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Influence of digital media literacy on health outcome of youths: A call for increased media education

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Abstract

Mass media influence on the attitude, behaviour and practices on users can never be overemphasised. Modern technologies have made it possible unrestrained access to one or more digital media, hence resulting in inappropriate use and abuse by media consumers. A major problem arising from excessive media use is the lack of knowledge and understanding of how the media works, called 'media literacy'. This has adversely affected people's analysis, judgment and consumption of media products with adverse effect on their health like - obesity, drug abuse, teenage pregnancies, bullying and aggression, low self-esteem, depression, negative body image, risky sexual behaviours, etc. This study examined the influence of media literacy on the health outcome of youths using Survey Research Method and questionnaire for data collection. Data generated from the study were analysed using *Descriptive Statistics* while the hypothesis testing was done using *One Way Analysis of Variance* (One-way ANOVA). Findings revealed that media literacy have great impact on the health outcome. The study recommended increased digital media literacy programmes and the inclusion of media education in the Nigerian curriculum to be taught from primary to tertiary levels of education.

Keywords: Media literacy, media influences, media education, health outcome, youths

Introduction

The importance of literacy in societies can never be over emphasised. It is a catalyst that drives speedy, sustainable growth and development in modern society. According to the UNESCO (2019a) ^[19], literacy is a matter of dignity and human rights, which must be adequately addressed to give way to impactful development of the society. This sure lead credence to why the United Nations, worried about the low literacy level in the world at the time, declared 8th day of September annually as 'International Literacy Day' which has been observe since 1967 as a way of reemphasising the need for adequate literacy in the world.

According to UNESCO (2019b) ^[20], literacy goes beyond the narrow conventional meaning attributed to the concept - a set of reading, writing and counting skills. It is now a means of identification, understanding, interpretation, creation and communication in an increasingly digital, text-mediated, information-rich and fast-changing world. The benefits of literacy are enormous; enabling participation in labour market, improving child family health and nutrition, reducing poverty and expanding life opportunities.

Despite several campaigns in the promotion of literacy all over the world and with progress so far made; the attainment of full literacy still remains a big challenge. Notable among these areas requiring urgent intervention, is that of 'Media Literacy', an area of literacy that deals with the ability to access, analyze, evaluate, produce and effectively understand as well as utilised media contents.

The mass media are veritable tools used to inform, educate, entertain and influence members of the society toward positive social changes. However, in most cases, they also have some undesired effect on consumers (mostly youths) which influence their daily lives and how they view the world; an influence which Media-Smarts (2017) observed begins in infancy.

Top among the pending issues affecting media consumers mostly in developing countries is poor knowledge and understanding of how media works as well as how best to put them to use.

More so, the advancement in modern digital media technologies have made things more complex for media users; hence, Solmaz and Yilmaz (2012) identified two basic issues affecting media consumers as skills to effectively make use of these media technologies to access media content and skills, not only to understand the presented content but also to adequately evaluate it.

Consumers who are media literate do possess some thinking skills that help them become more critical while consuming media products. According to Kurt and Kürüm (2010), a typical media literate individual chooses and uses media on a purpose and tries to access valid and reliable information. This individual must necessarily be aware that messages in the media are constructed as a result of planned work and by which tools the media messages are constructed, indicates questioning behaviour with these characteristics.

Most media users especially in developing nations like Nigeria experience understandable difficulties in effectively analysing and appraising mass media contents due to the obvious lack of 'media education' in their educational curriculums as compared to most developed countries where it is fully incorporated in virtually all levels of education. In several instances, most people get to learn or know about mass media and the intricacies involved in the production of its contents only at tertiary education level, particularly if their studies are media related.

This pitiable situation and naivety among some media users is mostly responsible for the misinterpretation of media contents; hence resulting in inappropriate or abusive use of the mass media to suit their pleasures. Most challenging is the way some parents allow unrestricted use of digital media products in their homes. Most parents pay little or no interest to the nature of media contents their children are consuming. Thereby consciously or unconsciously exposing their children to some contents that are not suitable for their age, especially while their away from home. Since most children are not being taught how they can use the media, the likelihood of negative consequences, misused, misconception, misinterpretation and unwarranted reactions to media messages are mostly imminent.

According to Baker (2010), the 21st century media literacy is not only limited to mere understanding of the words or texts in pages of most media products, but it also includes the full understanding of the accompanied still and moving images. This require media consumers to have accurate understanding of the modern technologically driven mediums (digital media) use to communicate to large number of persons.

While one can attest to the fact that modernisation have brought about increased research on the impact of media influences on consumers behaviours globally, this study however pigeon holes such influences on health outcomes of youths in Nigeria, with emphasises on the attendant health implications of media literacy. As contended by Thornton (2017) [18], just having critical media literacy skills is not enough. Youth and adults alike must know how to apply these process skills to specific media messages. This is because the media plays a critical role in determining how each health issue is represented and how individuals represent themselves in this life-or-death arena for action.

Higgins and Begoray (2012) [9] also observed that a growing concern on the health outcomes of adolescents, while blaming the negative outcome on today's indecent media use which are affecting their health. Most young people

passively absorb or actively access misguided or altogether inaccurate health information gleaned through their steady engagement with electronic, print and digital media, such stable sedentary routines not only displace them from homework and hobbies, but also disturb their health status.

According to Media Literacy Now (2017), increased media use and lack of understanding of same have contributed adversely to several public health issues such as obesity, bullying and aggression, low self-esteem, depression, negative body image, risky sexual behaviour, substance abuse, among other problems. The social and health ills emanating from increased media use in this 21st century calls for urgent intervention by the government and relevant stakeholders on the development of skills and habits of media literacy among users. These skills include the ability to access media on a basic level, analyze it in a critical way based on certain *key* concepts, evaluate it based on that analysis and, finally, to produce media by oneself.

Media literacy helps the consumer of media products to be conscious of the impact of media on their lives and prepares them towards creative usage of the media. By so doing, they become aware of how the media influence their thinking, value system and judgement. Media literacy also helps consumers become critical and discerning receivers of media contents, giving them the understanding needed to identify or demand for quality media programmes, respond intelligently to media contents and manipulation as well as the ability to create their own media (Srampickal & Joseph, 2002) [17]. Ifeduba and Bolarinwa (2016) [10] added that media education and media literacy will help youths to learn how to develop and deconstruct media content appropriately.

Statement of the problem

According to UNESCO (2019b) [20], globally, at least 750 million youths lack basic literacy skills. This is however in exclusion of low-literate and low-skilled youth. As observed by UNESCO (2019a) [19], literacy challenges persist despite global efforts made to address them. The media has been identified as one of the areas that require adequate literacy.

The proliferation, ubiquity and increased dependence of digital media technologies like smart phones, computers internet enabled web blog radio and television streaming calls for serious concern. Media illiteracy has been implicated as one of the leading pending problems affecting digital media consumers (mostly in developing countries). This has to do with the abject paucity in knowledge and understanding of how these digital media technologies can be best put to use.

According to Media Literacy Now (2017), increased media use and lack of understanding of same have contributed adversely to several public health issues such as obesity, bullying and aggression, low self-esteem, depression, negative body image, risky sexual behaviour, substance abuse, among other problems. This poses a serious social and health concern requires urgent intervention of the government and relevant stakeholders on the need to develop skills and habits of media literacy among media consumers (particularly youths).

Unfortunately, the mass media mostly aim at persuading, influencing, entertaining informing, educating and mobilizing people through their messages without taking into consideration how media illiterates consume and interpret such messages especially from the digital media

source. Most consumers lack the knowhow to operate these digital media, given room for misuse. This is why digital media literacy; special skills required of a consumer to access media content with a critical eye, evaluating sources intended purposes, persuasion techniques and deeper meaning.

This study therefore seeks to establish the influence of digital media literacy on health outcome of youths i. In other words, how does digital media literacy influence health outcome of youths?

Objective of the study

The overall objective of this study is to examine how media literacy influences the health of youths. The specific objectives of this study will be to:

1. Ascertain whether youths appreciate and utilise modern mass media technologies.
2. Ascertain the most common mass media channel among youths.
3. Find out if digital media contents affects the health outcome of youths.
4. Find out whether the level of education of youths influence their digital media literacy.
5. Find out how media education can help in achieving digital media literacy and positive health awareness among youths.

Research questions

1. To what extent do youths utilise modern mass media technologies?
2. What is the most common digital media channel among youths?
3. To what extent do digital media contents affect the health outcome of youths?
4. To what extent does the level of education of youths influences their digital media literacy?
5. To what extent can media education help in achieving digital media literacy and positive health outcome among youths?

Research hypothesis

H₁The level of education of youths significantly influence their digital media literacy.

Theoretical framework

This research work adopted the Social Learning Theory by Bandura (1977). According to Bandura (1977), people learn from one another via observation, imitation, and modelling which can also occur while using the media. When youths are exposed to media contents, they observe and make attributions for their actions which lead to the development of cognitive scripts.

Cantor (2003) ^[4] pointed out that people learn from direct experience with others or through the media. Social Learning Theory assumes that people and their environments interact continuously (Learning-Theories.com, 2016, p. 1). It is important to recognize that SLT clearly addresses both the psychosocial factors that determine health behaviour and strategies to promote behaviour change. According to Bandura (1977) most human behaviour is learned observationally through modelling: from observing others, one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action.

Bandura (1977) added that learning would be exceedingly laborious, not to mention hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. Fortunately, most human behaviour is learned observationally through modelling: from observing others one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action.

SLT helps us understand the level of influence digital has on learners and the level of influence derived or perceived by others as it relates to learning about health. According to Goetzman (2014) ^[7], learning is no longer limited to take place only in traditional setting or 'real world'. The introduction, utilisation and expansion of the internet have given easier and faster access to learning through the availability of the digital media which offers. The digital media offers a sense of connectivity and collaboration with common expectations, shared goals, values and mutual interdependence to those who participate in it even more than conventional media.

Literature review

The importance of literacy cannot be over emphasised. It is the primary skills that help one to effectively understand and actively participate in the social life which is needed to advance quality of lives. This is why the United Nations once declared a state of emergency on literacy and dedicated 1990 as "international literacy year" to increase the interest in some key areas that requires urgent literacy including media literacy (Kaya, Uludağ, & Çalışması, 2017) ^[11].

Mass media influence on the culture and health-related behavioural outcome of youths has prompted health communicators, educators and health promotion practitioners cum researchers to turn toward media literacy approaches (Gonzalez Glik, Davoudi & Ang, 2004) ^[8]. The much needed ability to access, analyze, evaluate, and convey information in various forms of media including print and non-print requires media literacy (Akbarinejad, Soleymani & Shahrzadi, 2017) ^[1].

Historically, the term 'media literacy' can be traced to a famous Canadian Scholar Marshall McLuhan in 1965 when he published his famous piece, 'the medium and the messenger'. Media literacy was said to mean the ability (innate or acquired) to access, analyze, evaluate, and convey information in various forms of media including print and nonprint is media literacy (McLuhan, 1965) ^[14].

To avoid the semantic confusion between media literacy and media education, it is imperative to state the distinction between these two concepts. As pointed out by Media Smarts (2017), media education is simply the process of learning media literacy skills. While media education is the process, media literacy is the outcome (product). According to Buckingham (2007), media education is the process and media literacy is the outcome. It therefore means that media education is a process of acquiring media literacy. In 1993, a gathering of the media literacy community in the United States developed a definition of media literacy as the ability to access, analyze, evaluate and create messages in a wide variety of forms.

Media Literacy is a key 21st century skill that teaches students to apply critical thinking to media messages and to use media to create their own messages. Media Literacy is critical to the health and well-being children, as well as to their future participation in the civic and economic life of

our democracy. The knowledge of media literacy helps to the following ways: 1. expand the concept of literacy, as today’s messages come in many forms and literacy can no longer refer simply to the ability to read and write 2. It offers a solution to public health issues, such as body image issues and substance use, exacerbated by toxic media messages and 3. It empowers all people to engage in a global media environment (Media Literacy Now, 2017). Bergsma and Carney (2008) [2] added that this kind of education must necessarily help to advance health knowledge among youths and it involves them in a critical examination of media messages that promote risky behaviours and influence their perceptions and practices.

Although there are few instances where adolescents explore audio-visual media to give them control of an important information stream about their own health and well-being. By this the knowledge of the media helps young children acquire health literacy (Rich, 2012) [16]. The attainment of health literacy through media literacy is important as it helps people to obtain, process, and understand basic information and services needed for appropriate decisions regarding their health (Akbarinejad, Soleymani & Shahrzadi, 2017) [1]. An empirical evidence from a study by Kaiser Family Foundation (2010) revealed that with the proliferation of technology allowing nearly 24-hour media access, there has been a drastic increase in the amount of time children and youth spend with the media. It is estimated that children between the ages 8 and 18 spends an average of 7 hours and 38 minutes per day with entertainment media outside of school.

Media literacy can lead to the development skills and competencies that enable people to gain access to, understand and apply health information to positively influence their own health and the health of those in their social environments which is called health literacy. This is why media education should be promoted to help advance health of members of the society (Levin-Zamir & Bertschi, 2018) [12]. According to Bergsma and Carney (2008) [2], media literacy education to promote health among youth involves them in a critical examination of media messages that promote risky behaviors and influence their perceptions and practices.

Hence, Bradford and Yates (1999) [3] suggested an increase in media literacy training to help young people combat the mixed health messages found in the media. Through media literacy they can learn to evaluate critically the health messages in various media outlets. This is because when young people realize how the media package messages, they will be more aware of what to look for and how to interpret what they see and hear.

Research methodology

This study adopted the survey research method in addressing the research objectives and answering the questions posed by the study. It is one of the most frequently used methods in humanities which helps the researcher to draw up a set of questions around a particular subject matter to which members of a given population are requested to react or provide answers to (Sobowale, 2008 cited in Chukwuma, Ezeh & Umuze, 2016) [5]. Survey research, according to Osuala (2005) [15], attempts to determine the incidence, distribution and interrelations among variables and focuses mostly on people, their beliefs,

pinions, motivations and behaviour about a particular subject matter.

The population of this study is Cross River State, projected as at 2019 to four million, twenty one thousand, two hundred and forty five (4,021,245). Adopting the Multi-Stage Sampling procedure, a sample of four hundred (400) was drawn from the entire population using the Taro Yamani’s formula, the proportionate sampling method was used to select the actual number of respondents per senatorial district for the study. This is however because the three senatorial districts differ in size in the population. Purposive sampling method was used to select the actual respondents who are youths between the ages of 12 – 25 across the three senatorial districts of the State – South, Central and North who were used for this study. Data analysis is done using descriptive statistics, while hypothesis is tested using *one way Analysis of Variance*.

Data presentation and analysis

Distribution of respondents by gender and educational qualifications

Responses/Options	Number of Respondents	Percentage
1.1 Gender		
Male	260	65.7%
Female	136	34.3%
Total	396	100%
1.2 Educational qualification		
FSLC	8	2.0 %
SSCE	176	44.4 %
ND	34	8.6 %
HND	21	5.3 %
First Degree	105	26.5 %
PGD	22	5.6 %
MA / M. Sc	19	4.8 %
PHD	11	2.8 %
Total	396	100

Source: Fieldwork (2019)

Table 1 indicates that majority of the respondents who participated in this study were males and mostly SSCE holders.

Table 2: Frequency analysis of responses on digital media literacy and health outcome

Responses/Options	Number of Respondents	Percentage
2.1 Whether respondents use digital media:		
Yes	368	92.9 %
No	28	7.1 %
Undecided	0	0%
Total	396	100
2.2 Which receiver respondents access digital media?		
Computer	100	25.2
Smart Phones	270	68.2
Video Game	0	0%
Others	10	2.5
Uncertain	16	4.1
Total	396	100%
2.2 How often respondents make use of digital media:		
Regularly	153	38.6 %
Occasionally	124	31.4 %
Rarely	84	21.2 %
Uncertain	35	8.8 %
Total	396	100%

2.3 Whether respondents receive health information through the digital media:		
Yes	372	93.9 %
No	24	6.1%
Undecided	0	0%
Total	396	100%
2.4 Whether respondents do find the health information received from digital media messages useful		
Yes	344	86.9 %
No	51	12.8 %
Undecided	1	0.3%
Total	396	100%
2.5 The digital media outlet respondents most preferred		
Social Media (Facebook, Whatsapp, Twitter, etc)	206	52.2%
Web pages / Websites (online newspapers, etc)	102	25.7%
Video Games	19	4.7%
Streaming Radio/Television	20	5.0%
Electronic books	32	8.2%
Others	7	1.7%
Undecided	10	2.5%
Total	396	100%
2.6 Whether respondents believe and trust the contents and health information from these media		
Yes	279	70.0%
No	95	24.0%
Undecided	25	6.0%
Total	396	100%

2.7 Whether respondents learn about how to use the most of these digital media in School		
Yes	40	10.1%
No	320	80.8%
Undecided	36	9.1%
Total	396	100%
2.8 Whether respondents will like to be taught how best to use the digital media		
Yes	380	95.9%
No	11	2.7%
Undecided	5	1.4%
Total	396	100

Source: Fieldwork 2019

Data from Table 2 reveals that majority of the respondents have access to the digital media regularly through their phones. It also shows that majority of the respondents also utilise the digital media channels for health information, especially through the social media, and they believe and trust on the health information.

Hypothesis I

H₁The level of education of youths significantly influence their digital media literacy.

H₀: The level of education of youths does not significantly influence their digital media literacy

To test this hypothesis, one-way analysis of variance (ANOVA) was applied. The F-ratio and LSD tests were used to test for significance. The main effect results are shown in Table 2 Above:

Table 3: One-way ANOVA of residents’ health awareness by their level of media literacy

Level of Media Literacy	N	Mean	Std. Deviation	Std. Error	Minimum	Maximum
FSLC	8	6.250	3.454	1.221	2	10
SSCE	176	7.296	2.524	.190	2	11
ND	34	7.353	2.741	.470	2	11
HND	21	7.000	2.366	.516	2	11
1 st Degree	105	7.371	2.207	.215	2	11
PGD	22	6.682	1.756	.374	2	10
Masters	19	7.368	2.241	.514	2	11
Ph.D	11	7.636	2.336	.704	4	11
Total	396	7.263	2.410	.121	2	11

Source of Variation	Sum of Square	DF	Mean Square	F-value	P-value
Between Groups	20.532	7	2.933	.500	.834
Within Groups	2274.155	388	5.861		
Total	2294.687	395			

*Significant at .05 level. P<.05

From Table 3, those who had PhD obtained the highest mean score ($\bar{x} = 7.636$), followed by those who had first degree ($\bar{x} = 7.371$) while the least were those who had FSLC ($\bar{x} = .834$) associated with computed F-value (.500) is greater than .05. Consequently, the null hypothesis was rejected. This means that the level of education youths has significant influence on their media literacy. Hence, the results of the LSD tests are not necessary.

Discussion of findings

This study was carryout, Nigeria to ascertain the influence of digital media literacy on the health outcome of youths. A total of 400 copies of questionnaire were distributed in the area of study using purposive sampling technique, out of which the researchers were able to retrieve 396 copies for analysis.

The study finds out that youths appreciate and utilise digital

media technologies in their day to day activities. This as a total of 368 (92.9%) of respondents who participated in the study were of the opinion that they appreciate and utilized the digital media technologies, on about 28 (7.1%) were of contrary opinion. Majority of the respondents used the digital media regularly. From the study, 153 (38.6%) went for regularly, 124 (31.4%) use it occasionally, 84 (21.2%) rarely use the digital media, only 35 (8.8%) were uncertain.

Data from the study shows that Social media (which includes Facebook, Whatsapp, Instagram, Twitter, etc) is the most common digital media channel popularly used among youths. About 206 (52.2%) of the respondent like and engage more on the social media, 102 (25.7%) use web pages/websites and blogs to get information the more, 32 (8.2%) read electronic books mostly, 20 (5.0%) love to use online radio/television via streaming, only 19 (4.7%) use video games.

According to Mahoney (2017) [13], in today's climate of uncertainty about the veracity of news in general, information about "good" health sources can play an important role in our personal well-being. The myriad of media does make that a challenge so becoming knowledgeable about media literacy can assist us greatly in making more informed choices

The majority of the respondents 372 (93.9%) were of the view that they usually get health related information via the favourite digital medium, only 24 (6.1%) held contrary opinion. Data from the study revealed that knowledge of media literacy is very important among youths, this is as majority of the respondents 344 (86.9%) are influenced by the contents of the digital media which affect the decisions they make towards their health. This finding validate the position of Akbarinejad, Soleymani and Shahrzadi (2017) [1], that the media literacy helps people develop the capacity to obtain, process, and understand basic information and services needed for appropriate decisions regarding health.

Results from the Hypothesis testing revealed that the levels of education of respondents influence their level of media literacy. From Table 2, those who had PhD obtained the highest mean score ($\bar{x} = 7.636$), followed by those who had first degree ($\bar{x} = 7.371$) while the least were those who had FSLC ($\bar{x} = .834$) associated with computed F-value (.500) is greater than .05. Consequently, the null hypothesis was rejected. This means that the level of education of Cross River State youths has significant influence on media literacy. Hence, the results of the LSD tests are not necessary.

Finding from the study also reveals that respondents are not tutored on how best to put media to use in their respective schools, as about 320 (80.8%) were of the view that they do not teach them about the media in school, only about 40 (10.1%) were of contrary view. As such, majority of the respondent, 380 (95.9%) were of the opinion that they could like to be taught in school. As also pointed out in Thornton (2017) [18], just having critical media literacy skills is not enough. Youth and adults alike must know how to apply these process skills to specific media messages, which was why Bradford and Yates (1999) [3], had earlier suggested an increase in media literacy training to help teach young people on how to combat the mixed health messages found in the media and learn how to evaluate critically the health messages in various media outlets. Media literacy help individual help achieve health literacy; which has to do with the knowledge and competences of persons to meet the complex demands of health in modern society. According to Bergsma and Carney (2008) [2], media literacy education though effective, is still at infancy.

Conclusion

This study concludes that media literacy influence the health outcome of youths. Hence, the importance of achieving media literacy among youths was reemphasised in this study, especially with the advancement and proliferation of modern media technologies, it is pertinent to develop a wider set of media literacy skills to help the society, particularly the youth understand how best to put the mass media to use. This is to enable youths comprehend the intrigues involved in making media contents and teach them how to effectively utilize these digital media tools to design and distribute their own messages without misuse of it.

It is found that digital media is common among youths who

mostly access the social media using their smart phones and personal computers. The digital media are very popular, appreciated and heavily utilized among youths and their level of education also influenced their media literacy. This is why media literacy is highly needed develop critical thinking skills that can empower youths to make informed healthy decisions as well as effectively analyse and evaluate media contents because most youths consume, believe and trust contents or messages they see in their favourite digital medium.

Youths need to be properly educated about the reality that goes on in the media and learn how to access, analyze and interpret media messages, create media to help young people recognize the limitations and problems of our current media system. This study make a case for the introduction and full implementation of media education in the curriculum of all levels of education in Nigeria to help individuals have a proper understanding of the media and create proper meaning as well as understanding of media contents.

Recommendations

Based on the findings of study, the following recommendations emerged:

1. There should be increased awareness programmes to efficiently improve youths knowledge and behavioural intention in dealing with digital media messages
2. The government should Introduce and fully implement the inclusion of media literacy in the Nigerian Educational Curriculum, especially in primary and secondary levels. The youths need theory-based media literacy education programme to improve on their health literacy.
3. Organizations dealing with various digital media (film, games, and TV) should look into showing their viewers the reality that goes on in the media to avoid viewer from having a misconception of media messages.
4. Digital media should be used to disseminate health information and health programmes targeted at young people.
5. There should be increased access to digital media in the rural areas to improve digital literacy and engagement among rural dwellers.

References

1. Akbarinejad F, Soleymani M.R, Shahrzadi L. The relationship between media literacy and health literacy among pregnant women in health centers of Isfahan, *Journal of education and health promotion*. 2017; 6:17. DOI: 10.4103/2277-9531.204749.
2. Bergsma L.J, Carney M.E. Effectiveness of health-promoting media literacy education: a systematic review, *Health Education Research*. 2008; 23(3):522–542
3. Bradford L, Yates B.L. Media Literacy: A Health Education Perspective, *Journal of Health Education*. 1999; 30(3):180-184
4. Cantor J. Media violence effects and interventions: The roles of Communication and emotion, In J Bryant D. Roskos-Ewoldsen and J Cantor (Eds), *Communication and Emotion: Essays in Honor of Dolf Zilman*. Mahwah, N.J: Lawrence Erlbaum Associate, 2003.
5. Chukwuma N.A, Ezeh N.C, Umuze N.A. Audience perception of NTA's coverage of the 2015 presidential

- election campaign, *The Nigerian Journal of Communication*. 2016; 13(1):175-190.
6. Farlex In. Sampling. Accessed on from, 2017.
<http://medical-dictionary.thefreedictionary.com/Accidental+sampling>
 7. Goetzman M. Digital Influences: Social Learning Theory. Accessed on 17 September, 2019 from, 2014.
<http://goetzman.co/blog/digital-influences-social-learning-theory/&hl=en-NG>
 8. Gonzales R, Glik D, Davoudi M, Ang A. Media Literacy and Public Health: integrating theory, research, and practice for Tobacco control, *American Behavioural Scientist*. 2004; 48(2):189-201.
 9. Higgins J.W, Begoray D. Exploring the Borderlands between media and health: Conceptualizing 'Critical media health literacy', *Journal of media literacy education*. 2012; 4(2):136-148.
 10. Ifeduba, Bolarinwa. Expanding media arena, communication skills and youth participation in newspaper discourse, *Journal of media and Communication Studies*. 2016; 8(2):15-24.
 11. Kaya S.D, Uludağ A, Çalışması B. The relationship between the health and media literacy: A field study, 2017.
 12. Levin-Zamir D, Bertschi I. Media health literacy, health Literacy, and the role of the social environment in Context, *International Journal of environmental research and public health*. 2018; 15(8):1643.
 13. Mahoney M. Media literacy plays role in health, well-being, Accessed on 17 August, 2019 from, 2017.
<https://www.tallahassee.com/story/life/wellness/2017/06/12/media-literacy-plays-role-health-well-being/388739001/>
 14. McLuhan M.M. *The medium and the messenger*, New York: Ticknor & Fields, 1965.
 15. Osuala E. *Introduction to research methodology*. Onitsha: African-First publishers, 2005.
 16. Rich M. Health Literacy via Media Literacy: Video Intervention/Prevention assessment, *American behavioural Scientist*, 2012; 48(2):165-188.
 17. Srampickal J, Joseph L. *Media education* Mumbai: Better Yourself Books, 2002.
 18. Thornton B. Health and media literacy Accessed on 17 August, 2019 from, 2017.
https://www.consortiumformedialiteracy.org/index.php?option=com_content&view=article&id=4&Itemid=34
 19. UNESCO. International literacy day. Accessed on 17 August, 2019 from, 2019a.
<http://en.unesco.org/themes/internationalliteracyday>
 20. UNESCO. Literacy Accessed on 17 August, 2019 from, 2019b.
<http://en.unesco.org/themes/literacy>