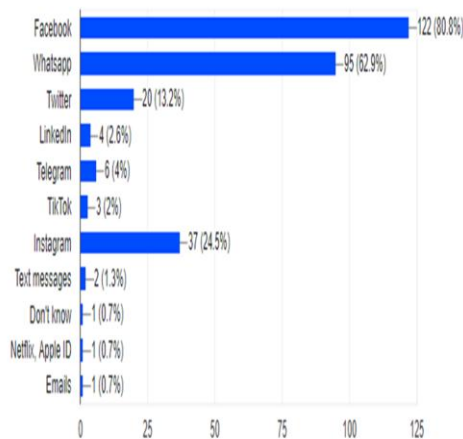
As presented in figure 2 above, the results showed the frequency of these attack attempts; 13.9% of the sampled respondents stated that the attempts were very often, 45.7% stated they often came across these attempts to defraud them by cybercriminals, 17.9% were neutral and indecisive, and 21.2% stated that the frequency was rare, while 1.3% submitted that they never came across these attempts.

The results provide a very glaring scenario, one which paints a picture of a very persistent attempt by cybercriminals to keep making attempts to exploit the vulnerable victims. As stated earlier, cyber criminals fall into the situational crimes school of thought submissions. They make the best of situations such as an outbreak of a pandemic with its attaining fears, dangers and uncertainties to make unscrupulous attempts to defraud unsuspecting citizens.

Figure 3: Social Media platform with the most cases of these cyber insecurities

Which social media platform are activities of cyber criminals prevalent

151 responses

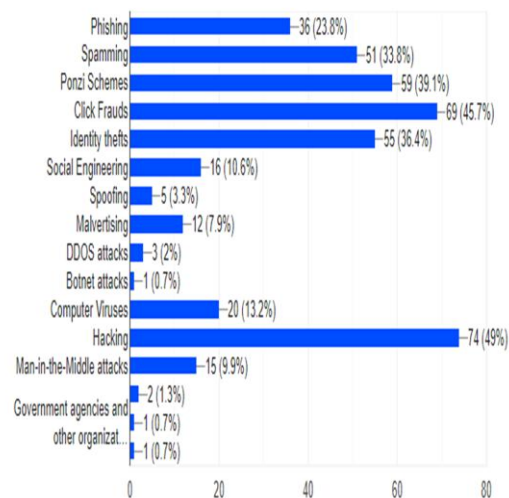
**Source: Field Survey 2020.**

The study further attempted to identify which of the social media platforms was used mainly by cybercriminals in carrying out their activities during the research period. Research results showed that Facebook was the busiest at the time, with 80.8% of the sampled respondents reporting the rapid hacking of Facebook accounts and subsequently using those accounts to push PONZI schemes and other financial frauds. Other platforms prevalently used were WhatsApp and Instagram. These platforms were used to push fake giveaways and mimic government and other agencies palliative packages. Other platforms like TikTok, Telegram and Instagram did not record much of these activities. Phishing emails and messages were also on the increase, as reported by the respondents.

Figure 4: Most prevalent attack pattern

Which crime patterns have been very prevalent within the period of the COVID 19 Pandemic

151 responses



In the weeks following up to the COVID 19 induced lockdown, we tried to identify the most prevalent cybercrimes witnessed by our respondents during the period and the results as seen in figure 4 above showed that the attacks in order of prevalence include hacking of accounts (49%), Malicious URL click frauds (45.7%), Ponzi Schemes (39.1%), Identity thefts (36.4%), Proliferation of Spam messages (33.8%), Phishing attacks at 23.8% and malware infestation (13.2%). Other crimes identified include social engineering, spoofing, malvertising, DDOS attacks, a man in the middle attacks, among others.

Table 1: Causes of the hike in cyber insecurities during the COVID 19 lockdown in Nigeria.

Response	Frequency	Percentage (%)
Lack of awareness and knowledge of cybercrimes patterns	151	100
The spread of uncertainties with the spread of the COVID 19 pandemic encouraged the growth of cyber insecurities.	120	79.47

Job losses left many people vulnerable in the face of the global COVID 19 pandemic, and hence they became easy targets for cyber-attacks.	151	100
The citizen's lack of appropriate information is a weakness exploited by the cybercriminals.	150	99.34
Lack of a skilled workforce to combat cyber insecurities was also a cause for increased cyber insecurities.	135	89.40
Cybercriminals were mimicking and exploiting several palliative channels rolled out by the government and civil society groups to defraud unsuspecting victims.	146	96.69
Poor investigation procedures and lack of prosecution of offenders is a propelling factor for the proliferation of cyber insecurities in Nigeria at the time.	100	66.23

Source: Field Survey 2020

It was deduced from the study that significant causes for the sporadic increase in cyber insecurities at this time could be traced to a lack of awareness by the citizens of what constitutes cybercrimes and the attack regimens. This, therefore, accounts for the reasons why citizens became very vulnerable in the face of uncertainties raised by the global pandemic. Job losses, hunger, uncertainties as to what tomorrow will bring boxed people into a vulnerable spot that became an avenue for cybercriminals to exploit actively. If citizens had some information on these issues, the prevalence

would not be so much. Get rich quick scheme, mimics of palliative programs, phishing messages, social engineering and the likes abounded, and people fell for them due to lack of knowledge and appropriate information. The government agencies responsible for national orientation failed to raise the level of awareness.

The law enforcement agencies lack the requisite technical know-how to investigate and prosecute these crimes thoroughly, and offenders are not usually punished optimally to serve as a deterrent to others. To this end, Nigerian cyberspace assumes a near haven state, making it very conducive to the proliferation of these crimes. If criminals are quickly apprehended, prosecuted and punished adequately, the issues surrounding the sporadic increase in cyber insecurities would be minimally controlled.

The study further identified ways of reducing the prevalence of cyber insecurities as suggested by the respondents and these solutions include:

- Citizenship awareness programs on dangers and types of cybercrimes and advocacies for cyber hygiene best practices need to be strengthened.
- The government need to educate the citizens on the correct channels to adopt in applying for and harnessing palliative programs.
- Creation of better technology to help curb cyber insecurities.
- Scrutinising of every information flying round social media.
- To curb cyber insecurities in Nigeria, the offenders have to be appropriately prosecuted once reported to the proper authorities.
- Companies should make sure they are constantly checking whether their staff comply with best practice guidelines concerning two-factor authentication for accessing company networks and webmail.
- Also, encryption on laptops and mobile devices is more convenient for employees working from home to use their devices to work. This makes it easy for data leakage and potential unauthorised access to company files.

- To provide an opportunity for training Nigerian professionals in the area of cyber insecurities that meets international standards.
- Government should strengthen existing laws against cyber security and enforce adequate implementation of those laws.
- Punishment of offenders should be enforced.

CONCLUSION AND RECOMMENDATIONS FOR FUTURE STUDIES.

In the face of growing concerns caused by the sudden outbreak of a global pandemic, perceived and confirmed by this study a surge in the rate of cyber insecurities in Nigeria. This sporadic increase, as was seen, stems from the fact that cybercriminals, like other kinds of criminals' elements, usually exploit vulnerable situations to unleash attacks on vulnerable victims.

The study reported a very high frequency of attack attempts geared towards defrauding victims during the study period, with social media platforms, especially Facebook, WhatsApp and Instagram, playing hosts to the majority of these fraudulent activities. Furthermore, the study identified Ponzi schemes, phishing attacks, click frauds and

hacking as the most used cyber-attack patterns during the period. The sudden rise in cyber insecurities the research exposed was because of citizens' uncertainties as orchestrated by the pandemic induced lockdowns. Job losses, closure of businesses and pay cuts forced the citizens to seek alternative income sources online. Cybercriminals exploited this vulnerability coupled with poor information dissemination and hence unleashed attacks on vulnerable victims.

To curb the surge in these cyber insecurities, the study recommends the government and civil societies increase awareness programs on cyber safety hygiene and best practices and disseminate the correct information on how citizens can access aids and palliatives to prevent them from falling victims to scammers. Cybercrimes should be appropriately investigated and prosecuted, and the total weight of the law should be invoked on offenders.

Facebook, WhatsApp and Instagram are exploited more by cybercriminals than more professional platforms like LinkedIn is a good area future research can be the next focus.

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Analysing Concepts of Terrorism in Igor Primoratz's Mindset: The Nigerian Experience

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ABSTRACT

Conscious observation of Nigeria's current society ravaged by the effects of terrorism creates curiosity about what continues to motivate the terrorists and those who support terrorism. For Igor Primoratz, terrorism is the deliberate use of horrific violence against innocent people who, on any credible understanding, are not responsible for the real injustice or suffering of the terrorist fight. Thereby intimidating them into a course of action they otherwise would not take. Perhaps as Primoratz thinks, there could be a moral justification for terrorism as we shall seek to find out. The investigation's main thrust is to explain the concept of terrorism (in Primoratz's mindset) and discover its effects on society and individuals. The Boko Haram insurgency and local (Fulani) herders' attack already provide a worthy case study for this investigation. How terrorism and terrorists have succeeded in advancing a "fear culture" in Nigerian society is a question to be addressed.

KEYWORDS: Terrorism, Boko Haram, Fear Culture, Morality, Nigeria

INTRODUCTION

There is no reasonable society that celebrates the loss of lives and properties. The terrorist tendencies in Nigeria have done her more harm than good and prick a curious mind. The recent attacks of Boko Haram and the local Fulani Herdsmen raise some critical questions like; who is a terrorist? What motivates them? Furthermore, can the Act of Terrorism be morally justified? Especially as the saying goes, "one terrorist is another man's freedom fighter." However a close look at terrorism from the spectrum of Igor Primoratz, who from a philosophical viewpoint sees terrorism as "violence melted against the innocent with the view of intimidation and coercion of other people" (Primoratz 2013 p.174), forms the motivation of this research.

PROBLEMS AND OBJECTIVES

Terrorism is an act of violence. Since that is the case, it supposes other forms of violence. However, whether those who suffer the pains of the act of the terrorist are innocent of it remains complicated. Moreover, the justification of their action also remains problematic. The problems posing this research could be articulated thus:

a. What is Terrorism? Who is a terrorist?

b. Can terrorism from any moral theory be justified?

c. How does terrorism lead to a fear-based society?

Thus, as the phenomenon of terrorism raises numerous questions, the objectives of this research aim to achieve threefold aims;

a. To unravel Primoratz's concept of terrorism to his definition serves as a backdrop to this research's second aim, which is the core base of the study.

b. The moral standing of terrorism

c. In the words of Primoratz? "terrorism causes outright fear for our own life and the life of our families and friends' (Primoratz 2013 p.3), which causes fear culture.

SIGNIFICANCE OF STUDY

Faced with many terrorists attack, the value of this research is narrowed down into the following three:

a. *Theoretically*: it serves as a clear understanding of what terrorism is to avoid conceptual misplacement- knowing the type of violence that should be tagged terrorism and who is a terrorist.

b. *Intellectually*: this research will enlighten its readers about the reality of terrorism globally, especially as it has been

perpetuated in Nigeria, calling to their mind how dangerous it is.

- c. Finally, the work helps in *character formation*, especially from the moral point of view, pointing out what makes terrorism so morally repugnant to most people, which will allow an open-minded person "decipherably" to know if terrorism is morally justifiable.

SCOPE OF STUDY

The scope of this work is on the Primoratz concept of terrorism. However, since in terrorism, there is state and non-state terrorism (insurgency), this research focuses on "non-state terrorism" insurgencies (Boko Haram and The local Fulani Herdsmen in Nigeria). Hence, other thinkers' ideas are used to prove some points in correlation with the investigation of defining terrorism and its moral standing in Nigeria.

METHODOLOGY

This investigation adopts the expository method and analysis of experience. The expository method aids in dissecting Primoratz's notion of terrorism, defining who a terrorist is, the problem of terrorism, its moral implications, and justifications, which culminates in how it leads to a fear-based society. The experience analysis contextualises Primoratz's notion of Terrorism in Nigerian society, bringing up the attacks of Boko Haram and local Fulani herders as a case study. These case studies will help us know if Nigeria's (Boko Haram and Local Fulani herders) attacks are morally justifiable.

LITERATURE REVIEW

Since terrorism is discussed in the philosophical milieu, it answers the question of meaning and the moral implications of terrorism. Philosophy only contributes significantly to this debate at the conceptual and moral levels. The moral question of terrorism is also dependent on how it is defined. In an attempt to find a universally acceptable definition for terrorism, some have concluded that it is simply impossible to define the term because of its complexities. However, an observer would know it when they saw it. Weinberg *et al.* (2004, 777-778).

The *Federal Bureau of Investigation* defines terrorism as unlawfully using force or violence

against property or persons to compel, intimidate, or coerce the civilian population, a government or any segment thereof to promote political or social objectives, Lomasky (1991, p.86-87). Alex Schmid and Albert Jongman see terrorism as an anxiety-inspiring way of repeated violent action used by (semi-)clandestine persons, groups, or state actors, for idiosyncratic, criminal, or political reasons. In contrast to the assassination, the direct targets of violence are not the real targets. The immediate human victims of violence are generally chosen randomly or selectively from the target population and serve as message generators." Jongman (1988, p.28)

In defining terrorism, Primoratz seeks to overcome relativism and double standards that often plague debate about terrorism. His primary concern is to investigate the main ethical approaches to terrorism in terms of its consequence, rights and justice, "supreme emergency," and the collective responsibility of citizens. With a rigorous yet accessible analysis of a range of moral positions, from accepting terrorism when its consequence is good on balance to its absolute rejection. For Steven Lee, on the cover page of *Terrorism: A Philosophical Investigation*, "this rigorous voyage is to help those who are morally perplexed by terrorism to know that it is morally wrong." It may be morally justified only when the entire person faces an actual moral disaster, which should be understood in a highly restrictive way.

Primoratz accepts a view of terrorism that does not make room for questioning a victim's innocence. Indeed, many of the most common justifications of terrorism attribute liability to its victims: political leaders or religious figures, for example. He shunts these aside, however, to the category of political assassination. While this might be appropriate, it avoids a big chunk of the terrorism debate, namely, are there individuals otherwise classified as non-combatants but who remain liable to harm nonetheless? These might include, for example, any civilians providing war-sustaining aid, no small population in asymmetric war. In response, Primoratz argues that,

- 1) This is a different moral problem, and

2) The vast majority of terror victims are not liable for any harm because they are entirely innocent. Furthermore, he builds those two assumptions into his definition of terrorism. (Primoratz (2013, p.123)

Once terrorism is limited to those innocent, primoratz faces two tasks. First, he must refute those philosophers who impose a measure of collective responsibility on all civilians under their membership in a state that practices injustice. Here, he takes on two recurring arguments by Barry Buzan and Burleigh Taylor Wilkins that hope to establish a firm measure of culpability among members of a policy that supports an unjust government. Primoratz's arguments are smooth and edifying. He persuasively defuses the notion of collective responsibility by arguing that a) many ordinary citizens support their government only nominally, if all, and b) whatever support they offer does not warrant injury or loss of life.

These are not new arguments, but primoratz presents them in a straightforward and easily comprehended way that will be appreciated by students new to the field. Once he established the innocence of terror victims, he can turn his attention to three-argument arguments that might nevertheless justify terrorism, whether by state or insurgents. These arguments are at the core of the book and include consequentialism (terrorism might bring about net benefits), rights arguments (terror victims do not suffer rights violations) and supreme emergency (extreme situations legitimate terrorism as a last resort to forestall). He rejects the first two arguments and restricts the range of the third.

Looking at consequentialism, one would agree with Primoratz that the goal of terrorism can never outweigh its consequences. According to an article by John F. Burns in *New York Times* on October 08, 2001, terrorists want to coerce compliance with their will by inflicting fear. Terrorism is efficient when its benefits outweigh its costs (Posner 1998, p.243). Darrell Trent states, "One man's terrorist is another man's freedom fighter." This is a complex calculus for some non-terrorists to understand. (Sustain 2002). The benefits of

terrorism often seem indeterminate or too intangible to quantify.

MEANING AND CHARACTERISTICS OF TERRORISM

Terrorism has been the focus of a global debate. Though the discussion has been fruitful, there is no agreement on any of the main questions on terrorism, conceptually, morally, or politically (Primoratz 2013 p.1). It has been -plagued by a lack of clarity about its subject matter. Who is a terrorist? Furthermore, What is Terrorism? For all plausible accounts, terrorism is a type of violence. Violence is an emotion-laden matter, mainly directed at life and limb, as most terrorist violence is the most frightening type. It is utterly unpredictable and potentially ubiquitous.

Etymologically, 'terrorism' is derived from the term "terror." Originally the word meant a system, or regime, of terror. At first, this meaning was imposed by the Jacobins, who applied the terms to themselves without any negative connotation (Primoratz 2013, p.5). subsequently, it came to be applied to any such policy or regime and expressed a strong negative attitude, as it generally does today (Primoratz *Ibid*).

Hence, for Primoratz, if Terrorism is to be discussed in the philosophical milieu, it is best defined as "*the deliberate use of violence, or threat of its use, against innocent people; to intimidate some other people into a course of action they otherwise would not take*" (Primoratz 1990, p.221-222). Defined this way, one can see that terrorism has two targets. First, one or a group is attacked to intimidate another person or group into doing something ordinarily they otherwise would not do. In terms of importance, the indirect target is primary, while the direct target is secondary. The secondary are those directly attacked innocent people (Primoratz 2013, p. 129-38). In the context of political conflict that falls short of war, the clear category has a similarly broad scope: it includes all expected government officials, police, and members of security services.

The direct victim(s) of terrorism are "innocent" because they are not guilty of any action (or omission) the terrorist could

plausible bring up as a justification. They (primary target) are not attacking them (terrorists); therefore, the terrorists cannot justify their actions in self-defence. They are not waging war or shooting the terrorist, nor on those whose behalf the terrorists presume to act; therefore, they cannot say they are merely war. The direct victims are not responsible, on any plausible understanding of responsibility, for the (actual or alleged) injustice, suffering, or deprivation inflicted on them or on those whose case the terrorists adopt which is so grave that violence is considered (Primoratz 2013, p.113)

In talking about terrorism, it is divided into *state and non-state terrorism*. State here implies nation or country (independent group like Nigeria, Russian, Israel, America, or Pakistan). Hence, any terrorism that is not carried out by the state is Non-state terrorism, otherwise known as 'insurgency'. Nevertheless, all terrorism is *prima facie* extremely morally wrong.

To be sure, the distinction between state and non-state terrorism does not always apply. Attempts at drawing hard and fast lines might be complex because of the widespread phenomenon of terrorist organisations receiving direct and indirect support from states. Building on this backdrop, a swift division of terrorism into state and non-state is no longer feasible as the moral assessment becomes much more complex (Primoratz, 1990)

Looking at the Primoratz view of terrorists, the terrorist's victim is innocent from the terrorist's point of view, even if we grant the terrorist his assessment of the policies at issue. He believes this captures the obscenity of terrorism. The terrorist kills or maims people he knows deep in his heart to be innocent.

FEAR AS A TOOL FOR TERRORISM

For Primoratz, the subject of terrorism is not emotionally laden only because terrorism is fear-driven (frightening). It not only triggers our apprehension or outright fear for our own lives and those of our family and friends, it often stirs our distinctively moral emotions leading to fear culture (Primoratz 2013, p.2).

Terrorism causes terror (extreme fear), and when successful, it does so.

Fear is one of the factors that even make terrorism morally distinctive. For Primoratz, terrorism uses violence and fear (Primoratz 2013, p.114) to destabilise or degrade the existing social order.

Terrorism is the opposite of governance. It is the strategic production of terror to undermine a society's capacity to endure the uncertainties of existence- to make society insecure by producing a social condition of fear (Sparks 2015, p.201). A significant factor in the success of terrorism lies in the fear and social paralysis it induces through the media, particularly television and social media. Terrorists thrive on exposure to their message. The connections created by the press between most parts of the world directly favour Terrorism (Ackoff and Strumpfer 2003)

Fear and terror are treated as if they are of a kind. It is not so; while anxiety is produced in response to objective threats, it responds to the uncertain element of those threats. On the other hand, terror is made by a certainty of life's destruction. For example, someone becomes afraid when he knows that he has cancer. He is unsure what will happen or how to act, but once he knows the tumour is killing him, he starts to experience it, so there is no doubt; then they are terrorised. A politics involving terror creation requires destructive acts to the people being intimidated. It is politics that deploy violence. However, power cannot be gained by the use of violence alone. When acts of violence produce terrorising situations, they barely last longer than violence itself. For this reason, terror produced by acts of violence cannot stay for very long and, in terms of power, has little effect after it is finished. Terrorism only has political value in producing uncertainty when it is a servant of fear's politics (Spark 2003, p.204).

MORAL JUSTIFICATION OF TERRORISM

Many scholars have questioned the justification of terrorism. The argument does not rule out the possibility of no terrorism whatsoever, or terrorism employed in our world so far, or which is likely to be used in it

is morally justified. Moreover, should that be the conclusion we reach, it should be a conclusion of some impotence.

Therefore, we should look to the authoritative consequentiality account of terrorism in the writing of philosophers like Kai Nielsen, who points out that terrorism, not on its own, but combined with others 'more conventional methods, has proven.

An effective tactic to derive an oppressor in South Vietnam and Algeria may have been justified in Chile, Angola, and Mozambique. Concerning terrorism, historical experience has not been uniform; therefore, whoever wants to judge terrorism exclusively in terms of its consequence cannot claim it is never justified (Nielsen 1981 p.446-449).

Many remain unimpressed by the consequentialist's defence of terrorism regarding its good consequences. They feel that the consequentialist account incomplete other considerations with great moral weight and point out that terrorism is morally unacceptable even with good consequences. These considerations are the following:

The Separateness of Person: This principle holds that the terrorist does not separate those they think are guilty of the crime they are fighting against from the innocent citizens. Although it is said that terrorism is indiscriminate violence, however, this may not be true if taken literally. Every human being is an individual. He is a person separate from others, unique, with an irreproducible thread of life and a value that is not commensurable with anything else. The terrorist does not understand this.

b. *The Respect of the Person:* The terrorist does not respect the separation of persons. S/he is not in a position to show respect to persons. This principle can be viewed differently, but the terrorist is bound to offend against it on any plausible destruction. The principle urges respect for each person's core of individuality on one interpretation.

c. *Guilt of the Innocent:* This principle holds that the terrorists are guilty of killing innocent people to carry out their attack. Terrorists deliberately and systematically

attack, kill, and severely harm innocent people, even though they claim guilty.

d. *Moral Dialogue:* This occurs when a group of people engages in sorting the value that will guide their formulations of the social good. For Primoratz, the terrorist should not be in the position or allowed to justify his actions towards his victims in free and equal dialogue. This is *ipso facto* an immoral act.

e. *Moral Equality:* Moral equity is the primary evaluative criterion for ethical judgment. It is based on the overall concept of fairness, justice, and right.

f. *Secrecy:* This principle holds that secrecy is the key to the terrorists' actions and principles of action. This is why Primoratz invites people to be morally suspicious of activity and policies that have to be kept secret. Concerning moral compass, in particular, he insists on publicity. Stressing that if the terrorists cannot satisfy publicly, his action has an honest question mark.

According to Primoratz, the objections to terrorism are incompatible with some of the most fundamental moral beliefs many people hold. People who do have these beliefs will find the consequentialist justification entirely unconvincing. Such explanations will not be seen as showing that terrorism is morally permissible under certain circumstances but as telling against the ethical theory, implying that terrorism is justified whenever such circumstances occur (Primoratz 1997 p.226).

EMPIRICAL REVIEW

Looking at the current situation of Nigeria, plagued with terrorism (insurgencies), there is difficulty in deciphering who a terrorist is or which act is terrorism? Furthermore, the proscription of Indigenous People of Biafra (IPOB) as a terrorist group continues to create tension considering the mission of IPOB in contradistinction to Fulani Herdsmen and Boko Haram.

Nevertheless, through Nigeria Terrorism Prevention Act 2011, the Nigerian government has passed various legislation making terrorism a grave transnational criminal offence. The legislation proscribes all manner

of terrorist activity in Nigeria is the *Terrorism (Prevention) Act, 2011*. According to this body.

Any calculated and extreme use of violence or threatened violence, perpetuated by malice, to cause severe harm or violence against governments, individuals, and their assets to gain political, religious, or ideological goals through coercion or intimidation or instilling fear in the civilian population is known as Terrorism (Apende Issac et al., 2015)

For Primoratz, every attempt to define terrorism must acknowledge the core meaning of "terrorism" as the use of violence for intimidation and definitions that sever the connection between "terrorism" and "violence" or between "terrorism" and "terror" (Primoratz, 2012). Hence, he presented a definition that helped in the moral discussion of terrorism, focusing on four traits that make it morally repugnant: violence, the innocence of its direct victims, intimidation, and coercion. Hence, terrorism means *the deliberate use of violence, or threat of its use against innocent people, to intimidate other people and coerce them into doing what they would otherwise not do* (Primoratz, 2012). This definition is well-fitting for the actions of the Herdsmen and Boko Haram.

In 2017 according to *Premium Times Newspaper*, Nigeria was ranked the third most terrorised nation globally for the third year. It had previously occupied the position in 2015 and 2016, respectively. The country has been battling the Boko-Haram insurgency in the North-East for years, occupying the same ranking in 2015. Nigeria, Afghanistan and Iraq have not changed to date, making the first and second 2021 GTI (Global Terrorism Index). According to the report, the first ten countries that suffered the most significant impact of terrorism in 2016 are Syria, fourth; Pakistan, fifth; Yemen, sixth; and Somalia, seventh. Turkey, India, and Libya are ranked eighth and tenth, respectively (Ukpong, 2017). This ranking also is characterised by the vivacious concurrent act of the Fulani Herdsmen, who kill at ease. The Fulani Herdsmen crisis remains a significant issue in Nigeria. However, thousands were killed, many were expelled from their homes, and the Nigerian government was unwilling to take

forceful action against them. Instead, they are requesting pieces of land from states to provide for the rampaging herders who have been known for wreaking havoc in specific communities in Nigeria. Recently, the rate at which they commit these crimes has increased exponentially. According to *The Institute for Economics and Peace Statistics*, 1,229 people were killed in 2014, up to 63 in 2013, and Benue State experienced the most brutal hit in recent times. In May 2015, five days after the end of Governor Gabriel Suswam's administration, over a hundred farmers and their family members were reportedly killed in villages refugee camps located in the Per, Ukura, Gafa, and Tse-Gusa local governments.

The biggest threat to Nigeria's security has been a devastating insurgency led by the terrorist sect Boko Haram and the late three years of the notorious Fulani Herdsmen blood bath. It is important to note that those two groups are non-state terrorist group-insurgents, even though one cannot distinctively affirm thus because no one can tell if no state or nation funds them. Nevertheless, this reign of terror under the auspices of Boko Haram and the Fulani herders has increased the fear climax of the citizens of Nigeria. This is because the contagious effect of fear disseminated through information makes one feel unsafe in the society he finds himself in.

According to Primoratz, in his analysis of terrorist-induced fear, drawing from Thomas Hobbes's famous portrayal of the state of nature and the critical rule of all-pervasive fear that makes the state so horrible. (Primoratz 2013, p.115) sees terrorism like that, which carries the fear that spreads throughout the society quickly and affects everyone. This is because; fear generated from terrorist attacks disrupts social life and destabilises society at large (Primoratz 2013 p.113)

The act that makes provision for and about offence relating to conduct carried out or purpose connecting with terrorism as enacted by the National Assembly of the federal republic of Nigeria, a terrorist is:

Anyone who knowingly attempts or threatens to do an act preparatory to or furtherance of an act of terrorism.

Commits to doing anything reasonably necessary to promote an act of terrorism or assists or facilitates the activities of the person engaged in the act of terrorism commits an offence under this act. Thus, it means a show that is deliberately done with malice, forethought, and to harm the country or organisation, conforming them to perform or abstain from performing any action, seriously intimidate a population. Moreover, this act seriously destabilised or destroyed the country's fundamental political, constitutional, economic, or social structures.

Among the three groups of proscribed terrorists, (Boko Haram and Fulani Herdsman) are recognised and cruising comfortably on the Global terrorist index. The one making it third (IPOB-Indigenous people of Biafra) remains Unacceptable to international observers as Nigeria still hold that they are terrorist. International bodies like European Union, United Nations, and countries like France, America, and the United Kingdom also reject the Nigerian proscription of IPOB, a terrorist group.

The Nigerian army Director of Defense Information, Major General John Enenche, Pronounced that IPOB is a terrorist organisation after a reported clash between military personnel and IPOB members in Umuahia, Abia. Maj. Gen. Enenche explained why is announced IPOB as a terrorist organisation stressing that members of the group used "stones, Molotov cocktails, machetes, and broken bottles, among others, on a military patrol on September 10, 2017." (Ndujihe, 2017) Still on that, the southeast governors equally condemned the activities of the IPOB in the region after the army's pronouncement on IPOB.

The federal government equally insists that IPOB is a terrorist organisation. They maintain that not even the Fulani herdsman reported to have clashed with and killed farmers, raped women, and destroyed farmlands could be placed on the same level with IPOB because IPOB carved out a territory for itself within Nigeria. Thus, the federal government said it had begun blocking the foreign funding source for IPOB? (Ndujihe 2017)

Just 24 hours after the Nigerian army pronounced IPOB a terrorist organisation, the ^{eight} senate President of Nigeria, Hon. Bukola Saraki condemned the categorisation of IPOB as a terrorist organisation, saying it is unconstitutional. For him:

Only legislation from the Nigerian National Assembly could make such a pronouncement valid. He added, "I also wish to state that the labelling of the group as terrorists by Governors of the southeast state and the Nigerian military is unconstitutional and does not follow due process." Because our laws make explicit provisions for taking such action, and not following the due process makes nonsense of the constitutional provision. I am confident that the president will do the needful by initiating the due process". (Ndubuihe 2017)

Despite the arguments, the Nigerian government maintains that IPOB is a terrorist organisation, especially with signing the group's proscription by the Nigerian President, Muhammadu Buhari (Braithwaite, 2017). According to Braithwaite Onikepo, IPOB is not mainly known for violence, at least not murder, bombing, or extreme violence typical of terrorists (Braithwaite, 2017). She compared the Fulani Herdsmen, who are senselessly unleashing pains on innocent, defenceless rural communities across the country. They are selfishly invading and destroying their farms and means of subsistence so their cows can graze, killing and maintaining people, raping their women, looting, and always carting the little valuables that these rural people have struggled for (Braithwaite, 2017).

Though, Nnamdi Kanu, the leader of the IPOB, is on record for sourcing funds, in his own words, "to buy bullets and guns." Since he could not gather the required funds for the project and did not embark on the journey, does this qualify him and IPOB terrorists? Can *men's rea* (guilty) with no *actus reus* (guilty mind) constitute a crime? (Braithwaite 2017). Since IPOB set up a Quasi-Military wing, many might argue that the Biafra National Guard and Biafra Intelligence Service kitted in uniforms and training qualify as a terrorist group. Hence, Kanu threatened to ensure that

the November election in Anambra state in 2017 did not hold thus terrorism if he could only achieve this obstruction by using force and intimidation (Braithwaite, 2017).

CONCLUSION

As a moral philosopher, Primoratz clearly emphasised the danger of Terrorism (Primoratz 2013 p.7) in man's existential struggle and stressed how to look at terrorism from a philosophical viewpoint. For him, in looking at terrorism, one needs to put aside both the identities of those employing terrorism and their ultimate aim and the related issue of the moral standing of the policies and politics they oppose. These will help one understand terrorism that is not plagued by relativism (Primoratz 2013, p.20).

Primoratz suggested how to define terrorism. For him, the definition of terrorism needs not to be purely descriptive and need not cover the entire range of everyday use of the term; however, it may legitimately be prescriptive. Building on this backdrop, he defined terrorism as "the deliberate use of violence, or threat of its use, against innocent people, to intimidate some other people and coerce them into doing what they otherwise would not do (Primoratz 2013 p.170)". Hence, terrorism is violence that aims to strike terror (great fear) in the hearts of people not directly attacked (Primoratz 170).

Primoratz affirms that state terrorism is worse than non-state terrorism (insurgency). He followed to justify this by arguing that civilians or everyday citizens are not innocent of the wrongs terrorists fight against. Such an argument relies on some notion of collective responsibility.

He (Primoratz) affirmed this claim in three ways stressing that the vast majority of direct victims of terrorism are innocent:

1. It treats the human person as a means and offends the fundamental moral convictions every human person shares, like separateness of persons and respect for persons.
2. Terrorism violates the fundamental human right (basic human rights of those victimised by terrorism) during the transition stage.
3. Terrorism is often and all the time morally wrong even if a supreme emergency is involved (Primoratz 172).

Hence, terrorism becomes morally distinctive because its deliberate violence inflicted on innocent people is compounded by the proximate aims of intimidating and coercing others. It is pertinent to note that despite all that Primoratz discusses about cornering terrorism, he does not look at the pivotal causes. For *The United States Institute of Peace, Teaching Guide on International Terrorism: Definitions, Cases and responses*, the cause of terrorism appears to be varied. No sole factor leads people to engage in the Act of Terrorism. They categorised motivations to include ideological, psychological, and strategic.

1. Psychological Perspective: Those involved in terrorism may do so for purely personal reasons, based on their psychological state of mind. What motivates them may be nothing more than hate or the desire for power.

2. Ideological Perspective: Ideology is the beliefs, values, cardinal plans, and principles that make a group identify its particular aims and objectives. Ideology might stem from religion or political philosophies and programs.

3. Strategic Perspective: Terrorism could be seen as a logical extension of the failure in political administration. People may resort to violence when they seek to redress their grievances through the government but fail to win the government's attention to their challenges. From this viewpoint, terrorism is the effect of a logical analysis of a group's goals and objectives and their estimate of the likelihood of gaining victory (United States Institute of Peace, Program 202, p11).

Nevertheless, Primoratz believed that if we consider that terrorism is the deliberate use of often deadly violence against innocent people to intimidate and coerce other people. Alternatively, if we peruse a detailed report on particular terrorism, we may feel that such violence ought to be extremely difficult to justify Primoratz (2013p.174).

Looking at how our present society is going, especially in Nigeria, one cannot admit that terrorism is not what one needs to reckon with. The recent Boko Haram and Fulani

Herdsmen attacks have drawn international attention making it one of the first three indexes.

Primoratz looked at terrorism from the philosophical and dynamic spectrum. Philosophically, he considers terrorism to be morally repugnant. Emotively because it triggers apprehension or outright fear, these feelings make terrorism morally provocative and disgusting as a vivacious example of moral atrocity. This could be seen in the

Nigerian life in I.D.P (internally Displaced People) who struggle now to survive where it seems all hope is lost in life and the farmers who suffer the destructive invasion of the Fulani Herdsmen into their farms.

Having said this, the value system in which terrorism is embedded is not universally accepted within the larger society from which it emanates. Hence, it is not unreasonable to conclude that terrorism is wrong.

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