

Dissemination of Fake News on Social Media: A Demographic Analysis of Audience Involvement

Tolulope Kayode-Adedeji, Nwakerendu Ike, Ifeoluwa Ogungbemile and Peculiar Amao
Covenant University, Ota Ogun State, Nigeria

tolulope.kayode-adedeji@covenantuniversity.edu.ng

nwanduike@gmail.com

ifeoluwaomiles@gmail.com

Amaooluwapeculiar01@gmail.com

Abstract: Social media users continue to threaten privacy with the spread of fake news thus impacting people negatively. This study seeks not just to reveal the predominant demography of Nigerians who spread false information, but also to access how the decision to verify and share such information is made. The cluster and systematic sampling method were used to select respondents from selected geopolitical zones in Nigeria. The study revealed that adults between ages 21-35 and 36 – 50 spread misinformation on social media platforms, and those in the latter age range would not verify before sharing on *Whatsapp* and *Facebook*. It recommends that the public needs to be educated on information verification, and the government and concerned organisations need to enforce laws necessary to discourage the spread of misinformation.

Keywords: social media, fake news, demography, misinformation, and verification

1. Introduction

Information technology has paved way for the creation of content and easy sharing of information from one source to another within seconds (Fasanya, et al, 2018). Newly invented information technologies increase abilities and open more possibilities for all humans, especially for the purpose of communication through sharing of messages. In the process of engaging in online interactions and discussions, users are forced to forward information that they deem relevant and vital to other people on their network. This is usually meant for the purpose of educating, sharing common interest, and creating awareness. Information technology allows for such sharing capability within the internet environment, which include social media, blogs, videos, websites, podcasts, etc. Social media applications like *Facebook*, *Instagram*, *Twitter*, *Whatsapp* among others are the most used internet platforms, mainly for the purpose of instant communication. Hence, they have not only become tools for increased citizens' active online participations but have also become platforms for the spread of hate speeches, misinformation and/or fake news (Dunu 2018, p. 6). Such activities, which are known to be common with political issues, have distorted the electoral system in several countries. Politicians have consistently used the social media platforms to attack the integrity of their opponents by spreading lies about them thereby gaining the upper hand in the electoral process (Igwebuikwe, Ebuka and Chimuanya, Lily, 2021). The after effect of such actions could distort the political system. A major negative impact is that incompetent politicians who lack the required knowledge to address the pressing problems of the nation at the state and federal levels could occupy political offices. In addition, the spread of fake news is likely to continue to limit the opportunity of good and credible politicians from ever coming into power. It means that only the unqualified politicians, who gain popularity by damaging their opponents' reputation using fake news, will have their way in politics thereby delaying the progress and restricting the development of the nation. Governments in certain parts of the world, including Nigeria are already seeking ways to reduce the impact of this menace that has become part of governance.

Previous studies by Finkel, et al (2019); Wilson and Umar (2019); Baum, Lazer, and Mele, (2017) have discussed the role of selected social media sites and educational status in the spread of fake news. Other research in this area also revolve around phenomenon of fake news, risk to society worldwide, and solutions to the spread of fake news among other research (Roozenbeek and Linden, 2018; Dentith, 2017; Egelhofer, 2019). Therefore, this study examined the demography descriptions of persons likely to be mostly involved in the dissemination of false information on social media, the rate at which they disseminate fake news, the nature of the stories they frequently forward and willingness or ability to verify social media contents, before dissemination. Results of this study would assist relevant stakeholders in regulating online contents by guiding them to make informed decisions.

The specific objectives are to:

- examine the use of social media in disseminating fake news; and
- investigate the role of Nigerian audiences by demography in the dissemination of fake news on social media

2. Literature Review

2.1 Fake News Dissemination on Social Media.

Social media is a global village involving several participants; this environment allows information to be shared from one person to another at the speed of light. It allows people to contribute and express their opinions on various issues with ease. It is known for minimum restriction on information sharing, low cost, and very easy access. The platform could be regarded as the home of hate speech, malice, and fake news, because common people can create their own content, which in many cases are not entirely true. Fake news is defined as cautious spread of false information in the form of news articles and stories with the intent of destroying an image. According to (Gentzkow, 2017) it is news articles that are intentionally and verifiably false, and could mislead readers. This expresses the fact that fake news could be news articles published and are set on being false. The spread of false information has become synonymous with the term fake news (Cooke, 2017).

In contemporary modern age, social media platforms have become major sources of information, people almost no longer refer to traditional media to confirm information. Indeed, some information found in the traditional media originates from the social media. The urge to search for news on social media is almost like an addiction. People are ready to feed this addiction by publishing fake news stories and post on social media, mostly to generate a high flow of online traffic. So many social media users are quick to believe what they watch or hear without much thought. This has become very convenient for people who use this flaw to spread fake news on social media, knowing that social media users are unlikely to confirm the information received. People used this high flow of traffic to create wealth for themselves. Since the audience is very convincing, they go on to share the information from one social media platform to another.

Fake news can spread faster than real news (Langin, 2018). It has a wider coverage and wider audience (Vousoughi, 2018). Fake news uses a lot of devices and tools to attract audience. In the case of social media, catchy headlines and captions are used to attract audience's attention. Social media articles use many exaggerated titles to sell their fake news.

2.2 Role of the Nigerian Audience in the Dissemination of Fake News

The presence of Nigerians on the internet is quite large. As at 2019, 113.3 million Nigerians use the internet (Statista, 2019). A section of this population includes users of the social media who constitute a major part of active internet users in Nigeria. This is prompted by easy access to electronic devices and internet connection at a relatively affordable rate. On the social media platforms, some Nigerians have more than one account. Thus, it could be said that the Nigerian audience have an established presence on social media which enables the rapid spread of information. Propagandists and people with different purposes take advantage of this quick circulation of information to spread fake news. Social media is the major carrier of fake news. The new information age has created a vital surrounding with loads of information, a large part of which is reliable, with the more significant chunk unverifiable.

According to Ogbette (2019), it was discovered that in Nigeria most people do not always confirm the source of a piece of information before believing and sharing it. In some cases, such information may turn out to be fake. This could be tied to the overwhelming amount of information on the internet (BBC, 2019). The average Nigerian social media user is presented with a lot of information every day. This user has other things to attend to and therefore has limited or no time to confirm every information he receives. As such, the user would likely spread information he deems important without proper confirmation. With a sense of protection and care for loved ones and friends, he forwards the fake news to them. They in turn forward it to family and friends who continue the cycle until it becomes common knowledge. The messages also contain instructions, which could be slightly coercive. These instructions state the benefits of spreading the messages and the consequences of not doing so. This encourages the average user to help in spreading fake news. The urgency some of these messages present also make some people to immediately respond and take whatever action presented. Audiences are required to forward the received message to others around them.

Regarding trending societal issues that are yet to be resolved by the appropriate authorities, fake news spreads faster. Fake news showing the brevity of the issue, a statement made by a public figure on the issue, or regarding a proposed solution gets to the audience easily as they are anxious to be informed about such an issue and for a resolution to be made.

2.3 Demography analysis of audience participation in the dissemination of fake news

Examining the categories of participants in the dissemination of fake news is germane in addressing the problems that comes with it. Although, there are other factors encouraging the creation and dissemination of fake news, it becomes significant for researchers to address the part each of the contributing factors play. This will enable the necessary organisations or regulatory bodies focus their efforts on the most relevant factors in seeking to ameliorate the issue. Several authors have examined the role of gender, age, income and educational status in the dissemination of political fake news online in America. Results show that, while the probability of sharing fake news is high in males, older people are more likely to share political fake news than younger people (Woodcook, 2019). In another study, Guess, Nagler and Tucker (2019) examine the effects of misinformation/fake news in political campaign and stressed that people over 65 years share nearly seven times as many articles from fake news domain than the younger generation.

There are pressing societal issues that seem to enhance this habit, one of which is level of literacy. With the high rate of illiteracy in Nigeria, more Nigerians are likely to spread fake news. The educational system of the country, especially the public sector, stands on wobbly legs. This results in a crop of citizens who are less critical in their thinking and citizens who lack the know-how for debunking fake news. Thus, if the illiteracy rate in Nigeria persists without a revamp of the education sector, the spread of fake news would only continue and possibly grow wider creating a threat to democracy (Lee, 2019). There are however further threats based on the results generated by Goyanes and Lavin (2018), who notes that most men and older people share political fake news. This could be linked to younger people's pressing desire for self-actualisation in areas of finance, career, academics, and family, which leaves them with little time to think of other sectors of society like history, culture, and politics. The same cannot be said of the older people who have spent most of their lives in self-actualisation and now they want a level playing ground for their children, the younger generation. As such they are interested in the affairs that make society work and one of these is politics and governance. This unwavering interest of older people makes them more susceptible to the antics of those who spread fake news. The older people want to be kept abreast of political situations and they also want to believe that they play a part in making the situation better. So, when they receive information, fake news or not, they most likely forward it to other like-minded older people as a contribution to the development of political situation in the society.

Also because of the generic make-up of women, their interest is on soft news like entertainment, sports, tourism, healthcare, and culture (Getz and Page, 2016). Men, however, are more interested in hard news like politics. It could be said that women are more interested in lifestyle than men instead of talking about soft news and hard news. Thus, men are more active in the political sector either verbally or in some other way, contributing to the majority of those interested in politics. As the social media is also a platform where fake news is spread, these men come in contact with fake news and as such help in the dissemination of such news. Thus, "detecting fake news at their early stages, in order to effectively avoid further risks and damages, is crucial" (Zhao, et al, 2018).

3. Theoretical Framework

Media Intrusion theory emphasized the consistent intrusion of the mass media in the political system especially during elections. Although the 'Media intrusion theory' specifically focused on the role of the television media in influencing or framing public opinion in the issues of politics, the social media serves as the most influential media in channeling political issues in this present generation. The social media intrusion in the political system are motivated by Nigerian politicians for personal gains.

The case of disseminating false information about political opponent further emphasizes how the political system continues to engage the most effective and influential media to attain political advantage. The social media platforms have encouraged 'many elicit leaders who do not necessarily hold political positions hold obvious political power, but may work behind the scene serving the interest of the social group they lead or represent' (Folarin 2005, p.187).

Thus, the social media platform has been taken advantage of as an anonymous medium to spread fake news usually to the advantage of the sender of these messages thereby disruption social order and activities alike.

Social media platforms have consistently been used by people hiding behind fake user-names and identity to manipulate the society, promote their ideologies and attract followers and get online recognition for diverse personal reasons, one of which is to make money. In the process, online users are desperate and spread false information, which tend to attract the attention of many. Such intrusion using the social media platform distort the peace of the society and leave audiences confused about what to believe and what to disregard.

4. Data and Methods

Data analyzed in this study were collected, from different locations in Nigeria. Data was gathered using a questionnaire containing relevant questions to understand the demography of Nigerians who are responsible for spreading fake news on social media platforms. The questionnaire was designed by the researchers to investigate the role of Nigerian audiences by demography in the dissemination of fake news on social media and examined how respondents use social media in disseminating fake news online. The questions contained in the questionnaire was not adopted but generated by the researchers as guided by the research questions.

In selecting respondents for the research, the researchers randomly selected a state each from the six cosmopolitan regions in Nigeria. However, only five states were finally used for the research, because, one of the geopolitical zones was not considered cosmopolitan at the time of this research. Thus, no state was selected from the North-East region because no cosmopolitan state exists in that region. In some other regions only one was selected because only one cosmopolitan state exists there. After all the above considerations, the study selected a total of five (Cross River, Delta, Edo, Enugu, FCT, Kano, Lagos, Oyo and Rivers) states from each region to participate in the survey.

Furthermore, in order to select the sample size (respondents) to participate in the process, from each state, the researcher employed the Yamane formula, 1957, (Singh and Masuku, 2014) which is considered one of the appropriate formula used in selecting sample size in social science research.

$$n = \frac{N}{1 + N(e)^2}$$

N= Total number of population of 8 states

n= error margin (0.05)

e = 400

STATES AND SAMPLES FROM EACH STATE

Cross River = 25, Delta = 36, Edo = 27, Enugu = 28, FCT = 23, Kano = 84, Lagos = 80, Oyo = 50, Rivers = 47

A total number of 400 copies of questionnaire were administered to residents in the eight states but 367 were returned.

5. Results

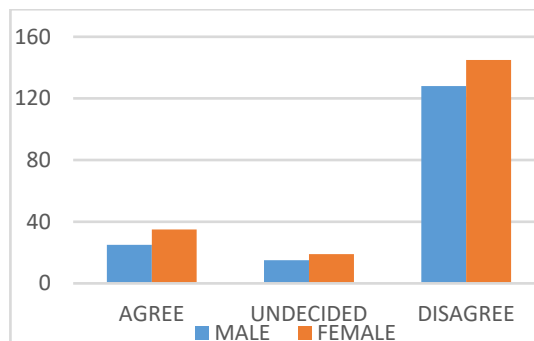


Chart 1a: Dissemination of fake news on social media by gender

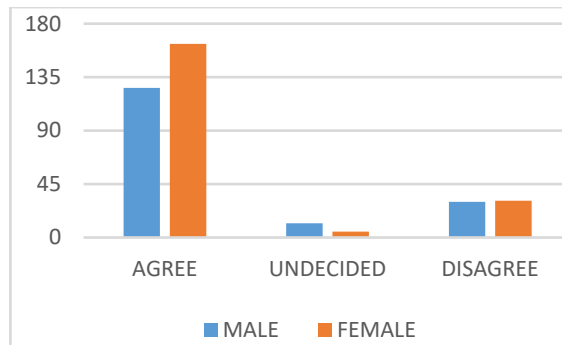


Chart 1b: Frequent Social media usage by gender

Source: Authors computation using SPSS

The column Chart 1a shows the rate at which the female and male gender spread fake news on social media. Although from the sample collected, a few number of the respondents are not heavily involved in the spread of fake news on social media. However, considering that there are few respondents who spread unverified information online, the female gender seems to be more active in the dissemination of fake news or unverified information on social media as compared to the male gender. The female gender spends more time on the social media platforms compare to the male gender as shown in Chart 1b. This explains the reason for the result in Chart 1a, which shows that they spread more fake news on social media than their male counterpart.

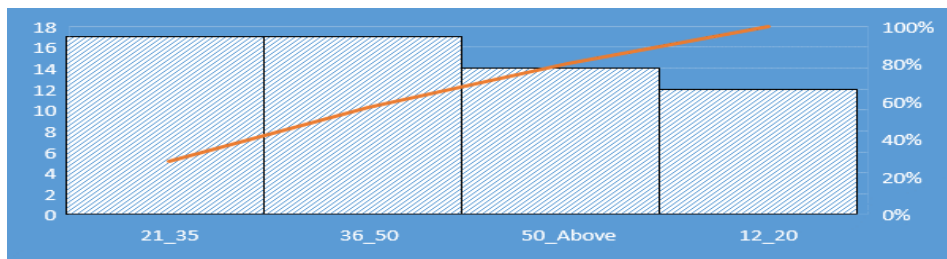


Chart 2: Dissemination of fake news on social media by age category

Source: Authors compute using SPSS and Excel

Chart 2 shows that the act of disseminating fake news on social media is mostly done by Nigerians between the ages of 21-35 and 36 – 50. The 21-35 and 36-50 age categories represents Nigerians in their middle age. Young people and teenagers are more concerned with having conversations and interacting with their peers through the exchange of pictures, videos etc. as they do not have the time to read and forward long messages that have been forwarded to their social media platforms. The reason young people do not forward fake news is because they are interested in the conversations, topics that inspire a sense of belonging and meaning to their life (Meijer 2007, p.96-116).

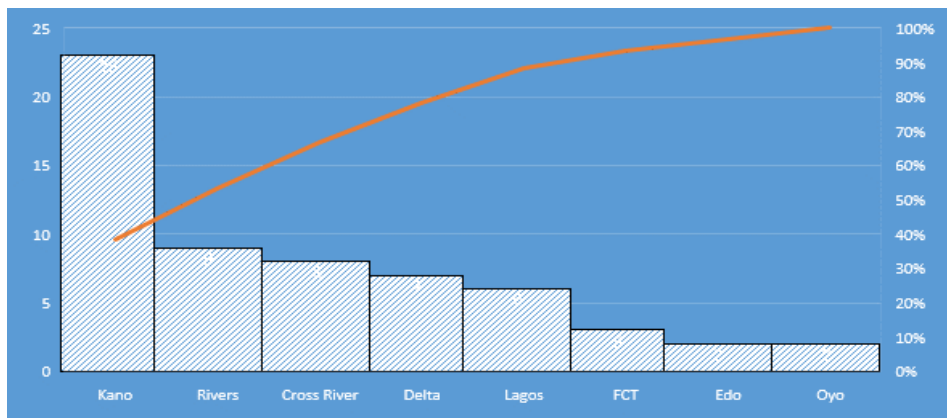


Chart 3: Dissemination of fake news on social media by location (Nigerian states)

Source: Authors compute using SPSS and excel

Residents in Kano disseminate news identified to be false to a large extent as compared to respondents based in other locations examined namely; Rives, Cross River, Delta, Lagos, FCT, Edo and Oyo in Chart 3. Kano state is in the Northern part of Nigeria and known to be one of the states affected by terrorist attacks more frequently than other regions examined. Considering this ample information, they have faced security issues. Therefore, there is a tendency that they circulate information that deals with security alerts and threats to one another to ensure daily security from possible terrorists’ attacks or community danger. Based on the fact that the nature of terrorist attacks bring fear, residents in affected geographical zones in Nigeria are least likely to have the time or place to verify social media information forwarded to them before sharing to other social media users on their individual platforms.

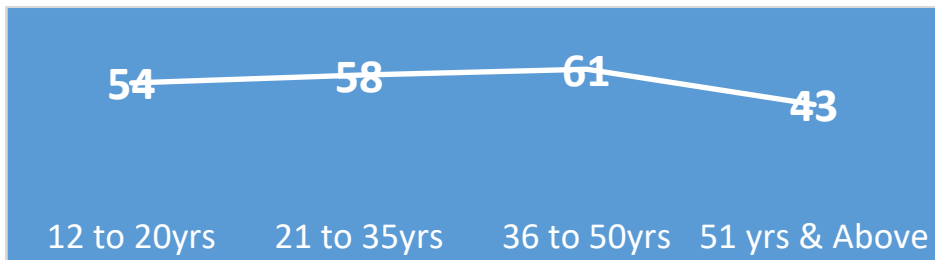


Chart 4: Respondents act of verifying information before spreading on social media by age category

Source: Authors compute using SPSS

Considering that it is currently difficult to avoid the creation of fake news by the numerous social media users, chart 4 addressed the age category that seem to verify information before forwarding to other social media users. Even though the age categories between 21 - 35 and 36-50 ages as identified in chart 2 as responsible in the spread of fake news, only respondents between the ages of 36-50 verify most of these contents before deciding to forward or not. Knowing that the more matured adults are likely to understand the implication of a message, they are naturally more likely to check the credibility of an information before making the decision to disseminate the message.

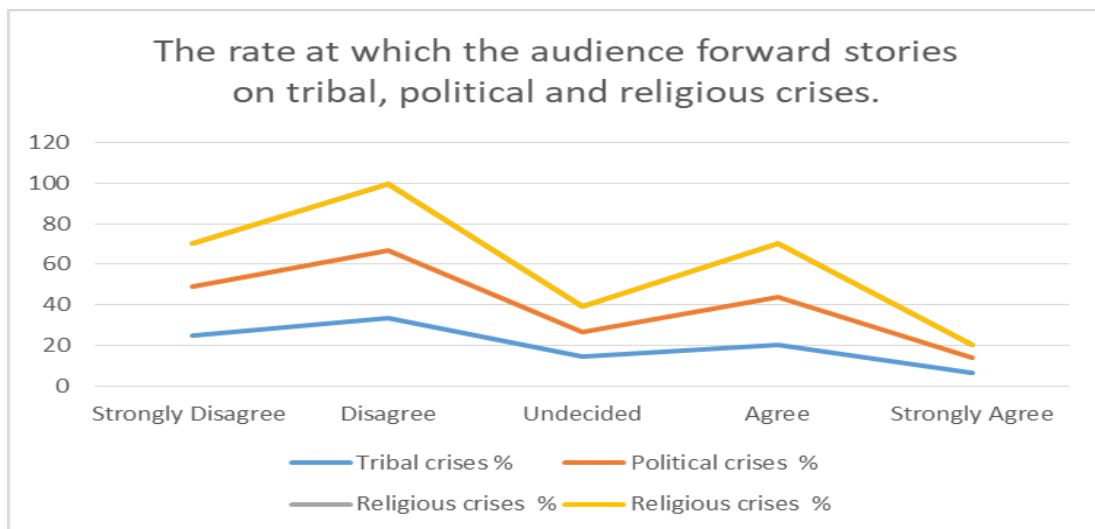


Chart 5: The rate at which the audience forward stories on tribal, political, and religious crises

Source: Authors compute using SPSS

Generally, of the 367 respondents, most of the audience do not forward crises related stories. However, in Chart 5, when compared to other crises examined, stories on religious crises were forwarded more on social media. Nigerians are sensitive about religious related stories, especially because the growing crises in the northern part of the country, were said to be based on the misapplication of certain religious principles.

6. Discussion

No doubt, the competition and desperation that surround the nature of Nigerian politics will continue to provide more platforms that condone the distribution of fake news on the internet. Already, Zhao, et al, (2018.) outlined the alarming number of blogs and social media handles that are solely channeled towards the spread of false information. The rate at which such blogs and webpages are being created is on the increase as more users seek avenues to make money online. It is further motivated by audience willingness to draw traffic to their pages. This is also motivated by the attempt to get rich as poverty continues to increase in the Nigerian environment. There is a possibility that the few younger generation will continue to engage in creating false contents for financial benefits to avoid poverty.

However, it is important to know that the federal government is making efforts to regulate the use of social media in Nigeria to curb the spread of fake news. Lai Mohammed in 2017, stressed that Fake news misrepresents society, leading to unadorned consequences on individual and national systems, such effects include: amplifying tension, building fear and increasing doubt among people and politicians (The *Premium Times* 2017). It is also of necessity for the federal government to understand the above-mentioned difficulties that could stand as a barrier. Therefore, detecting these sites and their owners is paramount. Unfortunately, the Nigerian Information Technology system is not close to being equipped to handle these problems. Hence, an important issue of concern is, how do we regulate social media platforms? While Nigeria is on a long journey to answering this question, proper education based on the demography data of Nigerian audience responsible for the dissemination of fake news is paramount.

Keeping in mind that these same politicians are major sponsors of those who create these profiles to spread false information about their opponents in order to be seen as the better candidate during an electoral process, the regulation of the platforms by politicians themselves is disturbing. Therefore, the action of the federal government is seen as an intention to use these, yet to be established regulations as tools in politics to attack future political opponents and political party rival.

Owing to the facts generated from the field that: majority of the category of audience are within the ages of 21-36, result confirms that several of these people are in most cases used by politicians to do their dirty work with the aim of attaining political advantage over their opponents. Beyond the education of Nigerians involved in the act, it is pertinent to give them a sense of belonging and fulfillment by providing a credible source of income and a conducive environment for them to sustain themselves, financially. Matured adults in the Nigerian society continue to be vulnerable to these politicians because of their poor state of life, imposed by the political elites. These problems could be far from being over considering these obvious militating obstacles.

7. Conclusion and Recommendations

The avid dissemination of fake news in Nigeria is likely to increase as people see it as a fast money making venture created by political elites in the country to have an edge over their opponents during political elections. The existence of increased poverty rate further makes the unethical role attractive to younger generations who are eager to become financially independent.

In order to address the issue of demography distribution of Nigerians involved in the spread of fake news (young adults), the study provides an overview of the general behavior of Nigerians in this regard. Data generated could serve as a guide to resolving the problem by geopolitical zones. Problems specific to each zone with regards to the spread of fake news can be adequately addressed with the output and recommendations provided by this research. Resolutions to the problems generated by misinformation becomes possible with the knowledge of Nigerian demographical involvement especially by location, age, and gender thus, the study recommends the following:

- The federal government and relevant organisations should collate research papers/materials particular to demography analysis on the dissemination of fake news in Nigeria and use results to identify the specific role of Nigerians in the dissemination of fake news based on the demography. This action will enable them to identify these categories of persons so that the educational plans can be channeled appropriately. Through this process, they can achieve the aim of creating awareness on the implications of spreading fake news.
- Since the political system is also involved in the creation and spread of fake news, it is necessary for journalists to begin to engage in proper investigations to expose this act in politicians. Considering their

professionalism in the field of 'investigative journalism', they should engage the relevant professionals such as programmers, IT practitioner to understand how and why people create blogs and other platforms for the sole aim of spreading false information. Such exposure will not only restrain Nigerians employed to do politicians' dirty jobs, but it would also inform Nigerians of the importance of verifying online information.

- Appropriate government arms should propose and pass into law the necessary bills that punish whoever propagates fake news.

Acknowledgement

The research is fully sponsored by the Covenant University Centre for Research, Innovation and Discovery (CUCRID) in Covenant University.

References

- Baum, M. Lazer, D. and Mele, N. (2017) "Combating Fake news: An Agenda for research and action", Paper read at Northeastern University and Harvard University, Boston, May.
- BBC. (2019) "How Much Data Is on The Internet?", [Online] <https://www.sciencefocus.com/future-technology/how-much-data-is-on-the-internet>.
- Cooke, N. A. (2017) Post-truth, truthiness, and alternative facts: Information behavior and critical information consumption for a new age, *Library Quarterly*, Vol. 87, No. 3, July, pp. 211–221.
- Dentith, M. (2017) The problem of fake news, *Public Reason*, Vol. 8, No. 1-2, December, pp. 65-79.
- Dunu, I. (2018) Social media and Gubernatorial Elections in Nigeria: A critical Discourse, *Journal of Humanities and Social science*, Vol. 23, No. 1, January, pp. 6-15.
- Egelhofer, J and Lecheler, S (2019) Fake news as a two-dimensional phenomenon: a framework and Research agenda, *Annals of the International Communication Association*, Vol. 43, No. 2, April, pp. 97-116.
- Fasanya, Amodu, Aiyelabola, Kayode-Adedeji and Okorie (2018) "Twitter Exposure on Lagosians' Football Betting Lifestyle", Paper read at *Proceedings of the 31st International Business Information Management Association Conference, IBIMA 2018: Innovation Management and Education Excellence through Vision 2020* February.
- Folarin, B. (1998) *Theories of Mass Communication: An Introductory Text*, Stirling-Horden Publishers (Nigeria Limited), Ibadan.
- Gentzkow, H. A. (2017). Social Media and Fake News in the 2016 Election, *Journal of Economic Perspectives*, Vol. 31, No. 2, Spring, pp. 211–236.
- Getz, D. and Page, S. (2016) Progress and prospects for event tourist research, *Tourism Management*, Vol. 52, February, pp. 593-31.
- Goyanes, M. and Lavin, A. (2018) The Sociology of Fake News Factors affecting the probability of sharing political fake news online. *Media and Communication*, Media@LSE Working Paper Series, June, pp.12-13.
- Guess, A., Nagler, J., and Tucker, J. (2019) Less than you think: Prevalence and predictors of fake news dissemination on Facebook, *Science Advances*, Vol. 5, No. 1, pp. 1-7.
- Finkel, J., Jiang, S., Luo, M., Mears, R. Metaxa-Kakavouli, D., Peeple, C. Sasso, B. Shenoy, A. Sheu, V. and Torres-Echeverry (2019) Fake news and misinformation: The roles of the nations' digital newsstands, FB, Google, Twitter and Reddit', [Online], Stanford Law School, www-cdn.law.stanford.edu/wp-content/uploads/2017/10/Fake-News-Misinformation-FINAL-PDF.pdf.
- Igwebuike, Ebuka and Chimuanya, Lily (2021) *Legitimizing Falsehood in Social Media: A Discourse Analysis of Political Fake News. A Discourse Analysis of Political Fake News'*. In: *Discourse & Communication*, 15 (1). pp. 42-58.
- Langin, K. (2018) "Fake news spread faster than true news on Twitter- thanks to people not bots", [Online], www.sciencemag.org/news/2018/03/fake-news-spreads-faster-true-news-twitter-thanks-people-not-bots
- Lee, T. (2019) The global rise of 'fake news' and the threat to democratic elections in the USA, *Public Administration and policy: An Asia-Pacific Journal*, Vol. 22, No.1, June, pp.15-24.
- Meijer, I. C. (2007) The Paradox of Popularity. How Young People Experience the News, *Journalism Studies*, Vol. 8, No. 1, February, pp. 96-116.
- Ogbette D. and Kareem, A. (2019) Fake News in Nigeria: Causes, Effects and Management. *Journal of Information and Knowledge Management*, Vol. 3 No. 2, March, pp. 1-10.
- The Premium Times (2019) "Premium Times seeks collaboration with NAN to curb fake news", [Online], www.premiumtimesng.com/news/more-news/361117-premium-times-seeks-collaboration-with-nan-to-curb-fake-news.html.
- Roozenbeek, J. and Linden, S. (2018) The Fake news game: Actively Inoculating against the risk of misinformation, *Journal of Risk Research*, Vol. 22, No. 5, February, pp. 1-28.
- Singh, A and Masuku, M. (2014). Sampling Techniques and determination of sample size in applied statistics research: An overview. *International Journal of Economics, commerce, and Management*, Vol. 2 No.2, November, pp. 1-22.
- Statista (2019) Number of Internet Users in Nigeria from 2017 to 2023 (in millions), [Online], www.statista.com/statistics/183849/internet-users-nigeria.

- Vosoughi, S; Roy, D; and Aral, S. (2018) The spread of true and false news online, *Science*, Vol. 359, No. 6380, pp. 1146-1151.
- Wilson, F. and Umar, M. (2019) The effect of fake news on Nigeria's Democracy within the premise of freedom of expression, *Global Media Journal*, Vol. 17 No. 32, April, pp. 1-12.
- Woodcock, A. (2019) "Nearly half of Social Media users who share articles have passed on fake news, study suggests", [Online], www.independent.co.uk/news/uk/home-news/fake-news-facebook-twitter-share-misinformation-survey-a8908361.htm
- Yamane, T. (1967) *Statistics: An Introductory Analysis*, 2nd, Harper and Row, New York.
- Zhao, Zhao, Sano, Levy, Takayasu, Takayasu, Li, Wu and Havlin., (2018) Fake news propagates differently from real news even at early stages of spreading, *EPI Data Science*, Vol. 9 No. 1, April, pp. 1–14.