HOW NIGERIANS' PRO- AND ANTI-GOVERNMENT COMMUNICATION BEHAVIOURS (MEGAPHONING) AND COMPLIANCE VARIED DURING THE COVID-19 LOCKDOWN BASED ON GENDER, AGE, EMPLOYMENT SECTOR, AND POLITICAL PARTY PREFERENCE

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Abstract

Research Problem: *Risk communication literature on the COVID-19 pandemic often describes government communication to persons at risk but seldom describes citizens' communication about the government, which is equally important. Therefore, this study investigated Nigerians' pro-government and anti-government communication behaviours during the pandemic, focusing on how they varied with gender, age, sector of work and political party preference.*

Methods: *This study adopted a quantitative design, using the survey method. It used a convenience sampling technique to recruit 401 adult Nigerians, among whom 141 (35.2%) were females and 260 (64.8%) were males. The research instrument was an online questionnaire, and the data collected were analysed using Statistical Package for the Social Sciences (SPSS) version 23.*

Results: *The T-test analysis showed that the males and workers in the private sector spoke and argued more against the government COVID-19 lockdown policy than the females and workers in the public sector, respectively. Also, the adults spoke and argued more in favour of the*

lockdown policy and complied more with the regulations than the youths. Participants who did not prefer the political party in government spoke more against the policy and complied less with regulations than participants who preferred the government in power.

Conclusion: *The study concluded that variation existed in the communication behaviours of Nigerians and their compliance with lockdown regulations during the COVID-19 pandemic, based on gender, age, employment sector and political party preference*

Key Contribution to Knowledge: *Nigerians' demographic and political characteristics accounted for variation in their communication behaviours for and against the government during the COVID-19 pandemic.*

Recommendation: *This study recommends that the variation in Nigerians' demographic and political characteristics should be considered while designing and implementing government risk communication strategies in tackling pandemics in the future.*

1.0 Introduction

This study is a contribution to the broad field of risk communication, with a focus on risk communication during the COVID-19 pandemic. Risk communication entails furnishing people with information to shape their decisions in times of crises (Chon & Park, 2021), and the information shared in risk communication usually emanates from experts, and the target audience is the people who are at risk and need to take personal or group actions to mitigate the risks (Bujalski, 2024; H et al., 2025; Rabe et al., 2024; Vrbos et al., 2023; Yudarwati et al., 2023; Zinn & Schulz, 2024) . During the COVID-19 pandemic, the whole world was at risk, and the World Health Organisation (WHO) recommended that each country should heighten their efforts at risk communication to mitigate the spread of the deadly coronavirus rampaging the world (Contreras et al., 2025; Edwards, 2022; Elom et al., 2021; Hussain, 2020; Obasi & Anierobi, 2021; Tee et al., 2020; Vinberg & Danielsson, 2021). The Nigerian government, like in other nations of the world, engaged in massive risk communication campaigns during the COVID-19 pandemic (Abayomi, 2024; Elom et al., 2021; Lanre et al., 2020; Obasi & Anierobi, 2021), and the campaign was led by the government-owned National Centre for Disease Control (NCDC) and supported by health agencies of the federal, state, and local ministries of health.

Many studies have been conducted on the risk communication among Nigerians during the COVID-19 pandemic. For instance, Ohaja et al. (2023) investigated the impact of government COVID-19-related information protection on citizens' compliance with the regulations to curb the spread of the virus. The study was a survey conducted in three states of the federation and the Federal Capital Territory, Abuja, and the participants were 183 respondents and 12 media practitioners (health editors). The study found that the higher the level of government confinement of the COVID-19-related health information from the public, the less believable the media stories

were during the pandemic and the less compliant the citizens were with the regulations to contain the virus. In the same vein, East et al. (2021) sampled 399 adults in the South-eastern part of Nigeria during the pandemic to assess their knowledge and attitude towards risk communication media messages about the COVID-19 vaccine. The study showed that the respondents' knowledge of vaccine safety is very low and concluded that the mainstream media's performance in educating the public on COVID-19 vaccine safety was poor, needing improvement.

In another risk communication study during the pandemic, Nwigwe et al. (2022) assessed Facebook conversations of Nigerians on the posts of the National Centre for Disease Control (NCDC) to draw conclusions on why adherence to the use of face masks during the COVID-19 pandemic was low. The study also drew data from interviews, photographic images, and personal observations. It concluded that public distrust in COVID-19 information from the media was the reason behind low compliance with face mask use during the pandemic. In addition, the impact of media literacy on the influence of fake news from social media on public perception about COVID-19 was studied by Usman et al. (2022) during the pandemic. The study adopted the survey method and was conducted among polytechnic students who responded to an online questionnaire. It concluded that media literacy reduced the impact of fake news about COVID-19 on the respondents

Similarly, Talabi et al. (2022) found that radio risk communication messages received by a sample of 400 respondents from south-west Nigeria during the pandemic increased the levels of their awareness of COVID-19 and improved their attitude towards adoption of the NCDC-recommended preventive measures. And finally, studies were also conducted on the significance of social media as platforms for risk communication during the COVID-19 pandemic, with conclusions that while social media platforms are good for information dissemination, they are also a thriving space for misinformation and fake news about it (Mogo et al., 2023; Obi-ani et al., 2020).

Though many studies were conducted on risk communication among Nigerians during the pandemic, some gaps still exist in knowledge. One of the gaps in knowledge, which is the problem this study addresses, is the need for information on how Nigerians communicate among themselves for and against the government's risk communication targeted at them during the COVID-19 pandemic. Addressing this gap, this study's main objective is to assess how Nigerians' pro-government and anti-government communication behaviour (upon the receipt of government risk communication about the COVID-19 pandemic) varies with their gender, age, work sector and political party preference. In addition, the study also looked at how Nigerians' compliance varied with their gender, age, work sector, and political party preference. Gender is this study is based on biological sex (female and male); age is based on youthhood (below 35 years, as stipulated by the United Nations) and adulthood (persons above 35 years); work sector is based on private and public (government) sector; and political party preference is based on preference for the political party in power or another political party not in power. The focus of this study is considered important because evidence from the study will increase knowledge on how citizens' demographic and political characteristics react to risk communication messages from the government, and the evidence will also improve future government risk communication strategies to mitigate the pandemic. The main research question that this study answered is, "How did Nigerians' pro-government megaphoning, anti-government megaphoning, and compliance with regulations

during the COVID-19 lockdown vary with their gender, age, work sector, and political party preference?"

2.0 Research Methodology

This study assessed how pro-government and anti-government communication behaviours (megaphoning) and compliance with COVID-19 lockdown regulations varied among Nigerians based on their gender (male and female), age (youths and adults), sector of employment (private and public) and political party preference (government in power and another government). This study adopted a quantitative design, using the survey method. The design was considered appropriate because during the COVID-19 lockdown, when the study data was collected, it was not practicable for the researchers to use a qualitative or mixed design for the study. The study population was Nigerians living in Southwest Nigeria. Via convenience sampling technique, 401 participants were recruited for the study: from Lagos state (99; 24.7%), from Ogun state (35; 8.7%), from Oyo state (104; 25.9%); from Osun state (146; 36.4%), from Ondo state (10; 2.5%), and from Ekiti state (7; 1.7%). Among the participants, 141 (35.2%) were females, while 260 (64.8%) were males. The age of the participants varied from 16 to over 55 years: 48 (12%) were 16 – 24 years old, 76 (19%) were 25 – 34 years old, 132 (32.9%) were 35 – 44 years old, 76 (19%) were 45 – 54 years old, and 69 (17.2%) were 55 years and above. The majority of the participants, 140 (34.9%), were employees of private organisations; 94 (23.4%) were government workers; 69 (17.2%) were self-employed; 49 (12.2%) were students; 28 (7%) were retirees; and 21 (5.2%) were unemployed. The political party that the participants preferred to be in power in their states were measured in four categories: those who did not want any political party were 37 (9.2%), those who did not mind any political party were 149 (37.2%); those who preferred the currently ruling political party in their states were 103 (25.7%), and those who preferred another political party to be ruling their states were 112 (27.9%).

The instrument for the study was an online questionnaire. The questionnaire fielded questions on the demographic and political characteristics of the participants, as well as their levels of megaphoning for and against the government during the lockdown, and their levels of compliance with COVID-19 lockdown regulations. Scales to assess the levels of megaphoning of the participants were adapted from the literature (Beach et al., 2016; Chon, 2019; Eisinga et al., 2013; J. Kim & Rhee, 2011; S. Kim et al., 2018; Lee, 2020) and assessed for validity and reliability. The two scales were valid; the Exploratory Factor Analysis (EFA) showed that each scale's items loaded on one component and accounted for over 70% variance. In the same vein the Cronbach Alpha values of the scales were good, affirming their reliability ($\alpha_{\text{anti-government megaphoning}} = .69$; $\alpha_{\text{pro-government megaphoning}} = .59$). To measure participants anti-government megaphoning as done in earlier studies, the participants were asked to rate the frequency of their engagement in two stated communication behaviours that related to the government during the lockdown: one, "When I hear news and opinions that praise state government regarding lockdown, I reject them and argue against them." And two, "I express my opinion against lockdown to people and share my reasons for not supporting state government on the issue, during face-to-face conversations or during interactions on social media/the Internet." Similarly, to measure participants' pro-government megaphoning, they were asked to rate the frequency of their engagement in two stated communication behaviours that related to the government during the lockdown: one, "When I hear news and opinions that praise state government regarding lockdown, I love them and argue in support of them." And two, I

express my opinion in support of lockdown to people and share my reasons for supporting state government on the issue, during face-to-face conversations or during interactions on social media/the Internet. Participants' responses to the four items were rated on a Likert Scale ranging from Never (0) to Very often (5), with higher values indicating higher levels of megaphoning. Compliance with COVID-19 instructions was measured by two items. The participants were asked to rate their frequency of compliance with all the state government lockdown regulations and the frequency of telling other people to obey the lockdown regulations. As with megaphoning options, their responses were rated on a Likert Scale ranging from Never (0) to Very often (5), with higher values indicating higher levels of compliance.

To collect the data, the questionnaire was designed on Google Form, and the link to it was shared on the researcher's personal and professional networks (Panggabean et al., 2013). The data collected were analysed with descriptive and inferential tools on the Statistical Package for Social Science (SPSS, version 23). A high ethical standard was maintained for the study: participation was voluntary, the responses were anonymised, and the researchers ensured that no harm was done.

3.0 Results

This study has three research questions, which all bother on how the participants' gender (male and female), gender (male and female), age (youths and adults), sector of employment (private and public) and political party preference (government in power and another government) account for variation in the levels of their pro-government megaphoning, anti-government megaphoning, and compliance with COVID-19 lockdown regulations. The T-tests were used to assess the differences in the levels among the various pairs of respondents. However, before the T-tests were conducted, the data for age and sector of employment were recoded. In the case of age, participants who fall between the ages of 16 -24 years and 25 – 34 years were recoded as youths, while participants between the ages of 35 – 44 years, 45 – 54 years, and 55 years and above were recoded as adults. Using 35 years as the youth–adult boundary was considered appropriate because it aligns with the United Nations bar categorisation standard for youths and adults. In the case of the sector of employment, participants who were employees of private organisations and those who were self-employed were recoded as being the private sector workforce, so they could be paired with government workers for comparison.

Besides the recoding, the T-tests also require that the test of normality be conducted to ascertain that the data were normal. Thus, two tests of normality were run in SPSS to assess that the participants' responses for pro-government megaphoning, anti-government megaphoning, and compliance were normally distributed (results are shown in the table).

Two tests of normality were conducted on the data: the Kolmogorov-Smirnov[a] test and the Shapiro-Wilk test. The Kolmogorov-Smirnov[a] test results showed that the data are normally distributed for megaphoning and compliance with COVID-19 regulations: Anti-government Megaphoning (401) = .11, $p < .001$; Pro-government Megaphoning (401) = .13, $p < .001$; and Compliance (401) = .19, $p < .001$. In the same vein, the shapiro-wilk test showed that the data is normally distributed for megaphoning and compliance: Anti-government Megaphoning (401) = .96, $p < .001$; Pro-government Megaphoning (401) = .95, $p < .001$; and Compliance (401) = .90, $p < .001$. Thus, it is concluded that the data are normally distributed, which satisfies the condition for conducting a T-test.

Having satisfied the condition for normality, the T-tests were conducted. Four groups of T-tests were conducted because the study assessed how four categorical variables (gender, age, employment sector, and political party preference) explain the variation in participants' pro-government megaphoning, anti-government megaphoning, and compliance with lockdown regulations during the COVID-19 pandemic.

The first Independent Samples T-tests results answer the first research question: "How did Nigerians' pro-government megaphoning, anti-government megaphoning, and compliance with regulations during the COVID-19 lockdown vary with their gender?" The Levene's Test for Equality of Variances had rho (p) values that were greater than .05 ($p_{\text{pro-government megaphoning}}$ = .54; $p_{\text{anti-government megaphoning}}$ = .22; and $p_{\text{compliance}}$ = .39. Therefore, all the results were interpreted based on the assumption that the variances were equal. The results showed that for pro-government megaphoning, females and males had mean and standard deviation scores of 2.60 (SD = .86) and 2.63 (SD = .90) respectively and had similar levels of pro-government megaphoning (t = -.38; p > .05). For anti-government megaphoning, females and males had mean and standard deviation scores of 2.34 (SD = .85) and 2.58 (SD = .94) respectively and the males had higher levels of anti-government megaphoning than the females (t = -2.60; p = .01). For compliance with COVID-19 lockdown regulations, females and males had mean and standard deviation scores of 4.10 (SD = .74) and 4.02 (SD = .86) respectively, and they had similar levels of compliance with the regulations than the youths (t = .95; p > .05).

The second Independent Samples T-tests results answered the second research question: "How did Nigerians' pro-government megaphoning, anti-government megaphoning, and compliance with regulations during the COVID-19 lockdown vary with their age?" The Levene's Test for Equality of Variances had rho (p) values that were greater than .05 ($p_{\text{pro-government megaphoning}}$ = .78; $p_{\text{anti-government megaphoning}}$ = .40; and $p_{\text{compliance}}$ = .13. Therefore, all the results were interpreted based on the assumption that the variances were equal. The results showed that for pro-government megaphoning, youths and adults had means and standard deviation scores of 2.45 (SD = .87) and 2.70 (SD = .88) respectively and adults had higher levels of pro-government megaphoning than youths (t = -2.61; p < .01). For anti-government megaphoning, youths and adults had mean and standard deviation scores of 2.59 (SD = .87) and 2.46 (SD = .94) respectively; however, both the youths and the adults had similar levels of engagement in anti-government megaphoning (t = 1.34; p > .05). For compliance with COVID-19 lockdown regulations, youths and adults had mean and standard deviation scores of 3.76 (SD = .87) and 4.18 (SD = .76) respectively and the adults had higher levels of compliance with the regulations than the youths (t = -4.84; p < .001). Table 1 below provides more details about the reported T-tests results.

The third Independent Samples T-tests results answer the third research question: "How did Nigerians' pro-government megaphoning, anti-government megaphoning, and compliance with regulations during the COVID-19 lockdown vary with their work sector?" The Levene's Test for Equality of Variances had rho (p) values that were greater than .05 ($p_{\text{pro-government megaphoning}}$ = .19; $p_{\text{anti-government megaphoning}}$ = .34; and $p_{\text{compliance}}$ = .28. Therefore, all the results were interpreted based on the assumption that the variances were equal. The results showed that for pro-government megaphoning, private sector workers and public sector workers had mean and standard deviation scores of 2.69 (SD = .89) and 2.76 (SD = .79) respectively, and they had similar levels of pro-government

megaphoning (t = -.67; p > .05). For anti-government megaphoning, private sector workers and public sector workers had mean and standard deviation scores of 2.61 (SD = .92) and 2.26 (SD = .82) respectively and the private sector workers had higher levels of anti-government megaphoning than the public sector workers (t = 3.18; p < .01). For compliance with COVID-19 lockdown regulations, private sector workers and public sector workers had mean and standard deviation scores of 4.13 (SD = .81) and 4.03 (SD = .76) respectively, and they had similar levels of compliance with the regulations than the youths (t = 1.04; p > .05).

The fourth Independent Samples T-tests results answer the fourth research question: "How did Nigerians' pro-government megaphoning, anti-government megaphoning, and compliance with regulations during the COVID-19 lockdown vary with their political party?" The Levene's Test for Equality of Variances had the following rho (p) values: $p_{\text{pro-government megaphoning}}$ = .66; $p_{\text{anti-government megaphoning}}$ = .05; and $p_{\text{compliance}}$ = .28. Therefore, results for pro-government megaphoning and compliance with COVID-19 lockdown regulations were interpreted based on the assumption that the variances were equal, while the results for anti-government megaphoning were interpreted assuming that the variances were not equal. The results showed that for pro-government megaphoning, participants who preferred the political party in their state and those who preferred another political party to be in power had mean and standard deviation scores of 2.84 (SD = .91) and 2.46 (SD = .87) respectively, and those who preferred their state ruling party had higher levels of pro-government megaphoning than those who preferred another political party to be in power (t = 3.14; p < .01). For anti-government megaphoning, participants who preferred the political party in their state and those who preferred another political party to be in power had mean and standard deviation scores of 2.26 (SD = .86) and 2.77 (SD = 1.04) respectively and those who preferred another party to be in power had higher levels of anti-government megaphoning than the those who preferred the ruling party (t = -3.95; p < .001). For compliance with COVID-19 lockdown regulations, participants who preferred the political party in their state and those who preferred another political party to be in power had mean and standard deviation scores of 4.09 (SD = .84) and 3.81 (SD = .92) respectively, and those who preferred the ruling party had higher levels of compliance with the regulations than those who preferred another party to be in power (t = 2.32; p < .05).

4.0 Discussion

Understanding how citizens communicated during the COVID-19 pandemic and how they complied with the government regulations to curtail the spread of the virus is important. Chief among the importance of such understanding is that it provides evidence to guide future preparations for handling pandemic situations or other forms of crises that may arise. Contributing to the knowledge about publics communication in problem solving during the pandemic, which is a concern in the field of risk communications, this study was conducted to assess how Nigerians' pro-government and anti-government communication behaviour (megaphoning), and compliance with COVID-19 lockdown regulations vary with their gender (in terms of biological sex of male and female), age (in terms of youthhood and adulthood), work sector (in terms of private sector and public/government sector), and political party preference (in terms of preference for the political party in government and preference for another political party not currently in power).

The study has four research questions. Results from the first research question that assessed whether or not gender accounted for variation in megaphoning and compliance

found that it only accounted for variation in anti-government megaphoning. The findings showed that the males spoke more against the government lockdown policy than the females during the COVID-19 pandemic in Nigeria. This is contrary to the researchers' expectations because many studies posited that lockdown had a greater impact on women than men in Nigeria. However, a likely justification for this finding is the societal expectation of women in Nigeria that does not expect them to be more vocal on issues of out-of-home interest than men. So, since the subject under study is speaking against the government, as many studies have affirmed, the men is expected to have louder voices. An interesting finding, however, is that both the females and the males had similar levels of compliance with COVID-19 lockdown regulations. This implies that though the females were not louder than men in speaking against the lockdown, they found subtle, noiseless, practical ways to react against the regulations, which matched the men's. The findings about the similarity in the levels of males and females' compliance despite the females having lower levels of complaints (anti-government communication behaviour) may be a signpost to the fact that African women, though not noisy on subjects of politics or public interest, may not be categorised as being more compliant and docile than men in actions for and against such issues.

Furthermore, the study assessed whether or not youthhood and adulthood accounted for variation in megaphoning and compliance with COVID-19 lockdown regulations. As expected, the adults spoke more in favour of the government than the youths and complied more with the lockdown regulations. These findings are not unexpected because many studies had pointed out that young people engaged more in risky behaviours (such as was the behaviour of disobeying health rules during the COVID-19 pandemic) than adults (Anson & Eritsyan, 2023; Cooper & Lhussier, 2025; Halsall et al., 2023; Xu et al., 2022). And in addition, young people are more mobile than adults, so it might not be easy to restrict their movements as adults during the pandemic. The findings of the study suggest that in future crises communication contexts, when the government demands compliance from citizens, adults may be used as channels to reach out to the youths under their care, as they were more pro-government in their communication behaviour during the last pandemic.

Also, the study assessed how the work sector differentiates Nigerians' megaphoning and compliance during the COVID-19 lockdown, and the findings showed that workers in the private sector (those who were self-employed and employees in private organisations) spoke more against the government lockdown policy than government workers. This might suggest that the private sector workers truly suffered much during the COVID-19 pandemic and the lockdown. Since the majority of the Nigerian workforce works in the private sector, it may be good for the government to review and improve the strategies for mitigating the sufferings of the lockdown so that such situations in the future will be better handled. Lastly, the study assessed how political party preference accounted for the variation in megaphoning, and the results were interesting because party preference accounted for differences in all three. Nigerians who did not prefer the political party in power spoke less in favour of the government's lockdown policy, spoke more against the government's lockdown policy and complied less with COVID-19 lockdown regulations. These findings showed that indeed political party preferences account for variation in people's communication behaviour, as affirmed in earlier studies (Chon, 2019; Koiranen et al., 2022), and such communication behaviours may have consequences for public health.

5.0 Conclusion

In conclusion, the study findings showed that Nigerians' gender, age, work sector and political party preference account for variation in their perception of government policies and compliance with government regulations during the lockdown. While this study was an online survey whose participants were drawn by a convenience sampling technique and thus subject to certain limitations (such as respondents' bias), the findings are worthwhile and useful as springboards for other studies in the fields of public relations and strategic communications in Nigeria.

6.0 Recommendations

Based on the findings of this study, it is recommended that in designing future government pandemic/disaster-related risk communication strategies, the demographic and political characteristics of Nigerians should be considered. In addition, governments in power should deploy efforts to win the favour of the citizens so that they could have their support and compliance with government regulations, especially during a pandemic or a disaster. And lastly, in government risk communication efforts to the citizens during a pandemic/disaster, adult citizens should be engaged to reach out to the youths under their care to improve the levels of compliance with government regulations among the youths.

References

Abayomi, K. Q. (2024). *Public trust and state management of the COVID-19 pandemic in Nigeria*. *June*, 1–12. https://doi.org/10.3389/fpos.2024.1334827

Anson, M., & Eritsyan, K. (2023). COVID-19 in social networks : unravelling its impact on youth risk perception , motivations and protective behaviours during the initial stages of the pandemic. *International Journal of Adolescence and Youth*, *28*(1). https://doi.org/10.1080/02673843.2023.2245012

Article, O., Sethi, B. A., Sethi, A., Ali, S., & Aamir, H. S. (2020). *Impact of Coronavirus disease (COVID-19) pandemic on health professionals*. *36*.

Beach, B., Ph, M., D, Y. R. P., & D, S. Y. P. (2016). *Developing public ' s information transmitting behavior (ITB) model in public relations : A cross- national study*. *February*. https://doi.org/10.1080/1062726X.2015.1107482

Bujalski, M. (2024). Drugs : Education , Prevention and Policy Exploring public preferences for alcohol risk communication. *Drugs: Education, Prevention and Policy*, *0*(0), 1–10. https://doi.org/10.1080/09687637.2024.2427218

Chon, M. G. (2019). Government public relations when trouble hits: exploring political dispositions, situational variables, and government–public relationships to predict communicative action of publics. *Asian Journal of Communication*, *29*(5), 424–440. https://doi.org/10.1080/01292986.2019.1649438

Chon, M. G., & Park, H. (2021). Predicting Public Support for Government Actions in a Public Health Crisis: Testing Fear, Organization-Public Relationship, and Behavioral Intention in the Framework of the Situational Theory of Problem Solving. *Health Communication*, *36*(4), 476–486. https://doi.org/10.1080/10410236.2019.1700439

Contreras, I., Pieters, J., Oseni, G., Palacios-lopez, A., & Weber, M. (2025). *Inequalities in job and income loss in countries with high*

prevalence of informal employment in Sub-Saharan Africa during the COVID-19 crisis. *40*(4), 890–907. https://doi.org/10.1177/18747655241301981

Cooper, C., & Lhussier, M. (2025). Adolescent health : from individual risk behaviours to wellbeing ecosystems : learning from the paradigm shift ABSTRACT. *International Journal of Inclusive Education*, *3116*, 1–15. https://doi.org/10.1080/13603116.2025.2449844

East, S., Anorue, L. I., Ugwu, A. C., Uzoamaka, S., Nwabunze, U. O., Ugwulor-onyinyechi, C. C., & East, S. (2021). *Communicating COVID-19 Vaccine Safety : Knowledge and Attitude Among Residents of Communicating COVID-19 Vaccine Safety : Knowledge and Attitude Among Residents of*. *6973*. https://doi.org/10.2147/IDR.S329183

Edwards, S. N. (2022). *Understanding the Present Through the Past : A Comparison of Spanish News Coverage of the 1918 Flu and COVID-19 Pandemics*. https://doi.org/10.1177/10776990211061762

Eisinga, R., Grotenhuis, M. Te, & Pelzer, B. (2013). The reliability of a two-item scale: Pearson, Cronbach, or Spearman-Brown? *International Journal of Public Health*, *58*(4), 637–642. https://doi.org/10.1007/s00038-012-0416-3

Elom, N. A., Nwimo, I. O., Elom, S. O., Alegu, D. N., Afoke, E. N., Okpata, O. O., Ogodo, J. O., Ilo, C. I., Okeworo, C. G., & Elom, C. O. (2021). *Emotional impact of COVID-19 lockdown and mitigation options : A cross-sectional survey of households in Ebonyi State , Nigeria*. https://doi.org/10.1177/20503121211032477

H, S. N., J, F. R., Erika, O., Nicolas, M., Ludger, B., Filippo, R., Leonie, D., Gyula, K., David, S., J, F. L., Novieta, S., J, F. R., Erika, O., Nicolas, M., Ludger, B., Filippo, R., Leonie, D., Gyula, K., & David, S. (2025). Citizen preferences for risk communication associated with emerging food risks linked to climate change. *Journal of Risk Research*, *0*(0), 1–19. https://doi.org/10.1080/13669877.2025.2553851

Halsall, T., Mahmoud, K., Iyer, S. N., Orpana, H., Matheson, K., Halsall, T., Mahmoud, K., Iyer, S. N., & Orpana, H. (2023). Implications of time and space factors related with youth substance use prevention : a conceptual review and case study of the Icelandic Prevention Model being implemented in the context of the COVID-19 pandemic. *International Journal of Qualitative Studies on Health and Well-Being*, *18*(1). https://doi.org/10.1080/17482631.2022.2149097

Hussain, M. W. (2020). *Impact of COVID-19 Pandemic on the Human Behavior*. *October*, 35–61. https://doi.org/10.5815/ijeme.2020.05.05

Kim, J., & Rhee, Y. (2011). *Journal of Public Relations Strategic Thinking about Employee Communication Behavior (ECB) in Public Relations : Testing the Models of Megaphoning and Scouting Effects in Korea*. *November 2012*, 37–41.

Kim, S., Krishna, A., & Kim, S. (2018). *Unpacking Public Sentiment Toward the Government : How Citizens ' Perceptions of Government Communication Strategies Impact Public Engagement , Cynicism , and Communication Behaviors in South Korea Unpacking Public Sentiment Toward the Government : How Ci*. *1198*.

https://doi.org/10.1080/1553118X.2018.1448400

Lanre, R., Bello, K., & Olatunde, O. (2020). Easing of lockdown measures in Nigeria: Implications for the healthcare system. *Health Policy and Technology*, *9*(January), 399–404. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7490626/

Lee, Y. (2020). A Situational Perspective on Employee Communicative Behaviors in A Crisis: The Role of Relationship and Symmetrical Communication. *International Journal of Strategic Communication*, *14*(2), 89–104. https://doi.org/10.1080/1553118X.2020.1720691

Mogo, E. R. I., Lawanson, T., Unuigboje, R., Chetty, Y., Onifade, V., Odekunle, D., Ogunro, T., Blanche, N., Alani, R., Foley, L., Mapa-tassou, C., Assah, F., Peter, C., Oni, T., Onifade, V., Odekunle, D., Ogunro, T., Blanche, N., Alani, R., … Oni, T. (2023). The other pandemic : social media engagement around non-communicable disease preventive behaviours during Nigeria ' s COVID-19 lockdowns. *Cities & Health*, *7*(4), 563–572. https://doi.org/10.1080/23748834.2022.2073540

Nwigwe, C., Fọlárànmí, S., Onuora, C., Nwigwe, C., Stephen, F., & Onuora, C. (2022). Cogent Arts & Humanities COVID-19 facemask rule , public distrust and artistic interventions in Nsukka , Nigeria COVID-19 facemask rule , public distrust and artistic interventions in Nsukka , Nigeria. *Cogent Arts & Humanities*, *9*(1). https://doi.org/10.1080/23311983.2022.2111828

Obasi, C. O., & Anierobi, C. M. (2021). *The Homeless-Poor and the COVID-19 Stay-at-Home Policy of Government : Rethinking the Plight of Homelessness in Nigeria*. https://doi.org/10.1177/21582440211045078

Obi-ani, N. A., Anikwenze, C., Isiani, M. C., Obi-ani, N. A., Anikwenze, C., & Isiani, M. C. (2020). Social media and the Covid-19 pandemic : Observations from Nigeria Social media and the Covid-19 pandemic : Observations from Nigeria. *Cogent Arts & Humanities*, *7*(1). https://doi.org/10.1080/23311983.2020.1799483

Ohaja, E. U., Ukonu, M. O., Mbamalu, M., Ezeanwu, R., Ohaja, E. U., Ukonu, M. O., Mbamalu, M., & Ezeanwu, R. (2023). *Cogent Arts & Humanities Covid-19 Information Protection : Between Information Privacy , Health Secrecy and Public Safety Covid-19 Information Protection : Between Information Privacy , Health Secrecy and Public Safety*. *1983*. https://doi.org/10.1080/23311983.2023.2184463

Panggabean, H., Murniati, J., & Tjitra, H. (2013). Profiling intercultural competence of Indonesians in Asian workgroups. *International Journal of Intercultural Relations*, *37*(1), 86–98. https://doi.org/10.1016/j.ijintrel.2012.04.002

Rabe, L., Sataøen, H. L., Lidskog, R., & Eriksson, M. (2024). Making risk communication in practice : dimensions of professional logics in risk and vulnerability assessments. *Journal of Risk Research*, *27*(3), 389–403. https://doi.org/10.1080/13669877.2024.2328199

Talabi, F. O., Oyedeji, K. A., Adelabu, O., Bernice, O., Adaja, T., Talabi, J. M., Bello, S. A., Lamidi, I. K., & Alade, M. (2022). Public perception of radio campaign messages in managing COVID-19

pandemic in selected states , Nigeria. *Human Vaccines & Immunotherapeutics*, *18*(5). https://doi.org/10.1080/21645515.2022.2085958

Tee, M. L., Tee, C. A., Anlacan, J. P., Aligam, K. J. G., Wincy, P., Reyes, C., Kuruchittham, V., & Ho, R. C. (2020). Psychological impact of COVID-19 pandemic in the Philippines. *Journal of Affective Disorders*, *277*(August), 379–391. https://doi.org/10.1016/j.jad.2020.08.043

Usman, B., Msughter, A. E., Olaitan, A., Usman, B., Msughter, A. E., & Ridwanullah, A. O. (2022). Social media literacy : fake news consumption and perception of COVID-19 in Nigeria Social media literacy : fake news consumption and perception of COVID-19 in Nigeria. *Cogent Arts & Humanities*, *9*(1). https://doi.org/10.1080/23311983.2022.2138011

Vinberg, S., & Danielsson, P. (2021). Managers of micro-sized enterprises and Covid-19 : impact on business operations , work-life balance and well-being. *International Journal of Circumpolar Health*, *80*(1). https://doi.org/10.1080/22423982.2021.1959700

Vrbos, D., Zamariola, G., Maxim, L., Nicolini, G., Ramsay, J., Rasche, M., Rogers, C., Schombert, L., Smith, A., Gallani, B., Vrbos, D., Zamariola, G., Maxim, L., Nicolini, G., Ramsay, J., Rasche, M., Rogers, C., Schombert, L., & Smith, A. (2023). Societal insights in risk communication planning – a structured approach. *Journal of Risk Research*, *26*(8), 841–854. https://doi.org/10.1080/13669877.2023.2197613

Xu, Z., Zhang, D., Ding, H., Zheng, X., Chung-man, R., Yang, Z., Mo, P. K., Lee, E. K., Yeung-, S., Lee, M., Yang, Z., Mo, P. K., Lee, E. K., Yeung-shan, S., Xu, Z., Zhang, D., Ding, H., Zheng, X., Lee, R. C., & Yang, Z. (2022). *Association of positive and adverse childhood experiences with risky behaviours and mental health indicators among Chinese university students in Hong Kong : an exploratory study behaviours and mental health indicators among Chinese university students in*. *8066*. https://doi.org/10.1080/20008198.2022.2065429

Yudarwati, G. A., Putranto, I. A., & Ratriyana, I. N. (2023). Towards an Interactive and Participatory Risk Communication : Lessons Learned from COVID-19 in Indonesia Towards an Interactive and Participatory Risk Communication : Lessons Learned from COVID-19 in Indonesia. *Cogent Social Sciences*, *9*(1). https://doi.org/10.1080/23311886.2023.2221594

Zinn, J. O., & Schulz, M. (2024). Rationalization , enchantment , and subjectivation – lessons for risk communication from a New Phenomenology of everyday reasoning. *Journal of Risk Research*, *27*(2), 295–312. https://doi.org/10.1080/13669877.2024.2328195