

Corona Virus Saga: How Happy were the People of Niger State from the slant of income?

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Abstract

The dramatic and widespread impacts of the COVID-19 pandemic made government responses serious and the major line of actions globally is the 'lockdown policy actions' premeditated to cushion the effect of spread. Apart from the known negative effects of pandemics on lives and properties, the global policy responses of lockdown is accompanied with mental challenges that includes boredom, loneliness, depression, suicide, etc. that affects people's happiness negatively. The objective of this work is to ascertain effect of corona virus on the happiness of the people of Niger State using income as an approach. This was motivated largely by the novelty of such study in the study area and the method employed at processing the data is factor analysis model. The findings revealed that most of the constructs show magnitudes of moderate and low correlations meaning that the level of people's impacting responses of Covid-19 to happiness is not high. The result therefore, suggests that although, people's responses to Covid-19 lowered their happiness in Niger State but the impact is moderate.

Keywords: COVID-19, Pandemic, Happiness, Income

JEL Classification: J17, J28

1. Introduction

The World Health Organization (WHO) declared the COVID19 outbreak as a Public Health emergency of international concern on 30 January 2020 and by 11 March 2020, categorized it as a pandemic. The spread of the virus was rapid and destructive to human population. While the health impacts were directly through contagion, the economic impacts were largely the result of the consequences of the preventive mechanism adopted by the respective governments to curtail its spread (Gondwe, 2020). By August 7, 2020, about 19,193,600 cases were confirmed and over 716,700 deaths across 188 countries or territories were already established. The high death rate has not only caused physical pain to families but a signal of psychological fear and burden around the globe (Yıldırım & Güler, 2021) which was a colossal treat to global happiness.

All continents of the world reported the infestation of the outbreak of COVID-19 with Africa's first case in Egypt by February 2020 (Ajisegiri, Odusanya, & Joshi, 2020) while, the first victim in Nigeria was confirmed in the Infectious Disease Hospital (IDH) Yaba - Lagos, in Lagos State on the 27th February, 2020. The victim was an Italian citizen, who arrived Nigeria on 24th February, 2020. He visited his company's staff clinic in Ogun State and was referred to (IDH) where COVID-19 status was confirmed. After a period of two weeks, a cluster of cases were detected in Lagos and Abuja, this marked the beginning of the nationwide spread of the virus in Nigeria (Ajisegiri et al., 2020; Oyeranti & Sokeye, 2020).

The dramatic and widespread impacts of the COVID-19 pandemic made government responses serious and the major line of actions globally is the 'lockdown policy action premeditated to cushion the effect of spread. Apart from the known negative effects of pandemics on lives and properties, the global policy responses of lockdown is accompanied with mental challenges that includes boredom, loneliness, depression, suicide, etc. that affects people's happiness negatively (Foa, Gilbert, & Fabian, 2020).

In Niger State, the first case of COVID-19 was announced by the Nigeria Centre for Disease Control (NCDC) on 10th April 2020; barely six weeks after the first confirmed case in Nigeria. Thereafter, many cases were established in the state and the population was still susceptible for more infection and transmission of the virus (Majiya et al., 2021).

Happiness is all about improved welfare of the people. Generally, the ancients' moral philosophy attached importance to happiness even though, the meaning of the concept differ among the schools of thought. They refer to happiness as the ultimate end in life, while in economics, happiness is mostly interpreted within the framework of a means-ends relationship. Economist associates happiness with the concept of human welfare which mean improved material prosperity and individual wellbeing. Obviously, at the beginning, for centuries individual happiness was the prime interest, however, from the eighteenth century onwards, the goal post shifted with preference emphasized at attaining public welfare or happiness of all. Thus, the phrase "the greatest happiness for the greatest number" which implies improvement of the highest possible welfare for everyone with no detrimental effect on anyone (Vivanza, 2007).

The aim of this work is to ascertain effect of corona virus on the happiness of the people of Niger State using income as yardstick for measurement. The motivation of the study is largely due to the novelty of such study in the study area. There is already a large body of research on the intense effects of COVID-19 on various aspects of life endeavors. A lot of people died, others affected negatively and some others had positive influence. However, research on covid-19 in the study area is not only being sparsely attended to but specifically novel in area happiness of the people. The knowledge of the people's happiness status in the subject area of Covid-19 is important (Yang & Ma, 2020).

2. Literature review

The improved economic growth as triggered by Industrial Revolution signaled the advent of a new era with promises of improved standard of living. This metamorphosed to two-pointer promises: first, the reduction of poverty statuses; and second, the increase in the degree of happiness among people. The two promises were both obviously connected. The two effects

are chained, after all, if human beings are freed of mass poverty, they should be happier (Bartolini, 2007).

Theoretically, level of happiness remains practically constant during the life cycle - set-point theory. Fluctuations in happiness are momentary. One can either be happy or very happy resulting from fortune experiences or unhappy or very unhappy due to misfortunes of life endeavors, but will practically return to equilibrium points of happiness in a long run. In other words, there is no constant fixed happiness standard and ones efforts to make self happier by all forms of achieving, amount to a short-term solution. People actually by nature react to events of fortune and otherwise and eventually return to baseline levels (Bruni and Porta, 2007).

The COVID-19 shock can be interpreted as a combination of supply and demand shocks. The supply shock was mainly driven by the restriction measures to contain the spread of the virus, while the demands' resulting from the income effect suffered by workers in restrictions. These generate costs in three stages: stage one, is the macroeconomic shock that spread quickly across countries causing a harmonized negative impact. This aspect of the shock caused more than 90 percent contraction in the global economy's per capita GDP; the highest of its kind since the Great Depression of 1930s. Second aspect is the fiscal reaction and responses from governments across the globe. The COVID-shock triggers different kinds of sizable optional fiscal support, along with the contraction in output and fiscal revenues that leads to increase in governments' debts. The last aspect is the experience of global economy recovering slowly from the lockdowns. Both advanced and developing economies were expected and operating below the 2019 levels even after the 2021 rebound – pointing to modest growth in 2020–2025 (Yeyati & Filippini, 2021).

Loss of lives and man hours due to diseases like COVID-19 is highly instrumental to loss of income. Health of population measured with life expectancy, infant and child mortality and maternal mortality, have direct connection with economic welfare and growth. Direct and indirect economic costs of illness are often the subject of the health economics. It emphasizes that losses established as a results of death and man hours loss was capable of not only direct cost on the national income but also indirect expenditure on medical care and supporting services; all as cost implications that associates with COVID-19 (McKibbin & Fernando, 2021). They are habitually negatively correlated with happiness (Nguyen, 2023).

Tuna, Evren, Şahinbaşoğlu, and Veznikli, (2023) and Nguyen (2023) in furtherance reported several studies that found positive correlation between income and self-reported happiness. There is that consensus of a positive relationship between income and happiness, even individual countries with higher GDP levels tend to report higher levels of happiness compared to otherwise. In other words, increase income in turn increases happiness while other studies showed that the effect of income on happiness is negligible but only after certain improved income level is achieved.

Social support is the resources that individuals get from their social networks, such as emotional support, practical assistance, and companionship. Opportunities to access social support ensure that an individual feels stronger and more valuable. Therefore, access to social support positively enhances happiness of an individual (Tuna, Evren, Şahinbaşoğlu, &

Veznikli, 2023). They in furtherance emphasized the importance of freedom to make one's own life choices as component of individual happiness. Increased freedom contributes or positively associates with higher levels of happiness.

3. Methodology

The administration of the questionnaire cut across the three senatorial districts of Niger State; the Niger South, Niger East and Niger North. The Local Government Areas (LGAs) covered were two from each of the three senatorial zones; Lapai and Agaie in Niger South, Bosso and Chanchaga in Niger East, while Kontagora and Wushishi were covered in Niger North. The number of questionnaires distributed in the LGAs were in line with Baron and Kenny in Sekaran and Bougie (2010) that advocated sample size of 380 questionnaires for a million population. Therefore, 380 questionnaires were adequate and hence, same were equally randomly administered amongst adults across the LGAs. However, out of the administered questionnaires only 240 were successfully returned for analysis.

Factor analysis model was employed to measure/estimate happiness status of Nigerlites. The study focused the income/earnings of the study area as it affect the status of their happiness via estimating the latent factors that capture the underlying dimensions of their income. Factor analysis allows for the identification of common underlying factors or dimensions that explain the covariance among the observed variables (Galván Vela *et al.* 2022). By analyzing the factor loadings, it becomes possible to understand how different aspects of income as captured by the latent factors contribute to the overall happiness status of the study area. In the context of factor analysis, the equation for estimating the income as it affect happiness of the people can be represented as follows:

$$X = \lambda_1 * \text{Factor1} + \lambda_2 * \text{Factor2} + \dots + \lambda_k * \text{FactorK} + \varepsilon \dots \dots \dots 1$$

Where X represents Happiness status. Factor1, Factor2, ..., FactorK represent the latent factors underlying the observed variables. These latent factors are not directly measured but are inferred based on patterns of correlations among the observed variables. $\lambda_1, \lambda_2, \dots, \lambda_k$ represent the factor loadings, indicating the strength and direction of the relationship between each latent factor and the observed variables. ε represents the error term, accounting for the unexplained variability in the observed variable (happiness).

4. Result

A descriptive statistics of the construct were analyzed consisting of mean, standard deviation and Cronbach's Alpha from 240 observations. The constructs are; inc1, inc2, inc3, inc4, inc5, inc6, inc7, inc8 as shown in the table below.

Table 1: Descriptive Statistics of Variables

Measure	Numbers of Obser.	Mean	SD
Inc1	240	2.65	1.21
Inc2	240	2.08	.73
Inc3	240	1.94	.94
Inc4	240	1.95	.89
Inc5	240	1.81	.82
Inc6	240	2.08	.89
Inc7	240	2.13	.90
Inc8	240	2.37	.94

Note: $P < 0.01$

The result in Table 1 shows the mean, standard deviation and Cronbach's Alpha obtained from 8 constructs from 240 observations. The constructs measures lost my job/income (Inc1) which has the highest mean value of 2.65 and standard deviation of 1.21, living standard (inc2), supplement from friends/NGOS outside my income (inc3), government support (inc4), social security benefits or disability income (inc5), monetary contributions/gifts in respect to rent or utility payment (inc6), social distancing and embargo impact on output/marketing (inc7) and shaded workers/work as coping strategy (reduced work force or workload) (inc8) showed mean value of 2.08, 1.94, 1.95, 1.81, 2.08, 2.13 and 2.13 with the spread of standard deviation of 1.21, 0.73, .94, 0.89, 0.82, 0.89, 0.90 and 0.94 respectively.

Several tests were put in place to ascertain the magnitude at which the constructs of income explain the happiness status of Nigerlites. Thus;

Reliability Test

This study used Cronbach's alpha reliability to test the internal steadiness for different dimension. Cronbach Alpha ranges from 0 to 1, according to George and Malley (2003) values below 0.5 stands as unacceptable.

Table 2: Descriptive Statistics of Reliability

Measure	Number of Items	Cronbach's Alpha
Income (inc)	8	0.6150

Source: Author's Computations

The result in Table 2 shows the relationship of the constructs of income within the acceptable region; 0.62.

Correlation Martix

The correlation explains the level of connection between two or more variables. Following Fidell, & Tabachnick, (2003) and Hinkle, *et al* (2003), high correlation exists when the correlation coefficient is 0.7 to 1.00 for either positive or negative which violate the multicollinearity assumption. A correlation value ranging from 0.50 to 0.69 represents a moderate correlation, while low correlation value ranges from 0.3 to 0.49. But for values starting from 0.00 to 0.30 indicates little or no correlation.

Table 3: Correlation Matrix for Income (inc)

	Inc1	Inc2	Inc3	Inc4	Inc5	Inc6	Inc7	Inc8
Inc1	1.00							
Inc2	0.14	1.00						
Inc3	0.09	0.21	1.00					
Inc4	0.40	0.19	0.30	1.00				
Inc5	0.17	0.21	0.01	0.18	1.00			
Inc6	0.13	0.10	0.07	0.06	0.44	1.00		
Inc7	0.25	0.12	0.39	0.05	0.28	0.31	1.00	
Inc8	0.22	0.05	-0.13	0.06	0.15	0.03	0.11	1.00

Source: Author's Computations

Table 3 presents a correlation matrix for various Income (Inc) measures, highlighting several significant relationships. "Lost my job/income" (Inc1) has a correlation of 0.40 with "support from the Government" (Inc4), indicating that as job/income losses increase, so does the lack of government support. Similarly, "supplement from friends/NGOs apart from my main

source of income" (Inc3) shows a correlation of 0.30 with Inc4, suggesting that a lack of supplements from friends/NGOs is associated with an increased lack of government support. Inc3 also has a correlation of 0.39 with "Social distancing and embargo on traveling which is negatively affected/hampered my output/marketing" (Inc7), implying that increased lack of supplements from friends/NGOs is linked to greater negative impacts on output/marketing due to social distancing and travel restrictions. In furtherance, "social security benefits or disability income" (Inc5) has a moderate positive correlation of 0.44 with "monetary contributions/gifts in respect to rent or utility payment from the government" (Inc6), indicating a relative significant positive relationship. Additionally, Inc6 shows weak positive correlations of 0.31 with both Inc5 and Inc7. Overall, these correlations suggest that income losses, lack of government support, and the absence of supplemental income sources during COVID-19 are interrelated, with the relationships more or less in the lower stratum.

Exploratory Factor Analysis

This study used Exploratory Factor Analysis (EFA) to determine the common factors that influence each construct, because it facilitates the covariances of the constructs (Kahn, 2006). The Kaiser (1960) eigenvalues criteria was used, such that eigenvalues less than 1.0 were dropped, while items with loading factor less than 0.30 were removed from the process.

Table 4: Factor Loading Associated with Income during COVID-19

Measure	Factor Loading 1
lost my job/income	0.47
living situation/standard	0.33
Supplement from friends/NGOS apart from my main source of income	0.41
received support from Government	0.44
received any social security benefits or disability income	0.50
received any monetary contributions/gifts in respect to rent or utility payment from government during	0.44
Social distancing and embargo to travelling negatively affected/hampered my output/marketing	0.56
shaded my work/workers as coping strategy	nil
Eigenvalues	1.52
Chi-square = 322.105	
p-value = 0.000	
Kaiser-Meyer-Olkin = 0.56	

Source: Author's Computations

Income Portfolio is seen in Table 4 with lost my job/income during COVID-19 with a moderate positive correlation of the financial impact, and a factor loading of 0.47, 'Living situation worsened' shows a moderate correlation, with a factor loading of 0.33, 'Receive any supplement from friends/NGOS apart from my main source of income' has a moderate correlation, with a factor loading of 0.41, 'Received any support from Government' also shows a moderate correlation, with a factor loading of 0.44, 'Received any social security benefits or disability income' has the highest correlation with a financial impact, and a factor loading of 0.50, Received any monetary contributions/gifts in respect to rent or utility

payment from government' has a moderate correlation, with a factor loading of 0.44, 'Social distancing and embargo to travelling negatively affected/hampered my output/marketing' has the highest correlation with a financial impact, and a factor loading of 0.56. 'Shaded my workers/work as coping strategy of COVID-19 has no factor loading provided, implying that this item is not to be strongly associated with the underlying factor.

The EFA results corroborate these findings, with significant factor loadings for job loss (0.47), lack of government support (0.44), and the impact of social distancing on marketing (0.56). These factors collectively indicate that financial instability and lack of support are critical issues that affected the income portfolio and, consequently, the happiness of people in Niger State.

All the factors in this construct has eigenvalue of 1.52 indicating that this factor explains a substantial portion of the variance in the data. The chi-square test value of 322.105 with a p-value of 0.000 indicates a good fit for the model with a good KMO value of 0.56. In other words, the constructs explanatory powers in explaining the happiness of people of Niger State is satisfactory.

Discussion of the Findings

The finding illustrates the relationships between various income-related measures, shedding light on how income factors have impacted on happiness in Niger State during COVID-19. A moderate positive correlation (0.40) between "lost my job/income" (Inc1) and "receive any support from the Government" (Inc4) indicates that lost of job and income moderately associated with a lack of government support, contributing to financial instability and reduced or lowered people's happiness. This is in line with the findings as reported in Nguyen (2023) that increased income associates with increase happiness and vice versa.

From the findings, between "receive any supplement from friends/NGOs apart from my main source of income" (Inc3) and "Social distancing and embargo on traveling hampered output/marketing" (Inc7) at 0.39 suggests that support from friends/NGOs has lower impact on marketing efforts, which goes to mean low effect on happiness since it has low correlation on income during Covid-19. The moderate correlation (0.44) between "receive any social security benefits or disability income" (Inc5) and "receive any monetary contributions/gifts in respect to rent or utility payment from the government" (Inc6) underscores a moderate lack of financial aid from government. The results suggest that the responses within the scopes or magnitudes of moderate and low correlations go to show the level of people's impacting responses to happiness is not high. Even though, access to social support positively enhances happiness (Tuna, Evren, Şahinbaşoğlu, & Veznikli, 2023), people are used to living in large scale poverty, inequality and deprivations (World Bank, 2022) before Covid-19 and therefore, for government/NGOs not supporting or augmenting their income in Covid-19 does not matter much to their happiness. High correlation would have meant high impact on people's happiness.

5. Conclusion and Recommendation

The Corona Virus was grave challenge to the global economy. Countries responded to the pandemic from different perspectives to subdue the accompanied pains in line with international standard. The WHO, in the its spirit of strong commitment and sensitivity to care for humanity in all times, (including hard times) advocates for wider access to palliative across

all Member States, as a responsibility and wakeup call to policymakers and medical professionals to uphold the ethical duty of no abandonment. In 2014, the 67th World Health Assembly (WHA) passed a resolution entitled “*Strengthening of palliative care as a component of comprehensive care throughout the life course*”. This mandated the WHO and partners to make a provision for countries with tangible guidance on palliative care programs. This was aimed at promoting the integration of palliative care as a cross-cutting dimension within health services (WHO, 2020). In the spirit of this global development, the federal government of Nigeria (FGN) joined the wagon of palliatives to the citizenry during Covid-19 but government agent kept stocking the items in the wire houses, maybe due to bureaucracy till when youth took to streets breaking government stocked stores for relief packages to reduce hardships all over the nation. Niger State was not left out, youth threaten to break palliatives store before responses from government (Wole Mosadomi, 2020)

The study therefore, in line with Inc6 that have to do with ‘monetary contributions or gifts’ recommends government commitment or sensitivity at caring for humanity in the times of needs. In other words, rapid responses to localizing international standardized laws when it comes to global issues that require local responses and with that, the morale and happiness of the people are going to be in high spirit even at difficult times.

6. Limitation of the study

This study took a relative long time to get to completion stage due largely to ethical issues that surrounded the sponsors that sometimes delays progresses of research works. This setback actually fades the vogue of the study in the area of Covid-19. The result however is able to bring out the fact or close up the gap of the lack of any study in the subject matter in the area of the study.

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