- . Pushpa Publishing House
- Home
- Journals
- Guidelines
- **Publication Ethics**
- Open-Access Policy
- Contact Us

A NON-PARAMETRIC ANALYSIS OF THE EFFECT OF COVID-19 PANDEMIC ON NIGERIANS' WELL-BEING BASED ON GEOPOLITICAL ZONES

# **Authors**

- Adedayo F. Adedotun
- Olumide S. Adesina
- Abbas I. Taiwo
- Onuche G. Odekina
- Olasumbo A. Adedotun
- Victor O. Adoghe

### DOI:

https://doi.org/10.17654/0973514324012

# **Keywords:**

COVID-19, non-parametric, Kruskal-Wallis, Spearman rank correlation.

# **Abstract**

The COVID-19 pandemic has crippled the economic activities of so many nations across the globe since its outbreak in 2019. This study is focused on the consequential effect of the COVID-19 pandemic in terms of standard of living, and perception of economic and security situation of Nigerians. A non-parametric approach was adopted on a primary data obtained through the administration of questionnaires online by NoiPolls during the COVID-19 period. The result obtained from this study depicts that there is a significant relationship between the security situation and perception of the country's economic situation. Kruskal-Wallis test was used to check if there is a significant difference in economic perception, security situation and standard of living where it was observed that there exists a significant difference based on the geopolitical zone. We, therefore, recommend that efforts should be made by the government towards improving the economic state of affairs especially in the southern part of the country as this will in the long run lead to sustainable cities and communities across the geopolitical zones which is one of the goals of SDGs. Moreover, efforts should also be made by the government towards improving the security situation in the north and southeast as improvement in the country's economic situation has a direct influence on the security position of the country.

**Received:** September 20, 2023

Accepted: November 10, 2023

# References

World Health Organization Online, WHO coronavirus (COVID-19) dashboard, 2021. (Online). <a href="https://covid19.who.int/">https://covid19.who.int/</a>.

C. Lakner, N. Yonzan, D. G. Mahler, R. A. C. Aguilar and H. Wu, Updated estimates of the impact of COVID-19 on global poverty: looking back at 2020 and the outlook for 2021, World Bank, Washington, DC, 11 January, 2021.

https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty-looking-back-2020-and-outlook-2021?cid=ECR\_E\_NewsletterWeekly\_EN\_EXT%26deliveryName=DM90562 [Google Scholar].

J. O. Bamidele and O. J. Daniel, Epidemiology of coronavirus disease (COVID-19) in Nigeria, Annals of Health Research 6(2) (2020), 125-132.

C. Del Rio and P. N. Malani, COVID-19 - new insights on a rapidly changing epidemic, JAMA 323(14) (2020), 1339-1340.

http://dx.doi.org/10.1001/jama.2020.3072.

Q. Li, X. Guan, P. Wu, X. Wang, L. Zhou and Y. Tong, Early transmission dynamics in Wuhan, China, of novel coronavirus infected pneumonia, N. Engl. J. Med. 382(13) (2020), 1199-1207. http://dx.doi.org/10.1056/NEJMoa2001316.

Y. Bai, L. Yao, T. Wei, Fei Tian, D. Y. Jin, L. Chen and M. Wang, Presumed asymptomatic carrier transmission of COVID-19, JAMA 323(14) (2020), 1406-1407. http://dx.doi.org/10.1001/jama.2020.2565.

Nigeria Center for Disease Control, COVID-19 Nigeria, 2020. Available at: <a href="https://ncdc.gov.ng/diseases/sitreps/?cat=14">https://ncdc.gov.ng/diseases/sitreps/?cat=14</a> & update of COVID-19 outbreak in Nigeria. Accessed: April 10 - July 12, 2020.

United Nations Conference on Trade and Development, World Investment Report 2020: International Production Beyond the Pandemic, UNCTAD, 2020 [Google Scholar].

C. A. John and O. S. Adeleke, The impact of COVID-19 on African economies: an introduction, 2021. doi:10.1111/1467-8268.12531.

World Bank, Urgent, effective action required to quell the impact of COVID-19 on education worldwide, 22 January, 2021.

https://www.worldbank.org/en/news/immersive-story/2021/01/22/urgent-effective-action-required-to-quell-the-impact-of-covid-19-on-education-worldwide?cid=ECR E NewsletterWeekly EN EXT%26deliveryName = DM91493.

Olawale Y. Olonade, Christiana O. Adetunde, Oluwakemi S. Iwelumor, Mercy I. Ozoya and Tayo O. George, Coronavirus pandemic and spirituality in southwest Nigeria: a sociological analysis, Heliyon 7(3) (2021), 1-8.

https://doi.org/10.1016/j.heliyon.2021.e06451.

A. F. Adedotun, O. P. Ogundile, G. O. Odekina and I. V. Okafor, Relationship between the standard of living, economic situation, and security situation of Nigerians during the Covid-19 pandemic. A non-parametric analysis approach, Journal of Statistics Applications and Probability 12(1) (2022), 175-180.

#### http://dx.doi.org/10.18576/jsap/120116.

L. Peter, B. Igor and S. Olena, Analysis of the main threats to the system of sustainable development and planning of the region in the context of ensuring the economic security of the state, International Journal of Sustainable Development and Planning 17(5) (2022), 1411-1416. https://doi.org/10.18280/ijsdp.170504.

M. Kryshtanovych, L. Antonova, V. Filippova, S. Dombrovska and T. Pidlisna, Influence of COVID-19 on the functional device of state governance of economic growth of countries in the context of ensuring security, International Journal of Safety and Security Engineering 12(2) (2022), 193-199.

#### https://doi.org/10.18280/ijsse.120207.

M. A. S. Nashwan, R. Jianping and O. Bojan, Sustaining trade during COVID-19 pandemic: establishing a conceptual model including COVID-19 impact, Sustainability 13 (2021), 5418. <a href="https://doi.org/10.3390/su13105418">https://doi.org/10.3390/su13105418</a>.

O. O. Gabriel, A. F. Adedayo and O. A. Odusanya, Vector autoregressive modeling of COVID-19 incidence rate in Nigeria, International Journal of Design, Nature and Ecodynamics 16 (2021), 665-669.

#### http://dx.doi.org/10.18280/ijdne.160607.

G. O. Odekina, Adedayo F. Adedotun and Ogbu F. Imaga, Modelling and forecasting the third wave of Covid-19 incidence rate in Nigeria using vector autoregressive model approach, Journal of the Nigerian Society of Physical Sciences 4 (2022), 117-122. doi:10.46481/jnsps.2021.431.

Emmanuel O. Amoo, Olujide A. Adekeye, A. Olawole-Isaac, Fagbeminiyi Fasina, Paul Oluwatomipe Adekola, Gbemisola W. Samuel, M. A. Akanbi, Muyiwa Oladosun and Dominic E. Azuh, Nigeria and Italy divergences in coronavirus experience: impact of population density, The Scientific World Journal 4(2) (2020). http://dx.doi.org/10.1155/2020/8923036.

E. S. C. Osabuohien, Obindah Gershon, Queen-Esther Oye and Uchenna Efobi, Addressing Budget and Debt Vulnerability amidst COVID-19: Policy Pathways for Nigeria, Policy Brief 2020, 01 April 2020, Centre for Economic Policy and Development Research, Vol. 1, Number 1, 2020, pp. 1-5.

doi:10.13140/RG.2.2.18998.04160.

Olawale Y. Olonade, Tayo O. George, David Imhonopi, Mathew E. Egharevba and Adamu G. Kasa, Youths' socio-economic well-being in Southwest Nigeria: what role can empowerment/poverty reduction programmes play? Cogent Social Sciences 8(1) (2022). doi:10.1080/23311886.2022.2115694.

# **Downloads**

Vol. 24, Number 1, Pages 177-196

# **Published**

2024-02-12

### How to Cite

Adedotun, A. F., Adesina, O. S., Taiwo, A. I., Odekina, O. G., Adedotun, O. A., & Adoghe, V. O. (2024). A NON-PARAMETRIC ANALYSIS OF THE EFFECT OF COVID-19 PANDEMIC ON NIGERIANS' WELL-BEING **BASED** ON GEOPOLITICAL ZONES. JP Journal of Biostatistics, 24(1), 177-196. https://doi.org/10.17654/0973514324012

More Citation Formats

### Issue

Vol. 24 No. 1 (2024)

# Section

Articles

### License

Copyright ©2024 PUSHPA PUBLISHING HOUSE, PRAYAGRAJ, INDIA



This work is licensed under a Creative Commons Attribution 4.0 International License.

**Licensing Terms:** 

Attribution: Credit Pushpa Publishing House as the original publisher, including title and author(s) if applicable.

Non-Commercial Use: For non-commercial purposes only. No commercial activities without explicit permission.

No Derivatives: Modifying or creating derivative works not allowed without written permission.

Contact Puspha Publishing House for more info or permissions.

# Most read articles by the same author(s)

 Opeyemi P. Ogundile, Hilary I. Okagbue, Akinwumi A. Akinpelu, Adedayo F. Adedotun, Toluwalase J. Akingbade, <u>MEDIATORS OF HIV/AIDS AWARENESS AMONG PRIMARY SCHOOL</u> <u>PUPILS IN NIGERIA</u>, <u>JP Journal of Biostatistics: Vol. 23 No. 3 (2023)</u>

# **Quick Links**

P-ISSN: 0973-5143

• Publication count: 300+

Citation count: 380+
Google h-index: 10
Google i10-index: 10

Downloads: 68240+

# **Recently Published:**

• EXPONENTIATED KAVYA-MANOHARAN BURR X DISTRIBUTION: ESTIMATION UNDER CENSORED TYPE II WITH APPLICATIONS IN MEDICAL DATA

- COMPUTATIONAL STATISTICS AND DATA ANALYSIS TO DETERMINE FINANCIAL AND ECONOMICAL IMPACTS OF COVID-19
- APPLICATION OF ROBUST REGRESSION ON SEA SURFACE TEMPERATURE DATA IN THE INDIAN OCEAN

# **Important Links:**



o Pushpa Publishing House

Copyright ©2023 Pushpa Publishing House. All rights reserved

#### QUICKLINKS

- o <u>Publication Ethics</u>
- o Open Access Policy
- o **Guidelines**

#### SERVICES

- o Refund Policy
- o <u>Disclaimer Policy</u>
- o Privacy Policy
- o Shipping & Delivery
- o Terms & Conditions