

A REVIEW OF THE EFFECTS, THE CONSEQUENCES, AND THE IMPLICATIONS OF COVID-19 PANDEMIC IN DEVELOPING, UNDERDEVELOPED, AND THIRD-WORLD COUNTRIES WORLDWIDEESPECIALLY IN SUB-SAHARA AFRICA

^{1st} DR. PARK E. ATATAH, ^{2nd} DR. CATHERINE W. KISAVI-ATATAH, & ^{3rd} RANDI PLAIR

^{1st} (Ph.D.) Public Health Services & Criminal Justice, Assistant Professor, Prairie View A&M University, Prairie View, TX, USA Email: peatatah@yahoo.com or peatatah@pvamu.edu

^{2nd} (Ph.D.) Health Services, Assistant Professor, Prairie View A&M University, Prairie View, TX, USA Email: ckisavi@yahoo.com or ckisavi-atatah@pvamu.edu

^{3rd} Graduating Senior Internship Student College of Education, Department of Health & Kinesiology Prairie View A&M University, Prairie View, TX, USA Email: rplair06@gmail.com

ABSTRACT

This comprehensive research study investigated, explored, and reviewed the effects, the consequences, and the implications of COVID-19 pandemic in developing, underdeveloped, and Third-World countries worldwide especially in Sub-Sahara Africa. This study used Social “Construction of the Ideology of Reality Theory” as a lens of analyses. The study used “Non-Experimental Research” or “Descriptive Statistics” methodology in analyzing the collected secondary data. The study found that Africans’ leaderships were not basically, theoretically, and practically ready to tackle any future predicted incoming pandemics due to their experiences with COVID-19 pandemic in 2020 and 2021 because majority of analyzed countries in Africa exceeded the acceptable statistical significant differences. The study found that less than 2% of all Africans actually received first COVID-19 vaccines’ shots during this pandemic. The study found that almost 90% of Americans actually received their third COVID-19 vaccines’ shots. Sadly, the research study found that the color of your skins’ play some significant roles in “who receives treatments”, “who survives”, or “who dies” during any contagious diseases such as COVID-19 pandemic in 2020 and 2021 and incoming predicted contagious diseases in the western world, in particularly in the United States of America USA based on the raw data analyzed during this research study. The study sums that the results and findings of this study will possibly HOPEFULLY shed some positive social changes in Africa, USA, and possibly beyond; if all noted effects are fully implemented.

KEYWORD: Africa, Sub-Sahara-Africa, USA, COVID-19 pandemic, Vaccines, Shots, Deaths, Dying, Underline Conditions, Blacks, People of Color, Dying, Surviving, Incoming pandemics

INTRODUCTION

The purpose of this research study was to investigate and review the effects and the implications of COVID-19 pandemic had in developing, underdeveloped, and third-world countries especially in Africans' countries. Africans' countries are very much classified as either third-world, underdeveloped, or developing, or all of the above countries at all rates. This means based on the worldwide classifications of these Africans' countries, Africans have no first-class countries for whatever reasons based on foreigners' assumptions, conceptions, and preconceptions about Africa in general. As such, Africans are usually "Hit Harder" whenever it comes to any form contagious transferrable diseases such as Ebola, Malaria, fever, and polio just to mention a few. According to information obtained from Center for Disease Control and Prevention (CDC, 2020; 2021), unintended consequences have plagued many minorities worldwide in different formats and Africa is not exemption from the above stipulated and pinpointed diseases' effects and implications. The question now becomes are we saying that all Africans' countries are underdeveloped, developing, or even third world countries across the board? Do we have any underdeveloped, developing, or third world countries in Europe or in the Western World at all? Who is in charge of the classifications of these countries worldwide? And what parameters do they use for the classifications of all Africans' countries worldwide? Does the overwhelming effect of COVID-19 pandemic set a new "Redefined Pretest" for the classifications or even the reclassifications of all countries worldwide due to the effects, implications, and consequences Africans and Europe experienced during COVID-19 pandemic? As such, this research study focuses on the investigations and reviews of some of the intended or the unintended COVID-19 pandemic's effects, implications, and its' consequences in Africans' countries between 2020 and 2021 during the world recently most infamous disease known as COVID-19 pandemic.

BACKGROUND OF THE STUDY AND LITERATURE REVIEW

COVID-19 pandemic has impacted all African countries because Africa today is no longer a discussion or conversation worldwide for some unknown reasons when dealing with COVID-19 pandemic in 2020 and 2021 just to be specific. Above all, CDC (2020; 2021) stipulated that when almost 55% plus of Americans has been fully COVID-19 vaccinated, African countries accounted for less than 2% of first vaccines as to compare to other Europeans' countries across the board. Furthermore, the effects and implications of COVID-19 pandemic are more racial related than international public health efficacies related worldwide. For example, majority of victims (Deaths) of COVID-19 pandemic associated with minorities in the US have been blamed on pre-existing underlying health as classified; rather than classifying the actual cause of deaths on COVID-19 pandemic. This falsely compounded the actual cause of deaths when dealing with COVID-19 pandemic implications and effects on minorities in general and African countries are not alone. Above all, issues such as quarantine without any proactive interventions' plans from the public health or public policies' leaderships along with domestic violence at home during quarantines, preventable under aged pregnancies, poverties, unemployment, lack of public accessibilities and not to mention mental health implications and effects were fundamental due to COVID-19 pandemic in 2020 and 2021 which were classified as unintended consequences that followed (see Anandappa et al., 2018; Atatah et al., 2016; Atatah et al., 2020; Atatah et al., 2021; Cordes & Castro, 2020; CDC, 2021; Coleman-Jensen et al., 2017 for more information). Beside the above pinpointed issues such as severe illnesses, treatments' disparities, overwhelming hospitalizations, and painful silent deaths were all contributed and associated with COVID-19 pandemic effects in 2020 and 2021 in many countries worldwide and African countries are not alone. **The question now becomes what were the intended or unintended effects, consequences, and implications of**

COVID-19 pandemic in developing, underdeveloped, or third world countries worldwide especially in Africans' countries? While this is the case in many countries worldwide, this research study focused basically on the effects, consequences, and implications of COVID-19 pandemic in African countries in general.

THEORETICAL FRAMEWORK

This research study used “**Social Construction of The Ideology of Reality Theory**” as a lens of data analyses (see Frankfort-Nachmias & Nachmias, 2008; Berger & Luckmann, 1966 for more information). Above all, COVID-19 pandemic actually set a new visible “**pretests**” platform for the decisions any public or private entities make as to “**who dies**”, “**who survives**”, or “**who partially stays alive**” based on their financial status and the classifications of the countries' status during COVID-19 pandemic; hence “**Social Construction of The Ideology of Reality Theory**” theory was selected above other theories for this critical research study. **This theory stressed, stipulated, and pinpointed that in any occasions the ideologies behind any public or private decisions making processes are/were always somehow different than the actual realities' outcomes thereafter;** hence this theory was selected as the theoretical framework in this critical research study.

DESIGN AND METHODOLOGY OF THE STUDY

This study used a quantitative methodology by analyzing “**secondary data**” which were already available data statistics and focused on investigating and reviewing some of the unintended or intended COVID-19 pandemic's consequences in Sub-Sahara Africans' countries between 2020 and 2021. This research study used a “**Non-Experimental Research Study**” also known as “**Descriptive Statistics**” as a threshold, as a benchmark, and as a methodology in analyzing collected secondary data above all other methodologies' options; hence “**Non-Experimental Research Study**” also known as “**Descriptive Statistics**” was selected over other quantitative research methodologies.

Collection and Selections of Data

Seconding data were collected from Who Health Organization (WHO, 2020; 2021) and Center for Disease Control and Prevention (CDC, 2020; 2021) about the countries in Africa defined COVID-19 pandemic infections, those who died, and those who actually received COVID-19 pandemic vaccines. These countries were divided into those countries from North Africa, Southern Africa section, West Africa, East Africa, and Central Africa as to cover Africa countries symmetrically and systematically across the board equivocally. Selected countries were as followed below;

East Africa:

Ethiopia was selected because Ethiopia is the most populous country in East Africa.

West Africa: Nigeria

Nigeria was selected because Nigeria is the most populous country in West Africa especially in Africa; according to data statistics, 1 out of 4 or 25% of Africans are Nigerians. These numbers are debatable because according to the unverified data statistics collected from Data Statista.com in 2023, the current population of trend of Africa is 1.4

billion plus people; if this is correct, and if 1 out of every 4 African or 25% is a Nigerian, that means Nigerians' population could be as high as 350 million people currently.

Southern Africa: South Africa

South Africa was selected because South Africa is the most populous country in Southern region of Africa.

North Africa: Libya

Libya was selected because Libya is the most centralized North African's countries.

North America: United States of America (USA)

United States of America (USA) was selected because USA is the most populous country in North American continent's countries.

All of the selected countries in Africa were recorded in four different categories such as **Confirmed Cases; Persons received booster or additional dose, Person boosted per 1000, and deaths.**

These collected secondary data were compared to the collected data in the results from North America Continent and United States of America USA was selected between 2020 and 2021 COVID-19 pandemic infections, deaths, and those who were able to take COVID-19 vaccines' shots.

DEMOGRAPHICS

Personal demographics data such as gender, age, race, levels of education, employments, marital status, financial status, previous medical records or status, and individual locations in the selected countries were not needed and were not collected in this research study because they were not properly classified.

However, sex, age, gender, and others demographics were well recorded, documented, and collected in this study based on the USA collected data statistics from CDC from 2020 to 2021 of COVID-19 pandemic's effects (see Center for Disease Control and Prevention (CDC, 2021; 2022 for more information).

HYPOTHESES

This study hypothesized two major Alternative Hypotheses:

Alternative Hypothesis 1:*H1-1*

Africans' leaderships are basically, theoretically, and practically ready to tackle any future predicted incoming pandemics due to their experiences with COVID-19 pandemic in 2020 and 2021.

Null Hypothesis 1:*HO-1*

Africans' leaderships are not basically, theoretically, and practically ready to tackle any future predicted incoming pandemics due to their experiences with COVID-19 pandemic in 2020 and 2021.

Independent Variable:

Africans leadership's readiness about tackling COVID-19 pandemic in 2021 and 2021 and about how they will tackle predicted future incoming pandemics.

Dependent Variable:

The outcomes' effects Africans experienced during COVID-19 pandemic in 2020 and 2021, and to possibly be experienced again during predicted future incoming pandemics.

Alternative Hypothesis 2:H1-2

Does the color of your skins play any significant roles in who receives treatments, who survives, or who dies during any contagious diseases such as COVID-19 pandemic in 2020; 2021; among other incoming predicted contagious diseases in the western world, in particularly in the United States of America USA?

Null Hypothesis 2:HO-2

The color of your skins does **not** play any significant roles in who receives treatments, who survives, or who dies during any contagious diseases such as COVID-19 pandemic in 2020; 2021; among other incoming predicted contagious diseases in the western world, in particularly in the United States of America USA.

Independent Variable:

The color of your skins' play some significant roles in who receives treatments, who survives, or who dies during any contagious diseases such as COVID-19 pandemic in 2020 and 2021 and incoming predicted contagious diseases in the western world, in particularly in the United States of America USA.

Dependent Variable:

The outcomes' affects the color of your skins' played during COVID-19 pandemic in 2020 and 2021, and possibly to be played during future incoming predicted contagious diseases in the western world, in particularly in the United States of America USA.

All the collected secondary data were fed into SPSS Version 27 and Sig. (2-tailed) was set at .95% or 0.05% for the data analyses outcomes.

THE RESULTS AND FINDINGS OF THE STUDY

Table 1. Statistics

		Statistics			
		Libya	Nigeria	Ethiopia	South Africa
N	Valid	4	4	4	4
	Missing	0	0	0	0
Mean		151276.353	272118.60	206054.33	1485478.13
Std. Error of Mean		118933.3	195257	119526	897402
Median		51621	129414.0	176891.5	1089499
Mode		1.41 ^a	.40 ^a	.30 ^a	3.50 ^a
Std. Deviation		237866.51	390513.8	239050.91	1794802.84
Variance		56580472251	15250101770	57145333193	32213172497
		.1	.9	.4	84.4
Skewness		1.804	1.497	.227	.702
Std. Error of Skewness		1.014	1.014	1.014	1.014
Kurtosis		3.243	1.884	-4.692	-2.072
Std. Error of Kurtosis		2.619	2.619	2.619	2.619
Range		501860.59	829645.60	470433.70	3762907.50
Minimum		1.41	.40	.30	3.50
Maximum		501862.0	829646.0	470434.0	3762911.0
Sum		605105.41	1088474.40	824217.30	5941912.50

a. Multiple modes exist. The smallest value is shown

Table 1. Showed a mean of 151276 for Libya, 272119 for Nigeria, 206054 for Ethiopia, and 1485478 for South Africa; and Std. Deviation of 237866.5, 390513.8, 239050.9, and 1794802.8 respectively for Libya, Nigeria, Ethiopia, and South Africa (see Table 1 above for more information).

Table 2. Libya

Libya

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Persons boosted per 1000	1	25.0	25.0	25.0
	Deaths	1	25.0	25.0	50.0
	Persons received booster or additional dose	1	25.0	25.0	75.0
	Confirmed Cases	1	25.0	25.0	100.0
Total		4	100.0	100.0	

Table 2. Showed cumulative frequency percent of 100% for Libya with no missing numbers in the data statistics (see Table 2 above for more information).

**Table 3. Nigeria
Nigeria**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Person boosted per 1000	1	25.0	25.0	25.0
Deaths	1	25.0	25.0	50.0
Confirmed Cases	1	25.0	25.0	75.0
Persons received booster or additional dose	1	25.0	25.0	100.0
Total	4	100.0	100.0	

Table 3. Showed cumulative frequency percent of 100% for Nigeria with no missing numbers in the data statistics (see Table 3 above for more information).

**Table 4. Ethiopia
Ethiopia**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Persons boosted per 1000	1	25.0	25.0	25.0
Deaths	1	25.0	25.0	50.0
Persons received booster or additional dose	1	25.0	25.0	75.0
Confirmed Cases	1	25.0	25.0	100.0
Total	4	100.0	100.0	

Table 4. Showed cumulative frequency percent of 100% for Ethiopia with no missing numbers in the data statistics (see Table 4 above for more information).

Table 5. South Africa
South Africa

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Persons booster per 1000	1	25.0	25.0	25.0
Deaths	1	25.0	25.0	50.0
Persons received booster or additional does	1	25.0	25.0	75.0
Confirmed Cases	1	25.0	25.0	100.0
Total	4	100.0	100.0	

Table 5. Showed cumulative frequency percent of 100% for South Africa with no missing numbers in the data statistics (see Table 5 above for more information).

Figure 1. Libya

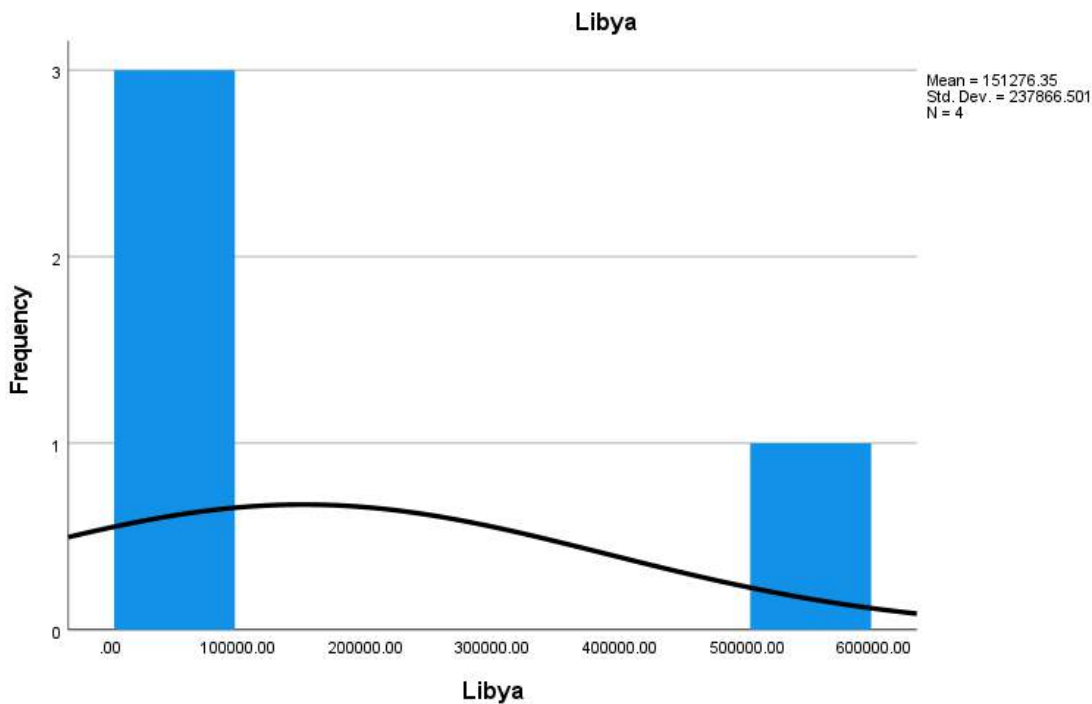


Figure 1. Showed Libya with a mean of 151276 and Std. Dev of 237867 with no missing numbers (see figure 1 above for more information).

Figure 2. Nigeria

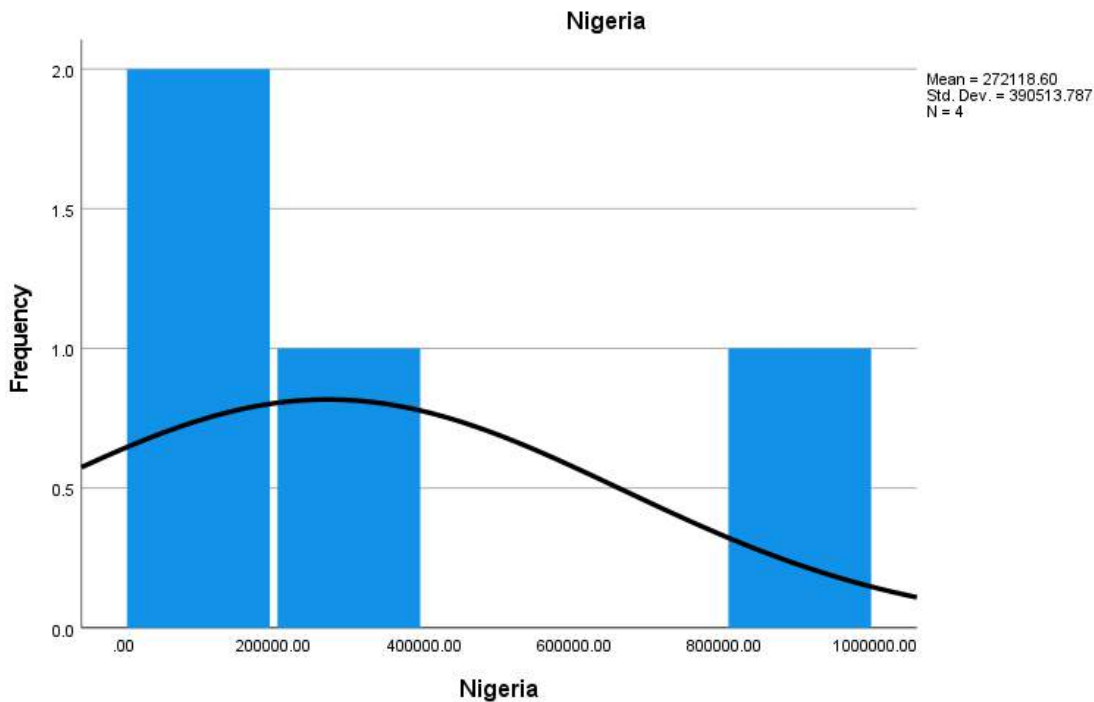


Figure 2. Showed Nigeria with a mean of 272119 and Std. Dev of 390514 with no missing numbers (see figure 2 above for more information).

Figure 3. Ethiopia

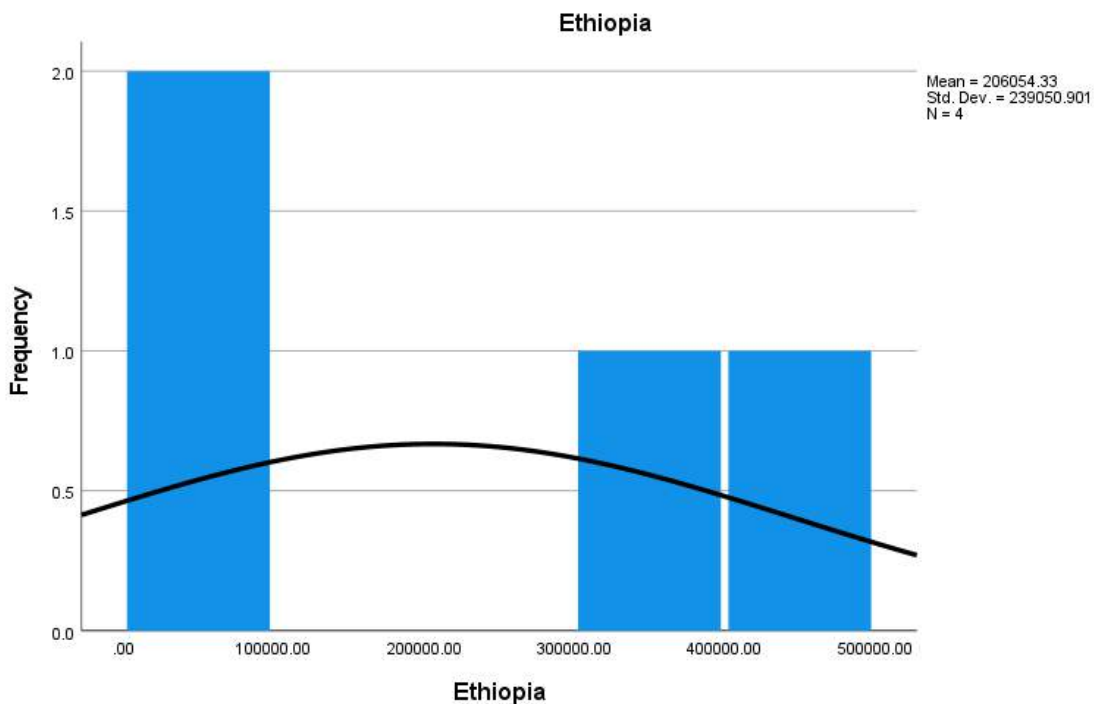


Figure 3. Showed Ethiopia with a mean of 206054 and Std. Dev of 239051 with no missing numbers (see figure 3 above for more information).

Figure 4. South Africa

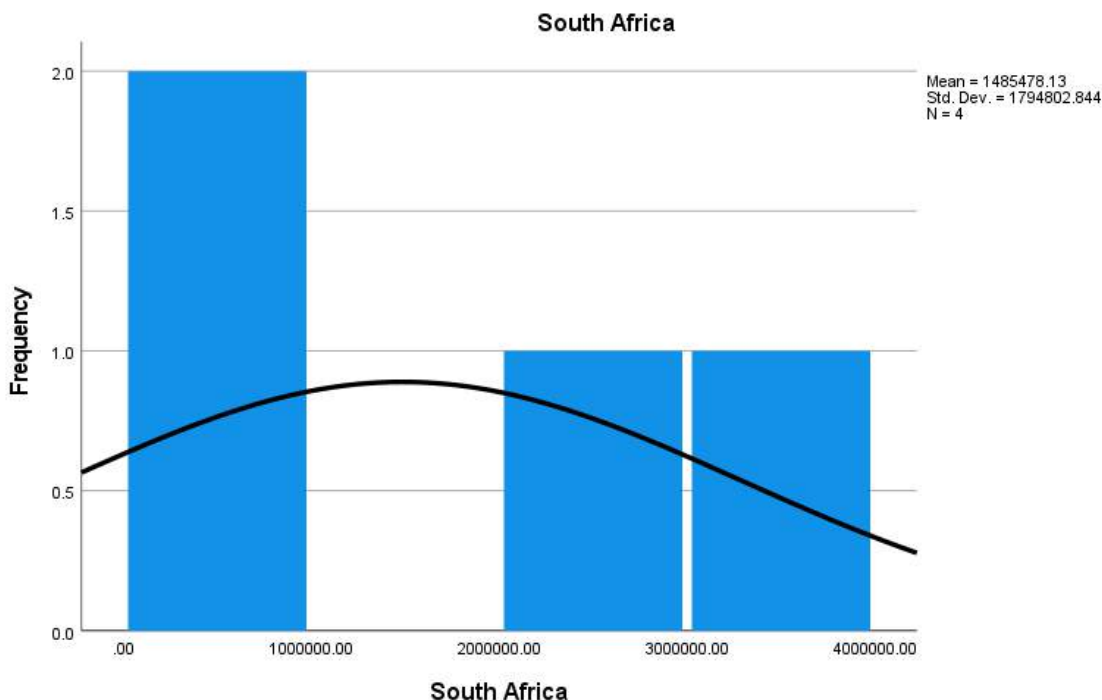


Figure 4. Showed South Africa with a mean of 1485478 and Std. Dev of 1794803 with no missing numbers (see figure 4 above for more information).

Table 6. T-Test One-Sample Statistics

One-Sample Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Libya	4	151276.4	237866.51	118933.26
Nigeria	4	272118.6	390513.79	195256.9
Ethiopia	4	206054.33	239050.91	119525.5
South Africa	4	1485478.13	1794802.9	897401.42

Table 6. Showed Std. Error of 118933.3 for Libya, 195257 for Nigeria, 119526 for Ethiopia, and 897401.42 for South Africa (see Table 6 above for more information).

Table 7. One-Sample Test
One-Sample Test

Test Value = 0

	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Libya	1.272	3	.293	151276.4	-227222.310	529775.04
Nigeria	1.394	3	.258	272118.6	-349275.98	893513.18
Ethiopia	1.724	3	.183	206054.33	-174329.01	586437.7
South Africa	1.655	3	.196	1485478.13	-1370453.8	4341409.97

Table 7. Showed Sig (2-Tailed) of .293 for Libya, .258 for Nigeria, .183 for Ethiopia, and .196 for South Africa with no missing numbers; however, scores exceeded Sig (2-Tailed) threshold's requirement of .95% or 0.05% (see Table 7 above for more information).

Table 8. One-Sample Effect Sizes

One-Sample Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Libya	Cohen's d	237866.51	.636	-.496	1.691
	Hedges' correction	328725.94	.460	-.359	1.223
Nigeria	Cohen's d	390513.79	.697	-.458	1.771
	Hedges' correction	539680.92	.504	-.332	1.281
Ethiopia	Cohen's d	239050.91	.862	-.361	1.998
	Hedges' correction	330362.76	.624	-.261	1.446
South Africa	Cohen's d	1794802.9	.828	-.381	1.950
	Hedges' correction	2480375.51	.599	-.276	1.411

- a. The denominator used in estimating the effect sizes.
Cohen's d uses the sample standard deviation.
Hedges' correction uses the sample standard deviation, plus a correction factor.

Table 8. Showed Cohen's sample standard deviation of .636 for Libya, .697 for Nigeria, .862 for Ethiopia, and .828 for South Africa while the Hodges' correction uses of sample standard were .460, .504, .624, and .599 respectively (see Table 8 above for more information).

Figure 5. Deaths by Race/Ethnicity in the USA

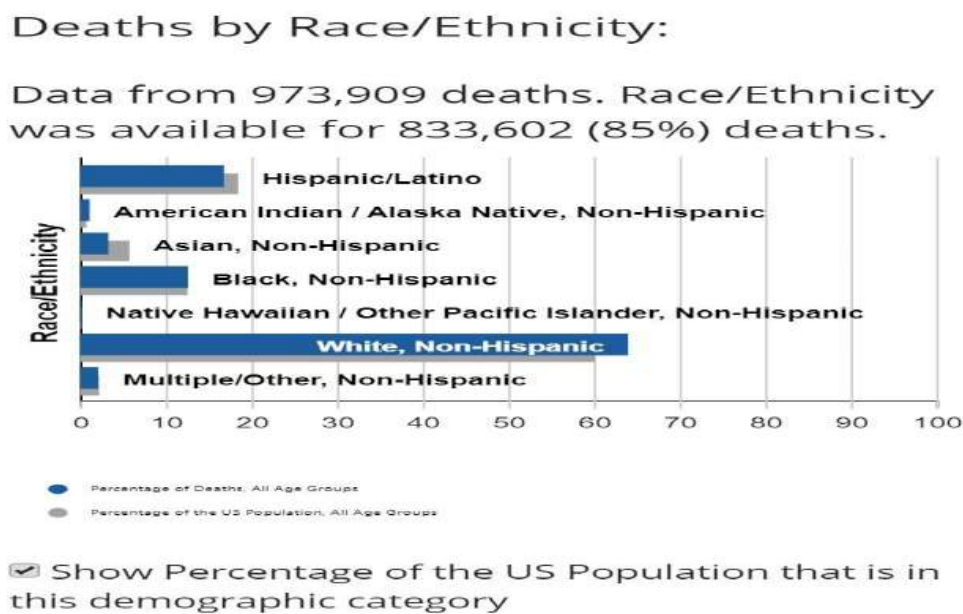
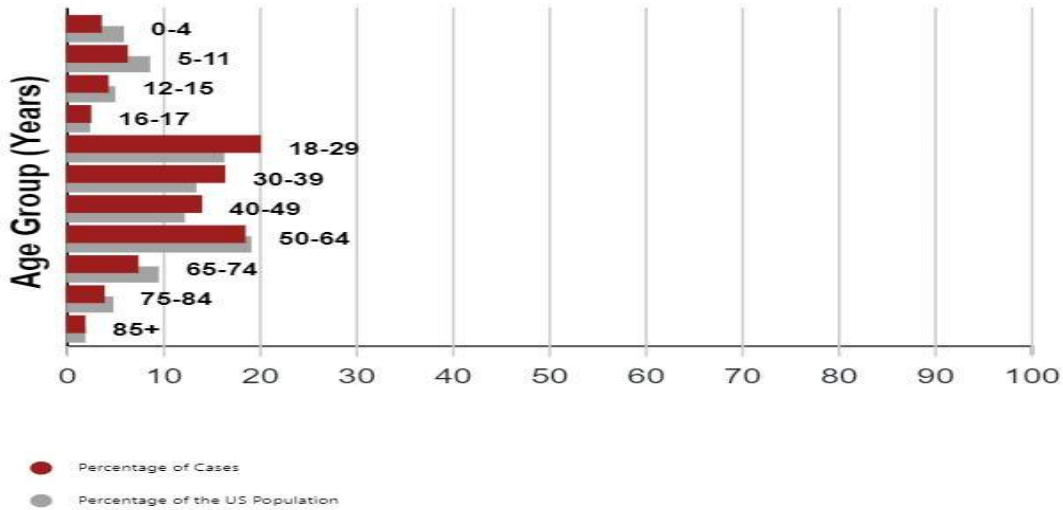


Figure 5. Showed that 85% deaths by race/ethnicity collected Hispanic/Latino were slightly below the population, Asian, Non-Hispanic were below the population, Black, Non-Hispanic were at the population White, Non-Hispanic were above the population (see Figure 5 above for more information).

Figure 6. Cases by Age Group in the USA

Cases by Age Group:

Data from 99,357,740 cases. Age group was available for 98,391,039 (99%) cases.



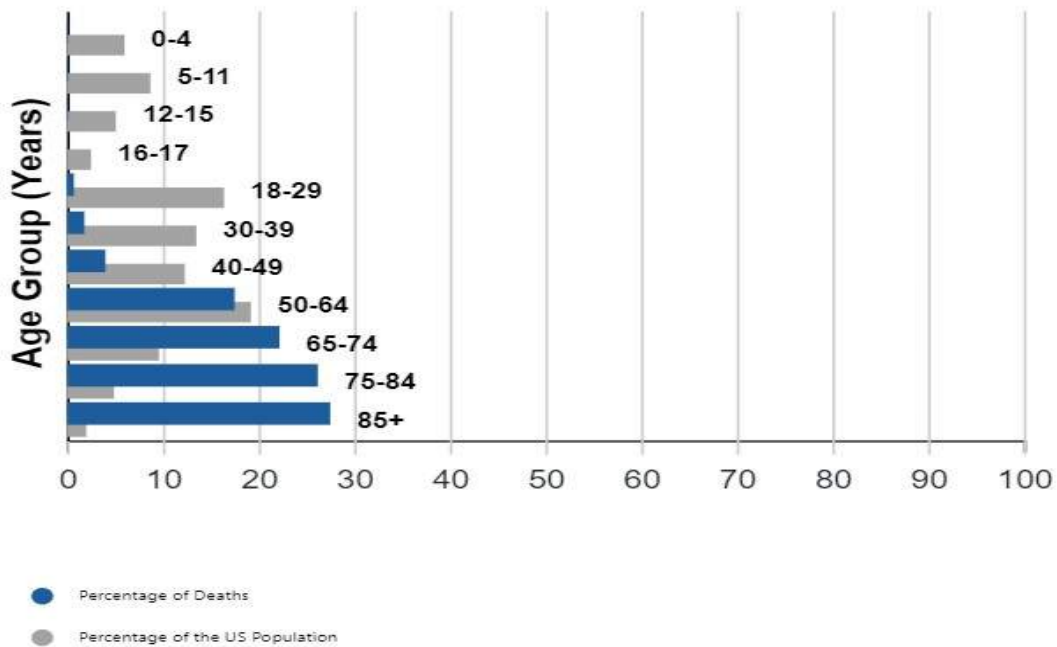
Show Percentage of the US Population that is in this demographic category

Figure 6. Showed 99% of cases by age group of those infected by COVID-19 pandemic 2020 and 2021 collected, ages between 0-4 were below the US population, 5-11 were below the US population, as well as 12-17 ages. However, 18-20, 30-39 and 40-49 exceeded the US population (see Figure 6 above for more information).

Figure 7. Deaths by Age Group in the USA

Deaths by Age Group:

Data from 973,909 deaths. Age group was available for 973,060 (99%) deaths.



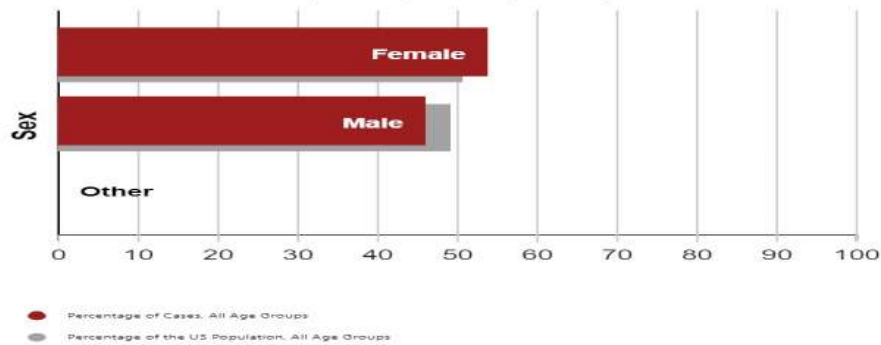
Show Percentage of the US Population that is in this demographic category

Figure 7. Showed 99% of death by age group ages between 0-64 was below the ages' population in the US; but people between 65-85 ages profoundly exceeded the US population (see Figure 7 above for more information).

Figure 8. Cases by Sex in the USA

Cases by Sex:

Data from 99,357,740 cases. Sex was available for 97,852,600 (98%) cases.



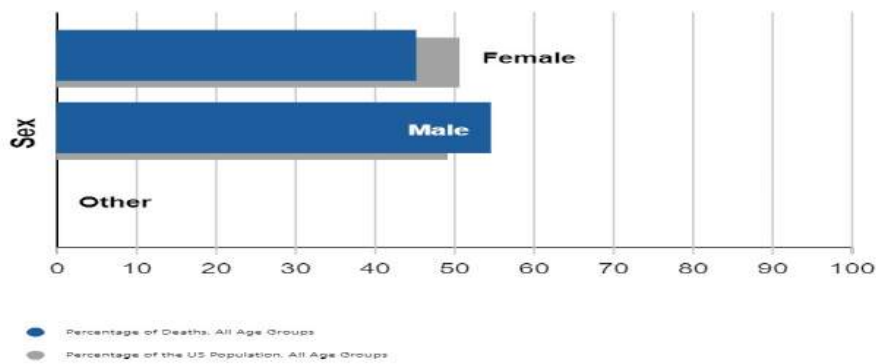
Show Percentage of the US Population that is in this demographic category

Figure 8. Showed that about 98% of cases by sex collected, about 52% were females and about 46% were males which exceeded the males' US population (see Figure 8 above for more information).

Figure 9. Deaths by Sex in the USA

Deaths by Sex:

Data from 973,909 deaths. Sex was available for 970,453 (99%) deaths.



Show Percentage of the US Population that is in this demographic category

Figure 9. Showed that of 99% data collected for those who were infected by COVID-19 pandemic between 2020 and 2021, about 55% deaths were males as compared to about 45% females. The females' deaths were below the US population as compared to the males' deaths (see Figure 9 above for more information).

INTERPRETATION OF THE RESULTS/FINDINGS OF THE STUDY

The research study found that in Libya for example, less than 1.41% out of 1000 people actually receive their first COVID-19 vaccine shot; in Nigeria less than 0.04% took their first shot, in Ethiopia less than 0.03% and in South Africa less than 3.5% took their first vaccine shots as compared to the US with 270,227,181 people or 81% took at least their first COVID-19 vaccine's shots and about 231 million or 66.5% were considered to be fully vaccinated. Also, the study found that of all the identified confirmed cases of COVID-19 in 2020 and 2021 about .012% deaths in Libya, about .012% deaths in Nigeria, about 0.016% deaths in Ethiopia, and about 0.026% deaths in South Africa as compared to the deaths US confirmed cases (see Tables 1 to 8 & Figures 1 to 4 above for more information). According to raw data collected from CDC in 2022 about the;

...color of your skins play...in any significant roles in who receives treatments, who survives, or who dies during any contagious diseases such as COVID-19 pandemic in 2020; 2021; among other incoming predicted contagious diseases in the western world, in particularly in the United States of America USA. (p. 4)

The study found that in deaths by race/ethnicity Hispanic/Latino exceeded their deaths' rate with about 3% as compared to about 15% US population rate to about 18%, Black, /Non-Latino were tied at about 14%, and White, /Non-Latino exceeded their population rate at about 63% rate as compared to about 60% of the US population rate. Also, the study found that in cases by age group analysis Americans between the ages of 50 to 84 exceeded the US population. Furthermore, the studies found that in deaths by age group Americans between the ages of 65 to 85 plus were more likely to die from COVID-19 pandemic infections than others. Additionally, the study found that in cases by sex about 53% of females were recorded as compared to about 47% males; but conversely, in deaths by sex about 55% of males as compared to about 45% of females actually die during COVID-19 pandemic in 2020 and 2021. Collectively, based on the raw data collected from CDC in 2022, about 94% of confirmed cases actually die from COVID-19 pandemic's infection in 2020 and 2021 (see Figures 5 to 9 above for more information).

THEORETICAL FRAMEWORK DATA ANALYSES CONFIRMATION OR DISCONFIRMATION

This study used “**Social Construction of the Ideology of Realty Theory**” which determines the public or even private organizational decision-making processes which directly or indirectly impact recipients in any environment worldwide (see Berger & Luckmann, 1966 for more).

As stipulated in Atatah et al. (2020): This study used Social Construction of the Ideology of Reality Theory as a lens of analyses which stipulated that error thinking, faulty errors, default errors, gossips, false perceptions, assumptions, and presumptions lead to the creation of ineffective, inefficient, and in proficient public social policies. (Berger & Luckmann, 1966; Atatah et al., 2020, p. 12)

Analysis of Confirmation or the Disconfirmation of the Theoretical Framework

Based on the data analyzed in this research study, the theoretical framework of “Social Construction of the Ideology of Realty Theory” was confirmed because the research study found that majority of the decisions which were made about who gets treatments, who lives, or who dies in America as well as in Africa countries during COVID-19 pandemic in 2020 and 2021. The research study confirmed that as for those Americans who actually died from COVID-19 pandemic in 2020 and 2021 die due to disorganized governmental decision making processes in the US based on their ethnicities, genders, races, locations’ of residences, financial status, and most especially, based on the colors of their skins in the US. The study also confirmed that Africans’ countries did not share viable, dependable, and reliable data about who actually die or survive during COVID-19 pandemic; however, majority of those who actually survived from the pandemic took at least their first vaccines’ shots and were well financially connected to the vaccines’ supplies in Europe and in the US. The research study confirmed that “**Social Construction of the Ideology of Realty Theory**” was used during COVID-19 pandemic in 2020 and 2021 in Africa and in the US.

ANSWERS TO THE RESEARCH QUESTIONS

Answer to Alternative Hypothesis 1: *HI-1*

The study found that Africans’ leaderships were not basically, theoretically, and practically ready to tackle any future predicted incoming pandemics due to their experiences with COVID-19 pandemic in 2020 and 2021 because majority of analyzed countries in Africa exceeded the acceptable statistical significant differences. For example, Libya scored .293, Nigeria scored .258, Ethiopia scored .183, and South Africa scored .196; these four major analyzed Africans’ countries overwhelmingly exceeded the acceptable “**statistical significance differences**”; **there were absolutely 0% correlations between the dependent and the independent variables**, as such this research study accepted the **Null Hypothesis 1: *HO-1*** and rejected the **Alternative Hypothesis 1: *HI-1***.

Answer to Alternative Hypothesis 2: *HI-2*

The research study found that the color of your skins’ play some significant roles in “who receives treatments”, “who survives”, or “who dies” during any contagious diseases such as COVID-19 pandemic in 2020 and 2021 and incoming predicted contagious diseases in the western world, in particularly in the United States of America USA based on the raw data analyzed during this research study. For example, the research study found that in deaths by race/ethnicity Hispanic/Latino exceeded their deaths’ rate with about 3% as compared to about 15% US population rate to 18%, Black/Non-Latino were tied at about 14%, and White/Non-Latino exceeded their population rate at about 63% rate as compared to about 60% plus of the US population data statistics. Above all, based on the racial breakdown of physicians in the US obtained in 2022, 63.9% of all physicians in the US were white, 20.6% were Asian, which was/is way above their population threshold or benchmark of less than 7.3%, 6.9 were Latino, and 5.7% were Black which were way below the population threshold or benchmark of 30% collectively in the US. These analyzed seconding data showed that the skins of ones’ color play significant roles about “**who receives treatments**”, “**who survives**”, or “**who dies**” in the US any pandemics’ occurrences. There were overwhelming

correlations between the dependent and the independent variables; as such, this research study accepted the **Alternative Hypothesis 2: *H1-2*** and rejected the **Null Hypothesis 2: *HO-2***.

IMPLICATIONS AND THE SIGNIFICANCES OF THIS RESEARCH STUDY

This research study shows several significances and implications to participants, researcher/s, healthcare practitioners, leaderships and others, in several ways.

1. This research study shows the significances and implications of planning in advance before any incoming pandemics due to the pretests posed COVID-19 pandemic in 2020 and 2021.
2. This research study also shows that for any effective, efficient, and proficient planning against any diseases or pandemics, world leaderships should and must see **eye-to-eye** in tackling them proficiently across the board.
3. This research shed some lights for leaderships in Africa as well as leaderships in Europe and the US that **the days of operating with assumptions that whatever happens in Africa will get them are completely over.**
4. This research study also shows that the “**bottom of the originality**” of COVID-19 pandemic needs to be holistically investigated; because Chinese’s leaderships completely turned their faces against any forms of investigations, which was/is obvious.
5. This research study overwhelmingly pinpointed and stipulated that African’s countries need to be very ready because possibly quarantines actually saved them due to lack of free transmissions, transfers, and transportations of COVID-19 pandemic across international borderies.
6. This research study shed some lights that political insignificant irreconcilable interests associated with COVID-19 pandemic in 2020, 2021, and 2022 made it somehow impossible to it stamp out, before it became a generational PANDEMIC for all, worldwide.
7. Finally, this research study serves as a good warning to all worldwide leaderships as a whole, because COVID-19 pandemic was/is a “**PRETEST**” and the “**POSTTESTS**” that follow may be overwhelmingly more dangerous for the world to tackle; until they all make some effective, efficient, and proficient workable solutions, systematically and symmetrically as to be successful in tackling them in the future to come.

LIMITATIONS OF THE STUDY

This study showed several limitations which are pinpointed and itemized below.

1. Majority of the analyzed data were self-reported by these countries’ leaderships, which makes it impossible to generalize the results/findings of this research study.
2. Majority of African’s countries lack similar public health-care effective systems such as CDC and WHO, which makes it impossible to verify or validate their reported data.
3. Majority of countries in western world such as Europe, USA, and even China, among others have shown and recorded false COVID-19 cases in 2020, 2021, and thereafter which poses validity and reliability issues.
4. Sadly, up till today China’s leaderships are still in transparent about the actual originality of COVID-19 pandemic which makes it impossible to pinpoint any effective treatments of this critical pandemic.

5. Some of the manufactured COVID-19 vaccines in many other countries are still ineffective, inefficient, and in proficient with a near 0% efficacies rates.
6. In the US for example, majority of “**The Cause of Deaths Cases**” were intentionally falsely classified as underlying conditions such as high blood pressures, diabetics, high cholesterols especially when dealing with minorities in general, in particular when dealing with Blacks.
7. Misinformation and disinformation posed profound problems when dealing with actuality cases of COVID-19 pandemic in 2020, 2021, and 2022 across the board.
8. Social media posed yet another problem we all dealt with during and after COVID-19 pandemic in 2020, 2021, and 2022.
9. Leaderships across the board criticized the efficacies of COVID-19 vaccines which made it impossible to convince their population to take any COVID-19 vaccines’ shots.
10. False positive of COVID-19 tests was/is yet another critical limitation of this study; because some people in the US were counted positive for COVID-19 infection, only to later find out that they actually negative in the secondary tests due to initial tests’ defaults.
11. Majority of world leaderships actually took at least their first shots of COVID-19 vaccines, only to condemn them thereafter in public.
12. Finally, the historic discriminations and experimentations against minorities such as “**The Tuskegee Experiment**” made in impossible to convince minorities in the US to take COVID-19 vaccines’ shots, especially Blacks/African Americans to take any public oriented vaccines.

UNEXEPECTED POSITIVE RESULTS AND FINDINS OF THIS RESEARCH STUDY

1. For some unknown reasons, **recorded COVID-19 pandemic cases** were way lower in Africans’ countries as compared to the Europeans’ countries as well as the United States of America USA.
2. For some unknown reasons, **recorded COVID-19 pandemic deaths’ cases** were way lower in Africans’ countries as compared to the Europeans’ countries as well as the United States of America USA.
3. For some unknown reasons, **recorded COVID-19 pandemic deaths’ mass burials cases** were way lower in Africans’ countries as compared to the Europeans’ countries as well as the United States of America USA.
4. For some unknown reasons, **recorded COVID-19 vaccines first shots’ cases** were way lower in Africans’ countries as compared to the Europeans’ countries as well as the United States of America USA.

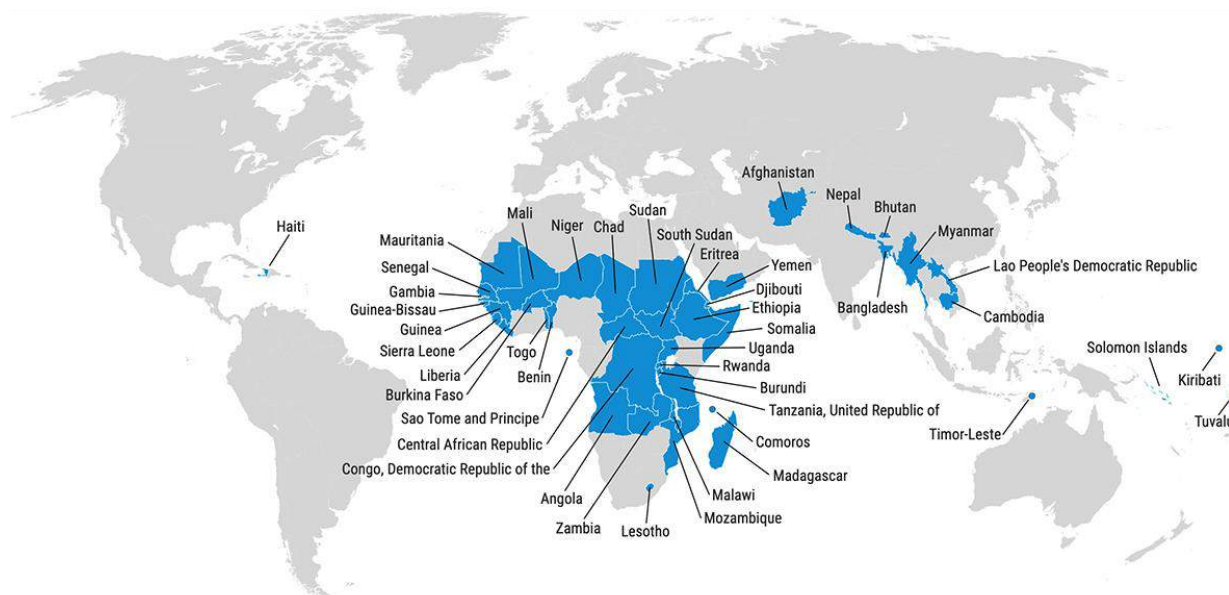
Finally, even though majority of Africans in Africa did not take any COVID-19 vaccines’ shots, they still remained healthy until today; which was/is positive results and the findings of this critical research study. Regardless, African leaderships cannot and must not get too comfortable with these unexpected positive results and findings of this critical research study; because several unknown national, continental, and international imposed factors may have contributed to these unexpected positive outcomes of this critical research study. Theseoverwhelming assumed, presumed, preconception operational assumptions are like working with people who live in a well-known, defined, verifiable flood plains in the state of Texas, only to pray that the unforeseen but guaranteed incoming rainfalls this year, should be way better than in 2017 when “**Hurricane Harvey**” **decimated the state of Texas, leaving every Texans in the state of LIMBO thereafter its effects. Please, do not get too comfortable anywhere with your positive and comfortable experiences with COVID-19 pandemic in 2020 and 2021; because the already**

predicted possibly incoming pandemics may not be as convenient, comfortable or favorable or good for anybody to experience.

CONCLUSION AND DISCUSSIONS

This critical research study exposed several challenges about the US healthcare applications in general; for example, according to national database obtained in July 2020 and 2021 indicated that about 98% of homecare and hospitals were short of personal protective equipment (PPE) supplies during COVID-19 pandemic. Also, the study found that more than 1 out of 5 or 20% plus nursing homes and hospitals reported a severe shortage of PPE and severe shortages of staff. Above all, rate of both staff and PPE shortages did not meaningfully improve in July 2020 and 2021; furthermore, many public healthcare practitioners, public policies' administration practitioners, and economics' researchers concluded that majority of the PPE are all "**Made In China**", as such, based on the overwhelming federal irreconcilable disagreeable leaderships' applications, China refused to send any lifesaving products to the US during COVID-19 pandemic in 2020, 2021, and thereafter. Consequently, countless Medical Doctors (MDs) along with Registered nurses in the US actually died from COVID-19 pandemic's infections due to lack of adequate or proper lifesaving protections such as PPEs.

Basically, the definition of what country is classified as a developed first class country which was address earlier will be analyzed in this section. For example, "The question now becomes are we saying that all Africans' countries are underdeveloped, developing, or even third world countries across the board? Do we have any underdeveloped, developing, or third world countries in Europe or in the Western World at all? Who is in charge of the classifications of these countries worldwide? And what parameters do they use for the classifications of all Africans' countries worldwide?" According to information obtained from Google Scholar as shown below, the definitions, the classifications, the acceptances, or the rejections of developed First Class countries or underdeveloped, developing, or even the Third World countries is all in the political means of the western leaders. The collected data showed that;



Note: The boundaries and names shown, and the designations used on this map do not imply official endorsement or acceptance by the United Nations

Date: October 2022

These 46 LDCs are distributed among the following regions:

1. **Africa** (33): Angola, Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, South Sudan, Sudan, Togo, Uganda, United Republic of Tanzania and Zambia
2. **Asia** (9): Afghanistan, Bangladesh, Bhutan, Cambodia, Lao People's Democratic Republic, Myanmar, Nepal, Timor-Leste and Yemen
3. **Caribbean** (1): Haiti
4. **Pacific** (3): Kiribati, Solomon Islands and Tuvalu

Based on the above data, it appears that majority of African countries are falsely defined, falsely classified, intentional called Third World countries in Africa; and above all, they are not accepted for holistic internal environmental developments which will improve their citizens' lives. Practically, COVID-19 Pandemic opened to valuable lessons to many African's leaders that the old ideal of overly relying on the Western World leaderships for century is counterproductive to benefit the Africa as continent. Yes indeed, there are developing, underdeveloped, or even Third World countries in Europe, in North America, South America, Central America, Australia, Asia, and many others just to mention a few. For example, in Europe, it is possible for a European to travel to more than 5 to 8 countries without any Visa; yet in Africa, you need a Visa to travel from Nigeria to Ghana, Liberia, Senegal, and Togo and these are all West African countries. These behaviors appeared to be systematically by the old masters to prevent African leaders from sharing some valuable lessons which can eventually improve the countries' outcomes. This is an old trick known as "Divide and Conquer" which is a humanistic part of racial discrimination. During COVID-19 Pandemic experiences in 2020 and 2021, Africans were deprived of having any workable access to COVID-19 vaccines or the formulas to produce theirs. Yet, countries such as Brazil, Mexico, Australia, China, Russia, Vietnam, Philippine, and majority of what can be classified as Third World countries in Europe given unequivocal access to the COVID-19 vaccines and the formulas to produce theirs. Even the major manufacturers of the COVID-19 vaccines basically refused to sell their products in Africa by using "**COSTINEFFICIENCIES**" an excuse; this was/is a good example of "**RACIAL DISCRIMINATION**" because majority of African countries could have afforded to pay in full for these so-called COVID-19 vaccines. As such, this study shows that less than 1.5% of the analyzed Africans got their first COVID-19 vaccines shots; but in America more than 85% of Africans actually got their third COVID-19 vaccines busters' shots. Unfortunately, majority of corrupted African leaders were able to find ways to get their full COVID-19 vaccines leaving the ordinary man to die if needed. However, in light of the overwhelming discriminations against Africans during COVID-19 pandemic, Africans were somehow fortunate because Europeans overrunning accessibilities were limited due to the setups international quarantines worldwide. Fortunately, according to the 78th United Nation (UN) meeting in 2023 in New York, majority of African leaders are now beginning to see their values in the eyes of the Europeans' leaderships. They are beginning to classify themselves and price their natural resources and products without any external interventions from the Europeans' leaderships; above all, those corrupt African leaders who have symmetrically and systematically

stressed the Africans for centuries were/are overthrown due to their sinful ineffective, inefficient, and in-proficient leaderships for centuries.

In light of the above, in America based on the data analyzed the findings were not so good as well; for example, issues such as social media, misinformation, disinformation, or practically lying about the overall outcomes of COVID-19 pandemic. In fact, many Blacks/African Americans who die during this pandemic were classified as previously known underline conditions. This is not true because some victims have survived with these underline conditions for years before the uninvited visitation of COVID-19 pandemic. This approach led to undercounting of the actual victims of COVID-19 pandemic. For example, in the state of New York, victims of COVID-19 pandemic were way undercounted; as such, **Governor Andrew Mark Cuomo** was forced to resign because of the grossly undercounting of the actual victims of COVID-19 pandemic which he admitted to prior to his resignation. Also, the state of New York was/is not alone because majority of states in the US actually undercounted their victims of COVID-19 pandemic. Based on the analyzed data obtained from CDC almost a million people actually died from COVID-19 pandemic; conversely, it appears that almost if not more than 2 million people in the US actually died of COVID-19 pandemic between 2020 and 2021 experiences. This is a good example of poor ineffective, inefficient, and in-proficient of divided leaderships in the US; because as to conquer any battle like **World War II**, all the international leaderships in particularly those from Russia and the US holistically agreed on a singular goals and objectives and not a multiple goals and objectives to win the WWII in light of the challenges they faced. This was/is what was missing in the US during the COVID-19 pandemic because politicians were fighting against scientific researchers, making it impossible to develop any workable solutions to effectively, efficiently, or even proficiently tackle COVID-19 pandemic. The internal war was between some politicians versus **Anthony S. Fauci (M.D.)**, who was the allergies diseases' infections director National Institute of Health (NIH) for more than 38 years? This kind of unneeded internal struggle cannot and will not solve any problems such as COVID-19 pandemic just to be specified. These unneeded internal irresponsible irreconcilable indifferences between politicians and scientific researchers actually cost many innocent Americans their lives; due to lack of agreements between the pairs.

In the US in general any causes of deaths in the minorities' populations are always blamed on "Lack of Care" among the minorities' populations especially among Blacks/African Americans (see Atatah, Kisavi-Atatah, Kyle, & Ngege, 2022; Atatah, Kisavi-Atatah, & Odesuwa, 2021; Atatah et al., 2021; Armelagos., 2005; Chowkwanyun, 2007; Cutler, Fryer (Jr.), Glazer, 2005; Curtin, 1992; Dubner, 2005; Grim & Robinson, 2003; Louis, Atatah, Kisavi-Atatah, Kyle, Redden-Louis, 2021; Kaufman, 2006 & 2008; Kaufman, & Hall, 2003; Kisavi-Atatah, Atatah, & Kyle, 2022; Redden-Louis, Atatah, Kisavi-Atatah, Kyle, 2021; Wilson & Grim, 1991; for more information). These minorities' causations effects of deaths' assumptions were even more negatively and even more falsely fundamentally documented about the causes of deaths during COVID-19 pandemic in 2020 and 2021 in the US. They were all blamed on the unknown causes, falsely documented causes, or even on the undocumented causes of underline pre-existing conditions.

Above all, the issues associated with **when, where, why, how, or if you should, or should not wear your masks posed other internal statistical political, power-driven, irresponsible, inconsistencies, and insignificant indifferences against scientific researchers' predations in resolving COVID-19 pandemic challenges in the US**. These undefined inconsistencies' indifferences between politicians and scientific researchers actually cost many innocent Americans their lives. The social scientific researchers said you should regularly but the White

House leaderships said you should not; followed by the RED-STATES, but DISAGREED with the BLUE-STATES in the US. The fundamental question now becomes **“How is it possible for a lay man from the streets to know whatever to do, when to do it, where to do it, how to do it, and the positive or negative implications of doing or not doing it; at all?”**For example, at the beginning of the infancy stage of COVID-19 pandemic, it was argued that COVID-19 does not affect minorities in particularly black men, women, and black children of both genders. This was a lie because it actually exposed many African/Americans to COVID-19 infections due the miscommunications and simply lying to the poor minorities holistically as to make them overwhelmingly vulnerable to COVID-19 pandemic in 2020 and 2021 in the US. Furthermore, frontline responders, foot leg streets’ law enforcements’ officers, first janitor responders, bus drivers, along with trash pickers were all minorities, especially Black/African Americans. Additionally, majority of meat butchers and packers in the US were made up of minorities especially Hispanic/Americans and Blacks/African Americans in the US; as such, many innocent meat butchers and packers lost their lives to COVID-19 pandemic due to political versus scientific platforms miscommunications and dis-communications about the effects of COVID-19 exposures. But the cumulative frequencies’ effects that followed were high prices of protein derivatives’ food components, prices of staple food components, shortages of food components, and not to mention the issues of affordability of overall food components between minorities specially among Blacks/Americans and the Hispanics in the US in general. In summation, this research study overwhelmingly showcased the fundamental effects of COVID-19 pandemic’s overwhelming effects on Africans in the Africa continent as well as the Blacks/African Americans in the US holistically speaking. Like an aged sating goes among Blacks/African Americans in the US, **“Whenever white men or women complains about having a FLU, Blacks/ African American men or women have practically suffered from a PNEUMONIA”**; and that is COVID-19 pandemic’s experiences in 2020 and 2021 in the USA for you all to learn from as we all move forward like TOYOTA into the FUTURE. Hopefully, the lessons learned and the insights gained from this comprehensive **COVID-19 research’s “PRETEST”** study should assist us in getting holistically ready to **effectively, efficiently, or even proficiently** tackle all our already predicted incoming **POSTTESTS of COVID-19**lookalike pandemics; which will hopefully **BRING SOME POSITIVE SOCIAL CHANGES TO ALL AFRICANS, ALL AMERICANS, AND ESPECIALLY TO THE US MINORITIES BLACKS/AFRICAN AMERICANS AT LARGE,**

RECOMMENDATION OF THE STUDY

This research study poses no recommendations for any political leaders in Africa as well as in any political leaders in the US because this study shed some overwhelming lights about the negative components’ implications of COVID-19 pandemic in 2020 and 2021 that we can all learn from in the possible incoming COVID-19 lookalike pandemics. Above all, as previously pinpointed and stipulated in this research study, this study used COVID-19 pandemic as a “PRETEST” and the lessons learned and the insights gained from this pretest should enhance the ways we all deal with the predicted incoming future “POSTTESTS” of any future COVID-19 lookalike PANDEMICS.

ACKNOWLEDGEMENTS

Grant Approval:

This study wants to give a special thanks to the PVAMU Division of Research & Innovation (R&I) in response to the Faculty-Research & Innovation for Scholarly Excellence (RISE)-Undergraduate Research Program Announcement has been reviewed and recommended for consideration.

All the researchers holistically appreciate this approved “RISE” approval and assistances in completing this long research study.” This study wants to thank the PVAMU Division of Research & Innovation (R&I), the College of Education, the Department of Health & Kinesiology for their assistances with this study process; we could not have done it, without your overwhelming involvement with the research process.

We also want to thank PVAMU Division of Research & Innovation (R&I) “RISE” for granting us two separate grants as to ensure the comprehensive research study is completed successfully.

This study thanks a graduating Internship senior student “**RANDI PLAIR**” who contributed and participated overwhelmingly to the success of this research study.

CONFLICT OF INTERESTS

We share no conflict of interests in this study.

REFERENCES

- [1].Anandappa, M., Boakye, E. A., Zeng, W., Rebmann, R., & Chang J. J. (2018) Racial disparities in vaccination for seasonal influenza in early childhood. Public Health Reports. 2018;158:1-8. DOI: <https://doi.org/10.1016/j.puhe.2018.01.030>
- [2].Atatah, P.E., Kisavi-Atatah, C. W. and Branch-Vital, A. (2016) Classification: The Analyses of the Psychometric Performances’ Effects on the Special Needs Offenders Program. Open Journal of Social Sciences, 4, 198-216. <http://dx.doi.org/10.4236/jss.2016.4502>
- [3].Atatah et al. (2020). “Underlying Health Conditions Three” Analyses of Underlying Health Conditions Among Minorities’ Children in Southwest Houston, Texas and The Roles Parents Play to Complicate the Inabilities to Control Them. Available at <http://www.ijahss.com/vol5-issue9.html>
- [4].Atatah et al. (2021). “Coronavirus COVID-19 Pandemic One” Globalization 4 Analyses of the Races Relationship Implications and Review of Vaccines” Confidences Levels Implications Among Blacks/African Americans in the US. Available at https://www.nairjc.com/assets/img/issue/IBYMFS_3uBcb8_wsEh22_XMKYV9_225095.pdf
- [5].Atatah, P., Kisavi-Atatah, C., Kyle, Latricia., & Ngenge, Wawa, N. (2022). A Review Of Hurricanes, Tropical Storms, tropical Depressions And Flooding Implications In The US And The Caribbean Due To Lack Of Effective Preventable Scalable Technology & Support For Organizational Learning. North Asian International Research Journal of Social Science & Humanities
- [6].Atatah, P. E., Kisavi-Atatah, C., & Odesuwa, O. (2021). Underlying Health Conditions Fivel Revisiting the Analyses of Underlying Health Conditions One, Two, Three, and Four among Minorities’ Children in Southwest Houston, Texas, and the Roles Parents Play to Complicate the Inabilities to Control Them Especially with

- COVID-19's Effects. Available at https://www.nairjc.com/assets/img/issue/VToMCp_li7m44_2VLf6b_qiOJK6_633381.pdf
- [7]. Atatah et al. (2021). —Coronavirus COVID-19 Pandemic One! Globalization 4 Analyses of the Races Relationship Implications and Review of Vaccines“ Confidences Levels Implications among Blacks/African Americans in the US. Available at https://www.nairjc.com/assets/img/issue/IBYMFS_3uBcb8_wsEh22_XMKYV9_225095.pdf North Asian International Research Journal of Pharmaceutical & Medical Science ISSN: 2456-8287 Vol. 7, Issue 5, May 2023 North Asian International Research Journal Consortiums www.nairjc.com 40
- [8]. Armelagos, G. J. (October 2005). "The Slavery Hypertension Hypothesis—Natural Selection and Scientific Investigation: A Commentary" (PDF). *Transforming Anthropology*. 13 (2): 119– 124. doi:10.1525/tran.2005.13.2.119.
- [9]. Berger, P.L. & Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. New York. Doubleday & Company; 1966 Center for Disease Control and Prevention (CDC). (2021). Unintended Consequences of COVID-19 Mitigation Strategies <https://search.legalboulevard.com/serp?q=Unintended+Consequences+of+COVID-19+Mitigation+Strategies&sc=YZTruafuO09o10>
- [10]. Coleman-Jensen, A., Rabbitt, M. P., Gregory, C. A. & Singh, A. (2017). Household Food Insecurity in the United States in 2016. USDA-ERS Economic Research Report No. (ERR-237). 2017.
- [11]. Cordes, J. & Castro, M. C. (2020). Spatial Analysis of COVID-19 Clusters and Contextual Factors in New York City. *Spat Spatiotemporal Epidemiol.* 2020; 34:100355. DOI: <https://dx.doi.org/10.1016%2Fj.sste.2020.100355> external icon
- [12]. Chowkwanyun, M. (June 11, 2007). "Race against History". *The New Republic*. Retrieved 19 June 2022.
- [13]. Cutler, D., Fryer (Jr.), R. G., Glazer, N. (March 1, 2005). "Racial Differences in Life Expectancy: The Impact of Salt, Slavery, and Selection". The only data set that allows us to compare health outcomes for a representative sample of African-Americans versus black immigrants is the National Longitudinal Mortality Study (NLMS), a national population sample drawn from the Current Population Surveys (CPS) [circa 1980]
- [14]. Curtin, P. D. (1992 December). "The slavery hypothesis for hypertension among African Americans: the historical evidence". *American Journal of Public Health*. 82 (12): 1681– 6. doi:10.2105/AJPH.82.12.1681. PMC 1694537. PMID 1456349.
- [15]. Dubner, S. J. (2005 March). "Toward a Unified Theory of Black America". *New York Times*. Retrieved 25 June 2022.
- [16]. Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences* (7th ed.). New York: Worth.
- [17]. Grim, C., & Robinson, M. (2003). "Commentary: Salt, Slavery and Survival: Hypertension in the African Diaspora" (PDF). *Epidemiology*. 14 (1): 120–122. doi:10.1097/00001648-200301000- 00029. JSTOR 3703294. PMID 12500061. Archived (PDF) from the original on 2021-04-20. Retrieved 2021-04-20.
- [18]. Louis, D., Atatah, P. E., Kisavi-Atatah., Kyle, L., Redden-Louis., C. (2021). ANALYSES OF THE RELATIONSHIP BETWEEN COVID-19 PANDEMIC AND THE OVERALL OUTCOMES TREATMENTS FOR MENTAL HEALTH CLIENTS. Available at https://www.nairjc.com/assets/img/issue/3Icw02_r1Rd9F_PtKZby_F2Y3ho_531677.pdf
- [19]. Kaufman, J. S. (2008). "Slavery Hypertension Hypothesis". *International Encyclopedia of the Social Sciences*. Retrieved 19 June 2017.

- [20]. Kaufman, J.S. (June 7, 2006). "The Anatomy of a Medical Myth". *Is Race Real?*. Social Science Research Council. Retrieved 19 June 2017.
- [21]. Kaufman, J. S & Hall, S. A. (January 2003). "The slavery hypertension hypothesis: dissemination and appeal of a modern race theory". *Epidemiology*. 14 (1): 111–8. doi:10.1097/00001648-200301000- 00027. PMID 12500059.
- [22]. Kisavi-Atatah, C., Atatah, P., & Kyle, L. (2022). *Comprehensive Analyses of the Correlations between Moderate exercises Such As Walking and Jogging and Obstruction Sleep Apnea (OSA) APHYPI North International Research Journal of Pharmaceutical Medical Sciences*
- [23]. Kisavi-Atatah, C., & Atatah, P. (2022). *Examining the relationship between BIPOC (Black, Indigenous, and People of Color) Communities and Their Companion Animals*. Available at <http://www.ijahss.com/Paper/07062022/1179451664.pdf>
- [24]. Thompson, E. E., Kuttab-Boulos, H., Witonsky, D., Yang, L., Roe, B. A., Di Rienzo, A. (2004). "CYP3A Variation and the Evolution of Salt-Sensitivity Variants". *The American Journal of Human Genetics*. 75 (6): 1059–1069. doi:10.1086/426406. PMC 1182141. PMID 15492926. The observation of a significant rank correlation between the frequency of the CYP3A5*3 allele that defines this haplotype class and distance from the equator further suggests the action of spatially varying selective pressures.
- [25]. Obasogie, O. K. (May 17, 2007). "Oprah' unhealthy mistake". *Los Angeles Times*. Retrieved November 1, 2017. [...] if that were so, a sizable number of today's West Africans would similarly exhibit hypertension North Asian International Research Journal of Pharmaceutical & Medical Science ISSN: 2456-8287 Vol. 7, Issue 5, May 2023 North Asian International Research Journal Consortiums www.nairjc.com 41 as their own salt consumption increased in modern times. This has not been the case. Epidemiologist Dr. Richard Cooper has shown, for example, that the prevalence of hypertension among Nigerians is significantly lower than white Americans, while Germans and Finns have a higher prevalence than black Americans. Surely, much more is going on here than genes.
- [26]. Redden-Louis, C., Atatah, P. E., Kisavi-Atatah., Kyle, L. (2021). —Coronavirus COVID-19 Pandemic Twofold Globalization 5 COVID-19 Vaccines' War Analysis of the Roles Races, Ethnicities, and Political Affiliations Differences Place in the —Confidences Levels| in COVID-19 Vaccines' Efficacies. Available at https://www.nairjc.com/assets/img/issue/6925qB_34R9mx_nSRL1O_s6h44c_161248.pdf
- [27]. Statista.com. (2023). Total population of Africa from 2000 to 2030. Available at https://www.statista.com/statistics/1224168/total-population-of-africa/?gclid=EA1aIQobChMImbGTq8ncgAMV8FJ_AB2VLwiHEAAYyAAEgLuz_D_BwE
- [28]. Wilson, T., & Grim, C. (1991). "Biohistory of Slavery and Blood Pressure Differences in Blacks Today". *Hypertension*. 17 (1Suppl):I1228. doi:10.1161/01.HYP.17.1_Suppl.I122. PMID 1986989. S2CID 8 043564.