Nigerian Youths' Exposure To Geospatial Data And Artificial Intelligence Technologies : Cultivation Theory And Perception of Social Relations

*Exposition des jeunes nigériens aux données géospatiales et aux technologies de
l'intelligence artificielle : théorie de la culture et perception des relations sociales*

Chidinma Henrietta Onwubere and Henry O. Osuji

Electronic version

URL: <http://journals.openedition.org/ctd/2617>

DOI: 10.4000/ctd.2617

ISSN: 2491-1437

Publisher

Chaire Unesco Pratiques émergentes en technologies et communication pour le développement

Printed version

ISBN: 2491-1437

Electronic reference

Chidinma Henrietta Onwubere and Henry O. Osuji, "Nigerian Youths' Exposure To Geospatial Data And Artificial Intelligence Technologies : Cultivation Theory And Perception of Social Relations", *Communication, technologies et développement* [Online], 8 | 2020, Online since 30 June 2020, connection on 29 March 2021. URL: <http://journals.openedition.org/ctd/2617> ; DOI: <https://doi.org/10.4000/ctd.2617>

This text was automatically generated on 29 March 2021.

Communication, technologies et développement

Nigerian Youths' Exposure To Geospatial Data And Artificial Intelligence Technologies : Cultivation Theory And Perception of Social Relations

Exposition des jeunes nigériens aux données géospatiales et aux technologies de l'intelligence artificielle : théorie de la culture et perception des relations sociales

Chidinma Henrietta Onwubere and Henry O. Osuji

1. INTRODUCTION

- 1 The mass media have a powerful influence in shaping our lives as we have to depend on them for information, advertisements and entertainment. The great breakthroughs in information and communication technology in the 21st century led to the proliferation of the new media which have facilitated the creation of the different platforms for social interaction with boundless potentials as regards interactions, interrelationships, and information sharing and exchange. Through the social media, Nigerian youths can create, access and disseminate any kind of information. Undoubtedly, their exposure to the messages accessed through geospatial data has some influence on their attitudes towards people around them since, according to George Gerbner's Cultivation theory and Bandura's Observational Learning theory, the youths cultivate attitudes likened to what they learn from the mass media. But the cultivated attitudes can impact both positively and negatively on people's ideas. This study investigates the relationship between the exposure of Nigerian youths to Geospatial Data and Artificial Intelligence Technologies and their Perception of Social Relations.

2. DEFINITIONS

- 2 Artificial Intelligence : the use of machines capable of engaging in human-like thought processes such as learning, reasoning, and self-correction to perform tasks that require human intelligence but without the presence of a human being.
- Fake News : violent message whose originator's aim is to mislead the receiver in order to create some disadvantage or some undue advantage for some people or entities.
- Geospatial Data : information with a geographic aspect attached to it, meaning that the records in the information have coordinates, an address, included with them.
- Perception : the process of making sense out of experience, process by which people select, organise and interpret information to have meaning to them.
- Social Media : a group of Internet-based applications that allow for the creation and exchange of user-generated content by using geospatial data and artificial intelligence technologies.
- Social Relations : social interactions between the different groups of people in the society.

3. AIM OF PAPER/OBJECTIVES

- 3 This study investigates the relationship between the exposure of Nigerian youths to Geospatial Data and Artificial Intelligence Technologies (GDAIT) and their perception of social relations. Specifically, the paper tried to :
- Identify the level of exposure of Nigerian youths to GDAIT
 - Determine their perception of social relations
 - Establish the relationship between the youth's consumption of messages from GDAIT and their perception of social relations
 - Investigate the relationship between the youth's demographic variables (age, gender, socio-economic background) and their exposure to GDAIT on the one hand, and their perception of social relations on the other hand.

4. RESEARCH QUESTIONS

- 4 1. To what extent are Nigerian youths exposed to GDAIT and what is the level or intensity of their exposure to violent messages on social media ?
2. How does the exposure of Nigerian youths to GDAIT (especially social media) affect their perception of social relation ?
3. How do Nigerian youths exposed to GDAIT perceive social relations ? Is it as human, personal and warm relationship, or as impersonal, electronic, distant relationship devoid of sensitivity or emotion?
4. Is there any relationship between Nigerian youths' demographic variables (age, gender and socio-economic background) and their exposure to GDAIT on the one hand ; and their perception of social relations on the other hand.

5. THEORETICAL FRAMEWORKS

- 5 The relevant mass communication theories are the Cultivation Theory, Observational Learning Theory, Uses and Gratification Theory, Perception Theory and the Technological Determinism Theory. But the topic focuses on Cultivation Theory.

George Gerbner's cultivation theory

- 6 This theory considers how the excessive exposure to the media, especially through the television and other interactive media subtly shapes the users' views of the world and social reality. It posits that viewers learn "facts about the real world through observing the world of television." The viewer automatically stores memory traces got from the TV and later uses the stored information to formulate beliefs about the real world. The concrete base behind this cultivation theory is that the more viewers watch TV, the more their faith in the TV version of reality. (Gerbner, G & Gross L, 1976).

6. METHOD OF STUDY

- 7 The survey research design was adopted. The population of study was undergraduates of Nigerian Universities. Sample was drawn from undergraduates of the National Open University of Nigeria (NOUN), a mega University in the Federal Capital Territory of Nigeria, because, first, the University is the largest in the country, with study centres all over the federation, and has a wide range of students presumed to be familiar with the tools of communication and the different social networks. Secondly, the researchers have access to all students' registration documents that enabled scientific selection of respondents. Through online SurveyMonkey platform, copies of questionnaires were distributed to 200 respondents using a simple random method. However, only 130 responses were received for analysis.

7. PRESENTATION OF SURVEY, DATA ANALYSIS AND INTERPRETATION

- 8 The survey questionnaire comprising 20 questions was designed to provide answers to the 4 main research questions which we further fragmented and expanded into 8 questions so as to obtain more detailed answers. Hence, for every research question, one or more corresponding survey questions were asked such that the survey responses will reinforce each other to make the answers to the research questions very reliable.

Research question 1

- 9 "To what extent are Nigerian youths exposed to Geospatial Data and Artificial Intelligence Technologies (GDAIT) and what is the level or intensity of their exposure to violent messages on social media ? "

Data analysis

- 10 From the 7 corresponding survey questions (4, 5, 6, 7, 8, 9,13), these results were obtained:
- i. 99.2%, that is, 125 of 126 respondents use their own smartphones
 - ii. The 3 activities most performed with their smartphone are information sourcing/news cast 90.6% (116 of 128), educational programmes/tips 75.8% (97), message delivery 75% most performed with their smartphone are information sourcing/news cast 90.6% (116 of 128), educational programmes/tips 75.8% (97), message delivery 75% (90)
 - iii. 68.8% (88 of 128) use their smartphones 7 days a week
 - iv. 43.3% (55 of 127) spend 4 or more hours in performing their activities on their smartphone
 - v. The sources of activities performed with smartphone are mainly Whatsapp 79.4% (100 of 126), Internet 70.6% (89), Facebook 62.7% (79)
 - vi. 74.6% (94 of 126) perform activities from programmes originating from both local and foreign sources
- 11 vii. 61.2% (74 of 121) pay attention to violent acts and violent verbal exchanges contained in the programmes they subscribe to.

Data interpretation & answer to research question 1

- 12 Given the fact that practically all respondents have permanent access to a smartphone which majority of them use everyday for at least 4 hours for about half of respondents, mainly for information sourcing/news cast, educational programmes/tips and message delivery especially on Whatsapp, Internet and Facebook, from local and foreign sources, it is clear that Nigerian youths are fully exposed to GDAIT and at high intensity, Whatsapp and Facebook being the greatest providers of information traffic on internet.

Research question 2

- 13 “How does the exposure of Nigerian youths to GDAIT (especially social media) affect their perception of social relations ?”

Data analysis

- 14 From the 7 corresponding survey questions (11, 12, 14, 15, 16, 18 19), these results were obtained:
- i. 53.2% (67 of 126) agree that some of the programmes they subscribe to contain violent acts and violent verbal exchanges
 - ii. 88.9% (112 of 126) perceive that members of the society are always fighting over one thing or the other
 - iii. 69.1% (87 of 126) disagree that people around them do not quarrel with one another; in other words, they perceive that people around them quarrel with one another
 - iv. 73% (92 of 126) agree that people in their community say negative things about one another
 - v. 96.8% (122 of 126) agree that their access to social media programmes make them more conscious of how people in the society and organisations relate with each other

vi. 84.1% (106 of 126) agree that their experience of social media programmes contributes to the way they relate socially with people or organisations (more cautious and apprehensive; bolder or more aggressive; freer or less constrained because of anonymity and safe physical distance between them and the people, etc).

Data interpretation & answer to research question 2

- 15 The fact that over half of respondents acknowledge that they notice violent acts and violent verbal exchanges in their social media programmes, that people around them always fight over one thing or the other and quarrel with one another, that people in their community say negative things about one another, that their access to social media programmes makes them more conscious of how people in the society and organisations relate with each other, that their experience of social media programmes contributes to the way they relate socially with people or organisations, makes us confirm logically that intensive exposure of Nigerian youths to GDAIT makes them more alert to violent acts and violent verbal exchanges and compels them to durably face social media violence, a situation which George Gerbner's cultivation theory predicts will prompt these youths to ultimately accept such manifestations of social media violence as being normal and the contents of the messages so true as to reproduce them, for example, fake news.

Research question 3

- 16 "How do Nigerian youths exposed to GDAIT perceive social relations ? Is it as human, personal and warm relationship, or as impersonal, electronic, distant relationship devoid of sensitivity or emotion ?"

Data analysis

- 17 From the 7 corresponding survey questions (11, 12, 14, 15, 16, 17, 18), these results were obtained:
- i. 53.2% (67 of 126) agree that some of the programmes they subscribe to contain violent acts and violent verbal exchanges
 - ii. 88.9% (112 of 126) perceive that members of the society are always fighting over one thing or the other
 - iii. 69.1% (87 of 126) disagree that people around them do not quarrel with one another; in other words, they perceive that people around them quarrel with one another
 - iv. 73% (92 of 126) agree that people in their community say negative things about one another
 - v. 50.8% (64 of 126) agree that members of their family disagree with one another most times
 - vi. 96.8% (122 of 126) agree that their access to social media programmes makes them more conscious of how people in the society and organisations relate with each other.

Data interpretation & answer to research question 3

- 18 We may safely affirm that Nigerian youths exposed to GDAIT perceive social relations as somewhat inhuman, impersonal, cold, electronic and as distant relationship devoid of sensitivity or emotion for the following reasons which emerged from the survey data

:

- majority of respondents witnessed unfriendly social relations on social media
- bad news and gossips sell better as news, so, they are the information mostly shared on social media platforms
- *geographical distance* separating interlocutors and *hiding under anonymity* protect them from violent physical response to social media aggression
- youths' preference for text messaging rather than voice calls because of their ease and speed of communicating by text message on smartphone, as against older Nigerians who cherish direct personal and warm voice calls to relatives and friends
- on smartphone, the *forward* to function key used by social media as strategy to communicate fast and wide discourages personal input to information received before sharing it, making social relations rather cold and mere distant electronic communication
- ease and efficiency of mobilising and rallying people for political or social activism, using social media applications
- ease and success of using social media platforms for online petitioning and opinion surveys boost the instrumentalisation or weaponisation of social relations at the expense of sincere human contact without which almost no socialisation was feasible before the advent of GDAIT.

Research question 4

- 19 “Do youths exposed to GDAIT perceive social relations positively or negatively?”

Data analysis

- 20 From the 6 corresponding survey questions (11, 12, 14, 15, 16, 17), these results were obtained :
- i. 53.2% (67 of 126) agree that some of the programmes they subscribe to contain violent acts and violent verbal exchanges
 - ii. 88.9% (112 of 126) perceive that members of the society are always fighting over one thing or the other
 - iii. 69.1% (87 of 126) disagree that people around them do not quarrel with one another; in other words, they perceive that people around them quarrel with one another
 - iv. 73% (92 of 126) agree that people in their community say negative things about one another
 - v. 50.8% (64 of 126) agree that members of their family disagree with one another most times.

Data interpretation & answer to research question 4

- 21 The total concordance among survey results which in majority present social relations on social media as negative shows that youths exposed to GDAIT perceive social relations negatively.

Research question 5

- 22 “Do Nigerian youths exposed to GDAIT feel induced by perceived manifestations of social media-based violence to act or behave in similar ways more than those who are not exposed to the social media ?”

Data analysis

- 23 From the unique corresponding survey question 19, this result was obtained:
84.1% (106 of 126) agree that their experience of social media programmes contributes to the way they relate socially with people or organisations (more cautious and apprehensive; bolder or more aggressive; freer or less constrained because of anonymity and safe physical distance between them and the people, etc).

Data interpretation & answer to research question 5

- 24 The high score for the answer to the unique and direct research question makes it unambiguous that Nigerian youths exposed to GDAIT feel that they are induced by perceived manifestations of social media-based violence to act or behave in similar ways more than those who are not exposed to social media. This result supports George Gerbner's Cultivation theory and Bandura's Observational Learning theory which, simply put, state that youths cultivate attitudes likened to what they learn from the mass media – viewers learn and imbibe certain behaviours by observing and copying people from the mass media.

Research question 6

- 25 “Is there any relationship between youths' demographic variables (age, gender, socio-economic background) on the one hand ; and exposure to social media-based violence and their perception of social relations on the other hand ?”

Data analysis

- 26 From the 6 corresponding survey questions (1, 2, 3, 6, 7, 20), these results were obtained:
- i. 94.4% (119 of 120) are aged 20 years and above
 - ii. 54.8% (68 of 124) are male, 45.2% (56) female
 - iii. 69.4% (79 of 114) are 400 level or 500 level undergraduates
 - iv. 68.8% (88 of 128) use their smartphones 7 days a week
 - v. 43.3% (55 of 127) spend 4 or more hours in performing their activities on their smartphone
 - vi. The type of apartment mostly occupied by respondents are self-contained room 27.6% (35 of 127), 3-bedroom flat 23.6% (30), 2-bedroom flat 18.1% (23).

Data interpretation & answer to research question 6

- 27 Judging by the responses, the demographic profile of youths who are exposed to social media-based violence with the exposure affecting their perception of social relations is: mostly a 4th or 5th year male undergraduate aged 20 years and above, who has a

smartphone and uses it for at least 4 hours daily, 7 days a week. This typology is also valid for the female gender which scored 45.2% in the classification by gender. The type of apartment occupied has no palpable incidence on the profile. This profiling can help governments and social workers to control and manage political and social activism in order to prevent any social disorder triggerable by fake news.

Research question 7

- 28 “Does exposure of Nigerian youths to social media-based violence make them cultivate cautious or offensive attitudes while relating with people and organisations ?”

Data analysis

- 29 From the 3 corresponding survey questions (13, 18, 19), these results were obtained:
- i. 61.2% (74 of 121) pay attention to violent acts and violent verbal exchanges contained in the programmes they subscribe to
 - ii. 96.8% (122 of 126) agree that their access to social media programmes makes them more conscious of how people in the society and organisations relate with each other
 - iii. 84.1% (106 of 126) agree that their experience of social media programmes contributes to the way they relate socially with people or organisations (more cautious and apprehensive; bolder or more aggressive; freer or less constrained because of anonymity and safe physical distance between them and the people, etc).

Data interpretation & answer to research question 7

- 30 The survey questions were to determine how alert respondents are to their exposure to social media-based violence and if or not this alertness makes them cultivate cautious or offensive attitudes while relating with people and organisations. The responses are direct and corroboratively provide the unequivocal answer that Nigerian youths are conscious of and alert to social media-based violence and this makes them cultivate cautious or offensive attitudes while relating with people and organisations.

Research question 8

- 31 “Does exposure of Nigerian youths to GDAIT affect their judgement or assessment of the possibility or the veracity of certain events and human actions ?”

Data analysis

- 32 From the 4 corresponding survey questions (5, 8, 10, 18), these results were obtained:
- i. The 3 most performed activities with their smartphone are information sourcing/news cast 90.6% (116 of 128), educational programmes/tips 75.8% (97), message delivery 75% (90)
 - ii. The sources of activities performed with smartphone are mainly Whatsapp 79.4% (100 of 126), Internet 70.6% (89), Facebook 62.7% (79)
 - iii. 74.4% (93 of 125) try to verify the source of the messages and programmes they receive from social media or online applications

iv. 96.8% (122 of 126) agree that their access to social media programmes makes them more conscious of how people in the society and organisations relate with each other.

Data interpretation & answer to research question 8

- 33 Whatsapp, Internet and Facebook constitute almost the exclusive platforms on which a crushing majority of respondents perform social media activities with information sourcing/news cast, educational programmes/tips and message delivery topping the list of activities. With 74.4% of them stating that they try to verify the source of messages received, it means the youths often ensure they are on Whatsapp, Internet or Facebook which unfortunately are the greatest carriers and propagators of *fake news* known to be consciously prepared and spread by the originator with the intention of influencing the judgement of the receivers of the information. It follows then that the exposure of Nigerian youths to GDAIT affects their judgement or their assessment of the possibility or the veracity of certain events and human actions, especially as these half-baked youths in terms of technology come as well from a small infrastructure country like Nigeria often naively attribute infinite powers and possibilities to GDAIT which still remain mysterious to them!

8. DISCUSSION OF FINDINGS : Consequences of GDAIT for Small Infrastructure Countries like Nigeria

- 34 Survey data analysed revealed that GDAIT has incidence on small infrastructure countries like Nigeria. This concerns the socio-cultural, political and economic consequences of the exposure of Nigerian youths to GDAIT, having in mind that Nigeria as a small infrastructure country, lacks effective means to curb or control the negative influences of these technologies on her people and society.
- 35 Electronic media contents developed with geospatial data and artificial intelligence (text, photo, audio, video and programmes) are accessed and disseminated by youths through social media and online applications such as Facebook, Whatsapp, Instagram, Twitter, YouTube, Imo, Mobile TV. These platforms unwittingly propagate **fake news, hate speeches, audiovisual manipulations and falsifications aimed at building conspirational theories or skewed points of view which may promote insurgency, ethno-religious and personal hatred, political propaganda and radicalism leading to terrorism and other forms of gratuitous violent acts and aggressions**. Several authors have identified Social Media as the “Oxygen” for Radicalisation. Confirming this view, Lemack and Hall (2013) consider the Internet as the single most important and dangerous innovation since the terrorist attacks of September 11, 2001.
- 36 Considering that a Nigerian in Poland stole his identity, that Nigeria was less than 2 months from her General Elections with the inherent political effervescence, and the low literacy/educational level of the population, Professor Wole Soyinka, Nigerian, and Nobel Prize laureate in Literature, on a Channels TV forum for checking fake news in Nigeria reported on 10th January 2019, warned that **"fake news is extremely dangerous and if we are not careful, World War III will be started by fake news and that fake news will probably be generated by a Nigerian!"** (<https://www.youtube.com/watch?v=AC0EhHrKqJg>). This underscores the gravity and ubiquity of fake news phenomenon in countries that lack the necessary infrastructure to curb

the negative outcomes of GDAIT. Nigeria's experience is critical and pathetic because up to less than 3 months before the Feb 16, 2019 presidential election, political opponents were still exploiting Nigerians' technological naivety and the unfounded power and possibilities they arrogated to hologramme technology, to spread fake news about Nigeria's president Muhammadu Buhari being dead from protracted illness and his political party replacing him in official functions, through a cloning technology, with a certain Jibril from Sudan! After months of neglecting "the joke", the recontesting president was forced by the rising and menacing belief in this fake news by the population, to personally debunk it on TV camera on 2nd December 2018 while in Poland for the COP24 Conference.

- 37 Character damage, online harassments and false promotions of persons and businesses are on the rise and can hardly be controlled by the developers of the applications and platforms through which these toxic media contents are spread, leading to loss of credibility, reliability and authority vis-à-vis conscientious stakeholders of the journalism profession, especially as the fake news phenomenon has revealed that receivers of media content merely share the messages without verifying their genuineness or probity.
- 38 The massive deployment of technologies that use the big data and algorithms, coupled with the unrestrained access to mobile and semi-mobile internet-connected devices magnifies the social and professional impacts of these emerging practices in technologies and communication for development. Parental supervision of youths becomes drastically limited due to the use of portable online devices which youths carry and use in secluded areas. So, they are more unrestrictedly exposed to the consumption and spreading of electronic media violence. With recent developments in geospatial data and artificial intelligence, it is possible to profile and target specific population groups, develop specific and ephemeral messages that will lure youths into certain delinquent behaviours without the knowledge of parents, neighbours, or relatives and without leaving trace of what transpired, the message sent or the sender of the message (cf Cambridge Analytics' manipulatory implication in the USA 2016 presidential election).
- 39 The study indicates that Nigerian youths use GDAIT voraciously in almost all their lives activities. Since these emerging technologies have eliminated the financial, spatial and temporal (time) barriers formerly existing between the acquisition of print and electronic media, the nature and content of what is consumed and spread as external information have radically changed and escalated. Consequently, there is upsurge of youthful exuberances, as youths can easily publish and widely express themselves positively or negatively through these electronic media, unfettered by the financial and editing constraints hitherto imposed on writers and producers who use the conventional publishing companies and channels. With today's information communication technologies using geospatial data and artificial intelligence, audios, videos, photos and texts can be produced, updated and uploaded to the internet for mass consumption in record time. This increases the pace and contents of gainful developments in diverse sectors of human activity. Conversely however, these laudable technologies also permit the pollution of minds and disruption of social relations in record time because social media has expanded public reach and has thus become a tremendous outreach tool that can widely disseminate any issue of public concern and give it an unprecedented level of broadcast. Scholars have confirmed that a lot of

violence is incorporated into circulated mass media messages and programmes (Singer & Singer 2001). As Sylwester (2001) and Demnievska (2018) rightly observed, the computer age has revolutionalised the mass media and this is a kind of cultural revolution amongst the youths.

9. CONCLUSION AND RECOMMENDATIONS

40 GDAIT contribute positively and negatively to development in diverse sectors of human activity. In small infrastructure countries with little or no suitable means to fight the bad influence, the latter appears to defeat the joys brought by the good influence. Since we cannot arrest progress, we recommend the following measures to temper the negative influence :

- Students in tertiary education are the future leaders, and over 65% of the voting population in Nigeria are youths who are often inadvertent victims of subtle manipulations through fake news in all its ramifications. So, to secure Nigerias's future, it is imperative to continue to evolve more effective ways to fight fake news to the barest minimum as it is the main culprit in the disadvantages of GDAIT. Culprits caught should be punished decisively to deter would-be culprits.
- Use of information and communication technology should be taught at all levels of education so that Nigerians can develop critical minds to distinguish what GDAIT can and cannot do.
- Mainstream media houses and agencies should continue to establish platforms to check fake news emanating from social media.
- The law courts must enforce existing laws to punish the various forms of fake news and impersonation while legislators should pass more effective bills aiming to dissuade fake news or disinformation

BIBLIOGRAPHY

Adaja, T.A. and Ayodele, F.A (2013). Nigerian Youths and Social Media: Harnessing the Potentials for Academic Excellence. *Kuwait Chapter of Arabian Journal of Business and Management Review Vol. 2, No.5; Jan.* On line : http://arabianjbmr.com/pdfs/KD_VOL_2_5/8.pdf

Bandura, A. (1994). Social Cognitive Theory of Mass Communication. In J. Bryant and D. Zilman (eds). *Media Effects: Advances in Theory and Research*, Hillsdale; NJ: Erlbaum. pp. 61-90

Boyd, D. M., and Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, vol. 13, 210-230.

Corner, J. And Hawthorn, J. (1980). *Communication studies. An Introductory Reader*. London: Edward Arnold

Christakis, N. A., and Fowler, J. H. (2010). *Connected: The surprising power of our social networks and how they shape our lives*. London: Harper Press.

- Demnievska, E. (2018). The UNESCO Courier • July-September 2018 | 3, pp1-72
- Folarin, B. (2002). Theories of Mass Communication in Adaja, T.A. and Ayodele, F.A. *Nigerian Youths and Social Media: Harnessing the Potentials for Academic Excellence. Kuwait Chapter of Arabian Journal of Business and Management Review* Vol. 2, No.5; Jan. 2013. On line : http://arabianjbmr.com/pdfs/KD_VOL_2_5/8.pdf
- Gerbner, G and Gross L, (1976) in Onwubere, C.H. *Exposure of Nigerian Children to Television and Video Violence and Their Perception of Social Relation*. Germany: Lambert Academic Publishing GmbH & co KG
- Gerbner, G., Gross, L, Morgan., M., and Signorelli, N. (1994). *Growing up with television : The cultivation perspective*. in Bryant J., Zillmann D., Oliver M.-B. *Media effects*, 100-127.
- Kaplan, A. M., and Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of social media. *Business Horizons*, Vol. 53: 59-68.
- Lemack and Hall (2013). In Siraj (2017) O. A. *Social Media and Social Vices: Curtailing Youth Violent Extremism through MIL Strategies*.
- McCarthy, J. (November 12, 2007). What Is Artificial Intelligence?
- McQuail, D. (2005) *McQuail's Mass Communication Theory*. Fifth Edition London. SAGE Publications
- Singer, D.G. and Singer, J. L. (2001). *Handbook of Children and The Media*. London: International Educational Publisher, Sage Publications
- Shrum, L. J. and Bischak, V. D. (2001). Mainstreaming resonance and impersonal impact: Testing moderators of the cultivation effects for estimates of crime risk. *Human Communication Research*, 27, 187-215
- Skillings, J. (2006). Getting Machines to Think Like Us. Cnet.
- Sylwester, R. (2001). *How Mass Media Affect Our Perception of Reality: A Monthly Column*. On line : <https://brainconnection.brainhq.com/2001/12/04/how-mass-media-affect-our-perception-of-reality-part-1/>

AUTHORS

CHIDINMA HENRIETTA ONWUBERE

National Open University of Nigeria, Abuja
 Emails : conwubere@noun.edu.ng ; chidi56@yahoo.co.uk
 Phone Nos : +2348023014372 ; +2348164071945

HENRY O. OSUJI

Hydroceutical Research,
 FNIEB Hydroceuticals, 35200 Rennes, France.
 Email : osuji.fnieb@wanadoo.fr
 Phone No : +33 670 230 025