

**NEWSPAPER FRAMING OF 2014 EBOLA OUTBREAK IN NIGERIA:
ASSESSING THE NEXUS BETWEEN AUDIENCE PERCEPTIONS AND
MESSAGE INFLUENCE**

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**FACULTY OF ARTS AND SOCIAL SCIENCES
UNIVERSITY OF MALAYA
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**THESIS SUBMITTED IN FULFILMENT OF THE REQUIREMENTS
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**FACULTY OF ARTS AND SOCIAL SCIENCES
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ABSTRACT

Having examined series of studies on media framing of health issues, a knowledge gap was noticed. Perhaps because framing of issues involves more than just the media but also other players most especially the audience, it has been very difficult to integrate the frames in media reports of a health outbreak with the framing influence on audience perceptions of and reactions to the issue framed all in just one study. The challenge has been complex theoretical explanations as well as methodological approaches involved. This study therefore employed triangulation approach in theoretical underpinning, methods of data gathering, and methods of data analyses. The approach was required to verify the media framing of Ebola outbreak in Nigeria in one hand and the audience perceptions and reactions towards the framed Ebola reports on the other hand. Discussions on the central focus of this study were grounded on some media effects theories, which explain media-audience relationship on the premises of message influence. The theories, agenda-setting, framing and priming were, based on their interrelated and complementary postulations, used to explain the layers in media-audience relationship process. Through content analysis of two daily newspapers reports of Ebola during the outbreak in Nigeria, this study established the framing patterns employed while reporting the outbreak as well as the preponderant frames used. Ten frames were found prominently emphasised in the reports while two (containment and fatality frames) were made salience in almost half of the total reports on the outbreak. The outcome was used to justify the priority upheld between the competing newspapers interests to sell and the media social responsibility towards containing the outbreak. The much capitalisation on containment frame portrayed the newspapers purposive interest to free the society of the outbreak, a reflection of the media social responsibility role. The priority, which pose no threat to professional journalism was not only much appraised but also recommended for media involvements in all health crises. This finding was not only

confirmed but also extended further by opinion survey of 400 newspaper audience. The survey, which was quantitatively analysed through SmartPLS confirmed a significant relationship between the framed newspaper reports of and the audience perceptions and reactions to the outbreak. It further established that audience exposure to and audience perceptions of the framed health reports are significant factors of the change in audience behaviours towards the outbreak. Based on some limitations in the scope as well as methodological approaches, this study therefore recommended that future studies engage holistic perspectives towards studying health outbreaks.

ABSTRAK

Penelitian ke atas pembingkai media tentang isu kesihatan telah memperlihatkan suatu jurang dalam kajian ilmiah. Pembingkai sesuatu isu bukan di bawah penentuan media semata-mata, malah melibatkan pelbagai pihak, termasuk audiens berita. Adalah sukar menggabungkan pembingkai laporan media tentang wabak kesihatan dan persepsi serta reaksi audiens terhadap pembingkai media tersebut di dalam satu kajian. Cabaran kajian sebegini melibatkan penjelasan teoretikal serta pendekatan metodologi yang kompleks. Kajian ini menggunakan pendekatan triangulasi terhadap rangka teoretikal, pengumpulan data serta kaedah menganalisis data. Pendekatan ini perlu bagi mengesahkan pembingkai media wabak Ebola di Nigeria serta persepsi dan reaksi audiens terhadap pembingkai media wabak tersebut. Fokus utama kajian ini berasaskan beberapa teori kesan media, yang menjelaskan hubungan antara media dengan audiens berdasarkan pengaruh mesej media. Teori-teori penentuan agenda, pembingkai dan "priming" mempunyai premis yang berhubungkait dan saling melengkapi. Teori-teori tersebut digunakan bagi menjelaskan lapisan proses dan hubungan antara media dengan audiens. Melalui analisis kandungan laporan berita dua akhbar harian tentang wabak Ebola di Nigeria, kajian ini telah mengenalpasti pola pembingkai dan bingkai berita yang digunakan dalam membuat pelaporan wabak tersebut. Dapatan kajian mendapati sepuluh bingkai yang ditekankan. Dua daripadanya (bingkai pembendungan dan bingkai kematian) didapati dalam hampir separuh daripada semua laporan tentang wabak tersebut. Dapatan ini menyokong tanggapan tentang keutamaan akhbar-akhbar yang bersaing untuk mendapatkan jualan, serta keutamaan tanggungjawab media membendung wabak tersebut. Penekanan bingkai pembentungan menonjolkan tanggungjawab sosial dan niat akhbar memastikan masyarakat bebas daripada wabak Ebola. Penekanan ini adalah amat baik dan disarankan bagi semua penglibatan media melaporkan wabak

kesihatan. Dapatan kajian ini disahkan dan dipanjangkan melalui kajian survei terhadap 400 pembaca akhbar. Survei tersebut yang dianalisis menggunakan SmartPLS mengesahkan hubungkait yang signifikan antara pemingkaian dalam pelaporan akhbar, dengan persepsi dan reaksi audiens terhadap wabak tersebut. Kajian ini mendapati bahawa pendedahan kepada bingkai pelaporan tentang kesihatan serta reaksi audiens merupakan faktor signifikan dalam mengubah tingkah laku terhadap wabak kesihatan. Berdasarkan beberapa batasan dalam skop kajian dan pendekatan metodologikal, kajian ini menyarankan agar kajian masa akan datang mengambil perspektif holistik dalam mengkaji wabak kesihatan.

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LIST OF ABBREVIATIONS

| | |
|--------|--|
| AG | Action Group |
| AIDS | Acquired Immune Deficiency Syndrome |
| AOAN | Airline Operators Association of Nigeria |
| APC | All People Congress |
| AVE | Average Variance Extracted |
| AWMC | Africa Women's Media Centre |
| BBC | British Broadcasting Corporation |
| CDC | Centre for Disease Control |
| CFA | Confirmatory Factor Analysis |
| CVR | Cross-Validated Redundancy |
| DV | Dependent Variable |
| EBOCI | Ebola Cote d'Ivoire |
| EBOR | Ebola Reston |
| EBOZ | Ebola Zaire |
| ECOWAS | Economic Community of West African States |
| EFA | Exploratory Factor Analysis |
| EHF | Ebola haemorrhagic fever |
| EVD | Ebola Virus Disease |
| FCT | Federal Capital Territory |
| GDP | Gross Domestic Product |
| GoF | Goodness of Fit |
| H1N1 | Influenza A Flu Virus, popularly known as Swine Flu |
| HINTS | Health Information National Trends Survey |
| HIV | Human Immunodeficiency Virus |
| HND | Higher National Diploma (Certificate issues by Polytechnics) |
| IHR | International Health Regulations |
| IV | Independent Variable |
| LAWMA | Lagos Waste Management Agency |
| LGA | Local Government Area |
| MCQ | Multiple Choice Question |

| | |
|----------|---|
| NCE | National Certificate in Education (Certificate issues by Colleges of Education) |
| NCNC | National Council of Nigeria and Cameroon |
| NCNC | National Council of Nigeria Citizens |
| NGO | Non-Governmental Organisation |
| NMA | Nigerian Medical Association |
| NOA | National Orientation Agency |
| NPC | National Population Commission |
| NUT | Nigerian Union of Teachers |
| OD | Omission of Distance |
| OND | Ordinary National Diploma (Certificate issues by Polytechnics) |
| PDP | People Democratic Party |
| PHEIC | Public Health Emergency of International Concern |
| PLS-SEM | Partial Least Squares Structural Equation Modelling |
| QCA | Quantitative Content Analysis |
| SARS | Severe Acute Respiratory Syndrome |
| SmartPLS | A form of PLS-SEM with graphical interface for variance based |
| SMS | Short Message Service |
| SPSS | Statistical Package for the Social Sciences |
| TB | Tuberculosis |
| TV | Television |
| UN ICT | United Nation Information and Communication Technologies (Task Force) |
| UNICEF | United Nation Children's Fund |
| UNIJOS | University of Jos |
| UNILAG | University of Lagos |
| UNILORIN | University of Ilorin |
| US | United State of America |
| WHO | World Health Organisation |

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CHAPTER 1: INTRODUCTION

1.1. General Overview

“We have had great success in the [last] five years in controlling outbreaks, but we have only recently come to understand that communications are as critical to outbreak control as laboratory analyses or epidemiology”, former Director General of World Health Organisation (WHO), Dr. Jong-wook Lee said in an address to the WHO expert consultation on outbreak communications held in Singapore, 21–23 September 2004 (World Health Organization, 2007: 2). The patterns of media reportage of health-related issues speak volume of the media roles in public health communication and how such roles translate to or reinforce other public health responses towards Public Health Emergency of International Concern.

In the recent history of infectious disease outbreaks such as the SARS epidemic of 2002 to 2004 and the H1N1 Flu epidemic of 2009, it is noted that behavioural effects have been responsible for as much as 80 to 90 per cent of the total impact of the epidemics (Jung Oh et al., 2012). The roles of the media to influence public behaviours vary proportionately to the issues emerging from an emergency health risk and relatively as important as public health response demands. In view of the significant relationship between public behaviour and health epidemics, the concern of this study is to establish how Nigerian media (Newspapers) framed its outputs (news stories, cartoons editorials, photos and captions) on Ebola outbreak; how the media audience perceived the framed media outputs; and what influence the framed media outputs made on the public attitude and behaviours towards the outbreak, which perhaps contributed to the early curtailment and containment of the outbreak in Nigeria.


1.2. Background of the Study: Ebola Outbreak










Ebola is one of the most lethal viruses that infect primates causes Ebola Virus Disease (EVD). Records show that it has a mortality rate of up to 90 per cent (Leaug et al., 2010; Ogunbanjo, 2014). It is originally endemic to Africa and to the Philippines but later spread beyond. Due to its highly pathogenic nature, majority of the scientific research conducted on Ebola were conducted in a Biosafety Level 4 laboratory (AIDS/HIV is a Biosafety Level 2 virus). The constraint on scientific research that Ebola nature dictated has resulted in many significant gaps, which is yet to be filled in what was known about it, and even larger gaps in what had been published about it before the 2014 outbreak. Its highly pathogenic nature has also resulted in a notable amount of misinformation that has been published which has a significant influence on the public actions towards the epidemics most especially in the affected West African countries.

In 1976, Ebola – named after the Ebola River in Zaire – first emerged in Sudan and Zaire, now Democratic Republic of Congo (Ogunbanjo, 2014). The first outbreak of Ebola (Ebola-Sudan) infected over 284 people, with a mortality rate of 53 per cent. A few months later, the second Ebola virus emerged from Yambuku, Zaire, Ebola-Zaire (EBOZ). EBOZ had the highest mortality rate of about 88 per cent of the 318 people infected. Despite the tremendous effort of experienced and dedicated researchers, Ebola's natural reservoir was never identified. The third strain of Ebola, Ebola Reston (EBOR), was first identified in 1989 when infected monkeys were imported into Reston, Virginia, from Mindanao in the Philippines. Fortunately, the few people who were infected with EBOR (seroconverted) never developed Ebola haemorrhagic fever (EHF). The last known strain of Ebola, Ebola Cote d'Ivoire (EBO-CI) was discovered in 1994 when a female ethnologist performing a necropsy on a dead chimpanzee from the Tai Forest, Cote d'Ivoire, accidentally infected herself during the necropsy (Bangura, 2016).

The 2014 Ebola outbreak on which this study focuses broke out around December 2013 in Guinea and rapidly spread across two of the closest neighbouring countries, Sierra Leone and Liberia. The highest number of cases as well as death recorded so far was in Liberia, with its reason traced to the weakened health system of the country as a result of the proceeds of long year of civil war, which ended in 2003. Prior to 2014 Ebola outbreak, the country could only boast of 50 medical doctors for a population of 4.3 million – a ratio of 86,000 Liberians to a doctor. As at January 14, 2016 when the country was declared free of Ebola, 4,809 deaths were recorded from 10,675 cases. The first case in Sierra Leone occurred in May 2014 through 14 people that attended the funeral possession of traditional healer, who was trying to cure Ebola patients in Guinea. Sierra Leone remained second to Liberia in the percentage of Ebola death recorded to cases reported. The country recorded 3,955 Ebola deaths from 14,122 cases reported as at March 17, 2016 when it was declared Ebola free. While Guinea has the highest fatality rate of the outbreak – about 67 per cent of the 3,807 cases reported in the country, the outbreak lasted longer in the country than it was in any other affected country. As at 17th of March 2016, when other affected countries had been declared Ebola free, two new cases and four deaths were reported in Sierra Leone (Christian, 2014).

Table 1.1: Distribution of Ebola Cases and Death across the Affected Countries

| Country | Cases | Deaths | Last update On 16 March 2016 by WHO |
|---|--------|--------|--|
|  Liberia | 10,675 | 4,809 | outbreak ended 14 January 2016 |

| | | | |
|--|---------------|---------------|---|
|  Sierra Leone | 14,122 | 3,955 | outbreak ended 17 March 2016 |
|  Guinea | 3,807 | 2,536 | 2 new cases/4 deaths reported 17 March 2016 |
|  Nigeria | 20 | 8 | outbreak ended 19 October 2014 |
|  Mali | 8 | 6 | outbreak ended 18 January 2015 |
|  United States | 4 | 1 | outbreak ended 21 December 2014 |
|  Italy | 1 | 0 | outbreak ended 20 July 2015 |
|  United Kingdom | 1 | 0 | outbreak ended 10 March 2015 |
|  Senegal | 1 | 0 | outbreak ended 17 October 2014 |
|  Spain | 1 | 0 | outbreak ended 2 December 2014 |
| Total | 28,640 | 11,315 | as of March 17, 2016 |

Source: World Health Organisation March 17, 2014

Schwartz (2014) attributes the pathetic spread of the virus across borders to eight mistakes that people failed to learn from in previous health disasters, which can be readily compared to 2014 Ebola resurface. Under the heading “*8 Mistakes We're Making About Ebola That We Also Made When AIDS Appeared*”, he discussed how people fail to learn from the response to AIDS by listing the following:

1. The victims are stigmatized.
2. Misguided calls for travel bans
3. Overblown fear of proximity to the infected
4. Leadership (and lack thereof) from the top.
5. Crazy rumours and myths flying
6. Misguided, overly optimistic predictions
7. Misunderstood transmission of disease to healthcare workers
8. Need for international response

Nigeria's first case was an imported one, and all subsequent cases have been linked to this. On July 20, 2014, a 40-year-old man, Patrick Sawyer, who had Ebola symptoms flew internationally from Monrovia, Liberia to Lagos, Nigeria while sick. He arrived in Nigeria on July 20. He vomited frequently during the flight and on arrival. The man's sister had died of Ebola in Liberia, and he had unprotected contact with her body fluids before he fell ill and travelled to Nigeria (International SOS 2014, CDC 2014).

Sawyer was hospitalized promptly on arrival in Nigeria at the First Consultant Hospital, Obalende, but died on July 25, 2014. Some healthcare staff had close, unprotected contact with the patient prior to realising he might have Ebola – including contact with his body fluids. These people subsequently fell ill and were amongst the country's secondary cases. Some of the secondary cases could not survive the infection. He spread the virus to medical staff that treated him, a fellow hospital patient, and a protocol officer with whom he had "very close contact". No one on his flight was infected (World Health Organization, 2014b).

Ebola outbreak occurred in Nigeria at a time when the country peace was elusive as a result of *Boko Haram* insurgency. The much focus on the embattled insurgency of *Boko Haram* and the move towards political transition did not allow government or its agencies to prepare for EVD outbreak despite the fact that its rampage in the neighbouring West-African countries was sending a warning signal. Doctor's strike that had been underway for more than a month was temporarily suspended in early August 2014 to enable medical personnel help with the Ebola outbreak. A State of Emergency was declared, discouraging large gatherings and asking schools to extend summer holiday. As the outbreak continued, the doctor's strike was cancelled (instead of suspended) and school closures were extended through mid-October. By mid-August

2014, several cases had been reported in Lagos. These included healthcare workers who cared for the country's index case and an ECOWAS (Economic Community of West African States) official who had contact with that case. A nurse who cared for the index case fled quarantine in Lagos to travel to Enugu, but no community spread took hold in Enugu (CDC, 2014).

A case appeared in Port Harcourt, Nigeria in late August, spread by a man, who had contact with the sick traveller in Lagos (the 40-year-old index case). The contact, who is an ECOWAS Commission staff member, then fell sick himself and travelled to Port Harcourt while ill. (This was in violation of quarantine. He was not supposed to travel since he'd had contact with a known Ebola patient.) A doctor was called to his hotel room to treat him between 1st and 3rd of August 2014. The patient lived, but the doctor was infected. The doctor developed symptoms/became infectious on August 11 but continued to work as a doctor (seeing patients, performing surgeries) until August 13. He died of the disease on August 22. This doctor is considered Port Harcourt's first case. However, after 42 days of no new reported cases, WHO declared Nigeria free of Ebola virus in October 20, 2014. As at the time when the declaration was made, Nigeria had reported 20 people with Ebola and eight of them died while the epidemic lasted in the country. Sawyer remains the index case that let loose the outbreak in Nigeria while the last reported case in Nigeria was confirmed on September 8, 2014 (Christian, 2014).

As Nigeria was enlisted among the affected countries in July 2014 and outbreak was spreading beyond West-Africa to United States of America, Spain and later to Italy and Britain, fear gripped most developed countries. Andrus et al., (2010), write that in 1950 when Smallpox, Cholera, Plague, and Yellow-fever continued to kill thousands of people worldwide and most deaths occurred in the poorest countries, wealthier countries

fretted over the risk of importations and the risk of outbreaks in their national populations. These concerns led to the first version of the International Health Regulations (IHR), drafted in 1951 and other versions that followed. WHO's Director-General, Margaret Chan declared the West Africa Ebola crisis a "Public Health Emergency of International Concern," on August 8, 2014, triggering powers under the 2005 IHR. The IHR requires countries to develop national preparedness capacities, including the duty to report internationally significant events, conduct surveillance, and exercise public health powers, while balancing human rights and international trade (Gostin, Lucey, & Phelan, 2014). The declaration of 2014 Ebola outbreak as Public Health Emergency of International Concern by WHO according to Gostin et al. was delayed since the essence of the declaration was to seek concerted efforts to ensure that such a disease is contained before it spread beyond control or beyond the boundaries of the affected countries.

According to Clawson, Clawson, and Waltenburg (2008: 1), "The wealth of nations depends on the health of families". The justification for this assertion also lies on various research findings on the importance of public health in almost all facets of human endeavours ranging from economic, social, political and technological prowess to mention but a few. Rane, Ewart, and Martinkus (2014), also concur when discussing an emphasis from the Association for Reproductive and Family Health's extract, that the health sector is critical to social and economic development with ample evidence linking productivity to quality of health care. Ebola virus eats deep into public health system (World Health Organization, 2014a). Its recent outbreak appears the worst ever because it recorded more death toll as it was allowed to spread almost beyond control before the call for international responses (see Appendix 1). World Bank analysis of Ebola trends as in the Table 1.2 shows the impact of Ebola outbreak on the growth and development of

the affected countries in 2014 and short term 2015. Entries are in current US dollars (with percentage points of GDP in brackets where appropriate).

Table 1.2: Estimates of Impacts on Output Individually and in Aggregate, in the Short Term (2014) and Medium Term (2015)

| Country | Short Term Impact 2014 | Medium-term impact (2015 - Low Ebola) | Medium-term impact (2015 - High Ebola) |
|----------------------|------------------------|---------------------------------------|--|
| Guinea | \$130 million (2.1 pp) | - \$43 million (1.0 pp) | \$142 million (2.3 pp) |
| Liberia | \$66 million (3.4 pp) | \$82 million (4.2 pp) | \$228 million (11.7 pp) |
| Sierra Leone | \$163 million (3.3 pp) | \$59 million (1.2 pp) | \$439 million (8.9 pp) |
| Core Three Countries | \$359 million | \$97 million | \$809 million |

Source: World Bank (September 17, 2014)

In Nigeria, the vision set to become one of the leading 20 economies of the world by the year 2020 is closely tied to the development of its human capital through the health sector. Andrus et al. (2010), prove that traditional infectious disease threats like smallpox, plague, yellow fever, and cholera prevented nations from ensuring the stability and well-being of their populations. In some countries, such diseases contributed to border conflicts and other disputes. Accordingly, these diseases have long been considered in the development of international treaties. Early attempts to control them led to the actual development of public health programs in which media involvement is noted for opinion, behavioural and attitudinal influence through information (probably framed) to achieve the health objective.

Social, education, political, religious and cultural sectors also receive similar effects from health epidemics. Religious activities in congregation were crippled;

Nigerians were denied the right to perform pilgrimage (Hajj right) in Saudi Arabia in 1996 in fear of the spread of meningitis, a disease outbreak in the Northern Nigeria around the time. Educational forum such as schools, conferences, workshops, and seminars suffered embargoes; all primary and secondary schools in the Ebola affected countries in Africa were temporarily closed and academic gathering in higher institutions of learning could not hold. Social gatherings and interactions suffered setbacks; cultural values and norms such as burial rites and child-naming alienated; and rallies and other political activities were given second thoughts by attendees all in fear of having contact with a communicable disease (Ebola) most especially in the affected countries.

Using all these facts as bases, World Health Organization (WHO) declares Health Emergency on any communicable disease it considers a threat to public health, through the International Health Regulations (IHR) in response to such threat of emerging and re-emerging diseases (Fischhoff, 1995). Baruch considered the Emerging infectious diseases as newly discovered public health threats that have the potential to cause serious health consequences at national or international level, such as HIV/AIDs, Ebola virus, new forms of cholera, Hantavirus pulmonary syndrome, SARS, and so on. And also considered Re-emerging diseases as public health threats that were thought to be under control, but later recurred on a level that once again threatened public health such as tuberculosis and cholera in the Americas; the plague in India and Peru; dengue fever in most Latin American countries; and diphtheria and polio in nations that have experienced declines in immunization rates, technical challenges, or serious economic or social problems.

1.2.1 Media Reportage of Ebola

The outbreak of Ebola virus, which had been one of the global concerns since early 2014, made banner headlines in the world media and perhaps formed news angles of audience attraction in the Nigerian media. Different captions, stories, editorials, photos and images, opinions, including cartoons and comics on Ebola occupied the chunk of the space in the print media, and news channels as well, allotted more airtimes to health talks, Radio and TV dramas as well as newscasts on Ebola issues than ever before. The outbreak also became the major topic of discussion in social media. If any, this could be regarded as the apex of agenda setting of the media on health issue – so much that it makes the outbreak more known than the media itself. Various angles at which Nigerian media reported Ebola stories; the frequencies at which the stories were been reported in the media and the emphasis placed on it; the eagerness in the audience to know more in order to cast away rumours; and the aggression demonstrated by the policy makers to be on top of the outbreak involved every Nigerian in “what” and “how” to be safe of the outbreak. Media used this opportunity to demonstrate its value and power not only to influence the audience on what to think, discuss or be concerned about but also set modalities on how to think about the concerned issue.

Media reportage of issues does not only vary from contents to contents but also varies in terms of methods, patterns and essence of reporting, the influence of each report, as well as the effects of the reports on audience. The variation in the reportage is informed by various factors ranging from the issues involved, the media, the audience; each constitutes a pulling force that shapes the output and or influence the effect. This trend is discussed under **framing**, a concept that has been extensively used to explain how messages are structured to justify how meanings are inferred from messages by the message recipients to achieve message objectives.

Framing has been used in many research works to understand media influence on the public understanding of various newsworthy events, and the aftermath public opinions as well as audience decision-making patterns since 1966, when the term was first introduced (not as a theory-based but used in context) from the sociological perspective work of Berger and Luckmann (1967) cited in Carter (2013). The various definitions given to framing are proofs of many areas in which the term manifests its influence in the media presentations of news events (either subjective or stage-managed by emphasizing certain details while obscuring others and priming or elevating certain considerations over others) to the audience (Larson, 1984). It will be too open to generalise the study of media framing with a definition (even the most appraised definition) without the operationalization of the concept on which the study will be based. D. S. Coombs (2013) agrees that this will help to know what types of frames are identified, at which levels of abstraction and units of analysis, which raises the question of whether a single dominant or several frames are identified within a news item. It will also help to know if and how visual material constitutes frames.

From the various definitions or descriptions given to framing either as a media concept or principle, social phenomenon or a sociological discourse (Edelman, 1993; Gamson & Modigliani, 1989; Goffman, 1974; Hall, 1982; Pan & Kosicki, 1993; Reese (2001); Sieff, 2003), it suffices this study to describe media framing as the direction to which media perceive or want people to perceive events whether covert or overt based on its judgment on the previous similar occurrences, driven by vested interest, which have significant relevance to the formation or occurrence of the current issue being framed. This is perhaps parallel with the submission of Carter (2013: 11), "Frames are embedded in culture, inside people's mind, and within the agenda of the media. All frames are subjective interpretation or emphasis of reality."

The use of media framing to influence permeates almost all events that set a stage for conflict of interests (individuals, groups, media, public, governments or foreign) to foster and thrill the overwhelming media audience to align with the interest celebrated by media. Media framing is used to give reasons to believe or disbelieve, support or desist, involve or withdraw, change or persist, and influence or discourage by twisting news stories in line with the motive; give exegesis order than the right interpretations; and change, annotate or remove part of the content to influence the public judgement of events. This summarises most of the conceptual approaches to the framing as it could be referenced to previous works. As exemplified in many research works, its usage cuts across all facets of human endeavours including artificial and natural events.

Carter (2013), discusses how mass media frame issues like war, politics, sports and health. Before wars, media framing could be used to seek supports by giving reasons why the war is either inevitable or compromised; during wars, it takes the form of propaganda, where the media make the voice of protagonist (base on the media judgement) louder than that of opposition; and after wars, it makes the public reason along over the benefits of the war (while silence on the loss) in line with the reasons earlier given to seek the support of the war. The case of media framing is not much different in political matters, economic issues, education, social interaction, sports, legal matters, religious differences, and indeed health issues, which is the central concern of this study.

Perhaps, there are more research works on media framing of political issues and wars than on health – making it appear as if there is no clear-cut approach to establish the influence of media framing on health issues. Few of the works on politics for example (Caliendo & McIlwain, 2006; Callaghan & Schnell, 2001; Gerth & Siegert, 2012;

Johnston, 2003; Sheaffer, 2008) discuss media framing of electoral issues, governance, policy formulations and implementations, political rivalries among others. While some of those on war (An & Gower, 2009; Hotchkiss, 2010) focus more on framing as a propaganda tool during wars. The study of media framing of health issues is just of recent gaining more momentum than earlier as a result of the grievous effect of health epidemics on the world population and the public consciousness of the influential power of the media. Prior to re-emergence of EVD in 2014 and other recent health risks (perhaps, from 2010 upwards), Shih, Wijaya, and Brossard (2008) confirm that less research attention was paid to media framing of health-related issues. And even when it appears such researches were conducted, the central focus has always been on “media coverage of health hazards in isolation” and as a result generalizing their “findings across health epidemics” without empirical justifications to link framing or change in frame (in one health risk to the other) to media factors relationship (p. 142). Unlike the effect of media framing on other issues, war for instance, where the focus and influence is most often on a particular country or rival countries (parties to the war), that of health epidemics, cuts across nation’s boundaries, therefore making it a global phenomenon rather than a regional concern.

1.3. Statement of Research Problem

Larson (1984) refers to mass media as a window to the world through which people learn about the world outside their country. While Park (2003) however furthers the argument that the window does not show the world as it is. People only see the world within the frame of the window. If the frame of the window is too small, people will only see a small part of the world. This was the nature of the media that led to Ebola outbreak in Nigeria. Despite of Ebola rampage in West African neighbouring countries, most especially Liberia, it appears little was known of Ebola by Nigerians before its outbreak in the

country. Only few among the elites, who were conversant with the happenings around the world through foreign media, were better informed about Ebola outbreak in the neighbouring countries. It was as a result of lack of communication preparedness with an evidence-based approach (the lesson which ought to have been learnt from other threats such as anthrax, Mad Cow Disease, H1N1, SARS, and HIV/AIDS) as emphasised by Jewkes and Letherby (2002) to prevent the virus. Government actions were perhaps a bit delayed and the media information-education function (to create awareness and to ginger government to actions towards preventing the virus from entering the country) seems deficient. Ogunbanjo (2014: 2) also confirms the unpreparedness when he asked, “Why did the affected countries wait for approximately six months to react to the EVD outbreak in the Republic of Guinea?”

The interrelationship between media framing of events, the public perceptions and reactions to such, and the corresponding effects during health epidemics has become one of the fundamental and intricate issues now that the world health is under various emergency health threats, which increase death toll by the day. The importance of the interrelationship became more visible as a result of 2014 outbreak of Ebola Virus Disease (EVD), (which started in Guinea as an outbreak in February 2014, and rapidly spread to Liberia and Sierra Leone, which are neighbouring countries and has engaged eight countries as at October 2014). The multiplier effect of this has recorded a significant number of casualties in the affected countries (Ogunbanjo, 2014). Ungar (1998) uses Sontag (1989)’s stands, “The most terrifying diseases are those perceived not just as lethal but as dehumanizing” in conjunction with the 'science fiction and gothic horror tales' as the bases of his argument to emphasise that Ebola causes the most horrific pictures of dying that one can think of. He writes “It is almost always accompanied by descriptions of liquefied organs, dissolving connective tissues, and profuse bleeding from every bodily

orifice” (Ungar, 1998). The havoc wrecked by the outbreak does not only call for attentions but also summon the efforts of those who are in one way or the other involved in health-related issues including the media. On this note, international policies on health and media involvement are assumed channelled towards kicking the virus out of our society. Members of the public are as well believed to be sensitized, enlightened, educated and mobilized by the mass media towards the struggle against the epidemics.

Due to the recent nature of Ebola outbreak, probably very few academic studies could be cited. Though, series of relevant academic studies and research efforts (on media framing to be specific) were conducted on Ebola in its previous outbreaks, which was at low key compared to the 2014 experience (Adeyanju & Oriola, 2010; Joffe & Haarhoff, 2002; Ungar, 1998). Studies have also been conducted on the media framing of other outbreaks such as HIV/AIDS (Bleich, 2007; Wu, 2006); Asthma (Johnson, Henderson, Pedersen, & Stonecipher, 2011); SARS (Tian & Stewart, 2005); and Flu (Nerlich & Halliday, 2007), perhaps none has been able to harmonize the key central variables of this study in order to establish the relationship between them and how the relationship influences the outcome (level of control or containment of the outbreaks). Most studies tend to examine some part(s), without elaborating on this fuller complexity. Some of the studies focus on media roles, efforts, influence or effects in combating health hazards in relation to the media potential to shape attitudes and significantly influence opinions. And some others explore the public perceptions and reactions to health policies alongside the crisis communication strategies set to check the emergency outbreaks. Consequently, identifying the nature of the links between and among the key variables set by this study has been a core difficulty in research efforts, partially exacerbated by methodological complexity, leading one variable to be ignored despite its inevitable connection to the other two.

The major variables to be given attention are: how do news media frame news stories concerning health hazards (the focus on Ebola outbreak); on whose interest do media frame the stories the way they do; how do media audience (members of public) perceive the framed stories; and what variation of influence do the news stories make on various audiences. Justifying the relationships between these variables would expose the hidden icons in media framing of health issues as it does to media framing on political issues, wars and crises, as well as economic matters.

Studies have confirmed that mass media influence public attitudes and decisions. The weight of this influence could be linked to how media structure news stories. It implies that how media frame news items determines the impact of such stories and the likelihood of the corresponding effects. An example could be noticed in how audience reacted to media (TV) reports of the victims (showing how the bodies were being retrieved) of AirAsia Flight 8501 that crashed into Java Sea on Sunday 28, December 2014. Devastated relatives of the victims collapsed in grief and were taken to hospital after an Indonesian television station showed disturbing images of bodies floating in the sea (Brajawidagda et al., 2015). There were serious criticisms on the way media reported the issue which is similar to the condemned media reports showing victims falling off Pentagon in September 11, 2001 terrorist attack in America (Propper et al., 2007).

Over the years, a growing number of studies have attempted to examine crisis or risk communication strategies as well as media message design during health emergency (Atkin & Wallack, 1993; Bernhardt, 2004; Cline & Haynes, 2001; Nutbeam, 2000; Wete, 1988). Some research efforts were also channelled towards studying media roles in crisis and the public perceptions and reactions in that direction. Various research evidences

have proved the potency of health communication through mass media on the development and promotion of health issues most especially the outbreak of health hazards. On these bases are mass media considered as one of the active players in the promotion of societal health both at micro and larger society perhaps through awareness creation, public education and enlightenment, and supporting health development policies.

Therefore, researches have proved that the contributory roles of the media towards any development goal including health issues is in its power to design, package and distribute effective messages, which inform, educate and to certain extent reshape the behavioural tendency of the target audience towards controlling health hazards or combating health related challenges before they get out of control. For instance, Bernhardt (2004) concurs that Public health communication is inherently interventionist, seeking to promote and protect health through change at all levels of influence. When well-conceived, carefully implemented, and sustained over time, public health communication programs have the capacity to elicit change among individuals and populations by raising awareness, increasing knowledge, shaping attitudes, and changing behaviours.

But a clear distinction should be made between media campaigns, which is the central focus of majority of the aforementioned studies, and media reports of news events through which framing becomes an issue of discourse. The primary role of the media is to tell the news stories as they occur while promotion of health policies, or influencing the public towards the policies and any other developmental role expected of media do not fall within the basic scope of the media essence. Though, selecting and writing news stories on health issues can serve as impetus for distribution of health messages and

sensitization of the public, news media coverage of health topics is not synonymous with a public health campaign (Jarlenski & Barry, 2012). Smith (2014), emphasises that news media engagement with an issue is likely to reflect any “official” perspective or stance on a given issue. Therefore, this study intends to establish how media frame health issues (in relation to public news demand and their interpretation of the framed news).

The dichotomy between media health campaign and media frame of news stories on health must first be established in order to subject media framing of a particular news event to test of influence rate on the public (which originally, is not the primary interest of the news media). It should be noted that media health campaigns are for specific interests (most often the interest of the health professionals or those of health policy makers) order than the media interest. Smith (2014: 221), confirms “Public health agencies and medical institutions routinely seek to engage the news media’s interest in an issue in order to inform the public about risks as well as desired and available solutions”. It therefore suggests that, the perspective through which many of the studies on media framing of health issues established the concept is public health campaign; and the public perceptions of the media messages on the health issues are also measured along similar direction.

Also, previous studies perhaps overlook the question, “on whose interest do the news media frame health issues” which logically will provide answer to the reason(s) why media frame news about health issues, if media truly do as established by previous studies. Media framing of news items is not done without reasons as every news item is sent out to the audience to fulfil a specific purpose (it may be for information, education, entertainment, merchandising, or any of other purposes upon which the essence of the message lies). The purpose for which the media send a message to the audience most

often determines the interest that the media bound to protect (whether overtly or covertly) and that invariably influences how media frame such news item.

Finding the relationship between the variables will lay a solid foundation for establishing how the public perceives and responds to the way media present (framed) news stories on health issues most especially Ebola outbreak. The way issues are presented in the news guides how people perceive the message and how they conceptualize possible solutions to the problems presented or take to suggestions made. The public perceptions of framed news items order than health issues might not be applicable to media framing of health issues if it could be established that the essence of framing the duo news items is for different interest and the patterns of framing the duo differ. Smith (2014: 222), agrees that “.... descriptive analyses of the nature of news coverage of health topics can provide important insights into how the public understands issues as well as how policy initiatives may fare.”

Going by the analyses of previous studies on Ebola issue, media involvement is well noticed in terms of coverage and campaigns but the efforts perhaps seems non-encompassing because it appears the effect of every communicable disease outbreak recorded so far is always ahead of media messages designed to control and contain it. Ebola virus was discovered long ago specifically in 1976 in Republic of Congo and since has been having dangerous multiplier effect on public health despite the increase in media campaign (in methods, patterns and frequencies) yet, result recorded is not commensurate. This perhaps brings up different perceptions and reactions from the public on media messages and health policies embarked upon to address the situation. The links between the variables are not much focused by previous studies to establish the relationship and how one influences the others in the process of returning to normalcy.

And the case studies are more of outcomes in terms of success or failure recorded in the strategies used and not the relationship between the variables concerned, which eventually lead to the outcomes (Atiq, 2011; Bloch-Elkon, 2007; W. T. Coombs, 2007; Ma, 2005; Sobel, 2014; Thuesen, 2010).

With these loop holes, information management during health outbreaks or health crises as well as media efforts towards influencing public health decisions becomes futile and perhaps results into communication crises, rather than crisis communication. An example was the 2006 case of Diethylene Glycol Poisoning in Panama in which close to 600 people died as a result of late information, misinformation, and what the public eventually tagged insincerity of the government and its policies (Pan-American Health Organisation, 2007).

It was reported that the case was remedied when the Minister of Health, who began to hold daily press conferences even though the cause of the deaths was not known, exhibited empathy and compassion and became increasingly transparent and much less technical in his public appearances. At the same time, press releases became simpler and more responsive to the concerns of the local population and their demands for information, improving the health ministry's communication efforts. Three factors contributed to these improvements: the 24-hour hotlines that had been set up for public use, the feedback from the mental health teams who went door-to-door, visiting the homes of people who had been affected, and media monitoring, which served to alert the authorities about rumours and information gaps. The problem was caused by lack of congruent efforts from the concerned parties. The concerned parties principally are seen as government and its policies, crisis communicators using mass media to frame the issue and the recipient party, whose perceptions and reactions determine the success or failure

of the whole exercise, which eventually led to communication crisis rather than crisis communication.

Though the study does not indicate the level of influence that the public reactions have on the communication strategies used and the change in the communication patterns (framing) by the media, all evidences show that the media understanding of the vacuum created and efforts made to close the gap has significant influence on the public reactions as well as government policies.

Similar case is also established in Larkin and Regester (2005) in which information mismanagement and delay nearly wrecked a giant oil company during crises. The company (Exxon Valdez) failed to dish out information to the concerned public through mass media when the 987-foot *Exxon Valdez* oil tanker fell and ten million gallons of oil spewed out of the vessel into Prince William Sound (a rich natural habitat) causing America's worst oil spill disaster.

The consequences for the company and the rest of the industry were dire. It is estimated the spill cost the company - in fines, clean-up expenses and lost market share - at least \$7 billion. The company slipped from being the largest oil company in the world to the third largest (Larkin & Regester, 2005: 4).

They attribute the consequences to failure of the company to address the media in order to ensure that the public and the concerned are conscious of its concern rather than letting the media loose to make unfavourable news from its silence. The media framed the crisis in such a way that the company was painted black, seen as such and boycotted by the public as retaliation to its 'ineptitude' as reported by (Larkin & Regester, 2005).

The reaction of the people of Northern Nigeria to polio vaccines is another sample that depicts the neglect in the level of interaction between the variables. This reflects

factors such as socio-cultural and religious that significantly influence the efficacy of media messages, which are meant to improve behavioural health (one of the calculated antidotes towards resolving health outbreak). For instance, local Islamic leaders alleged that Western countries were using the polio immunisation campaign to spread HIV and cancer and to sterilise Muslim people in order to reduce the population of Muslims in Nigeria (Jegade, 2007). Until lately, some Nigerians believed that polio is a spiritual attack, which could be cured by spiritual intervention just like Ebola case in Sierra Leone. Some relied on local herbs, concoctions, charms and wearing of amulets for protection against the outbreak. Despite the fact that the virus was spreading at alarming rate, both the affected and susceptible population refused to be vaccinated with anti-polio vaccine. Governments and the media had allowed public to react out of information gaps, which wrecked a lot of havoc in the area before the necessary interventions were effected. Religious and spiritual leaders as well as community heads became sources of credible information and decisions rather than governments and the media. Media contributions were not only recognised but also suspected of favouring Western plans (Yahya, 2007).

Owing to various efforts from governments, mass media, organizations concerned, and the people affected, previous health epidemics were either contained or managed depending on the level of correlations and the rate at which variables influence one another. The case of Ebola is not different. The fact that Ebola was discovered in 1976 and yet still ravaging the health sector up till 2014 is an indication that there are loop holes in the efforts making towards kicking the virus out of our society. Some Nigerians were seeking cure to Ebola in bitter cola, drinking and bathing with hot water and salt-solution while some still believe that Ebola was invented by the Western world to reduce the African population. And any support from the western world would rather reinforce their strategy rather than help cure or control the outbreak. Some even perceived

Ebola as mystery, an imaginary idea like HIV/AIDS used to create fear in people. All these are linked with the three effect-driven roles that define media involvement in public health issues, “the learning of correct health information, the changing of health attitudes and values and the establishment of new health behaviours” (Griffiths & Knutson, 1960: 515).

From various research outputs and cases, it could be deduced that some efforts ever made to achieve the key three effects itemised by Griffiths and Knutson on health hazards are weak because of all or some of the following factors:

1. Communication gap exists between the policymakers and the people (those who are affected/ infected or those who are liable to be affected/ infected;
2. Communication strategies set on motion are not people-oriented thereby addressing issues not from the public perspective;
3. Information delayed, inadequacy, not directed to the right audience, not addressing the key issue and not convincing;
4. The credibility of the policy makers or that of the mass media is questionable as a result of efforts made in the previous health emergency;
5. The public reactions are detrimental to the effectiveness of the policies as well as media efforts to achieve the health goals; and most significantly
6. The way media frame health issues is perhaps not concomitant with audience level of understanding and trust.

However, the interrelationships between the variables are essential to understanding the nature of emergency health disasters as well as media contributory efforts towards addressing it. For example, to what extent do media have real power to influence not just public opinions but also government health policies through news framing? Or do

governments manipulate the media and, through them, the public in line with its policies? Or when it comes to emergency health issues, do media influence public opinions for or against government health policies? Or do public reactions influence the media while setting agenda, which invariably affect the way media frame reports and how government responds through its policies towards addressing health risks? Examining these connections requires an interdisciplinary approach, if a complete picture is to be presented.

It therefore means that studying the outcomes of the efforts or contributions of each or all the variables in isolation without establishing the relationships between them (which result in the outcomes) is leaving a wide gap in the academic study to be filled. This study therefore sees the need to fill the gap in order to establish not only how the media frame issues on emergency health epidemics, but also how the audience perceive the framed messages and react to it in form of attitudinal and/or behavioural change.

1.4. Research Objectives

The overall objective of this study is to establish nexus between media framing of EVD issue and audience perception of the framing influence. This would be partly achieved by assessing the media contributions towards preventing, controlling as well as suppressing the effects of health hazards/outbreak through effective and timely dissemination of information and campaign messages which convince, guard, educate and change the recipients' attitudes that are likely to jeopardize the efforts. It also, among its specific objectives intends to:

1. Examine the contents of newspaper reports of Ebola so as to establish the direction of media framing of the issue and to establish which frames are preponderant to influence the readers;

2. Investigate the perceived public reactions to Ebola outbreak based on newspaper framing of Ebola reports which presumably contributed to the early containment of the outbreak in Nigeria;
3. Examine the mediating effect of the newspaper readership pattern on the relationship between framed Ebola reports and framing effects on the audience;
4. Explain how the media audience perceive media framing and how their perceptions influence their interpretations of media reports and vice versa; and
5. Design a media framing model that explains the relationship between framed Ebola stories, the audience perception of the stories and the corresponding effect of the framed report on audience during the health crises.

1.5. Research Questions

Having the objectives and problem that this study aims to solve in mind, some questions need to be answered by the study to give direction towards solving the problems identified. There are variations in the way mass media frame news items depending on the types of news story, the target audience, the times of report, the central issue or key subject upon which the stories revolve and the interests bade to be protected in the story. All these are parts of the criteria to assess how a media report is being framed as enumerated in (Westwood & Westwood, 1999) and that leads to the first research question:

RQ1: How did news media frame news stories concerning Ebola outbreak in Nigeria?

- a) What were the dominant news angles through which the Ebola stories were narrated?
- b) What was the degree of proximity and prominence given to the Ebola stories in terms of the news holes and location of the stories in the newspapers?

- c) What news sources did newspapers use for the authentication of the Ebola news stories, and how credible were the sources of the news? And
- d) How relevant were the photographs used to substantiate the stories and to stimulate readers interests or aid their understanding of the stories?

If news media frame news items differently as supposed to be verified by the first research question, there must be purpose(s) for framing (for example) story A into right direction and story B into the opposite direction. The media objective for framing determines which frame is mostly used during Ebola outbreak. This linked the first research question to another:

RQ2: Which frame is more preponderant than others while reporting Ebola issue during the outbreak in Nigeria?

The information circulation regarding health epidemics is relative to how much members of the public are exposed to media. Do health epidemics drive people to the media for information needs? While studying media effect on audience reactions, Druckman (2001) writes that people's preferences over different social policies to combat a disease can depend on whether the policies are framed in terms of saving lives or losing lives. Perhaps, mass media are used to explain such health policies; and relatively the perception of the policies would depend on how informed the audience is. The third research question will quest for answers to this.

RQ3: Is there a significant relationship between the audience reading pattern of newspaper health reports during EVD outbreak and their behavioural responses towards the outbreak? And (if any), what kind of relationship exist between them (direct or inverse)?

Closely related to the audience readership pattern of newspaper reports of Ebola issue is the audience perception of the reports read. Media reports are commodities produced for the final consumers, who are the media audience. The value of any product is determined by how consumers assess the product. Same goes for media messages – the way the media audience perceive a news story is proportioned to how such news item is being framed. It is crucial to know how the audience perceived the media reports of Ebola issue in order to know whether or not the reports have any influence on their reactions to the outbreak. This leads to the fourth research question:

RQ4: Is there a significant relationship between how newspaper audience perceived the framed EVD stories in Nigerian newspapers and their behavioural responses towards the outbreak? And (if any), what kind of relationship exists between them (direct or inverse)?

The 2014 first case of Ebola outbreak was reported in Nigeria on July 20th, while the last was reported on September 8th; making the outbreak last for less than two months in the country. There is need to evaluate the contribution of framed EVD news stories and the audience perceptions of the stories to the early containment of the outbreak by using the audience attitudinal change towards the outbreak as a yardstick. To establish this, this study has endeavoured to answer the last research question, which is:

RQ5: How much of the variance in the audience attitudinal change towards Ebola outbreak is as a result of perceived influence of framed Ebola stories and the audience reading pattern of health news during the outbreak in Nigeria? And, which is the best predictor?

1.6. Significance of the Study

Holistically, this work would establish how and why media frame health issues, how members of the public perceive such reports as well as the effect such reports generate. Establishing these will help the media audience to be well informed on how to relate with media reports on health issues. Among other significances of the study is that it will generate empirical back-up for the analysis of framing model for health and health related news and it will discuss the analysis of model change from one media message or issue to another. While envisaging a normal media-audience relationship, the outcome of this study will also establish media/message effect analysis on media audience in relation to media-use pattern and the competing interests in news production and dissemination.

It will again ginger up mass media in Nigeria and across nations towards research, planning, design, distribution and evaluation of effective health messages, which can yield the desire objectives in resolving certain health epidemics and the promotion of world health. This will be achieved by compelling the attentions of the health communicators to crucial health challenges in order to come up with laudable communication strategies, which provide timely information to the affected publics and address public health issues, regardless of their nature during emergency health threats. It will as well send signals to governments at various levels and across nations on the importance of formulating policies that will create enabling environment for media practitioners to embark on audience research in order to come up with effective health reports that are likely to shape people's attitudes, increase their knowledge and change their behaviours that endanger government policies towards resolving health risks.

The study output will also, based on the analyses of the media-audience trends regarding health crises, suggest laudable directions for health communication plans and

strategies not only towards managing health hazards such as Ebola outbreak but also toward preventing such before it breaks. In addition to this, the outcome of this investigation will as well guide towards using the right medium to pass health messages to specific target audience so that the messages can get to the grassroots people, who ordinarily do not have adequate access to the mainstream media for health information.

1.7. Scopes and Limitations of the Study

The scope of this study is limited to Nigeria as newspapers selected as samples are from Nigerian media spectrum and the respondents selected for the survey analysis were chosen from the Nigerian population. This is an indication that the findings may not be applicable in or generalised to the countries whose media practices significantly differ from that of Nigeria and or the health policies and political environment substantially differ. The mass media coverage of Ebola issues in this study is limited to newspapers and the discussions were centred on newsprint media. Therefore, the findings cannot be applied to other mainstream media such as television and radio or social media as their audiences and messages might vary from those of newspapers.

Nigeria was chosen as a case study because as one of the affected African countries, it recorded cases of Ebola victims in which some died of the disease; some survived critical stages while some others survived the window period observation. The country also has track records of similar outbreaks in the past: it has been suffering and managing similar outbreaks such as HIV/AIDS, Polio Myelitis, Meningitis, Cancer, Malaria; and tuberculosis among others. The country was used as a case study because it made significant headway towards containing Ebola outbreak when compared to other countries affected in Africa and when compared with the efforts made and success that the country has recorded in other health outbreaks and challenges. Being the most

populous African country and a window to the world (Ogwueleka, 2010), Nigeria has higher tendency of prevalence and higher chance of spreading the virus across borders, which constitutes threat to the entire world. It therefore necessitates that health risks and the efforts made towards its control in the country can guide towards resolving similar health crises in other less populated African countries.

The study is also limited to 2014 Ebola outbreak in Nigeria. The focus is not extended to the earlier fashion of the virus, which broke out in 1976. Other health epidemics are also not part of the central focus of this study. The findings may not be adapted to other health epidemics as there could be variations in the causes, public health responses, media approaches towards each as well as audience responses to media messages on each.

The period of the study is limited to the duration of Ebola rampage in Nigeria. Although, the 2014 Ebola Virus Disease broke out in December 2013 and ravaged in the affected countries up till 2016, the focus of this study is within the three months (July 20, 2014, when the first and index case was recorded in the country up till October 20, 2014, when WHO declared Nigeria Ebola free) of Ebola reign in Nigeria.

1.8. Operational Definitions of Terms and Concepts

The meaning and usage of the under-listed terms in this study are limited to how they are defined below. Effort will be made to make a clear-cut explanation or additional information wherever any of them is used to mean order than how it is defined.

Framing: the way mass media structure information or an issue in news reports in a way that influence audience interpretations of the news items. It entails the amount of emphasis that newspapers give to a news angle of an issue as a result of the frequency of

the news angle in the related reports, the type of photograph used to back up the story, the source quoted to authenticate the news angle, and the newspapers' choice of words to compel certain interpretation of the issue from the readers. It is used in this context as the connections between the attributes of a news story which influences how the issue being reported is interpreted by the audience. Framing in this work focuses on how issues surrounding Ebola Outbreak in Nigeria were structured in the newspapers reports to induce certain responses from the audience. It specifically focuses on the news angles on which Nigerian newspapers most often emphasised while reporting Ebola and the patterns of reporting used to achieve such.

Frame: Frame has been used in various contents more often outside media and communication domain. Its usage in communication is also elaborated and varies from content to content. Its usage herein will be limited to thematic grouping of newspaper health stories informed by the focus on most salient news angles in the contents of the stories as defined in ...

Agenda transition: this term has been used by various studies (Kim, Scheufele, & Shanahan, 2002; Kioussis & McCombs, 2004; Moon, 2013) to explain how media agenda translates to what the audience considers as the most important issue. They used the concept to describe issue salience in what is considered first-level agenda-setting. The concept mostly explains how the issue attributes emphasised by the media are transferred and make the most important aspect of the issue that are evaluated by the audience as intended by the media.

In this work, the term is used to connote something different from media-audience issue attribute salient transfer but rather newspaper gradual shift from positioning an issue as the most important to the audience to another emerging or re-emerging issue, which a newspaper considers proportionately of equal or more importance than the earlier one that

enjoys media agenda. The term is used to explain two major ways that newspapers change the saliency of an issue to another. It describes the first method as agenda-shift; also referred to in this work as partial agenda-transition. It occurs when the saliency enjoys by an issue in newspapers is reduced to allow media agenda to be formed on another issue. The earlier issue still maintains certain degree of media saliency or rather may still be competing with the new issue. The second method is tagged agenda-transfer; also referred to as full agenda-transition. It is a total shift of the media emphasis away from an issue that has been enjoying newspaper agenda to another emerging or re-emerging issue, which media considered the most important for the audience at the time.

Ebola Virus: a very dangerous communicable virus which lives on human and animal fluids and causes Ebola Virus Disease formerly known as Ebola Haemorrhagic fever with fatality rate ranging between 50 to 90 per cent in its various outbreaks. Ebola Virus Disease most often referred to in this work as EVD is basically the one that broke out in late 2013 in West-Africa and was later declared as Public Health of International Concern in August 2014 by WHO. The study focuses majorly on the Ebola outbreak in Nigeria from July till October 2014 when the outbreak lasted in the country.

Health Crisis Communication: act of managing the outcome, impact, and public perception of a crisis through integrated messages that are channelled towards critical elements of a four-part overall crisis management process, which includes prevention, preparation, performance and learning. it is herein used as a form of communication strategy or pattern to inform, influence, and motivate individuals, institutions, and communities in a way that allows them making effective decisions to improve health and enhance quality of life particularly during health crisis or health emergency. It is also used to refer to the media roles in a state of health risk as a result of outbreak of a health hazard, natural or social disaster or any other form of unusual negative occurrence, which affects

or is likely to affect significant proportion of the population and thereby requires urgent intervention.

Public Perceptions: general view of the people on a particular event, issue or policy base on their level of information, knowledge or believe about the issue. Its usage in this study focuses on how newspaper audience assess the benefits of newspaper reports on Ebola issue to them in terms of information load, the credibility of the information, as well as how logical and simple the information were presented. Parts of the criteria through which the public assessed Ebola newspapers reports are also: the freedom of the reports from any form of conspiracy or influence; the level of solutions the reports proffer; freedom of the reports from political propaganda; and the level of objectivity of the reports. Other criteria are: whether the reports are well-researched and as a result were supported with detail factual and evidence-based justifications; whether it provided audience with protection techniques against Ebola; whether the reports lessen or allay the tension in the society and did not unnecessarily induce fear in the public; and whether the reports are adequate in terms of the frequency the reports in the media in order to facilitate reinforcement through which it becomes diffused among the audience.

Mass Media: it is used to refer to all media of information either print (newspapers, magazines, billboards etc.); broadcast (television, radio, cable etc.); or any other form of electronic media including social media except where specific media vehicle is in focus and expressly mentioned. The concept was also used synonymously with newspaper, which is the case study in this research.

1.9. Chapter Summary

This chapter discusses the background from which the central focus of this study germane. It traces the long history of Ebola virus and its fatality consequences prior to its 2014 outbreak which is the main concern of this study. It also emphasises how the 2014

version of Ebola came in a world-threatening dimension with higher infectious and fatality rate that eventually led to the outbreak being declared as a Public Health Emergency of International Concern. How the EVD was imported to Nigeria and the circumstances that led to its spread was discussed cum its effects are also discussed. Then the media involvement during the outbreak in terms of coverage, reports, public sensitisation, and relevant information concerning EVD in Nigeria and abroad are parts of discourses as background of the study.

The chapter also discusses problems that constitute the essence of the study by laying emphasis on the oversight of the previous study on interactivity between framing of health issues, public perceptions of the frames, and the effect of the framed reports on public reaction to health issues. It particularly explains how public perception of framed health messages influence public reaction to health risk and how this is downplayed. Also, part of the focuses in this section are the enumeration of the research objectives, formulation of research questions, discussion of the significance of the study, highlighting the scopes and limitations of the study, and operational definition of important concepts used in the study.

CHAPTER 2: LITERATURE REVIEW

2..1 Overview

This segment focuses on examination and discussion of various perspectives through which scholars understand and conceptualise media framing of issues as the bases to analyse “how do the media frame issues?”, “which frames are preponderant to specific issues?”, “of what effects are the framed issues on the message recipients?”, and the changes in pattern of framing news events from one issue to another. These variables bring to the limelight the key players in framing (media and audience), which are linked together with the forces of the message, the news sources and other factors that determine the pattern of framing. The study of media framing is not new but the numerous ways through which its conceptualizations and applications expose media influence and various measures of media effects on audience makes it appear as if each additional study of framing is a new face of the concept.

However, D'Angelo (2011) suggests a justifiable tenet for studying framing by examining how various literatures have conceptualized the term; how they have

developed a theoretical framework for research questions, or devise a suitable operational plan for data collection and analysis. This, according to him gives studies clues on the understanding of the concept and how to effectively adapt such to the central focuses of studies as well as developing methods that are comprehensively appropriate to studies, “...all to produce a solid piece of research on a portion of the whole framing process”.

He submitted that:

This, in fact, encapsulates the battle that goes on in many framing studies, whose literature reviews often resound the notion that framing research is in trouble because of a scattered conceptualization of main terms or because types of frames and measures of frames appear to have proliferated. It is as if the study is saying, “Framing is scattered, so let’s try to fix it in this study.” But how a particular study fixes framing analysis – or, better, how much it fixes it – depends on how well its concept explication, theories, and design fit into a theoretical model of framing analysis that is comprehensive (e.g., covers many sub processes) yet offers only provisional definitions of frame and framing (D'Angelo, 2011: 356).

It was on these bases that this study worked out a modality to synchronize the understanding of media framing to health issues and used 2014 Ebola outbreak as centre of focus while discussing the key variables. The intention was to examine the context of previous studies on various findings, discussions as well as understanding of framing in myriad of issues or events and how it relates to framing effects most especially in the formation of attitudes, opinions and behavioural tendencies both at individual as well as public level of the media audience. And also, to investigate whether a framing pattern is able to resolve the problem identified in the issue being framed.

The historical development of framing was traced with the focus on how the concept evolves and series of effort to build on it or remould its essence and usage to serve as the basis for understanding the appropriateness of the concept in the previous studies and more to be conducted and to give directions to the discussions of the studies in its application.

It was also part of the focus to follow the trends in the previous studies dissecting of frames and framing, not as different concepts but as layers of the same concept. This gives direction on how framing is conceptualised in various studies and how patterns of studies as well as their areas of focus dictate the inclusion and exclusion of what makes framing. In an interesting style, effort was also made to establish not only how various studies distinguish framing from other related concepts such as agenda-setting and priming but also how the concepts are intertwined and how the relationship between them serves as the basis for understanding the shift in media effect paradigm.

Application of the concept to health-related issue forms another focus area in order to establish how previous studies (in their analyses) reflect media influences against the reigns of the health hazards in different societies using framing patterns and factors that uphold the pattern as parameters for discussing the contexts of the studies. As it is understood that some of the studies on media framing of health issues linger on health campaigns, the dimension through which they present their arguments will be juxtaposed viz-a-viz, the focus of news framing on health challenges in terms of objective, focus, structure, and effect of media output being studied alongside framing.

Efforts are made to bring diverse theories to bear on the problem under study. Detail discussion about the relevance of the theories, applications to the study, and their areas of deficiencies will establish the bases for understanding the phenomena in the study. Media Framing theory will be used to discuss how media frame health messages in relation to internal and external factors that influence the pattern, structure, and effect of framed health messages. The theory will be traced to the pool of media effect theories

in order to understand the influence of framing on the audience understanding and interpretation of media messages and how such affects decision making process.

2.2 Mass Media and Health Reporting in Nigeria

Unlike in politics and other issues that constitutes media outputs, in which the forces from news sources and interest groups give rise to intense framing of news events, the ‘forces’ in health issues seem not to be well pronounced. Rather, the public interests supersede individual interests, and the common goal in health-related issues, which is basically on how to ensure a community free of ailments lessens the influence of competing interests on the media framing of health events. David, Atun, and La Viña (2010) substantiate that while various interest and elite groups have different problems, solutions, and political motives to an issue, conflicts and contradictions are abound as each mounts pressure on how to make its view represented by media. Framing is not only done by media; most often, events are framed by parties involved in an issue and they use media only to reinforce this by making their views salient. “Actors can and do package and frame policy ideas to convince others that certain policy proposals constitute acceptable solutions to pressing problems”, they added.

Another factor in which media presentation of issues differ is media business and financial concern as well as profit maximization motive. The journalists’ motto, ‘it leads when it bleeds’, which means that mass media prioritise and promote conflicting issues as a means to compel public attentions justifies the media race to gain more audience in the media market. In a study conducted by Plasser (2005) to ascertain why media outputs are losing the quality and dropping in standard, 30 per cent of the respondent journalists attributed the problem to the emphasis on business and financial factors, citing the pressures from corporate owners and commercial advertisers as the bottom-line for

journalistic failures. Lee (2014) emphasises that this media motive prompted many newspapers into various forms of business strategies which affect their controls over stories they publish. One of the business tactics discussed among the many identified by Lee is spin-off, which is a very popular practice across the globe specifically in the US and South Korea. Spin-off strategy according to him occurs when a newspaper provides news coverage for its parent company and at the same time uses its potential advertisers as the sources to authenticate the story. The tactic is a way of making what ordinarily should have been published in form of advertisement a news story such that it induces the audience to throw the weight of their trust behind the story.

It was argued that spin-off tactic influences how media structure their news coverage as journalists are at the mercy of the interests of either the parent company or those of the advertisers. In his finding after he content analysed two Korean newspapers (*ChosunIlbo* and *Dong-a Ilbo*) reports before and during spin-off, Lee confirmed that the frames differences in their reports are attributed to spin-off effects. It is significant to acknowledge that this tactic and many related others that influence how media structure news are more detrimental to health reportages than other form of news. It according to Lee (ditto: 173) might cause the media consumers to make “poorly informed health choices that are unnecessary, expensive, and potentially harmful”.

However, it should not be misconstrued that spin-off tactic is purportedly used by journalists to relieve the burden of getting professional sources for health stories, which is considered an excuse for journalists’ (most often) lack of specialized medical knowledge and, as a result, need to rely on professional sources to assist in the production of frames (Schwitzer et al., 2005). Spin-off is rather similar to news sponsorship. It is easily recognised by audience when used in political news since political news stories are

always characterised by conflicting political ideologies or interests. The media consumers' assessment of political news is quite distinct from health stories because audience place no suspicion on the latter.

2.2.1 Health News Coverage in Africa

Hardly a study has ever opened up debates or criticisms on the significance of the central role that mass media play in informing the public about health challenges and medical issues. What triggered argument several years back was how effective the media play the roles in different issue (Griffiths & Knutson, 1960). Likewise, efforts have been made to specifically discuss how print media play crucial roles towards development of healthy societies by providing information that help the readers in health decisions and also serve as a common source that people rely on for health information about emerging health threats, disease outbreaks, discoveries of health solutions or breakthrough, national and international alerts as well as day-to-day health tips. Torwell and Rodney (2010) recap this argument when they listed common mass media (newspapers, magazines, television, radio, and social media) as the sources of health information to people and emphasised that the media have tremendously helped the public in making beneficial health decisions. However, what always raises dust regarding media roles in health issues are: the degree of success or failure recorded by mass media in a particular health outbreak or health challenge compared to other risks; how effective have mass media in a society/state promote health when compared to some others?; which media strategy is used to achieve what health development at a particular time?; under what media practice/government policy do mass media effectively promote health?; and what are the in-house and environmental factors that influence mass media roles towards health development.

It will be empirically intangible to attribute success or failure to African media for the role they play in health promotion without the delineation of a particular aspect of health issue in focus, the country involved, the degree of success or failure, and many other significant parameters for the justifications. As there is plethora of health challenges in Africa leading to more information ground for the mass media to cover, it becomes apparent that some of the health risks require distinct media approach. Ascertaining a suitable media approach to an emerging health outbreak or even a reoccurring media risk has been one of the media challenges in health promotion. As a result, mass media sometimes vary their approaches towards a health threat or sometimes use multiple approaches when one is not yielding the target result.

Since HIV/AIDs joined the compendium of health threats, the role of mass media has become more significant in various African countries subject to the prevalence of health risks. Without discarding the findings of a study by Africa Women's Media Centre (AWMC, 2004) on media coverage of HIV/AIDS, TB and Malaria in five sub-Saharan African countries, which assessed that media role towards the health challenges was at low key, media roles during health emergencies sometimes surpass evaluation of short term effect (Torwell & Rodney, 2010). It is indisputable that some of the media approaches towards HIV at initial stage were off-target, yet, through ceaseless reports and information distribution, the mass media in Africa have made a landmark in suppressing the spread of the health threat by ensuring an informed society. The media principle, "follow the trend of events" sometimes makes it appear as if mass media have relented in their struggles against HIV/AIDS. The principle allows the media to set agenda on the burning issue and at the same time discourage them from generating unnecessary tension by making saliency on the issue already fading away.

The decline in mass media reports and campaign messages on HIV/AIDS is not peculiar to Africa, but rather cut across other continents. Various questions have been raised in other countries beyond Africa (specifically the US) about whether there is “AIDS fatigue” on the part of media organizations as journalists’ writings on HIV/AIDS are becoming faint. Among other issues raised against mass media include: inadequacy in the coverage of global HIV; the imbalance of topics covered in HIV news, most especially between treatment and prevention; and the media neglect of or failure to make salient the “recent” fundamentally new scientific developments in HIV epidemic. While responding to the questions and criticism, Brodie, Hamel, Brady, Kates, and Altman (2004: 1) clarified that:

Yet, the old adage that the media doesn’t tell the public what to think, but does tell them what to think about, suggests that declining coverage of HIV/AIDS in the news might have some relationship to the public’s declining perception of the urgency of the problem. Ultimately, coverage of HIV/AIDS by mainstream news media serves as one important gauge of how prominent the issue is on the policy and cultural agenda of the nation, and how overall attention to the epidemic has changed over time, both in terms of quantity and content.

As would be discussed under agenda-shifting, emergence of other pressing health risks might have been a cogent reason for the fading away of the media agenda on HIV/AIDS issues, discussed in Brodie et al. above. Despite the fact that HIV/AIDS, Polio Myelitis, and Malaria fever are ravaging the public health in Nigeria, media agenda was shifted to EVD because it was not only new when it broke out in 2014 but also constituted health emergency hence, it enjoyed media saliency in Nigeria until Lassa fever took over in 2016 despite the fact that EVD outbreak had been contained as at the later part of 2014.

Several other studies conducted on health-related issues in Africa (Benefo, 2004; Jacobs & Johnson, 2007; Torwell & Rodney, 2010) indicate that mass media play critical roles in helping to close the people knowledge gap about diseases and adopting safer

preventive and curative pattern of health reportage. Cases cited by some studies against African media are precipitated by some extraneous media approaches which left certain expectation unmet. For instance, Hughes and Malila (1999) while studying the social construction of HIV/AIDS in the Africa media, used framing analysis to identify the various salient themes employed by media in the representation of HIV/AIDS. The study submitted that despite wide coverage and increased public campaigns of the health risk in mass media, the attitudinal change of people is not much influenced by the approaches employed by media. It concluded that if media intend to give alternatives to turn knowledge into action they need to consider the everyday reasoning of the target groups, and understand their needs and interests.

In this scenario, it is blatant that the accusation on media is on the failure to frame its reports in a manner that influences public attitude towards the pandemic. This could be one of the many off-target approaches which African media engage in as new health epidemics surface or the old ones resurface. Catalán-Matamoros (2011) provides relative answers by clarifying that mass media campaigns on health issues transcend awareness creation function alone but also aim primarily at influencing knowledge, awareness and attitudes, as well as contributing to the goal of changing behaviour. The study clarified that the expectations place on media to upturn people's attitude and behaviours regarding health issues is not always visible because media messages alone cannot change people's behaviour. It emphasised that media campaigns on health issues can perform and achieve behavioural change in people and as a result promote healthy lives and environment if such messages are reinforced by other public health responses such as "law enforcement efforts, grassroots activities, and other media messages" (p. 399).

Not only on HIV issue is criticism of African media hanged; the media are also accorded either praise or blame on other health issues. In many African countries, various studies have discussed the media involvement in health promotion; specifically emphasised how various mass media outlets have influenced the local populace towards health consciousness and synthesised their coverage to accommodate problem-identification and problem-solving approaches on health and environmental related issues.

Example of such research is the study by AWMC (2004) cited earlier. The study covered various health challenges (HIV/AIDS, TB and Malaria) in five sub-Saharan African countries alongside the effectiveness of mass media approaches in each of the countries. After critical assessments of the various media roles towards the sampled health challenges, the study noted some hiccups that are inconsiderable for effective media roles towards health promotion. Among the media errs identified is that most of the media reports on the health challenges were not issue-based. Too much focus on personalities and government officials involved in most cases outshined the analyses of the health topic and as a result trivialised what should be main concerns.

The study also noted that the editorial messages were non-directional, rich, lack adequate information to engage media audiences, especially young people to develop positive attitudes towards health information and health policies. The issue of professionalism in media coverage of health issues was questionable as journalists were at the mercy of the health sources to frame health stories. Many out of the few journalists who specialise in reporting health news lack investigative quality to nose for health issues; interpret health research outputs by simplifying the health jargons in terms easily

understood by common man; write to warn, predict, advise, encourage or discourage people and policy makers on issue concerning impending health risks.

Another hiccup noted is that government and media roles during health challenges were not corroborating as contained in the report. There were conflicting efforts between government and the media on health policies and health coverage culminating in communication and coordination gaps between the duo. This as a result, negatively affected the objectives towards healthy society and faulted the efforts. The variances in the role channels by the two key players lie in the interest each is trying to protect.

Since health issue is crucial among issues of public concerns, it requires holistic approach to get over the highlighted entanglements. Schwitzer et al. (2005) suggest that journalist roles in coverage of health news are beyond being accurate and objective, which are major parameters used to access news order than health. Covering health and medical news according to them require that journalists should not only report conflicting interests from news sources but also balance the report by emphasising the evidence-based submission upon which the audience would be guided towards health decisions. Also, avoidance of reporting poorly executed health research or baseless and uncertified solution to health risks except all the weaknesses are enumerated to guide the audience is suggested as another way journalists could enhance media role in development health coverage.

Among other recommendations suggested for journalists is to scrutinise some media or health terms which are likely to mislead the audience before employing such in their reportage of health issues. Any medical term that is likely to be misinterpreted should be explained in simple unambiguous expressions. It is also necessary for journalists to get

the public sides of community health challenges. Most of health issues reported in media are what journalists considered newsworthy and not what the public considered as their health challenges. Involving the public on health issue concerning them by media will enhance their understanding of media messages and as a result will yield behavioural changes desired to solve the health risks in focus. Again, journalists' roles in health promotion should include effort to convince or advice governments, bodies and health workers on the formulation and implementation of beneficial health policies that are solution oriented to health risks and enhance development of public health (Schwitzer et al., 2005).

2.2.2 Radio and Health Reportage

It is apparent that access to radio sets as well as its networks makes the radio use for health promotion highly important across all African countries. Owing to low literacy rate that discourages newspaper readership as well as unavailability of amenities to support television operation and networks in rural and sub-urban areas in most African countries, rural people make better use of radio broadcast in all developmental issues including health. Skuse (2004) cites some statistical data from a study conducted by UN ICT Task Force in 2002 to establish the priority given to radio in the dissemination of health messages. Skuse emphasised that radio use is more popular among poor rural dwellers, who take the advantage of low or no cost of radio maintenance to improve the health awareness in their localities.

Relating its advantages to its effective use for health promotion, Skuse (2014) itemised the reasons while radio roles are critical to health development in Africa. Among the edging characteristics that radio enjoys are:

First, radio can transmit in multiplicity of languages depending on the target audience. Most of the community radio stations do not only broadcast in local languages, where they operate but also use some peculiar terms, slangs, or expressions, which may be considered unofficial in other broadcast media or print media. This makes radio messages richer and hit-the-target. It also makes the messages simple, understandable, interesting, alluring, with long lasting effect on the audience. Some international popular radio stations engage in local services in some major local languages to care for the rural poor. Example of this is BBC special services in Africa. The station has many services in major African languages through which health information and development messages are reinforced. Among the BBC African service stations is BBC Focus on Africa (Hausa Service) in Nigeria, which caters for millions of rural poor including the nomads who rear cattle within and across the border of northern Nigeria.

Second, the poor rural electrification in many African countries is not a barrier to radio receiver gadgets as most of transistor radio gadgets that are used in rural areas are powered by cell batteries. The cost of batteries to power the radio is not burdensome to poor listeners when compare to other media since a set of batteries, which cost about half a dollar can last for a month (Myers, Harford, & Skuse, 2000). Interestingly, the various micro sizes of radio set make it portable and more convenient for people to use as mobile media. The inclusion of radio network function in cell-phones also enhances its accessibility more than other form of media.

Third, radio among other media enjoys a low message production cost. The simplicity of the technology both at the message production end as well as message consumption end makes it more important to people across ages, gender and educational classes. This advantage together with affordability of radio set to all as well as its low or no cost

maintenance merit give rise to a number of radio users who listen to health information most especially among people living in suburbs. They can listen to radio while working or engaging in other activities. Radio then becomes a personal companion to many people as they carry it about to ensure informed societies.

Summarily, all broadcasting channels are involved in health promotion whether through coverage of health news or by designing and airing programmes that support good health policies. However, radio is playing a leading role, particularly in developing countries where the availability, usage as well as access to other media such as TV and internet in rural suburbs is limited.

2.2.3 Television and Health Reportage

In western world, television viewership has an edge over newspaper readership. Studies (Kurtz et al., 2001; Myers et al., 2000; Skuse, 2004) have confirmed the preference of television above all other mass media as a result of its motion and audio-visual advantage. The preference is justified by the increase in number of television boxes per household, which is far lower in African settings. The studies also confirmed that more children and youth watch television more than adults. The implication of this is that the youth may be exposed to more health information on television than adults.

The African media use for health information is structured by the accessibility to certain media than others as well as affordability and the richness of the information. The media preference in urban settings might have less influence of accessibility since the availability of social amenities gives all media equal opportunity to be explored. Media preference in urban areas are much more defined by types of information searching for as well as how well a medium treats the issue in question. Television is more preferred

for health information among youths because of the vision which allows them to have practical demonstration of health solution. A study conducted by Kurtz et al. (2001) on students' media preference of information on the danger of cigarette smoking shows that 69.2 per cent of the sample students prefer television to other media sources.

Studies conducted in some Nigerian cities regarding media preference on an issue related to health revealed similar findings. A survey on television promotion of family planning in Ibadan, Ilorin and Enugu between 1985 and 1988, despite the fact that access to television set was very limited at the time, proved a significant influence of TV messages of health issue on the audience attitudinal and behavioural change (Piotrow et al., 1990). As against television use for health information in cities, rural dwellers do not have access to television because they lack amenities that can make television work. Rural population across countries in Africa therefore depend much on community newspapers and radio for health information and campaigns to make health decisions. Television news reports on health issues are not always detailed; it is commonly between forty-five seconds to one minute per health story. But television health campaigns (such as TV Drama, Talk-show/Health-talk, Health Interviews, and Health Documentary) are outstanding in terms of message contents and package. They improve public knowledge about health issues and guide people towards informed health decisions (Skuse, 2004; Torwell & Rodney, 2010).

Due to the metropolitan nature of Lagos, where EVD outbreak was first experienced in Nigeria, Television roles were notable for various educative programmes. Being a commercial city and most the populous city in Nigeria, Lagos enjoys conglomeration of broadcast media; about twelve traditional television stations and many other online stations operate within its axis. This gave the people opportunity to be selective of the station that airs relevant health programme concerning the outbreak. Health campaigns

from the stations did not only create awareness about the outbreak but also educated masses on how to curb its spread by airing programmes that demonstrated some hygienic measures such as hand-washing. Much about the horrific nature of Ebola patients are shown and accompanied by warning messages on careless human interactions to be avoided in order to be saved from the outbreak.

2.2.4 Newspaper and Health Reportage

Newspaper, being the oldest of traditional mass media, is popular in urban as well as rural areas in many African countries. Some newspapers have wider coverage while others operate on community basis to cater for the interest and information need of the communities in which they operate. Community newspapers publish in popular languages of the communities and do feed the people with information that aid the development of such communities. Community newspapers are experiencing boost in terms of readership as people depend on them to fill their information gap unlike national newspapers, which as a result of emergence of and growth in social media are suffering from readership recession (Andsager et al, 2015).

Public interests in seeking health information from newspapers is informed by detail analyses on health issues, which most often ensure that readers are better informed with related facts and figures including suggestions and recommendations as well as interpretations of health policies. With such detail reportage, people are helped in health decision making. Even in the US, where access to internet has enhanced social media use, local populace still depends much on local newspapers for health information (Andsager et al., 2015). As part of the detail news stories, newspapers do call for public action towards laudable health programmes or policies as much as they also call for actions against non-beneficial ones (Basnyat & Lee, 2015).

Permanency of the newspapers messages on health issues for record purpose as well as read-later advantage, which allows readers to revisit health reports at any time and as many times as they want makes it a popular medium for seeking health information. Reading and rereading a health story in a newspaper can make the key health tips in the report enliven people's consciousness of health messages and as a result live by it.

Besides the unusual health news, which are reported as they occur, Nigerian newspapers dedicate some pages of their daily editions to health and medical tips. The contents of the pages keep readers abreast of latest health discoveries, solutions to health problems, common health challenges and how they could be overcome, medical advices on common ailments, warnings against self-medication, counselling on childcare and other family health issues, food and dietary, as well as issues concerning unorthodox health issues and alternative therapy centres. Journalists support health tips with professional research findings/discoveries or confirmation from relevant and famous health professionals (Hove et al., 2015). Many readers are attracted to newspapers because of the health pages as they consider the pages home for health information; some of the health tips are sometimes reported in episodes (the story run from one edition into subsequent editions) and the reinforcement technique sustains the interests of the readers in following up the story.

The suitability of newspapers for dissemination of health information also lies in its appropriateness in audience targeting. Most newspapers audience are mature people, who can make health decisions for themselves and for others (family members, friends, neighbours and groups). Children, who constitutes the bulk of television audience can hardly interpret health information let alone make health decisions from such. They are regarded as "politically powerless, positively-constructed group that attract sympathy"

(Patterson et al., 2015: 2). This group constitutes less percentage of newspaper audience perhaps because certain literacy level is involved in reading and understanding newspaper stories. Even when some media audience got exposed to health news on broadcast media, they would still search for details in newspapers before making health decisions (Torwell & Rodney, 2010). Such is why the underage are exempted from the survey samples of this study to ensure the audience perceptions of media framing of EVD outbreak is saved from unjustified audience perceptions.

2.2.5 Internet and Social Media Use for Health Issues

Upsurge in social media use as a result of access to internet perhaps supported by increase in mobile phone usage enhanced information sharing in almost every issue of public concern including health and medical issues. Social media are internet-supported technologies and practices which people use to generate, develop, communicate and share information with other people without any feedback barrier (Wen, Chia, & Hao, 2015). Socialisation function of social media has turned to a means of sharing, discussing, deliberating and counselling one another on fundamental issues that affect the public. The primary essence of social media, which is defined by its interactivity feature to ensure entertainment among audience, is accommodating issues upon which mainstream media dwell. As a result of the rapid speed in which information spread on internet and social media, its role is becoming elaborate with public demand and means of searching information. Going through different search-engines, individuals within the four walls of their home can access loads of health information on various health challenges or needs.

The search for health information online whether for research purpose or individual and family health needs is sustaining its progressive intensity. Every health epidemic intensifies the propensity of the search through which information seekers are linked to

new and essential health tips. As EVD broke out in a threatening dimension in 2013, the search for information through various online media rose to millions during the outbreak and indeed making Ebola the leading searched item in Yahoo engine and the fifth rated search word in Google in 2014 (Alicino et al., 2015). While citing data from National Trends Survey (HINTS) reports, Madathil et al. (2015) emphasise that the rate at which internet users search for health information is aggressively high; about eight out of every ten internet users search for health information.

The structure and rates of health information search also vary from countries to countries depending on the public health needs of a country, the predominant health challenges/epidemics affecting the country and the rate of havoc wrecked, the accessibility to internet and consciousness of health information online, as well as the rate of information satisfaction the public get from the mainstream media regarding health issues. The argument that the higher socio-economic class have better advantage to getting health information online as a result of access to computer and computer literacy opportunity is not much significant as the use of mobile phones to perform the same function makes the gap rapidly becoming thinner (Alicino et al., 2015; Kim, 2015).

Social media such as Facebook, Twitter, LinkedIn, YouTube, WhatsApp and others have expanded the tentacles of health information sharing thereby promoting health-informed society. People are now taking information on social media serious as much health and other vital information flow to help people make informed decisions. Medical practitioners also use Facebook page and Twitter account to share medical advices and health research discoveries. This does not replace person-to-person professional medical service but rather supports emergency health decisions, help the public towards taking health precautions, and update the public on the situation of

environmental health as well as health challenges (Hawn, 2009). Health information embellished with digital images that enhances the understanding of the messages are sent inform of blogs to World Wide Web to reach wider receivers. More of those living with ailments or in a health epidemic environment seek online health information and are more interested in health information shared on social media than the healthy and those outside health risks vicinities (Kim, 2015). The margin might not be substantial since those who are healthy also use health information for precautions. Others even use social media and online health information for day-to-day affairs regarding the value and effect of every food substance consumed to make decision on what-to and what-not-to eat, drink or consume.

The search for health information and sharing of health tips on social media during EVD outbreak in Nigeria was copious. Despite the fact that Nigerians got much information regarding the outbreak from mainstream media; social media became a popular avenue through which they shared some of the information while they still searched for more online to corroborate or complement those from mainstream media. For instance, posters and short video drama in comedy form, centred on Ebola were uploaded on YouTube to correct the erroneous information and rumours about the outbreak; to emphasise on the precaution, prevention, and treatment of the victims. YouTube which its function as a “repository of videos and as a social networking interface became a medium for sharing health messages and was effectively used to influence public understanding regarding EVD outbreak (Madathil et al., 2015: 174).

The major concern about the health information online or shared on social media is much about the authenticity and the likely hazard effect the unsubstantiated information could cause since most of the social media platforms are not (fully) regulated. The

platforms welcome information from every Dick and Harry, thereby making health information uploaded online or through social media wariness to governments and healthcare providers. Another danger was that online information on EVD was most often used to disprove stories from the mainstream media during the outbreak in Nigeria. Members of the public were sometimes confused about which of the conflicting information should be used during such emergency health situation.

2.3 Newspaper Access and Reading Habits in Nigeria

Newspaper, being the harbinger of mass media in Nigeria enjoyed the monopoly of audience for ages until the domination was challenged by the emergence of radio and television in early and middle part of twentieth century respectively. The challenge of the monopoly of audience brings about audience competition which enriches various media output to meet up with audience demands and tastes. Aside the fact that public were tired of the monotony of newspaper as the only news medium then, the emergence of radio and television eases the access to more news stories and creates means for confirming the authenticity of news items in the newspapers.

There have been contradictory findings and empirical analyses regarding newspaper readership pattern in Nigeria. The contradictions perhaps might be as a result of time differences of the studies as well as the locations and groups where samples were drawn. For example, Edegoh, Ezech, and Samson (2015)'s surveys of newspaper readership among university students in eastern part of Nigeria reveal a distinctive finding, in which 99 per cent of the respondents read newspaper regularly. Aliagan (2011) considers various submissions that the rate of newspaper reading habit of Nigerian is poor following some local observations. While analysing the local observations on newspaper readership, he cited a survey conducted by Afro-barometer in 12 African countries,

including Nigeria, in 2003, which proved that only 13 per cent of the sampled population read newspaper daily. Aliagan used the data he collected between 2002 and 2007 to present another argument to justify that newspaper readership habits grow, but along international newspaper readership patterns. Citing from (WAN 2007: <http://www.wanpress.org/article14362>, released 4 June 2007), he presented:

There is a reported astronomical increase in newspaper circulation worldwide, with 2.3 per cent increase recorded in 2006 and 9.8 per cent increase in five years, with corresponding increase of 7.89 per cent in Nigeria within the same period (Aliagan, 2011)

He also cited a survey conducted by National Population Commission (NPC) which reveals that most Nigerians do not buy or have limited access to newspapers, resulting to low rate of newspaper readership in almost all the six geopolitical zones of the country. This view rests on Nigerian population distribution, in which higher percentage are rural dwellers with a low level of literacy as well as low income, making newspaper access and reading habit a second to that of urban dwellers. The potency of the use of newspapers to cater for information needs of the rural illiterate population was belied by many studies. The focus is not to evaluate the media potency by media reach (the factor, which does not even place newspaper ahead) but rather, by how the information is diffused and construed to generate the desired result from audience.

The audio-visual advantage of television as a welcome alternative to radio negatively influenced newspaper reading rate in Nigeria. The same ordeal the newspaper industry faced when radio was introduced resurfaced in a more threatening dimension as a result of the peculiar characteristics of television that satisfy the tastes of media audience till date. As access to television increased in Nigeria in the 1970s to '90s, the expectation that it would end the era of newspaper circulation as a means of mass communication became close to reality. The reduction in newspaper patronage and the fear of seeing

newspaper going to extinction intrigued the industry to diversify – restructured newspaper outputs and accommodate some columns other than straight news including comics, fiction stories and riddles to entice and sustain the audience interests.

As emphasised in Salawu (2004) that social demographic variables of the audience, more importantly their literacy rate, influence newspaper readership, it is essential to discuss the variables vis-à-vis the change in the newspaper readership pattern. The expectation that the percentage of newspaper readership should increase as the general literacy rate advances proves contrary as newspaper patronage has suffered the effect of every technological innovation in media industry. The new era of social media follows the same trend as social media, facilitated by mobile phone online opportunity to access and transfer information with no hurdles, won more of newspaper audience most especially the youth, until online newspaper edition came to the rescue of the offline edition. The dying state of newspaper audience reading pattern has been resurrected with accessibility and affordability of online editions of newspapers, which affords the industry an opportunity for increased connectivity with readers.

Factors affecting newspaper readership transcend literacy level of audience. The attribution of the decline in newspaper readership to low literacy rate falls short of empirical justification since studies (Alabi, 2011; Salawu, 2004) affirm that some among the literate population in Nigeria rarely read newspaper. Subjecting newspaper readership to reasons connected with audience structures and behaviours would constitute holistic understanding of factors that are responsible for low newspaper readership in Nigeria. The information needs of media audience are demanded in accordance with their economic gain; every consumer would want to get a high volume of media information at the lowest possible cost. The cost of a newspaper copy in relation to economic setback in Nigeria narrows the chance of offline newspaper accessibility in the competition for

media audience. As the gap between the upper and lower economic class becomes swelling and phasing out the middle economic class, which contains a bigger volume of newspaper consumers, the demand for newspaper could no longer measure the readership pattern.

However, some of the newspaper audience whose economic means cannot afford them a copy of newspaper daily constitute free-readers. Free-readers are members of the public who access newspaper copies through other means other than buying, such as public or private library, newspaper-stands, sharing a copy with relatives or friends and through occasional chances. Aliagan (2011: 460) finds that free-readers group are majorly youths, “who are the most vibrant and active section of the community”. This single factor explains why the emergence of online edition of Nigerian newspapers is met with youth admiration and keen acceptance. One would expect that online newspaper edition, which addresses the limited access to offline newspapers created by economic disparity gap, would have greater influence on numbers of free-readers. Other purposes upon which offline newspaper editions still remain relevant in the media competitive market explain the intangible influence of online edition on offline version.

Another social demographic index that is considered a factor of newspaper readership in Nigeria is age differences. Studies on newspaper reading pattern or habit in Nigeria could be categorised into two based on sample structure. Some of the studies, especially those that used higher institutions as case studies (Akanda & Haque, 2013; Edegoh et al., 2015; Igbeka & Ola, 2010), drew their samples from students, who are majorly youths. Studies such as (Alabi, 2011; Hassan, Latiff, & Atek, 2015; Salawu, 2004) drew their samples from general population. In either of the two categories, findings show that more youths read newspaper than any of the other age categories

though their rate of newspaper patronage, due to their low income, does not commensurate with their newspaper reading habits.

Information sharing and transfer is very rapid among youth than it is among other age groups because of youth's social relation. The implication of having a youth in possession of information is highly advantageous to information sharing because youthful exuberance – to always be the first to break news – does not allow youth to keep information. Even before the era of social media, youths were major news analysts at many of the newspaper stands, where they assume the role of opinion leaders. Being the most information seekers and active players in information analyses and rebroadcasting, their roles during EVD outbreak in Nigeria were notable.

Studies have revealed that youth are major consumers of online newspaper as a result of their high level of computer literacy compared to other age groups and coupled with internet access advantage through hand phones. During EVD outbreak, many did not wait for the release of the edition of the day, they searched for breaking news online and most often only used the daily editions for confirmations and details of the information already acquired. Majority of the youth were of secondary and higher institution school age. The quest to know is highly awakened in youth. This attribute made information gathering about EVD outbreak similar to the manner in which students search for academic information online. The underage and the aged are both not as strong in searching for information most especially when media are not within their reach or are too technical to put to use. Such advanced media technology like social media.

2.4 Nigerian Media System and News Coverage

Right from the inception of media industry in Nigeria, religion, ethnicity or regionalism, economic concern as well as political interest are the key elements that describe, define and determine the structure of Nigerian media and the pattern of news reporting. The polarisation of the information power and influences (monopolised by the international-media-supported world giants) coupled with the imbalance in the communication and information flow at the global level is reflected in the local content trends of information dichotomy and power-relation media structure in Nigeria.

Besides, the influence of long years of colonial dominance and foreign policies still shape the kind of media structure and practices in the country. The foundations laid by the hegemonies that characterised the early press in the so called developed or first world countries are considered appropriate for the growing countries. Nigerian media structure is partly fashioned after British and American models. It also has alliances more with the media of the role-model countries in terms of news exchange, coverage, media market, staff training, and other media interchange activities (Ojo, 2003).

The Nigerian media system started in 1859 on a religious structure when *Iwe Irohin fun Awon Ara Egba Ati Yoruba*, established by Reverend Henry Townsend, published its maiden edition to cater for religious activities. The media scene later cut the attention of colonial masters having noticed the potency of media to influence the publics. The game of media ownership, structure and operation largely remained in the hands of private individuals up till the emergence of radio with stringent regulations from colonial leaders who used draconian laws to gag the press. Media messages were drifted away from its religious and economic coverage to political promotion of colonial policies (Omu, 1968). The literacy rate did not only increase newspaper reading pattern but also newspapers in

return were used to promote mass literacy. The language of the earliest media being the language of the local audience promoted the audience interests and facilitated literacy goal.

The second face of the Nigerian media system was characterised by political avarice and nationalism struggle while a chunk of the media was still under the control of private bodies. Introduction of elective principle and promotion of political participation during colonialism precipitated this phase. Press became agents of political actors and media messages stunk of ownership political wills, which eventually resulted into polarisation of the press. Political awareness later turned to agitation for freedom from colonial bondage, in which the press was used as weapons for the advocacy to subdue imperialism and the draconian regulation that incapacitated press freedom. Newspaper readership during this period was encouraged to promote political participation and to mobilise towards struggle for self-determination. Such is the reason why Oso (1991) describes the foundation of Nigerian journalism as a child of anti-colonial and political agitations, the trends which still influence the present media structure and practices.

Post independent face of Nigerian media system constitutes era of media-government rivalry between the media motive to protect human rights and government obligation to safeguard the national security and national interest of the country. The press challenged the government of hiding under national security to evade its malpractices and deficiencies being exposed by media. According to Olukotun (2002), many of the mass media that sprang up around the time such as *The Champion*, *The Tribune*, *The Vanguard* and *The Punch* had their names reflecting the struggle against the repressive laws that barricaded media from championing human rights and protecting the public from autocratic policies of governments. He submitted that:

Having had to fight for freedom under both military and civilian autocracies, the Nigerian press often sees itself as the nation's social conscience and moves easily to the offensive in times of repression and inept governance, to act as the people's mouthpiece (Olukotun, 2002).

The media struggle eventually led to the deregulation of the broadcast media (which until 1992 had been exclusively owned and controlled by governments at various levels) and pressed for the deliberation on the Freedom of Information Acts. The various concepts that are attributable to the various political systems that Nigeria had had in the past still reflect themselves in media operations and practices today. The new media system under democratic governments in recent times still reeks of and suffers from repressive acts and decrees of the long years of autocratic civilian and military rules in Nigeria (Agbaje, 1990). Some of the major differentiating factors that define one type of media system from others are: 1) the ownership structure of the media industry; and 2) how much freedom the press enjoy while carrying out their professional task. The two factors are interconnected; a regulated media depicts governments enjoying absolute monopoly of media ownership and control while a free market media breeds press freedom. But information, unlike other commodities, is public goods, which should not be absolutely driven by market force to ensure sanity and to protect media consumers as well as national security and interests.

The roles of media in democratic process and political development at various capacities substantiate the essence of media as the fourth estate of the realm (Kaufhold, Valenzuela, & De Zúñiga, 2010). The involvement of media in political processes and governance is not only essential to development of politics but also most often than not, defines the content of political structures and practices in many societies. That is why the kind of media practice in a society is always a perfect reflection of the political structure of the society because vibrant media suppresses absolute political power to produce

accountable government. On the other hand, absolute political power suppresses or acquires the media (and mass media function as a mere government information agency rather than playing the essential watch-dog role that ensures check and balances) to produce irresponsible and unresponsive government. This is reinforced in Schramm, Siebert, and Peterson (1956: 1) describing that media system “takes on the form and colouration of the social and political structures within which it operates”. Ette (2000: 67) adds that it is “unrealistic to expect Nigerian press to be democratic under a military dictatorship” (autocratic rule) or to be a controlled media system under a pure capitalist-democratic government.

Therefore, media roles in a normal media system are not only tied to check-and-balance surveillances of the government and its policies. Media are expected to interpret events or issues affecting the public; ensure that the neglected (rural populace) are adequately covered in media reports as much as they are fed with information about the urban elite; mobilise media audiences towards issues that speed up development; and monitor national challenges and promote national image and values in a way that accentuates the development of the country and rebrand her international trust and status.

The Nigerian media system nowadays could be described as the midpoint between controlled and free press. Activities of Nigerian media including ownership and control of media houses are regulated by government agencies. Mass media are enjoying more freedoms though accesses to certain information (classified) are denied despite government assent to Freedom of Information Act. This explains why Nigerian mass media were subjected to government dictates during EVD outbreak on issue relating to the state of the virus most especially at the apex of the tension.

According to Orewere (1991), any policy maker, planner or administrator, who desires to effect a functional socio-economic, educational, health, political or ideological change within a social structure, must first identify such community communication modes and channels and utilize the duo to provide the people with maximum information about such change. Such modes and channels of communication must be audience-oriented or public-involved. While describing the structure of the Nigerian media system up till 1990, Adesonaye (1990) decries the proliferation of mass media in Nigeria expected to yield mass communication but amazingly producing progressive mass 'incommunication'. Media-rural audience relationship was characterised by top-down information transfer, in which the neglected rural population are fed with information about the few urban elites. The voices of the rural populace to register issues affecting the rural lives were regarded insignificant to make news in mass media. Media and media professionals were situated far from rural community to take cognisance of developmental issues that required media promotional sympathy.

If EVD had come to Nigeria through the back door (one of the unrecognised porous borders in rural areas), perhaps, the virus could have spread beyond early containment and could have caused irredeemable damages than those of all other affected West African countries put together. Why? Aside that the virus might not have been diagnosed early due to poor medical apparatus in rural suburbs, negligible interests of media reportage of rural issues could have left the issue degenerating to a point of comatose before it could be considered newsworthy. Information on what the virus is and what it is not; who are the affected, whether at window period or point of comas; as well as how to prevent the virus from multiplier spread and effect could have become a scarce commodity, which might have prepared ground for unceasing health woe.

Internet and social media have influenced the structure of the Nigerian media system and operations. Unlike offline media, online media enjoy more of press freedom and solve the challenge of mass ‘incommunication’, which was characterised by alienating the audience or silencing their voice while addressing/reporting issues concerning them. Online media eliminate the barrier between media and media audience, strip media of monopoly of information and empower the audience to be active players in information exchange by turning full information role of mass media to shared communication function. Having a segment of media falling out of the stringent regulation, though not without its own demerits, encourages mass communication. The audience become parts of news sources/originators rather than being restricted to consumption end. Mass media-audience communication system becomes instantaneous as audience are alerted of breaking news from time to time (Odone et al., 2015).

Nigerian media system, having elements of various media system combined, it is rather difficult to streamline the modality of its operation. For example, the capitalist elements of the system define information as commodity and thereby encouraging competition in media market as a survival strategy to remain in the market. Media houses will focus more on news aspect that satisfy their consumers (audience) so as to encourage patronage, the only means to remain relevant in media market.

2.5.1 Media Coverage of Issues and the Ideological Influence

Mass media operate within a social system in which various ideologies and principles determine how the social structure works. Mass media either fit in its ideology within the ideologies that define the social system and have its outputs reflecting the dominant

ideologies or try to sustain its unique ideology by engaging in ideological discords to make its outputs free of any external ideological dominance (Ette, 2000). However, the focus of this segment is to relate the concept of ideology as a ground upon which some media systems operate and reproduce their ideas and messages with competing ideologies within the same social structure. Again, the focus is also on *ideology* and *framing* as concepts that have relational properties; one can influence what becomes of the other and the duo can shape mass media outputs. The simple analogy is that what constitutes mass media determines what media represent and what influences what media present, which results into how media present the society it represent and how the society in turn perceives and represent what media present.

Media framing is not just an idea, action or decision blindly taken; it is a process in which various factors determine how each element in the process is a pulling force to how media make an event appear. The first element in the process is that there must be an issue (a newsworthy issue that arouses public interest). Media framing is more pronounced in burning issues that compel public attention; issues on which the public need to interpret and understand to make decisions. Chong and Druckman (2007) believe that framing in communication can only be defined or discussed in relation to a specific issue, which could be political, security, war, health, sport or any other issue that is of public concern. "...the frames for social security reform differ from the frames for immigration reform. Even the same issue at different times may invoke alternative frames", they emphasised. Chyi and McCombs (2004) add that in a news event's life span, news media often reframe events by emphasizing different attributes of such events so as to keep the story alive and afresh – the practice which they refer to as "frame-changing".

Second, to ensure media framing, the antecedents of the issue in focus are traced and used as the foundation and reference facts to interpret the current issue. Every news event is not absolutely new; it definitely shares something in common with older news stories upon which its interpretation depends. The ability to relate the current news event with the previous relevant occurrences dictates towards which direction is the current issue likely to be interpreted. Chong and Druckman (2007) agree that previous relevant issues to an event serve the purpose of attribution. It does not only give background information but also serve as pointers to the course of the new event and from which direction this could be viewed.

The third element is interest which could be individual or collective. There are at any point in time various interests in any issue arising, which are most often competitive. Interest is another force that pulls how a news event is structured in order that a particular interest is protected and takes edge over other competing interests. The interests of those who are directly concerned or affected by the story such as media ownership/editorial, media accolades such as advertisers or suppliers, news sources, pressure group or media audience as well as general public are always in conflict when an issue makes a news story. The supremacy of an interest over others while considering story direction (framing) depends on the news item involved and which one would have greater effect.

2.5.2 Media Framing and Political Ideology Influence

There are numerous studies that focus on media framing of various aspects of political issues such as: policies, manifesto or campaigns; parties or political affiliations; and political candidacy and representatives. In political issues, it is obvious that there are many interests competing for ideological supremacy, political control and power

domination, political gains and influence as well as supports to earn legitimacy. These competing interests have in no small way contributed to how media source, interpret, structure, produce and present political events as news stories.

It is necessary to establish the circumstances under which the true measure of framing and its influence in political issues could be clouded. Politicians have long ago realised media power to influence and its use to gain political influence. As a result, politicians and their political affiliates from the early rise of politics in Nigeria (even during colonialism) have seen the need to be allies of news media or establish theirs to serve as affiliates of their political movements. Such media played their game obviously in Nigeria from era before independence up till the present political reign.

In Eastern part of Nigeria before independence, Dr. Nnamdi Azikwe of National Council of Nigeria and Cameroon (NCNC) political party, which later changed to National Council of Nigerian Citizen (NCNC) used his chain of newspapers to propagate the activities of and support the political party (Duyile, 1979; Omu, 1978). The Ziks newspaper chain includes *West African Pilot* (1937); *Eastern Nigerian Guardian* (1940), published in Port Harcourt; *Nigerian Spokesman* (1943) published in Onitsha; *Southern Nigerian Defender* (1943) first launched in Warri and later transferred to Ibadan; *The Daily Comet* (1949); and *The Northern Advocate*, published in Jos and *The Sentinel* published in Enugu. The news items published in the newspapers were framed towards the positive activities of the political party and its policies of the proprietor, who was the flag bearer of the party.

A similar case was recorded in the West, where Chief Obafemi Awolowo of Action Group (AG) political party established *Nigerian Tribune* newspaper and other

Lagos-Ibadan axis press to project the party image. The practice persists till today and renders such mass media to mere political puppets rather than acting as watchdog to ensure objective reporting in order to earn and sustain credibility, a required principle for media survival. Studies consider it irrelevant, studying framing under such scenario, as the result will not reflect the true picture of media influence exerted through news framing. In such, it will not be a litmus test of framing effect on political issues (Omu, 1978; Uche, 1989).

Another scenario that is not suitable for the study of framing of political issues is precipitated by the types of media system or the degree of freedom that mass media enjoy in the country under study. In a society where developmental journalism reigns, press freedom will be seen as secondary to national development; press and government will become partners in progress or the press is considered as an arm of government through which government policies are projected; and objectivity is only considered as media value when it is favourable to development policies. This is more exemplified in Cenite et al., (2008) study of balance and framing in the 2006 Singapore election coverage. Cenite et al. (2008) clarify that Singapore media are more of developmental than free press when they quoted former Singapore Prime Minister, Lee Kuan Yew, calling for a subordinate press and condemned Western media for causing chaos, “press freedom in Singapore is secondary to nation-building, and can help to present Singapore’s problems simply and clearly and then explain how if they support certain programs and policies, these problems can be solved”.

In Cenite et al. (2008)’s study of framing under developmental media theory, efforts were made to analyse the level of freedom that media enjoy. Emphasis was also

made on the objectivity and balance of media reports, which serve as the bases on which framing was tested. The study confirms:

Our study examines election coverage using a conception of balance based on which includes the amount of coverage devoted to parties and 'positive or negative perspectives on the parties'.

Given that the press is expected to co-operate with the ruling political party in development journalism (Wong, 2004), it seems likely that balance, as defined here, may be compromised in the Singapore press.

Similar case could be found in Chen (2005)'s study of media framing of a religious movement in China. Chinese news media operate under Soviet Communist Theory of the press, in which media act as agents of the ruling party. The skew of the media towards supporting the ruling party is already an indication that media messages are framed to reflect the support.

The essence of all these analogies is to substantiate the fact that a litmus test of media framing of events will be in an atmosphere where the press freedom is to a certain extent guaranteed and media performance driven by market force rather than being relegated to adherents of what government or ruling politicians spit in favour of their policies or interests. It should also be established in the same vein that political and other interests influence on media activities cannot be overruled. David et al. (2010) assert that as politicians and interest groups strive to shape the structure of media coverage so as to get favourable outputs concomitant to their pressed interests, the press (base on their convictions having taken certain circumstances into consideration including their interests) repackage the story either to reflect their own version of the framed issue.

How does media framing apply to the study of political issues? Power is the determinant element in media coverage of political events because frames are sponsored in political scenes. Gamson and Modigliani (1989) do not only list power (sponsor

activities) as one of the three determinants that produce a framing package but also stress its influence in political struggles. Other two determinants according to them are cultural resonances and media practices. Dai and Hyun (2010) also noticed how some studies criticize the “neglect of power” in framing research and urge scholars to consider social movement, as well as social and political power, as resources available to sponsors of frames.

There are numbers of issues in politics that form news stories which are necessary to be discussed one after the other in relation to how they are framed in media. There are always at least two competing sides or views to any of the political issues or government policies – those that embrace the policy and those that reject it; ruling party and the opposition party; or the optimistic view and pessimistic view. The consequence of having two views on an issue competing for press attention subjects media to framing such issues in either of three ways: support either of the views by making the argument of one view more salient than the other; against the duo views by coming out from a different and fresh angle with superior arguments; or choose to emphasize conflict, which is a new frame as in the findings of David et al. (2010).

David et al. (2010)’s study of media framing of family planning in Philippines could be cited as a close example of policy framing. The policy was framed in two ways. (1) A group align with the government to project the policy as a road to development. The group believed that unchecked population growth negatively affects development outcomes in many sectors such as education and income. They see the policy as a check on excessive population growth through the use of ‘contraceptives’ to help achieve the goal of the policy. (2) Another group emerged from religious perspective with their argument framed in two ways: the first linked the policy with abortion, an act that is

culturally and religiously condemned; while the second argued that such policies will lead to a degradation of moral values. David et al. found out that media frame reflects in both views, though the discourse is presented as conflict.

In Nigeria, the issue of family planning though follows similar trends with that of Philippines; it is more of health than government policy. There was a 'change in frame' when it was obvious that adherents of the health policy were losing ground. The policy was changed to 'Child Spacing' and media reframed it to appear as such. The frame 'Child Spacing' is also supported and discussed under another frame known as 'Exclusive and longer breastfeeding', which easily found its way into the cultural and religious principles of Nigerians and as a result popularly acceptable.

Political candidacy is another issue that does not escape media framing. Politicians are branded in either the colour acceptable or unacceptable to the public. The public form opinions on a candidate based on how he/she is portrayed by media; which aspect of his/her attitude, charisma, political knowledge and influence, education standard or over-ambition are more salient in reports concerning him/her.

2.5.3 Media Coverage of Ebola and Economic Influence

One of the driving forces of the media operation and output is the financial aspect of news generation, production and distribution as well as the move towards profit maximisation. The focus here is not to balance the argument on whether media operation thrives when it is left to be driven by market forces or when it is moderated in relation to political ideology and development policies of the state. The concern is to assess how each economic ideology influences media operation in terms of how issues are structured as news. Do the perspectives through which mass media assess news items are as a result of

influence of some economic indices relating to survival strategies in a keen competitive media industry? No matter how small and whether consciously or unconsciously, mass media effort towards profit maximisation in a free economic society influences not only what issues the mass media report but also how the issues are reported.

Mass media derive financial strength or means from the same society it covers aside sponsored messages (Advertisement), which has its own degree of influence on media message direction as a result of advertisers' relationship with the media outfits. Straight news items are not free from being subjected to manipulations towards satisfying the perspectives of economic influence. Personal economic disadvantage status of the reporters in Nigeria, which has placed more than average of them below the medium economic class, encourages "Brown Envelope Syndrome", (a practice in which reporters are induced with monetary presents by those affected by the issue under coverage to influence how the issue is reported).

Similarly, mass media in a free economic market are owned by few capitalists who leave above poverty line and dictate the fate of the multitude poor, and also control the information flow and contents to benefit their capitalist ideology. Commodification of news stories remains the basic ideological tenet of mass media under free media market such that he who has economic means can influence news direction; make news out of non-newsy events; and make media silent on newsy occurrences. The argument that capitalism is a brilliant economic aid to the development of democracy, supported by the position alludes to the bidirectional stimulation of growth; where capitalism creates a "constituency for personal freedoms" through a free market and "transparency and accountability" of democratic systems prevents much of the corruption that would otherwise impede a capitalist economy (Magnuson, 2003). It seems logical and may

sound meritorious in first world countries, where giant media are owned by conglomerates. Capitalism in developing political structures hardly benefits democratic system as capitalists' struggle to maximise profit open media messages to various economic dictates.

Controlled economy on the other hand is considered non-democratic because it does not encourage a free market operation. Mass media functions and operations are regulated to suit the political ideology upheld by the state. Then, mass media messages become symptoms of deficiency in press freedom with feeble wills to act effectively as watchdog on erroneous government policies and other social vices. Issues that mass media considered important and given adequate coverage are those that facilitate the development of policies of state ideology. With some level of media regulation in Nigeria, some mass media spilt out what the policy makers dictate most especially when it concerns issues of public interest. Whether mass media are under the full control of the state or have their activities and operations regulated by state organs, certain degree of the media ideology on which stories to publish and what angles of the stories to be emphasised is overridden by state policies.

As much as media continue to operate within certain economic and political ideologies, which influence the environment of the media, mass media are subjected to perspectives of issues that align with situation that society unfolds. However, the struggle of the media to make its ideology supreme in order to have total control on what information it deems fit for public taste and from which perspectives are the issues better reported lingers on the unending solicitation for press freedom. It is incontrovertible that no media system is without freedom as no media system enjoys absolute freedom – the gap is such that some media systems enjoy more freedom than others (Becker et al., 2007).

2.5.4 Media Coverage of Ebola and Religious/Ideological Influence

Nigeria, being a secular state accommodates different religious ideologies to cohabitate and reform Nigerians. The influence of religious ideologies cannot be separated from Nigerian media system because the foundation of the media system was the earliest religious strategy that traversed the entire country with mass proselytization. Until today, Nigerian mass media are not only dichotomised along religious lines but are also sensitive of religious related issues in relation to their target audience as well as their environments (Uche, 1989).

Nigerians are majorly divided along three lines: (1) political party affiliations, which result from political ideology of individuals; (2) ethnic groups or regionalism, which are based more on race in relation to geographical boundaries and cultural differences including major languages and history of lineage, under which Nigeria is categorised into three major ethnic groups (Hausa, Igbo and Yoruba) or into three major regions (Northern region, Eastern region and Western region) or the present six geopolitical zones (North-West, North-East, North-Central, South-East, South-South and South-West); (3) religious beliefs, which predominantly share between Islam and Christianity. The three major lines of differences influence one another; people of different faiths and from different ethnic groups could be members of the same political party except otherwise such a party is regional.

Though, the three dichotomies are interrelated, religion is the most delicate of all because its affiliations transcend Nigerian boundary and religious ideologies are internationally linked. Unlike others, religious stories or reports always arouse international attentions and are most often drifted towards international disorder. For

instance, the *Jyllands-Posten* Muhammad cartoons controversy in which the Danish newspaper, *Jyllands-Posten* published 12 editorial cartoons on 30 September 2005, most of which depicted Prophet Muhammad “blasphemously”. The cartoons and other information, some of which were found to be falsified were considered blasphemous in most Islamic traditions and offensive and maligning to the character of Prophet Muhammad (Henkel, 2010). Muslim groups in Denmark complained, and the issue eventually led to protests around the world, including violent demonstrations and riots in some Muslim countries after the Danish government had refused to meet with the diplomatic representatives of the Muslim countries and would not intervene in the case. As a result, the issue received prominent media attention in some Muslim countries, leading to protests across the world in late January and early February 2006. Some of these protests escalated into violence resulting into more than 200 reported deaths, attacks on Danish and other European diplomatic missions, attacks on churches and Christians, and a major international boycott. The case also caused chaos in Nigeria and recorded many casualties in solidarity for religious ideologies. Danish Prime Minister, Anders Fogh Rasmussen described the controversy as Denmark's worst international relations incident since the Second World War (Modood et al., 2006).

A similar case could be established in the December 12, 2015 clash between Nigerian Army and Shiite religious group in northern part of Nigeria. The perspective at which mass media, most especially social media reported the case as being attack on a sect based on religious rivalry rather than attacks to uproot another militant or terrorist group, which some Nigerian media likened to the formation of another version of *Boko-Haram* insurgency, generated international sympathy for the group. Iranian government, a country where the Shiite sect is predominant launched a war threat on Nigeria while calling for a redress on the attacks on their Nigerian members (Onunaiju, 2016). Many of

other political, economic, socio and ethnic unrests are reported by the media with religious undertone.

Hackett (1998) proves that mass media have become tools for widening the gospels most especially among the Pentecostal Christian denomination in Nigeria such that the Christian popular culture is transformed to become the dominant culture to be generally accepted by all in Christendom. The cordial attractions to mass media widely displayed by all denominations in Christendom to intensify evangelism and to spread ideologies proclaimed do not only increase the competitions for media use but also climb down on media needs for other issues of public concerns such as health issues. Mass Media have so much famed religious messages among the public that other issues such as health and education, which require professional attentions are recommended for spiritual (religious) solutions. Hackett (ditto: 258-259) concludes that:

The 'modern' media are deemed an acceptable weapon for God's army in the battle against Satan. While there is clear boundary maintenance on the part of these religious organizations with regard to their own sanctified identity and territory and those who fall beyond the pale of God's grace, it has not resulted in an introversionist, sectarian stance. In fact, their dualistic theology belies the contested, negotiated nature of religious public space, which is increasingly being defined by the cultural modalities of electronic media

Religious ideologies of mass media owners also play prominent role in what mass media consider newsworthy and how stories concerning religious interests are reported. Part of the measures placed on media practice in Nigeria is the restriction on who are licensed to own and operate mainstream media (radio, television and newspaper). Private ownership of mainstream media excludes religious bodies because it is considered a challenge to objectivity and other ethical principles of media practice. Yet, individual owners of private media outfits belong to different religious ideologies and as a result frame news event along the interest of the religion they profess. The same way

government owned media are accused of serving government information needs, some private media outfits also serve various ideological interests akin to theirs. Meanwhile, religious bodies have also directly or indirectly gained ownership and control of some section of media to propel their ideologies (Ojo, 2003).

2.5.5 Media Coverage of Ebola and Ethnic Rivalry Influence

The wave length of crises in Nigeria as well as the media patterns of its coverage rotates within political, religious and ethnic perspectives. Ethnic polarization or regional segmentation in relation to geographical location and cultural variance of Nigerians also has its ray cast on media structure and operation throughout the long history of mass media in the country. Regional and community media have always been a welcome development towards the penetration of media messages to the remote suburbs by having local and regional mass media cater for the information needs of the people at the peripheries. Information and communication are more diffused when media operate within the level of the audience – speak the language they understand; promote their culture and identities; and involve them in the news (generate news both from them and around them, and avoid feeding them with news outside their domains alone). It helped in the awareness creation of EVD outbreak as members of various communities were educated and reoriented on issues concerning the virus. It also helps in information feedbacks as Ojo (2003) agrees that “the media may convey to the authorities the grievances, the needs, the problems, the hopes and aspirations of the people, and the responses of the authorities may in turn be conveyed by the media to the people”. Yet, these significances are beclouded when such mass media are turned to weapons to engage in struggle for ethnic hegemony of the regions they serve.

Ethnic dichotomy in the Nigeria media system treads the path of political intolerance of the pre-independence and earlier part of post-independence democracy in Nigeria. Parties, political ideologies and interests grew along ethnic inclinations; and the media were used to fulfil political wills (Udoudo et al., 2015). The emphases on stories that: sympathise with ethnic marginalisation; debase ethnic dominations in power relation context; encourage or discourage quota system in matters relating to ethnic benefits; promote merits or equity to encourage quality and utility; and appraise or axe secession to avoid disintegration of common aspirations and goals, are areas where mass media are deeply involved in ethnicity and regionalism. For example, if a story about ethnic marginalisation is reinforced in the media, it does not only call for redress but also insight one ethnic group against the others. As politicians and their political parties are establishing mass media to fulfil political wills, ethnic groups are also wooing private mass media established by people from their ethnic background to nurture ethnic agendas.

The promotion of regional media in the earliest history of Nigerian mass media most especially broadcast media was more of a regional competition to facilitate development than ethnic jingoism and regional ascendancy (Uche, 1989). The biased interests of individual newspaper owners towards their ethnic group also influence their perspectives to issues and how they frame news stories on such. The ownership pattern of mass media in Nigeria whether print or broadcast is within government and private individuals. This is unlike in advanced countries, where mass media have become conglomerate and they are owned by shareholders, who cut across different political, religious, ethnic or social groups. Individual biased interest to favour a group does not arise, as such mass media serve collective interests. Prior to and even after the establishment of *Nigeria Daily Times* in 1926, all other Nigerian newspapers were owned by private individuals or at most, partners or political parties (Oso, 1991). Government

monopoly of broadcast media until 1992 was not favourable to having conglomerate broadcast stations. The deregulation of broadcast media in 1992, though caters for private and shareholder ownership, yet shareholder ownership is not much featuring in the industry.

If ethnic influence on media framing of issues is considered from audience perspective, the effect is relative. The credibility of a media outfit within the region it operates may have certain influence on audience perspective of issues reported. Similarly, how active and sensitive the audience are concerning the issue been reported is another factor, which drives mass media to how-to and how-not-to frame such issues. Media audience are very sensitive to issues affecting their ethnic groups and a slight media influence on such issues makes greater impact on how audience perceive and interpret it.

2.5.6 Media Coverage of Ebola and Media Entertainment Influence

Sports and entertainment are presently claiming the chunk of, or more than half of all the media outputs in order to meet up with the challenge posed by new generation demand. More of the radio airtimes are dedicated to music as substantive programmes or as interludes within programmes such as radio drama as well as other various sports activities and entertainment programmes. The case of television is even more as more entertainment cable Televisions are springing up threatening the viewership of traditional television channels. Availability and affordability of television decoder as well as more accessibility to internet, which enhances television streaming, expose television audience to both terrestrial and online television stations perhaps more than required. As entertainment stations seduce the teeming youth population with entertaining

programmes, conventional television stations are also joining the trend to remain relevant in media industry thereby given in to more entertainment and sport programmes than usual or packaging news stories, health and other current affair programmes in an entertaining style. Newspapers have also, in addition to the entertaining online editions, increased their entertainment pages of offline editions to allow more stories that seduce the readers' attentions humorously. Pages like "Fashion and Styles", "Humour and Music" and "Nollywood Reports" including sports and games stories make newspaper more interesting to readers than usual.

Mass media relationship with entertainment could be discussed through two faces: (1) how the entertainment industry influences the media structure and its outputs and (2) how mass media perceive and report entertainment stories in relation to other stories competing for airtimes or news-holes. As the world is moving towards entertainment, supported by contributions from social media ends, almost every aspect of mass media reports is influenced by entertainment significance. Mass media have added to the entertainment integrated roles such as "edutainment" – reporting education issues from entertainment perspective; "infotainment" – disseminating information through entertainment angles; "healthainment" – reporting health issues using entertainment codes; "crisestainment" – reporting crises from entertainment perspective; and many other reportorial occurrences that make news in media.

Mass media satirically report burning issues to lessen the impact of the news stories on the audience. Whenever mass media notice that the audience are bored of the monotony of the domination of stories on crises and wars as well as other social vices, they change the saliency of the stories from pathetic angles to amusing themes. As a result, the pangs are relieved to allow audience to interpret the circumstances and take

decisions regarding the critical issues reported. It is also used to calm down tension generated by crises stories in a way that does not misconstrue the understanding of the crises or jeopardise the efforts towards resolving it.

During EVD outbreak in Nigeria, series of reports were directed towards the scourge. For instance, on page 15 of August 10 edition of *The Guardian*, a story titled “New forms of greeting ... Going comical with Ebola” is supported with many photographs mimicking how Nigerians were greeting themselves while trying to avoid body contact in fear of Ebola. The story satirically educated the public on how to prevent the virus from spreading in a comical way that passed the message without emphasising on the tragic nature of the virus or escalating the tension already built. Also on page 44 of August 16 edition of the same newspaper, a story captioned, “How Ebola virus is changing socio-cultural behaviour in Nigeria” was reported using entertainment approach. It was perhaps used to lessen the fearful effect of previous EVD stories on the readers in the same edition. The newspaper even used the same pattern in the early period of the outbreak when tension was on the rise. A story, “Ebola scare: A farewell to handshaking, hugging” on page 7 of August 10 edition though could not belie the obvious that EVD had mounted fear in people, it comically presented some form of preventions to lessen the fear.

2.5.7 Media Coverage of Ebola and Educational Influence

The influence of education on EVD outbreak in Nigeria was highly felt. Nigerians were fortunate that Ebola was first experienced in the city of Lagos, where the level of literacy is higher and access to different forms of mass media including foreign media is superior. Being a cosmopolitan city, a substantive number of people living or working in Lagos are literates and as a result they are highly educable through mass media on key issues

affecting their socio, political, health and economic lives. Their sensitivity to mass media reports on EVD both nationally and internationally illuminated the entire state with more facts about the virus and how to live safe of it.

Another fortunate story of influence of education hangs upon the preparatory and high school session-break at the time EVD broke out in Nigeria. EVD outbreak in Nigeria coincided with end-of-session break for primary and secondary schools across the country thereby reducing the chances of the virus being spread through body contact, which might have resulted into unwary interactions among pupils. The emphasis here is that both agenda-setting effort and framing pattern of the media has no direct influence on school-age children since their access to news media most especially newspapers is limited and their ability to interpret and react to stories on EVD is insignificant. They were much influenced by opinion leader interpretations and decisions of the reportages on EVD outbreak in Nigeria such as parents/guardians, religious leaders and mentors within neighbourhoods. Though it was established that “not all issues, frames, or attributes have similar effects on audience attitudes” (Aday, 2006), however, it should also be noted that not all media audience are influenced the same way by being exposed to the same issue the media set as agenda or framed. The divergence might have been occasioned by how active or passive the audience involved are. Though school-age children could be categorised as passive audience and the expectation that the media framed of EVD reports should have greater effect on them than the active audience, their inability to be self-sufficient in decision taken regarding the media reports refutes the expectation.

Another notable influence of the saliency of media messages on EVD outbreak in Nigeria is that it disrupted school academic calendar. Primary and secondary schools end-of-session breaks were prolonged beyond the normal holiday as a result of the fear

attributed to the schools by various media reports as being the most likely means through which EVD could be spread faster. Nigerian newspapers focused more on the influence of EVD on school resumption such that it became public agenda. For instance, a front-page story in August 27 edition of *The Guardian* titled “Nigeria contains Ebola, shuts school till October 13” opened up the debate on issue regarding the EVD scare and school resumption. Other stories on the same issue started forming saliency of the issue. Some of such stories from *The Guardian* (2014) are cited below:

1. Kaduna schools to screen pupils before resumption (August 30, pg. 3)
2. Ebola: Lagos mentors principals, headmasters (September 5, pg. 3)
3. Ebola: school now to reopen September 22 (September 6, pg. 1)
4. Reps, Lagos may review schools’ resumption date over virus (September 10, pg. 1)
5. Government insists on Sept 22 for resumption of schools (September 11, pg. 1)
6. Ebola: Rivers won’t be in a hurry to reopen schools – Jonathan, N/Assembly urged to extend resumption date (September 12, pg. 3)
7. Ebola and resumption: No date is sacrosanct, But September 22 is safe – Fashola (September 14, pg. 17)
8. Ebola: Uncertainty over schools resumption, teachers divided (September 21, pg. 1)
9. Ebola: Lagos shift schools resumption to October 8 (September 22, pg. 1)
10. School resumption and Ebola crisis: Students shun classes in Enugu (September 23, pg. 5)
11. Lagos battle ready for Ebola as schools resume October 18 (October 4, pg. 46)
12. Schools resume today after Ebola containment (October 8, pg. 1)
13. Schools resume in Lagos, Rivers, Others, get safety kits (October 9, pg. 6)
14. Relief as schools finally resume after Ebola scare (October 9, pg. 13)
15. Rivers wants sick pupils to stay at home as schools resume – distributes anti Ebola materials (October 10, pg. 77)

16. Ebola: NUT directs teachers not to resume in Rivers (October 11, pg. 3)

The saliency emanated from the news stories quoted above also affected academic and non-academic works in higher institutions of learning. Entman (1993: 51) envisages that “analysis of frames illuminates the precise way in which influence over a human consciousness is exerted by the transfer (or communication) of information from one location – such as a speech, utterance, news report, or novel – to that consciousness”. Media emphasis on the havoc the interaction among students in school could contribute to the pang of EVD outbreak propelled various managerial policies in higher learning institutions within and outside Nigeria. It also resulted in attitudinal and behavioural changes towards interaction among students and staffs as well as student/staff relationships. For instance, in September 9, 2014 edition of *The Sun*, a report titled “VC cautions new UNIJOS students on Ebola” focused on the university new policies to address EVD issue. Likewise, some other stories: “University of Ibadan mobilises against Ebola”; “Ebola: UNILAG screens staff, others”; and “Universities, poly allay fears, say: We are prepared to tackle Ebola outbreak on campus” in September 11 and 16 as well as October 1 editions of the newspaper respectively. The report in the October 15 edition, “Texas College rejects Nigerian applicants, cites Ebola”, testifies to the effect of media portray of EVD outbreak in Nigeria on the actual and prospective Nigerian students abroad.

In another development, media emphasis on EVD impact on education revealed deficiency of some necessary medical tools in university teaching hospitals, which are considered as the epitome of healthcare institutions in Nigeria. In a story, “Ebola bugs Nigerian varsities – Deadly virus exposes flaws, deficiencies in nation’s ivory towers”, the newspaper wrote:

The helplessness of Nigerian universities in the face of the disease ravaging the continent is obvious. Weeks after the incident was first reported in the country, investigation revealed that none of the teaching hospitals owned by universities has the facility to quarantine an Ebola patient, much less offer any medical help. Also, none of the laboratories in these teaching hospitals has the capacity for a sustained and safe enquiry into a highly infectious disease like the Ebola (*The Sun*, October 1).

Issue concerning insufficient health facilities in most colleges of medicine of many universities became exposed as mass media highlighted the ill-preparedness of the Nigerian government prior to the outbreak.

2.5.8 Effects of Media Coverage of Health on Audience

If truly mass media influence public thinking (in terms of how to think about issues, which remains the central focus in media framing analyses), attitudes, behaviours or decisions, then media interest in every event becomes public interest. It therefore means that members of public have no specific interest in issues being reported by media except that which the media influence the public to develop. It may also mean that media interest is a reflection of public interest or that media interest overrides public interest, as a result of its influence, and allow media point of view to prevail as Chong and Druckman (2007: 104) affirm:

Either the public has no attitudes on many political issues, or it holds so many fragmentary and conflicting attitudes that it cannot reconcile or resolve them. If opinions can be arbitrarily manipulated by how issues are framed, there can be no legitimate representation of public interests.

Media can as well select among public interests and set it as a priority as Iyengar and Kinder (1987) suggest that one of the most important effects of media is in setting priorities for public, which, in turn, can have an impact on public decision. Bell and Entman (2011) emphasise this in their findings from the study of Bush's tax-cuts policy

of 2001 and 2003 in which the media essential role to manipulate or influence audience by emphasising on certain aspect of issues reported and project such as the best while silent on or deemphasising the alternative or other options was established. The work found out that media enhanced public compliance to government policies despite the fact that it was not favourably beneficial to their economic status and values. It was made to appear by media as if it favoured the haves-not and as well acceptable to all Americans whereas it was another mode of extortion by the haves.

The primary essence of media is not always to protect public interest as many studies have established because public interests are not at all time justifiable to media view. Mass media was born to protect only one interest which is "Truth". Any other interest that media try to protect (under the influence of any theory, concept, ideology, or model) may jeopardise the basic and foundation interest. If media try to operate under social responsibility or developmental section of old normative theory for example, the primary interest of media would at a point be at loggerhead with developmental role expected of media. Entman (2007) emphasises "... systematically employing agenda setting, framing, and priming under the conceptual umbrella of bias would advance understanding of the media's role in distributing power, revealing new dimensions and processes of critical political communication". Media framing is therefore an effort to prioritise some interest ahead of competing interests in news reporting, though Bloch-Elkon (2007) argues that it is not always clear for whom the media are mobilized: the government or party or interest groups.

2.6 Theoretical Perspective

Considering the nature of the research problem, research objectives, as well as the research questions set to achieve them, a combination of scientific and critical theoretical

perspectives is required. The approach will link quantitative survey analysis of the audience opinion on media reports of EVD issues with the thematic interpretation of the content analysis of the media reports such that explicit values could be placed on the interpretation (Scotland, 2012).

2.6.1 Relationship and Application of Media-Effect Theories

Effort to establish how effective media effects are may open another link to previous discussions and arguments about changing-faces of media-effect theories, which gave birth to agenda-setting, framing and priming. The concern in this work is ‘how to’ and ‘how not to’ apply the theories in the face of media relationship with and the influence that media messages have on media audience. Media-effect theories are central to all media messages because they are about what media do to people and how people react towards media messages (Ngoa, 2012). Then, the discussion of current trends as regards the theories will point to area of application that conforms with pattern of reporting EVD stories. It will also focus on issues surrounding media decision on what and how to report and which interest to be protected (Why reporting from a perspective) in the reportage in order to generate certain effect (whether intended or unintended) in media audience.

Almost all research findings on media effects right from the era of “All-powerful media” (Bineham, 1988; Bratić, 2006) to the current trends of “Media-agenda setting, priming and framing” (Chong & Druckman, 2007; De Vreese, 2005; McCombs & Shaw, 1993; Scheufele, 1999) confirm that media exert certain influence on audience through its messages. The point of divergence lies in the degree of media influence, the consideration of other influential factors (e.g. opinion leaders), the perception of media audience (whether active or perceive), and many other determinants upon which the

theories accommodate new perspectives and development. It is pertinent to discuss how the later fashion of media-effect theories influences the reportage of EVD stories.

2.6.2 Agenda-setting Influence

Right from the time Siebert, Peterson and Schramm came up with the idea of media agenda-setting; there have been a lot of criticisms, empirical justifications, modifications and improvement from various scholars. The accommodation of significant perspectives based on continuous researches on the theory by scholars are purposively to ensure that agenda-setting idea conforms with and prove right the findings in: various related communication issues of study regardless the environment of the studies, classification of audience structure involved, methodological approaches, and the type of media practices under which the studies are carried out. It is believed that agenda-setting is applicable in all issues competing for public attentions. Mustapha (2012: 106), agrees that members of public do not only learn about competing issues through the mass media; “.... they are primed to attach differential weights to those issues in response to the media placements, displays and contextualization.” He argued further that media narrow the attentions of public to certain issues by laying more emphasis on them at the expense of others to accomplish the agenda.

Agenda setting simply means “the creation of what the public thinks is important”. It occurs when mass media present certain issues frequently and prominently with the intent of getting large segments of the public to perceive those issues as more important than others. It can also be defined as, “the more coverage an issue receives, the more important it is to people” (Coleman, McCombs, Shaw, Weaver, 2008). Coleman et al. (2009: 147), describe agenda-setting as “...the process of the mass media presenting

certain issues frequently and prominently with the result that large segments of the public come to perceive those issues as more important than others.”

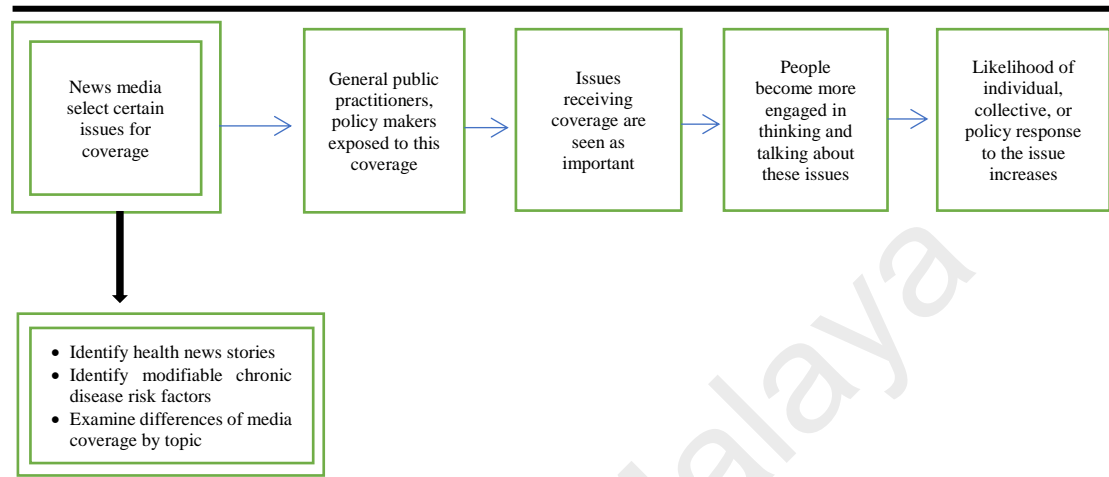


Figure 2.1: A Generalized Model of Agenda-setting Effects of News Media

Culled from Caburnay et al. (2003:711) News on Health Behaviour

This description in actual sense makes the theory relevant to central obligation of mass media to manage news in favour of societal development. The theory remains applicable as long as mass media are ready to align their philosophies, editorial interests and decisions towards making stories of public concern their priority through agenda setting. There should be no fear of where public interests lie as earlier raised (that the market need determines what to produce) since media agenda has some level of influence on market needs. Agenda-setting of media manipulates audience interest towards what it considers important for the public not only to discuss but also to prioritise and act on. As analysed in the generalized model of agenda-setting effects of news media in Figure 2.1, media emphasis on issue transforms the issue into agenda and eventually manipulate the audience to perceive the issue as the most significant to them. It is against the importance that audience attribute to the issue that government or policy makers decide to act or react.

Mustapha (2012), further agrees that the application of agenda-setting theory cuts across various issues. Coleman et al. (2009), also confirm that researchers have adapted the theory to discuss and understand a number of issues. But the concern is how layers of agenda setting influence public agenda and decisions and how do media and public agenda shift from one issue to another most especially when issues saliency are competing for audience attention and public concerns. Whether first level or second level of agenda-setting or even “agenda-building” (Curtin, 1999) and “agenda melding” (Shaw et al., 1999), the central focus, which is salient shift is a confirmation of media involvement at all levels.

The media agenda-setting concern of ‘What the audience think about’ could be regarded as the primary stage of media influential might on audience. As the inequitable treatment of myriad news items competing for audience attentions elevate audience interests in a news item above others, it paves the ways for other media influential concepts such as framing and priming to germane. It saves and redefines media framing concern of “how to think about all issues” to a more succinct and manageable concept, “how to think about the most important issue”.

a) Agenda Transition

At the time when Ebola broke out in Nigeria, there were other issues of equal importance competing for audience attentions such as the Boko-Haram saga, which was then at its tensed stage, and the issue of political transition, which was hanging loosely as hyper-tension general election (first of its kind, in which the opposition unseated the ruling party) drew near at the time. Mass media, particularly newspapers explored the many news angles through which the issues surfaced and resurfaced to keep public interest aglow of Boko Haram saga. The 2014 Boko-Haram attacks on three Nigerian media

houses (*ThisDay*, *The Sun* and *Moment* newspapers) and the abduction of 273 school girls in Chibok in April 2014 were the two most salient news angles on which media agenda mostly capitalised just before the outbreak of Ebola Virus Disease (EVD) in Nigeria (Adelakun, 2014). “Bring Back Our Girls” became a permanent caption on the front page of some Nigerian newspapers (*The Punch*, *The Sun*) to sustain the agenda. Making choice out of competing news items upon which media agenda is set is a media task that depends on certain number of influence ranging from media perception of reality and the nature of media environment including audience wariness to happenings around them. Audience wariness (how active the audience is) is an important factor that segregates between what media considers to be important and what the audience assumed essential (Bantimaroudis, Zyglidopoulos, & Symeou, 2010); a dichotomy that leads to “transfer of salience”.

Shifting audience attentions from what they earlier considered most important in relation to the earlier media positioning of issues reported is another area where the essence of media agenda is felt (Ragas & Roberts, 2009). This requires that mass media proportionately reduce the saliency (the amount of attention and prominence given to issues) of one issue to give in to the new one that requires public attention. Prior to EVD outbreak in Nigeria, *Boko Haram* insurgency was the main agenda (both media and public), which went as far as influencing international perception and assessment of the peaceful co-existence in the country. Despite the fact the increase in the insurgency attacks, media repositioning of issues (Agenda-Shifting) subdued its saliency to place EVD outbreak at the centre of public attraction (Besiou, Hunter, & Van Wassenhove, 2013).

However, shifting agenda from one issue to another can be discussed under two faces – full and partial. A full shift of media agenda (which could be regarded as Agenda-

setting transfer) occurs when there is over domination of media attentions on new issue as a result of a total shift in the saliency that the previous issue enjoyed in the media. It results in the assumption that the old issue has rather been over-flogged or it has been concluded and there is no fresh angle to it, which may press for public attention or debate. In this kind of scenario, new issue on media agenda benefits immensely as more attention is given to it by both media and public. EVD outbreak did not enjoy the kind of agenda shift since other issues of proportionate importance competed for media saliency as well as public attentions. The case of EVD outbreak fits in to Partial agenda shifting (Agenda-setting shift) in which new issue competes with the old media agenda for media saliency as well as public attention. Though the main agenda may be shifted to the new issue, old issues are not totally wiped off but are rather subjected to saliency reduction as well as shortfall in public attentions. As EVD outbreak became media and public agenda, the importance attached to *Boko Haram* insurgency and general election, which were at the time burning issues was reduced (Adelakun & Adnan, 2017).

Studies (Kim et al., 2002; Kioussis & McCombs, 2004; Moon, 2013) have used Agenda-setting transfer to depict how media agenda translate to what audience consider as the most important issue, a concept used to describe issue salience in what is considered first-level agenda-setting. The concept mostly explains how “issue attributes salient in the media were functioning as significant dimensions of issue evaluation among audience member” (Kim et al., 2002: 9). The operational assumption of agenda-setting transfer in this work refers to transition from one issue salience to another rather than movement of salience between agenda players (media and audience).

Most often, the rate at which an issue fades-in to allow the agenda set on another issue predominantly depends on the differences in the gravity of both issues as well as

the longevity of the period in which the earlier issue remains on top of media agenda based on the issue lifespan (Vliegenthart & Walgrave, 2011). The lifespan of an issue includes the period from issue conception (perhaps, when first reported in the media) until salience is built around it to enjoy public attention and recognition (public agenda). Agenda climax sets in when the issue becomes the central focus of both media and public and remains the priority on the ladder of individual concerns. Fresh angles to the issue usually dictate how long it remains at the climax of media and public agenda ladder. Mass Media capitalise on the fresh angles to prolong the salient period an issue enjoys from the public. Until a new issue of predominant importance occurs to facilitate 'return to scale' of the previous issue, public attentions remain attached to the previous, which enjoys its agenda climax. EVD outbreak diverted a certain proportion of public attentions away from *Boko Haram* insurgency, which had enjoyed a long period of uninterrupted media agenda. EVD outbreak did not totally fade away *Boko Haram* insurgency, rather its importance caused a minor reduction in the salience the insurgency enjoyed and consequently brought EVD issue to limelight.

b) Agenda Sponsoring

The change in issue agenda most often does not follow a natural cause. Attributing media agenda-setting of issues to what media consider important for public to think about, is most often what studies (Kiousis & McCombs, 2004; Moon, 2013; Nwanne, 2014; Shaw et al., 1999) consider as the normal trend of the theory. This consideration substantiates the explanation on 'where agenda-setting of an issue originate from – media or public'. Sometimes, market demand (public interests in an issue) compels the media to set agenda on such issue by making the issue the central focus of their reportages, while most times media emphasises on an issue entice public interests and as a result making them the most important to the public. While trying to discuss the reciprocal nature of agenda setting

using politics as a case study, Thesen (2014) emphasises that though agenda-setting is still referred to as a media function, media agenda-setting of issues are sometimes triggered by politicians or public. It is upon this agenda corroborative influence that Thesen substantiated the relationship between media agenda and public agenda while discussing agenda-setting as mediatised politics. Discussing the “degree to and ways in which media agenda influences the agendas of political actors” (Thesen, 2014), attention was drawn to the question of “who influences who.”

There are substantive arguments from scholars that agenda-setting of issues is more of media function than audience-triggered influence on media decision on which issue deserves more attentions. Such is a reason why Shaw et al. (1999: 3) emphasise that:

Agenda setting implies that the mass media are powerful and send messages to (somewhat passive) audiences, and most agenda setting studies do show more influence from the mass media-to-audience than influence in the audience-to-mass media direction.

Having established that the power to set agenda is not a monopoly of the media but rather a reflection of media-public reciprocal influence, it is necessary to justify how agenda are sometimes sponsored by those who have significant influence on what come out of the media or those who have the potential to manipulate members of the public towards their interests. Politicians and policy makers most often divert the attention of the public from issue of public concern, which they assumed unfavourable to their political goals by generating an issue, and use media to blow it beyond proportion. In Nigeria, influential people including politicians, parties and groups grant the media audience whenever they want to set agenda on issue as a form of attention diversion from real issue nowadays. Since their views make news and mass media benefit from their

economic dominance through advertising charges; their voices become louder and the issue they emphasise on in media becomes a new agenda.

Information surplus in relation to scarcity of attention induces the struggle to influence the agenda-setting function of media. The competition for the limited attention as a tenet for agenda-setting delineates the origin and the routes through which an issue becomes prioritised – whether through natural cause or artificial generation and sponsoring of issue for the purpose of attention diversion. The earlier of the routes might be an outcome of the ranking in the gravities of issues for agenda consideration base on public concerns or benefits while the latter are most often attached to individual interest. But both routes use media to facilitate the spread of the issue in order to ensure that public interest and attention are won. The relationship between them encourages that an issue may be stripped off the saliency it enjoys as a result of the importance of another issue to the public or influential individual and groups.

2.6.3 Media Framing Influence

Media Framing could be regarded as an extended arm of agenda-setting. Scheufele and Tewksbury (2007: 10) confirm that the theories are interrelated not only because they are from the same root but also because they are “based on similar premises” and each born out of what McQuail (2005) regards as paradigm shift in the understanding of media-effect theories. Agenda-setting simply means choosing for the public which media consider the most important among competing news stories by laying the most emphasis on it such that it becomes public discourse or agenda. This is a true understanding of what Baran and Davis (2010) consider first-level agenda-setting. On the other hand, media framing could be regarded as the direction in which media perceive or want people to perceive a news story by making salient a news angle, based on its judgment of and

reference to previous similar occurrences (often driven by editorial interest or ownership philosophy (Yusha'u, 2011)), which have significant relevance to how the public interpret and react to the entire story. Agenda-setting (first-level) is choosing between stories while framing is choosing within a story, an attribute similar with second-level agenda setting (attribute salient rather than issue salient). Carter (2013: 11) submits "Frames are embedded in culture, inside people's mind, and within the agenda of the media. All frames are subjective interpretation or emphasis of reality."

Relating the effect and influence of attribute-salience on public behaviour and reactions to what makes media reports enlists framing in this discussion. It does not matter, which news story the media set for the public as agenda or what issue the public perceive the most important (public agenda) upon which the media-agenda is set. Framing influences public behaviours by choosing from various attributes of a news story, and make one salient in relation to what effect to be triggered in media audience.

The salient attribute considered reinforces the aspect of a news story that media pay more attentions to and as a result dictates which effect is manifested in media consumers of such news. De Vreese, Peter, and Semetko (2001) add that the core of framing is "selection, organisation, and emphasis of certain aspects of reality, to the exclusion of others". Mass media may find it difficult and unprofessional to kill unpalatable and not-good-for public-taste news item in order not to make negative effect in the public. But the fair/positive attribute of the story could be made salient to lessen the damage such effect of the story could cause in the media developmental focus. The meaning the media give to a news story based on the angle of the news emphasised tells how media consumers perceive and act on the report (Mustapha, 2012). Framing is in no

belittled way a theoretical justification through which the social responsibility of mass media towards development could be achieved.

2.6.3.1 Historical Record of Framing

It is not difficult to believe that framing evolves as it develops from one level (in context and usage as well as understanding by various disciplines such as sociology, economics, psychology, as well as media and communication) to another. Framing did not start as media or communication theory, its usage in sociological perspective was first noticed in Berger and Luckmann work of 1966, "*The Social Construction of Reality*" as observed by Carter (2013). Berger and Luckmann (pg. 15) provided justifications for having different media frames on the same issue by emphasising on the social relativity of reality and knowledge.

Earlier than Berger and Luckmann's work on sociological perspective of framing, Bateson (1955)'s essay, "A theory of play and fantasy: A report on theoretical aspects of the project for study of the role of paradoxes of abstraction in communication" is what Vliegthart and van Zoonen (2011) consider as the beginning of framing concept in social sciences. This in essence is an indication that framing grew from sociological and psychological roots of studying abstraction of meaning from human communication, arising from the processes of interaction, interpretation and contextualisation. Goffman (1974) regards the processes as social frameworks, which according to him, provide meaning, determine what is relevant and irrelevant when considering certain actors, issues or events, and suggest appropriate behaviour". Chong and Druckman (2007) also agree that the expectancy value model's general assumption that an individual can place different emphases on various considerations about a subject is a useful abstraction for discussing the psychology of framing. Placing emphasis on subject, which is assumed the

foundation of psychology of framing, could not have only resulted from or influenced by individual level of information need but also individual level of information access and assessment as well as information structure, born out of the concern of the information source. Borah (2008) considers Goffman (1974) as the first study to have developed the general concept of framing in which framing is seen as ‘principles of organization, which govern events – at least social ones – and our subjective involvement in them’. Goffman described framing as ‘schemata of interpretation,’ a framework that helps in interpreting events into something meaningful (Brantner, Lobinger, & Wetzstein, 2011b).

The idea of Luntz (2007), “It’s not what you say, it’s how you say it” emanated from his real-time study of political campaign (as a pollster to Republican party in US) and the effect of messages as well as distilled terms and phrases that resonated with specific interpretive schemas among audiences helped shift people’s attitudes. Luntz’s political campaign test as emphasised by Scheufele and Tewksbury (2007), confirmed that the effect of messages on the receiver is not a function of content differences but of differences in the modes of presentation. This therefore, put Luntz in the fore front as the first to employ framing in the study of political messages although his idea was predated by the applications of the concept in other disciplines such as the existing research in sociology (Goffman, 1974), economics (Kahneman & Tversky, 1979), psychology (Kahneman & Tversky, 1984), and communication (Entman, 1991).

Framing was imported into communication study to establish how news media package, structure or weave meanings around issues being presented as news items to the audience. Media framing grew out of different layers of media effect paradigms (in which each paradigm shift measures how much more influence do media messages have on the audience) to feature another pattern through which media influence is exhibited.

2.6.3.2 The Concept of Frame and Framing Analysis

The opportunity upon which media framing rests is not only that issues can be viewed from different angles and reported from various perspectives but also that issues can be produced using myriad of expressions, which are likely to affect the message structure or the way audience interpret and perceive the message. Going by how media framing has been conceptualised by many studies, it will be far away from justice to assume that a definition covers it up. Perhaps until a consensus is reached among researchers of media framing, giving the length and breadth of its scope or totally segregate the concept from other interrelated media phenomena such as media agenda and priming, the study of media framing will continue to accommodate interest-based conceptualisations as much as areas of media coverage become wider and more studies conducted to fill the vacuums.

Matthes (2009) agrees that framing is a multifaceted concept and while trying to establish the various forms in which the term is conceptualised and operationalised, he observed that the term has been used inconsistently. This was reflected in his effort to establish “what framing is and what it is not”, when he scrutinised various definitions of ‘frame’ as an identical construct of ‘framing’.

It therefore requires that some of the definitions be examined to have an insight into how framing is conceptualised and how each study varies the usage of the term to adapt to different areas of focus as well as diverse objectives in framing studies. Entman (2007), see framing as a process of culling a few elements of perceived reality and assembling a narrative that highlights connections among them to promote a particular interpretation. The study discussed further that frames perform four functions: problem definition, causal analysis, moral judgment, and remedy promotion. And through the

functions, framing works to shape and alter audience members' interpretations and preferences by raising the salience or apparent importance of certain ideas, activating schemas that encourage target audiences to think, feel, and decide in a particular way. In the analysis of Entman, it could be deduced that framing is perceived as **causal and effect** element in news reporting. It means that if media structure a news report in a particular way, the effect in audience is likely to differ from structuring the news report in another way round.

In another definition by Gitlin (1980), frames are regarded as principles of selection, emphasis, and presentation composed of little tacit theories about what exists, what happens, and what matters. There is a level of resemblance between 'framing' defined by Entman and Gitlin definitions of 'frame' as both focus on making choice out of myriad of competing information as well as structuring the choice to place emphasis (for a purpose though not stated) except that Gitlin's definition is devoid of the effect on the receiver.

Tversky and Kahneman (1981)'s focus is on "decision frame", which is more or less similar to principle of selection emphasised by Gitlin, though their presentation of decision frame is opened and not specific on whether the decision frame is on the side of the media or the audience. They regarded decision frame as the decision-maker's conception of the acts, outcomes, and contingencies associated with a particular choice. The question that needs to be answered is "who is the decision-maker in the definition" – media or audience?

Directional definition, focusing on message structure rather than principle of selection and emphasis could be traced to Gamson and Modigliani (1989). They

submitted that a frame provides a central organizing idea or story line that provides meaning to an unfolding strip of events, weaving a connection among them. And it suggests what the controversy is about, the essence of the issue. The basis of the definition is that related past stories can be linked together to give direction to the understanding of the present event in order to influence audience decision. For example, Nigerian health workers industrial strike action as well as porous border could be weaved as causes of the emergence of Ebola rampage in Nigeria.

Iyengar (1994)'s definition appeared raising the issue of objectivity in news framing. He sees framing as a concept that refers to subtle alterations in the statement or presentation of judgment and choice problems. The phrase 'subtle alteration' is an indication that framing is not free of bias during selectivity (inclusion and exclusion), while structuring (words choice and language use), or making some facts salient than others (emphasising and deemphasising) to make the desired effect during audience interpretation of the report as well as decision making.

Goffman (1974)'s definition is more sociological than communication. Though it is one of the earliest understandings of the concept, Goffman conceptual analysis is general on human cognitive capacities to include the ability (and the need) to set up frames, or structured understandings of the way aspects of the world function. Its peculiarity is the introduction of human reasoning capacity as the basis for interpreting the world around him rather than the effect of message structuring which is the basis of argument in almost all the definitions of framing most especially in communication.

Cappella and Jamieson (1997) consider the changes that occur to every part of report as well as rhetorical devices used while writing or producing the reports as

parameters for the expectation of different interpretation of the message from the audience, which Entman (1993) refers to as audience frame. They reduce framing to “the way the story is written or produced,” including the orienting headlines, the specific words choices, the rhetorical devices employed, the narrative form, and so on. To Chyi and McCombs (2004), only two elements of news are taken into consideration while framing news stories, that is, news framing is based on the manipulation of space and time, which are prime elements of news as the duo correspond to where, what, why, who, and when of a news story.

Lee (2014) sees Entman (1993)’s definition of framing as the most related and frequently used in health communication. According to the definition, framing serves ‘to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described’. Coleman et al. (2009) while adapting the definition to health-related news, reiterated that media framing serves to select health problems (or types of issues), diagnose causes, make moral judgments, and suggest remedies according to newspaper frames.

Carter (2013) has a different opinion from Lee (2014) on the most appropriate definition of framing as he considered Reese (2001)’s definition the best. Reese definition recounts that framing is concerned with the way “interests, communicators, sources, and culture combine to yield coherent ways of understanding the world, which are developed using all of the available verbal and visual symbolic resources”; specifically, “frames are *organizing principles* that are socially *shared* and *persistent* over time, that work *symbolically* to meaningfully *structure* the social world”. Carter argued further that Reese’s six aspects to framing (organizing, principles, shared, persistent, symbolically, and structure) are important to address the detail towards understanding how frames

emerge, persist, and affect individuals and audiences since (according to him) all previous definitions of frames resonate.

Druckman (2001) believes that majority of framing definitions reveal two distinct uses of the terms frame and framing. First, some use the terms to refer to the words, images, phrases, and presentation styles that a speaker uses when relaying information to another, or what can be called *frames in communication* (Cappella & Jamieson, 1997; Gitlin, 1980; Iyengar, 1990). The frame that the speaker chooses may reveal what the speaker sees as relevant to the topic at hand (Gamson & Modigliani, 1989). For example, a politician who emphasizes economic issues when discussing the campaign uses an “economy frame” that suggests economic considerations are pertinent.

In an effort to harmonise the various views on the concept of framing that gave birth to as many definitions and conceptualisations as the numbers of studies conducted on framing, D’Angelo (2011b: 6) concludes:

This means that conceptual definitions of frames in communication— what are typically called media frames or news frames in political communication research—can vary from model to model and, hence, from study to study, because they are conceptualized in light of (re: in the same model as) certain conceptual definitions of frames in thought. Thus, I argue that we do not have—indeed, we cannot have and we do not need—truly full (read: complete or finished) conceptual definitions of frames in thought or frames in communication. What we need is a fit-into attitude for doing framing research. By fitting into an integrative model, a single study or even a whole research agenda accepts certain conceptual definitions of frame and framing and relies on specified theoretical constructs and mechanisms regarding frame building or framing effects. Only then can the lone researcher or team of researchers get busy bringing together particular conceptual definitions of frame and framing and particular measures of frames needed to set up a specific research design.

In the opinion of De Vreese, Boomgaarden, and Semetko (2011), it is important for researchers to identify the types of frames they are investigating by being explicit in the operationalisation of the concept. Working in tangent with the opinion and based on the

focus of this study, framing could be conceptualised as the direction to which media brand reports or want people to perceive events whether covert or overt based on its judgment on the previous similar occurrences. The judgement may be driven by vested interests, which have significant relevance to the formation or occurrence of the current issue being structured. This description of the concept accommodates the intent (describing the motive of the media behind structuring a particular report), the process involved (the method used to achieve the motive; that is how the event is framed) and the effect (the interpretation and understanding of the message by the message consumers in relation to the framing pattern).

News framing begins from news gathering, making the news sources the first determinant of news direction. The influence of news sources is blatant because journalists many times lack specialized medical knowledge and, therefore, must rely on expert sources to help them produce frames (Lee, 2014). Oh et al. (2012) concur that in addition to corresponding with variations in news frames, cultural and political influences also correspond with variations in the types of sources journalists rely on. Based his argument on a current research finding, Oh et al. add that journalists predominantly rely on expert sources and resources such as health care providers in the case of health stories. The news sources, to a certain extent, exact influence on how a news story is framed since journalists cannot create news stories themselves but rather depend on the narration of news sources (Lee, 2014; Mohamad, 2011). Most often, issues are framed by news sources in line with their interests; living journalists with no choice but to act accordingly (present the story as being narrated by the source). In this kind of scenario, D'Angelo (2011) sees journalists as having a rather passive, stenographic role in transmitting source positions.

While gathering news, journalists decide on the events to cover based on their evaluation of the events and in relations with the house-style as well as the philosophy of the media outfits they report for. A journalist decision on what to cover can also be influenced by self-interest, which result from his background, social status, education and training, ethnic and culture, faith or religion, and his natural instinct (feelings, love, hatred, emotion, excitement, sensation, or passion). Journalists from south-west Nigeria, who cover news in northern part of the country around 1996, would consider covering story on Meningitis outbreak in the north newsier to covering story on a medical breakthrough in the region. A northern journalist would consider otherwise because ethnic interest would have certain influence on his decision.

Another area where journalists are much concerned about frame building is news structuring through what David et al. (2010) tags linguistic approach. All the factors that determine journalists' decisions on what to cover also come to play while writing the news. The issue is beyond telling lie but telling "framed truth" as Rosas-Moreno and Harp (2013) emphasise that journalists' "truth" in the story is determined by myriad of influences (earlier mentioned), and they also agree that "journalists do not tell *the truth* but versions of stories they understand to be true based on what they have seen and know". Two journalists may write two different stories from the same events covered. Each picks a news angle that suits his interest and projects all fact of the events that support that interest while closing his eyes to other facts that are likely to reduce the impact he wants such story to make in the audience. This act is also achieved through the use of metaphor or other clichés that give such a story a stand-out outlook. David et al. (2010) cite the example of using the word "baby versus foetus" while framing abortion issue; "killing the unborn **baby** or removing the **foetus**". Carter (2013) agrees that rhetoric thus plays a

key element in how frames are defined in social environments. Frames are not just visual; they are embedded in the language used to structure news.

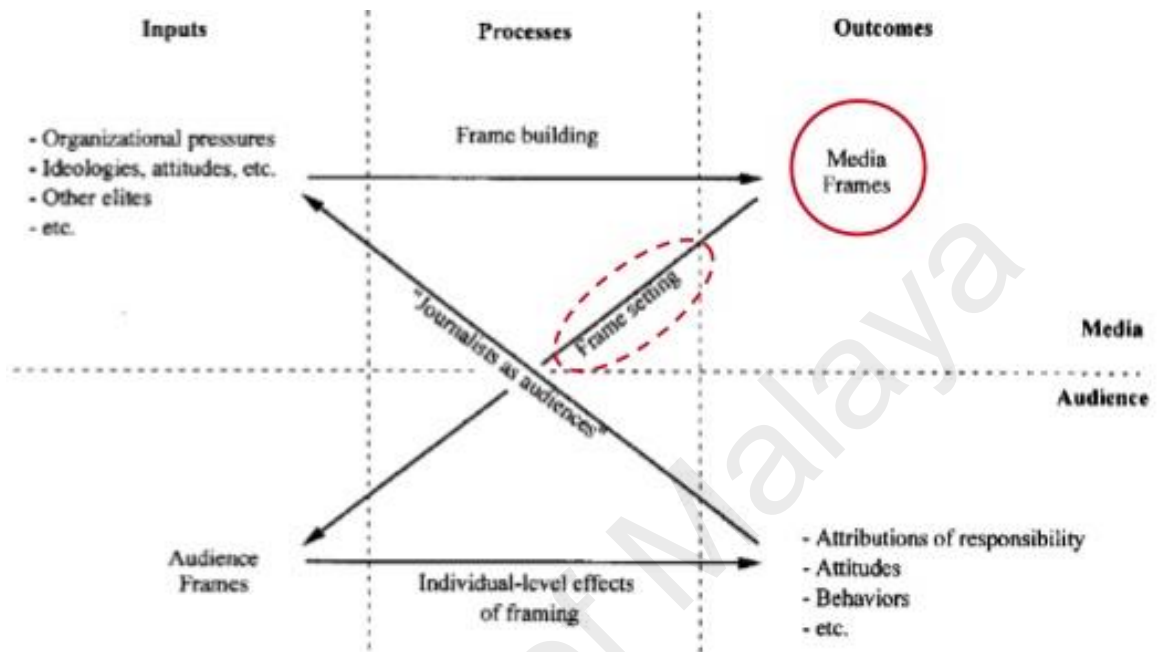


Figure 2.2: A Process Model of Framing Research

Source: (Scheufele, 1999)

Studies such as Shoemaker and Reese (1996) as well as Borah (2008) have identified that factors such as organizational pressures and constraints, social norms, journalistic routines, pressures of interest groups, and the ideological and political orientations of journalists could influence how journalists frame an issue. Brantner, Lobinger, and Wetzstein (2011) add that journalists give the story a 'spin,' taking into account their organizational and modality constraints, professional judgments, and certain judgments about the audience. While analysing how frames are built and how such generate certain effects in the audience behaviours or attitudes to the issues framed, Scheufele (1999) came up with a model that explains the process and the players that are involved in framing cycle (Fig. 2.2).

Understanding how journalists framed reports about Ebola outbreak and how it spread in Nigeria or its effect on people and society at large, and why they wrote from the perspective from which they did, are important for several reasons: to understand the news sources as well as the person writing the story and his/her context in relation to the subject matter while building frame; to appreciate the journalists' interpretations of Ebola outbreak, its effect and the people affected; and to weigh the objectivity in the framing of the story. Gaining this understanding about journalists and their views as reflected in the framing of Ebola stories becomes a focus for one to appreciate the foundation of how media reports are framed (Burns, Richter, & Kant, 2013).

Another element that shapes how news reports are framed is the editorial philosophy and ownership influence of news media. Editorial philosophy reflects what a news media stands for and as well affect which information goes on air and when (at prime or non-prime time, and the longevity of time allotted) or make it to 'where' on the pages of the newspaper (front, inside or back page and the size of the space allotted) (Mohamad, 2011). Chyi and McCombs (2004) also discuss similar element when they were analysing the four dimensions of media framing in previous studies. According to them, the dimensions are: the topic of a news item (what content is included in the frame), presentation (size and placement), cognitive attributes (details of what is included in the frame), and affective attributes (tone).

The decision on where a news item appears on the pages of newspaper and through which format can make such story salient. Carter (2013) emphasises that the more pressing, "important" stories are usually placed at the top of each page, and the most pertinent stories of the day are located on the front page. He also considered that the audience focuses are usually drawn to (as cues that signify the importance of a story);

word placement, font size, and colour, as all provide references for a story's level of impact and importance. He concluded that these media techniques frame reality by providing cues and making certain types of events more salient than others.

In some cases, media audience are not passive. Although they are assumed weak and being driven by media messages in some studies, it is not in all cases that the audience agree with what media feed them with. They also influence how media frame issues most especially if they rely much on their experiences or have access to some obvious facts, which the media cannot help but make salient. Besides that, media audience select stories that satisfy their needs, they also sieve the stories they are exposed to even if they must consume such messages.

2.6.3.3 Media Framing: Between Subjective and Objective Reporting

Going by the openness of conceptual descriptions given to media framing in some studies, Nelson, Clawson, and Oxley (1997) for example, it translates that every media report is framed. What makes the difference is the degree of framing, in terms of how much focus or emphasis is placed on some facts of the story as reflected in Brantner et al. (2011)'s description of framing, where they agreed that framing in communication research refers to an observation that differentiates media reports on the same topic in diverse ways, emphasizing or neglecting particular evaluations or particular parts of the issue. Chyi and McCombs (2004) affirm the traits of frame in every news item when they proved that previous studies conceptualized "frames" in such a way that almost every characteristic found in news coverage can be identified as a kind of frame.

If the reasons are considered sufficient to substantiate that all media reports are framed and that the degree at which each is framed makes the difference, then as the

degree at which a report is framed increases, certain level of objectivity is compromised – similar to what Aday (2006) refers to as advocacy frames. And as the degree decreases, the report gains more objectivity. To make the analogy clearer, there is a need to make a dichotomy between facts and objectivity. Every objective report is factual but not all factual reports are objective. A news report can contain facts but without being objective if the selected facts in the study outshine some other facts of the story (imbalance facts presentation), which could have helped the audience further in their understanding and interpretation of the story. This is also buttressed by the submission of Carter (2013) that the abstract principles of framing are used by news media; doing so shifts the objective occurrence into a subjective event. This reason could also be reinforced by a common adage that says “there is no absolute objectivity in media reports of news events”.

Framing is most often achieved by laying emphasis on some facts of a story, and deemphasise other facts with the intent to blind the audience from paying attention to competing facts, which are likely to influence audience assimilation and perhaps leading to forming parallel opinions (Aday, 2006).

Another way through which media lay emphasis is by giving so much detail that the audience would assume they have enough to form opinion, whereas some facts are (knowingly or accidentally) concealed in the process of giving the detail. It may also be achieved by giving less detail than required to form opinion such as in the case of George W. Bush’s tax proposals of 2001 and 2003, in which media framed the policy in such a way that citizens were not provided with adequate information necessary to balance assessment of either the effects on their own individual economic interests, or of impacts on widely shared, collective (i.e., sociotropic) values. Bell and Entman (2011) explain that the tax cuts’ putative was framed as collective benefits in terms of economic growth

while neglecting the likelihood of greater inequality. By deemphasizing the skewed particularistic benefits, broadcast coverage diminished citizens' ability to deliberate effectively over taxation policy.

Carter (2013) believes that an example of how media narrations frame reality and skew the objectivity of reality is found in the content of news. Journalists tend more towards the negative side of an event than the positive side while choosing news angle, the practice that does not deviate from the status quo of media practice aiming to attract audience attention and interest (Adams, 2009). Information policies adopted during EVD outbreak in Nigeria perhaps forced the Nigerian press away from the status quo of arousing readers' interests with catchy headlines and sensational reports. Following the status quo do not always help resolved issues reported but rather compound audience's interpretations and understanding of issues in order to generate a fresh news angle upon which media agenda is set.

2.6.4 Agenda-Setting and Framing: Points of Divergence and Convergence

According to Aday (2006), studies on media framing of issue is much more concerned about the structure of the story context and the most emphasised angle (qualitative) than making an issue among competing others (quantitative) more important, giving it preferential treatment in order to become people's central focus and topic of discourse. Some scholars have argued that framing is an additional layer of agenda-setting. Looking through the arguments, it is deductible that framing always rests on the foundation prepared by agenda-setting; until an issue becomes famous through agenda-setting, public attention may not be drawn to salient news angle. For instance, public interest in an issue is achievable through agenda-setting, but how media structure a story reinforces the

interest and dictates how audience interpret the story. The angle of the news focused or the detail emphasised induces the public interpretation and understanding of the issue.

The call for the merger of the theories based on what are considered as their overlapping identities and applications emphasised by Pan & Kosicki (1993) and Maher Harford, & Skuse (2000) is yet to be stamped. This is on the ground that the second-level agenda setting, which is likened to framing, according to Aday (2006) “has not been consistent in conceptualizing a dependent variable, or in settling on one that distinguishes the effect from agenda-setting or framing theories”. Therefore, the main concern of both agenda-setting and framing theories are: distinct and of separate effects on the audience. Another concern is what issue the public consider most important and how the issue is interpreted based on the structure of news stories. The unproved effect of the second-level agenda-setting still makes it not a perfect resemblance of framing. The fusion of agenda-setting and framing despite their related and reinforcing saliency roles to issues is still subject to empirical justifications of the nature of the effect of second-level agenda-setting on audience.

From all indications, the merging between second-level agenda-setting and framing is narrow since the difference is not quite distinct except the unsynchronised effects of the duo on the audience. A continuous accommodation of empirical justifications of the contrast effect on the audience may close the gap thereby making the marriage between agenda-setting and framing fit. Arguments in some studies (Ghanem, 1997 and later McCombs and Ghanem, 2001), that agenda-setting is about issue salience reinforces the closeness between second-level agenda-setting and framing because attribute salience that the press associates with issue is synonymously used for frames. Issue salience is the emphasis that media place on some issue in order to make them

appear most significant before the audience, while second-level agenda-setting focuses on attribute silence. Yet, the discussions on the similarity is not only enough yardstick to assume that framing is a second layer of agenda-setting, hence could be merged to be used to explain the same phenomenon.

Aday (2006) explains further that a frame is a more elaborated concept beyond emphasising issue attribute. While explaining issues surrounding the submission of McCombs and Ghanem, comparing a frame with issue attribute, Aday pointed out that framing can produce effect reinforcing the first-level agenda-setting by salient on issue attribute, which will result into “frame-setting”. The concern in this study is not to emphasise or deemphasise framing as an extension of agenda-setting or an independent theory of distinct attributes, the end results of the theories (effect) on audience regarding health issues remains the priority. Nigerian media framing of health issues is improving from the evidences relating to EVD early containment, but prioritising health issue order than the period of health risks requires media attention such that the accumulated effect of media attention to various health issues on audience will reinforce media effort during health hazards.

2.6.5 Media Priming Influence

Priming is another product of paradigm-shift in media effect theories. Ju (2006: 50) confirms that “Framing and priming do not operate independently of each other, even though media effect studies have examined them separately”. Intensive coverage of a particular story among competing others (agenda-setting) can set the pace for priming. So also a continuous emphasis on a particular angle of a story content (issue framing) can increase the tendency to recall such issue and use its content to interpret, understand and evaluate new occurrences (Kim, Han, and Scheufele, 2010).

Every issue, whether new or known, has antecedents, which are linked to form the bases for the discussion of the issue. This simply means that previous issues have certain effects on the interpretation and understanding of the new occurrences or re-occurring issues (Stevens et al., 2011). Media reportage of issues takes various dimensions. Old issue may be reported from new angle and often new issue are substantiated and discussed from the perspectives of previous news stories. If the cumulative interpretation of an issue over time tends towards a direction based on media agenda and issue-framing, subsequent media reports on the same issue will be interpreted in line with the foundation already built (how people are programmed).

Majority of earlier studies on media priming of issues were centred on election and politics (Ju, 2006; Kim et al., 2010; Malhotra & Krosnick, 2007; Stevens et al., 2011; van der Brug, Semetko, & Valkenburg, 2007) because political issues are predominantly on both media and public agenda. Such is the reason why in Nigeria and some other developing nations, agenda-setting, issue-framing and priming are instrumental to how people become bearers of social change and development. If media agenda are more on positive issues that enhance development, or the media frame more of negative issues in a way that drives away people from negative implications, priming effect will negotiate for optimism in public reactions to issues towards development.

2.7 Conceptual Framework

Explaining the concept of Media-Audience exchange relationship towards health issue would require the ontological and epistemological explanations. The ontological position of this study is to establish whether or not the framing patterns engage by the media during a health crisis influence audience interpretation and understanding of the framed

messages as well as their actions towards the health crisis. This will require that the relationship in the General Model of agenda setting be integrated to reflect a two-way relationship. The relationships between each pair of the variables are bilateral in nature, explaining cause-effect inflow and outflow among the components.

The concern about the relationships among three major components in media studies (media, message and audience), which ignites epistemological explanations on the nature of the relationships and how it leads to media effect size on audience has been the focus of the proposed framing model. In the proposed framing model (see Fig. 2.3) the relationship is triangulated with cause-and-effect arrows linking the three main components in triangular shape, each at the angle edge of the central triangle. The relationship is two-way directional cycle, clockwise or anticlockwise. The outer arrows signify causes or reasons while the inner arrows signify the effects or influence. Each arrow head shows the direction to or movement away from the components as the process continues in cycle.

If the movement starts from health crisis, the arrow away from health crisis to media indicates the degree of health crisis that interests or compels media attention. Once the gravity of the health crisis compels media attention, media in turn frames the issue to set agenda for the public. The framed issue has certain influence on the audience based on how the audience perceive the message and eventually the audience show certain responses to the health crisis in form of attitudinal or behavioural change dictated by the message influence as well as the effect of the health crisis. The audience reactions will result in or aid the health issue been resolved or degenerated to attract further media attention, hence the cycle continues. In the other way, the arrow away from health crisis to the audience shows the degree of effect of the health crisis on audience which presses

the audience towards seeking information about the health crisis from media. The pressed audience information need prepares ground for media agenda/framing of the issue and the process continues.

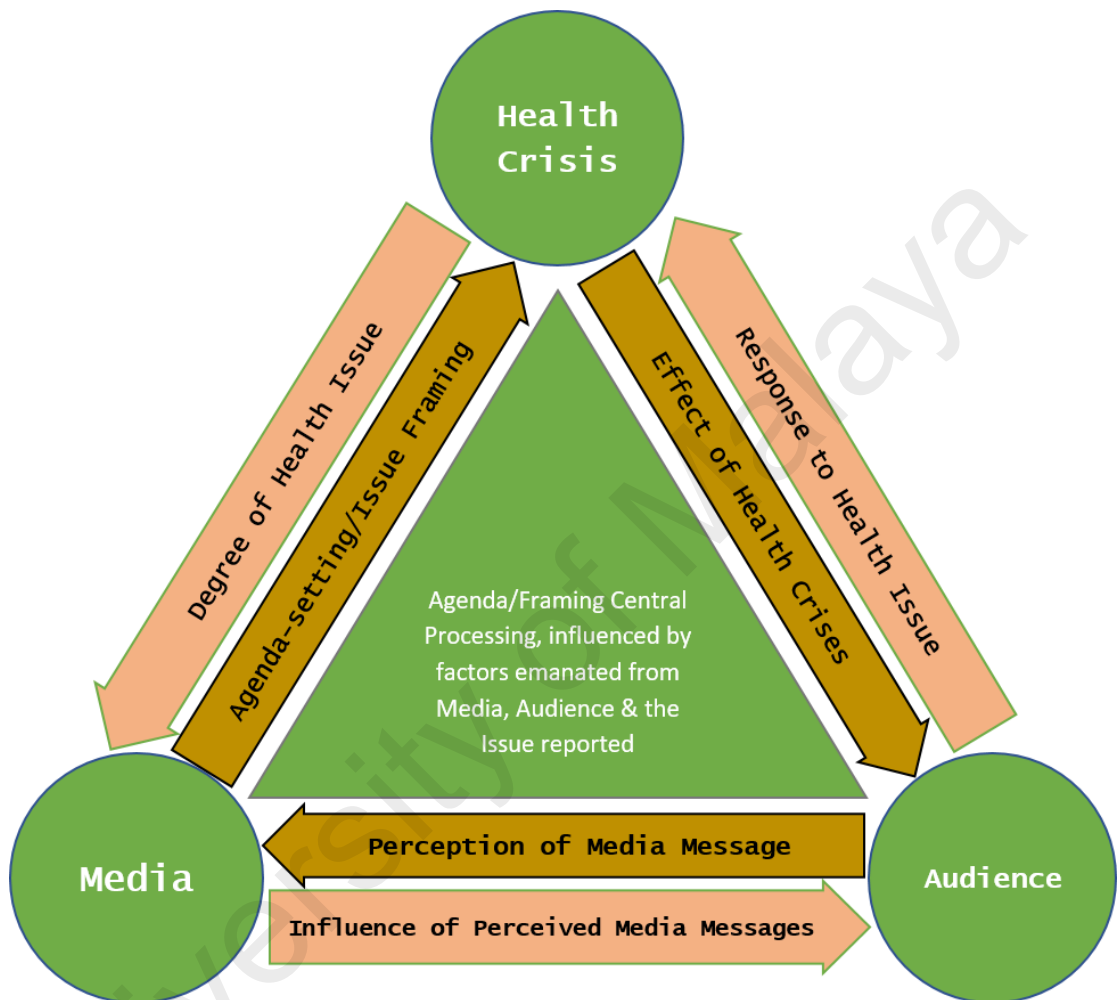


Figure 2.3: Framework for Framing Effect Cycle in Media-Audience Exchange Relationship towards Health Issue (Ebola Outbreak)

Based on the overall objective of this study, the relationship among the key components of the framework would be better defined by the answers, which the findings of this study provide to the research questions earlier highlighted. For instance, the answer to the first research question, “How did news media frame news stories concerning Ebola outbreak in Nigeria?” would explain what media do with health issue, that is, how do media report health issues in terms of attention, dedication, interest, salient news angle,

and prominence. Another research question, “Is there a relationship between how newspaper audience perceived media framing of Ebola stories and their behavioural responses towards the outbreak?” would explain or restructure how media audience perceived the news on EVD.

Similarly, the answer to research question four would confirm or redefine the influence of the media reportage of health issue on audience actions (perhaps induced by the framed reports) towards Ebola outbreak. The final research question capped it all by seeking finding(s) that establish cause-effect relationship among audience actions towards Ebola outbreak, the perceived influence of framed Ebola stories and the audience newspaper reading pattern during the outbreak in Nigeria.

2.8 Chapter Summary

The chapter brings to bear related discussions, assumptions, conceptual applications as well as theoretical underpinning of past studies towards understanding the core focus of this study. The various perspectives through which the studies approach framing analysis of media messages and effect in relation to their findings were used to establish the significance of effort made so far and the outstanding areas that still require empirical justifications and theoretical explanations. Effort was made to review how previous studies discuss various media coverage of health issues both at local and global levels as well as how mass media cover non-health issues in order to establish variation in the media coverage of both.

Discussion on relevant media effect theories such as agenda-setting, framing, and priming was channelled towards understanding the conceptual framework of the study. The framework was used to explain both inputs and effects of the relationship between

media and audience during health crises. The framework, through a diagrammatical representation explained framing and framing effect as a continuous process that ensures media influence on audience health decision as long as audience seek for health information.

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CHAPTER 3: RESEARCH METHODOLOGY

3.1 Overview

Approaches to media framing analysis vary from one study to another depending on the focus, the objectives set to achieve, the research questions set to address, and the relevance of each approach to the overall variables of investigation in a study. Some studies require a single approach to meet the set objectives and to satisfy all conditions necessary to achieve laudable findings as well as balance and credible assessment of the research variables. For example, quantitative assessment does it all in a study, where opinion sampling answers research questions or hypotheses, addresses problem of study, and satisfies target objectives of the study. Qualitative approach does it better where an in-depth analysis enhances the credibility of the findings. No study or scholar has ever proved or reasonably justified that an approach is better than others in all circumstances; rather the relevance of an approach to a study makes it more preferred than other approaches in similar studies. Its lapses are noticed and its defects appear not condoned if used wrongly (if it is not relevant to the study). Either of the approaches with its numerous defects will be insufficient to study some research problems that combine the characteristics of the duo. Such studies would never have all its objectives met and its findings to solve the research problem credible and acceptable using either of the approaches except when the duos are combined to unlock the intertwined elements or variables in the study. The combination of the approaches in a single research problem is what Jick (1979) refers to as triangulation.

Olsen (2004) sees triangulation as a way of mixing data or methods so that diverse viewpoints or standpoints cast light upon a topic. Mixing of methods helps to generate

various credible data while the latter (data types) helps to validate findings or solutions to a research problem in a study. He submits that, “The mixing of methodologies, e.g. mixing the use of survey data with interviews, is a more profound form of triangulation” (p. 3).

Triangulation approach involves using multifaceted perspectives to look into a research problem or combination of similar research problems in order to establish their relationships with the best possible data that address all cases in the study. Using combination of approaches in a single research is a strategy to ensure that all stems of the study are attended to, so as to facilitate a more valid and holistic picture of the problem under study. It is unlike a single approach that does not address perspective outside its jurisdiction. Henn, Weinstein, and Foard (2005) explain that a multi-strategy research approach will give researchers opportunity to investigate a single research area from various dimensions, focusing on different aspects of the research problem by sourcing different data that answer such aspects. The data may be analysed through different techniques and may as well be interpreted from different approaches. They agree that the approach will give researchers assurance that all stems of a research problem and focus are investigated; relevant data that are all-encompassing are collected and adequately interpreted to take care of every angle of the study.

Choice of a method or combination of methods to be used in a research work largely depends on a theoretical perspective or combination of theoretical perspectives used to explain a research problem and the desire to achieve the best possible data to address the aims and objectives of the study (Henn et al., 2005). Triangulation approach does not only mean combination of qualitative and quantitative analyses, the merger otherwise known as Between-methods triangulation approach, but it also includes using

different methods within either of the two approaches, tagged Within-method triangulation approach.

As a result of various stems contained in the research problem that need to be addressed and the combination of the theoretical perspectives (scientific and critical) required to explain mutually-inclusive nature of the variables involve in this study, triangulation approach was adopted. The approach was considered not only to cover the multiple phases of the research problem but also to establish how a phase influences others. The method was considered because a single method would create vacuums (not able to address some of the research questions) and as a result, could leave the study haphazardly inconclusive or exposed it to unnecessary criticisms, which ordinarily could have been averted.

Another reason for employing the approach lies in its appropriateness. Jick (1979) explains that, it holistically captures all the elements or stems of the problem under study. He added that:

That is, beyond the analysis of overlapping variance, the use of multiple measures may also uncover some unique variance which otherwise may have been neglected by single methods. It is here that qualitative methods, in particular, can play an especially prominent role by eliciting data and suggesting conclusions to which other methods would be blind. Elements of the context are illuminated. In this sense, triangulation may be used not only to examine the same phenomenon from multiple perspectives but also to enrich our understanding by allowing for new or deeper dimensions to emerge (Jick, 1979, p. 603).

The formation of the triangulation approach chosen for this study would answer 'how and why' and 'what effect' of the media framing of Ebola outbreak in Nigeria and consequently would lead towards finding the relationships between framed messages and

the producer of the messages (media), the message consumers (audience) as well as the message effects.

3.2 Research Design

It is germane to restate the research questions that this study intends to answer here in order to justify the appropriateness of the methods chosen to verify them. Five research questions that were set to elicit findings on the research problem are:

1. How did the news media frame news stories concerning Ebola outbreak in Nigeria?
2. Which frame is more preponderant than others while reporting Ebola issue during the outbreak in Nigeria?
3. Is there a relationship between the audience reading pattern of newspaper health stories during EVD outbreak and their behavioural responses towards the outbreak? And (if any), what kind of relationship exist between them (direct or inverse)?
4. Is there a relationship between how newspaper audience perceived media framing of Ebola stories and their behavioural responses towards the outbreak? And (if any), what kind of relationship exist between them (direct or inverse)?
5. How much of the variance in the Audience attitudinal change towards Ebola outbreak is as a result of perceived influence of framed Ebola stories and newspaper reading pattern during the outbreak in Nigerians? Which is the best predictor?

Going by the research questions that this study set to address, three key variables (media, message, and audience), which are usually studied in media framing are major focus. The quest into how Ebola news were framed, what influenced the media to frame Ebola news the way they did or why the media framed Ebola news the way they did, and

what effect did the framed Ebola reports generated in the audience towards the containment of the outbreak, required an integrated method. D'Angelo (2011) emphasises that models of studying framing dictate various methods and measures that optimally ground empirical inquiry. He submits:

Framing models offer a range of guidance regarding how methods and measures should be used to (a) observe frames both in texts and in the contexts of their production, (b) observe frames in the mind of whoever constructs the frame, and (c) observe frames in the mind of whoever is at the receiving end of the topic being framed in a discourse (D'Angelo, 2011: 356).

Studying how each of the variables influences one another will require an analysis of each variable through a suitable method before the integration. It therefore requires that this study employs two different methods (while subjecting each body of data garnered through the methods to quantitative analysis). (1) Content analysis method was used to study how media framed Ebola event. Frames would be observed in the texts and around the contexts of the news production. Frequency of each of the frames would also be examined to ascertain the media motives behind framing Ebola issue. (2) Survey method (using questionnaire as data gathering instrument) was also employed to measure the audience perceptions and reactions to the framed reports regarding Ebola and the aftermath effect on the containment of the virus. This means that frames would be observed in the mind of whoever is at the receiving end of the issue being framed in the news reports.

Content analyses method would generate data that answer the first two research questions while survey method would be used to answer the last three research questions. Olsen (2004), who considers this approach as 'methodological pluralism' emphasises that

it will enable researchers use different techniques to get access to different facets of the same social problem.

The data for both methods employed were generated from Nigeria. Nigeria was chosen as a case study because the country made significant headway towards containing the outbreak earlier than other countries affected in Africa. Efforts made and success recorded during Ebola also surpassed those of other outbreaks the country had experienced. Also, being the most populous African country and a window to the world, Nigeria has higher tendency of prevalence and higher chance of spreading any virus or disease across borders, which may constitute threat to the entire world.

3.3 Content Analysis

There couldn't have been a better alternative to study how media structure news story than to examine the content of the news reports. To establish how media framed Ebola issue, two Nigerian daily newspapers would be content analysed. The contents to be examined in the newspapers include news stories, editorials, opinion articles, and features on Ebola issue. Attention would be paid to where the stories appear in the newspapers (whether front or inside page) in order to establish how salient the newspapers made the stories.

Content analysis is a research method that makes use of replication and valid inferences to interpret and code context of documents or series of information by analytically evaluating texts (e.g., documents, oral communication, and graphics), to ensure that qualitative data are transformed to quantitative analysis. Duriau, Reger, and Pfarrer (2007) confirm that content analysis bridges the gap between purely quantitative and purely qualitative research methods. It allows researchers to analyse socio-cognitive and perceptual constructs that are difficult to study via traditional quantitative archival

methods and give researchers opportunity to gather large samples that may be difficult to employ in purely qualitative studies.

The method is relevant in framing analysis because it is presentational and interpretative (Entman, 1993). It involves categorization of ideas into interpretive forms that are consonant with dominant meanings and culturally-based socially constructed ideas (Gamson & Modigliani, 1989). It is promising for rigorous exploration of many important but difficult-to-study issues of interest and allows for analytical flexibility (Doriau et al., 2007). Lying in between qualitative and quantitative analysis, it allows quantitative analysis of seemingly qualitative data (Kondracki, Wellman, & Amundson, 2002).

These features of content analysis would not only generate relevant data for this study but also present an in-depth analysis of the media messages and the pattern used in swaying the messages. It would ensure knowledge and understanding of the phenomena under study through systematic classification process of coding and identifying themes or patterns as suggested by Hsieh and Shannon (2005). The news stories that centred on the subject of this study (Ebola) would be delineated into different patterns, categories or themes to bring out the dominant but cognitive themes (frames) that newspapers used while covering the stories.

There are series of arguments about whether content analysis should be approached through a quantitative or qualitative analysis. Having considered the arguments from the adherents of qualitative analysis e.g. (Bruce & Berg, 2001), the antagonistic justifications from quantitative promoters e.g. (Silverman, 2012), and those who believe in the combination of both e.g. (Kondracki et al., 2002), what proves the appropriateness of an analysis depends on the volume of data generated, researcher's

focus and the nature of the research problem. It is necessary to emphasise here that the most basic and content analysis method as a research tool is Quantitative Content Analysis (QCA) most especially where the volume of data is large (Riff, Lacy, and Fico, 2014). It allows large unstructured data to be codified, categorised, and summarised to sizable information that can be processed. In the same vein, Riff et al. attest that quantitative content analysis could be described as the systematic sharing of communication contents into certain categories according to certain rules by using statistical method to establish relationships between the categories.

QCA would be more appropriate for the content analysis method employed in this segment considering the volume of data generated, which covered all the news stories in the selected newspapers throughout the period of Ebola rampage in Nigeria. The news contents would be codified to ensure that they conform with analyses criteria with all news features evenly captured such that frame results reflect credible analyses of the media reports.

3.3.1 Reasons for Choosing Newspaper

There is no gain saying that television is gaining more momentum in terms of audience preference than other news media most especially radio, perhaps as a result of its audio-visual characteristic coupled with its motion images, which ensures credibility of its reports. Yet, the importance and relevance of newspaper cannot be overemphasised as the medium presents detail news analyses than others. The medium also gives support to the broadcast media (television and radio) as the later present 'Newspaper Review' (Analysis of the major stories in the newspapers) to meet up with the information demand of their audiences. Broadcast media also discuss salient headlines and leads of newspaper stories

on daily bases. Through this act, audience interests are aroused more to the newspapers from which they could access details of the news stories.

Choosing newspaper for the analysis of a segment of this study was based on certain relevant criteria dictated by the focus and direction of the study. First, non-perishable nature of newspaper messages has made it the most preferred in content analysis research. It is easier to retrieve previous newspaper editions from archives than those of radio and television. Second, issues of media framing are more prevalent in the newspapers than on the broadcast media. Besides structuring news items by using certain expressions, which is common to both print and broadcast media, newspapers go steps ahead by ensuring salience of news stories through the kind of typeset used such as type-face, colour, word characters, and the accompanied images.

Third, newspaper is a major source of health news in Nigeria. Almost all Nigerian newspapers have some of their pages dedicated to health issues, in which health development, challenges and other health related issues are given adequate treatments. Fourth, newspapers become major sources of information whenever a big issue (such as Ebola outbreak) crops up. As a result, newspaper-stands become centres of public discussion on such issue by the 'free readers' (those who cannot afford to buy a newspaper but go to vendors at nearby newspaper-stands to read some newspapers, or those who buy a newspaper but seize the opportunity to glance through some of the other newspapers at the stands) in Nigeria.

3.3.2 Selection of the Newspapers

There are tens of print news media competing for audience attentions in Nigeria. Some focus on local or rural populace and present their editions in the dominant language within the area. Some other are regional based, extend their tentacles to the states and

communities within their regions such as *Osun Defender* and *Port Harcourt Telegraph*. Those that wear national outlook circulate within the nooks and crannies of Nigeria and even sometimes beyond. National dailies carry news of both national and international importance such as Ebola outbreak to wider audience.

Two newspapers were selected from the pool of Nigerian national dailies for this exercise. The newspapers were selected based on their rating, patronage, credibility, acceptability, location, as well as the relevance of their contents to health-related issues. The newspapers are: *The Guardian* and *The Sun*. It is relevant to discuss each of the newspapers in order to justify why they were chosen for this study. The newspapers are privately owned; they are assumed free of state dictates and less apolitical. There is a need to emphasise here that in no way has this study evaluated the newspapers as the best in Nigeria or better than some others. Priority given to them is based on their relevance to the subject matter and motives of this study since all Nigerian national newspapers cannot be studied herein.

The Guardian: It is a daily newspaper published in Lagos, Nigeria, by Guardian Newspapers Limited. It was co-founded by Alex Ibru, an entrepreneur, and Stanley Macebuh, a top journalist with the *Daily Times* newspaper. Founded in 1983, the period when almost all first-generation newspapers have gone into extinction, *The Guardian* came up with new perspectives to news reporting with balance and in-depth analyses of news stories. This feature and its thoughtful editorial content made the loyalist audience of the newspaper refer to it as the pioneer of high-quality journalism in Nigeria.

Unlike many of the newspapers that came before it, *The Guardian* was not born out of political rivalries; an added advantage that reaps the newspaper off bias reporting, which could have set in on the bases of political, ethnic, religious, and any other sectional

interest as pointed out by Popoola (2011, 2014). This is much emphasised in the mission statement of the newspaper herein quoted in parts:

What *THE GUARDIAN* stands for: The Guardian is an independent newspaper, established for the purpose of presenting balanced coverage of events, and of promoting the best interests of Nigeria. It owes allegiance to no political party, ethnic community, religious or other interest group. Its primary commitment is to the integrity and sovereignty of the Federation of Nigeria and [beyond that] to the unity and sovereignty of Africa.

The Guardian is a liberal newspaper, committed to the best tradition and ideals of republican democracy. It believes that ...

The Guardian will at all times uphold the need for justice, probity in public life, equal access to the nation's resources, and equal protection under the laws of Nigeria for all citizens...

The Guardian's logo is the ancient Egyptian symbol for Conscience. The motto, "Conscience, Nurtured by Truth," is inspired by Uthman Dan Fodio's saying: Conscience is an Open Wound; only Truth Can Heal It." (*The Guardian*, Sunday, 27 February 1983: 1)

On the contrary, Omenugha, Hands, and Siapera (2004) disclose that owing to complexity of Nigeria as a society, characterised with complex power relations, the claim, "non-partisan" by the newspaper can never be favourably confirmed. They cited a case in 22nd April 2002, where Vincent O. Erundu (a member of Nzuko Igbo, USA, Inc., Washington D.C. Chapter) in an article titled "Boycott *The Guardian* newspaper" accused the newspaper as anti-Igbo (south-east ethnic group).

The Guardian is regarded as the most educated elite paper because its linguistic approach to news reporting is beyond the comprehension of an average semi-literate audience. This is unlike *The Punch* and some other newspapers that use simple expression, which can be understood by anyone with basic education. The newspaper was first published on 22 February 1983 as a weekly, appearing on Sundays. It started daily publication on 4 July 1983. Though it is owned by a member of an ethnic minority, it has a national outlook in terms of reach and content. *The Guardian* is the main competitor to

The Punch for advertising, although not for circulation. The paper is one of the few relatively long-lasting private national newspapers in Nigeria (Aimufua, 2007).

The Guardian joined the booming online journalism by publishing online edition of *The Guardian* to care for immediacy in information distribution and audience participation through provision of “comments” opportunities. The online edition of *The Guardian* also encompasses the breaking news of the day without waiting for the next edition before feeding the public of fresh information, one of the hiccups in the offline edition.

The Guardian is one of the Nigerian newspapers that make health information one of its social responsibilities to the health and wellbeing of Nigerians. The newspaper dedicates some pages of its edition to health issues, keeping the public inform of new trends regarding human health, environmental health factors, and issues surrounding food and drug substance as well as hygiene. It dedicates its editorials to health issues whenever such issues are considered of public interest and require some clarifications for public guidance. Its roles during Ebola outbreak in Nigeria were characterised with public service by dedicating more pages to issues of public concern regarding the outbreak and threw off its back sensational stories that though might arouse public interests but of which its tastes have no significance to public health decisions.

The Sun: It is a Nigerian daily print newspaper founded and published in Ikeja, Lagos, Nigeria but later moved to Kirikiri Industrial Layout, Apapa area of Lagos. As of 2011, *The Sun* had a daily print run of 130,000 copies, and 135,000 for weekend titles, with an average of 80% sales. This made *The Sun* the highest selling newspaper in Nigeria. Its circulation cut across all the regions in Nigeria given the newspaper a national

outlook. Buttressed by its motto, “Voice of the Nation”, *The Sun* choices of news stories capture public concerns and most often reinforces public interests on various issues.

The Sun was incorporated in March 29, 2001. It started production as a weekly on 18 January 2003, and as a daily on 16 June 2003. The chairman of the publishing house is Dr. Orji Uzor Kalu, a former governor of Abia State while the first Managing Director/Editor-in-Chief was Mike Awoyinfa. In January 2010, there was a shake-up in which Tony Onyima succeeding Awoyinfa, and the original deputy editor, Dimgba Igwe, was replaced by Femi Adesina. Awoyinfa and Igwe remained as directors on the company’s board. Though it is majorly own by one of the Nigerian politicians, the newspaper maintains its credibility across all ethnic and political groups by allowing itself being buy off by none. Its editorials are issue-based and are to certain extent free of political or interest group sponsorship undertone.

The newspaper writes from public interest angle with a penchant for 'British Tabloid' style of journalism. The paper and its online version lean strongly towards entertainment, politics and environmental issues. The target audience are young adults between 18 and 45 years age bracket and in the low social economic class. The paper is similar in format to the popular *Sun* newspaper of the United Kingdom. *The Sun* dedication to social responsibilities is reflected in the way it handles issues of public concerns to ensure that the country developmental focuses are not obliterated. The newspaper also gives much concern to public health by having some pages of its editions (particularly Wednesday edition) dedicated to health issues most especially common ailments among the lower economic class. Its wider coverage of EVD outbreak in Nigeria makes it relevant for this study.

3.3.3 Unit of Analysis

This study would examine news stories, editorials, and features that have connections with Ebola issue in the selected newspapers. As a result, the units of analysis were news stories. For the purpose of this study, a news story is defined to include any news report, editorial, feature, opinion article, or letter to the editor that narrate or discuss issues concerning Ebola. In the search for relevant news stories, the focus was on both headline and the body of the news. Once the headline of a news story contains or describes Ebola, it would be selected for the frame analysis. Also, if the whole body or part of the body of a news stories contains or describes Ebola issue, it qualifies to be included as a unit of analysis.

The basic focus in the search of the relevant news stories is the keyword, 'Ebola'. However, visual representations such as photographs, graphs and charts, drawing images, as well as cartoons and comics would not be independently treated as news stories, but they would be treated as complements or accompanies of news stories. Also, advertisements relating to the keyword whether in part or whole would not be treated as news stories and would therefore be exempted from the units of analysis.

The search for related news stories would be done manually by accessing hard and softcopies of sampled newspapers. All news stories in the editions of the sampled newspapers within the period already specified would be checked in order not to miss out any news story that could add-up to the data. The expectation was to get a manageable size of data, since health news stories are usually relatively few when compared with political or economic stories. Another reason for sampling all news stories concerning EVD in all the editions of the selected newspapers is that the period of Ebola rampage in Nigeria was short (less than three months) and the news items on Ebola within the period

would not be too large for the analysis. This form of sampling is regarded as available sampling procedure, which is a form of non-probabilistic sampling method.

3.3.4 Period of Study

The newspaper editions considered are those from 20 July 2014, the day when the first Ebola case was recorded and reported in Nigeria till 20 October 2014, when WHO declared Nigeria free of Ebola virus. Though the last case of Ebola in Nigeria was confirmed in 8 September 2014, news reports about Ebola in Nigeria and the tension the outbreak generated lingered on until the country was declared Ebola free. Such is the reason why the sampled newspaper editions would cover beyond September 8, 2014. The focus is not beyond 20 October 2014 because newspapers occasionally published issues relating to Ebola in Nigeria after the country had been declared free of the epidemic.

Also, the media sensitivity to issues surrounding the outbreak prior to its containment would give a better test of news framing of health challenges than in other period when the tension had died down and the audience quest for information about Ebola had vanished. The three-month newspapers' reports of EVD rampage in Nigeria would also be classified into five stages (early, tensed, climax, decline and containment stages) to depict the momentum of the outbreak and how newspaper reports of the issue change to address each of the stages of the pandemic.

3.3.5 Coding Instruments & Inter-Coder Reliability Coefficient

A Pilot test was conducted with five per cent of the texts data (840 news stories on Ebola), which were randomly selected from the sample newspapers using four trained independent coders, consisting of media researchers – the author included. Having

realised that none of the commonly used inter-coder reliability coefficients that are commonly used for content analysis data is without some inadequacies, two of the most commonly used reliability coefficients were used. The two, Cohen's kappa (κ), and Krippendorff's alpha (α), were used to test, compare, and confirm the inter-coder reliability as well as percentage of inter-coder agreement for the eight variables of the content analysis data. Using Deen Freelon's inter-coder reliability calculator (ReCal3), the results (as detailed in table 3.1) show that each of the variables has inter-coder reliability coefficients that satisfies the minimum value required (κ , or $\alpha > 0.7$), with a percentage of inter-coder agreement of more than 80% (Freelon, 2013). The results fall within the recommended inter-coder reliability coefficient value for the liberal index employed (Lombard et al., 2002).

Table 3.1: Inter-coder Reliability Coefficient of the Variables

| S/N | Variable | N | N decisions | Cohen's kappa (κ) | Krippendorff's alpha (α) | Agreement (%) | Interpretation |
|-----|---------------------|----|-------------|----------------------------|-----------------------------------|---------------|---------------------|
| 1 | Frame | 42 | 168 | 0.783 | 0.784 | 81.4 | Perfect reliability |
| 2 | Publication period | 42 | 168 | 0.922 | 0.923 | 94.1 | Perfect reliability |
| 3 | Story types | 42 | 168 | 0.982 | 0.983 | 98.8 | Perfect reliability |
| 4 | Location of stories | 42 | 168 | 1.000 | 1.000 | 100 | Perfect reliability |
| 5 | Sources cited | 42 | 168 | 0.936 | 0.936 | 95.2 | Perfect reliability |

Table 3.1 continued

| | | | | | | | |
|---|----------------|----|-----|-------|-------|------|---------------------|
| 6 | Headline types | 42 | 168 | 0.908 | 0.908 | 97.2 | Perfect reliability |
| 7 | Newspaper | 42 | 168 | 1.000 | 1.000 | 100 | Perfect reliability |

| | | | | | | | |
|---|------------------|----|-----|--------------|--------------|-------------|----------------------------|
| 8 | Photo relevance | 42 | 168 | 0.869 | 0.870 | 90.1 | Perfect reliability |
| | Mean reliability | | | 0.925 | 0.926 | 94.6 | Perfect reliability |

*Inter-coder Reliability coefficient values above 0.7 are considered perfectly reliable

The coding was manually conducted by the trained coders and the constructs used by the coders to measure the variables were justified until about 98% agreement level was reached among the coders. Then, all the 840 Ebola stories were treated under the agreed codes. The coding was used as the basis for the identification and grouping of the news stories in the selected newspapers. It also helped when imputing data into the statistical tool chosen for data analysis, Statistical Package for Social Sciences (SPSS).

The criteria adopted in the coding are evidenced in some literatures that focus on the analyses of newspaper contexts (Entman, 1993; Torwell & Rodney, 2010; Westwood & Westwood, 1999). Framing patterns of news reports were hanged on some measures such as news prominence characteristics (frequency, headline size, page, location, sources cited, edition, and photograph), as well as content direction and treatment (based on the most prominent information in the reports). Below are the explanations on the items used to represent different constructs on the table of coding sheet and how they apply to various attributes of the news stories.

- 1. Headline:** The size of a headline determines most often the prominence a report enjoys in newspapers. News stories with big headlines catch audience attentions and as a result are read more than others by audience. Ebola stories were grouped into two based on headline sizes: '1' represents 'Minor' and '2' for 'Major' headlines

2. **Newspaper:** Selected newspapers were given numbers from one to two. Figure '1' represents '*The Guardian*' '2' for '*The Sun*'
3. **Date of publication:** This indicates the period in which a story was published during Ebola outbreak in Nigeria. Ebola stories were grouped into five categories using the time of publication as well as the tenacity of the phases of the outbreak as a yardstick. Some of the terms used in McComas and Shanahan (1999) while grouping period in newspaper framing of global warming were borrowed. The categories were coded as: '1' for 'Early stage', '2' for 'Tensed stage', '3' for 'Climax stage', '4' for 'Decline stage', and '5' for 'Containment stage'.
4. **Types of the stories:** '1' stands for 'News report'; '2' for 'Editorial/Opinion article'; '3' for 'research report'; and '4' for 'advertorial/comics'
5. **Space and location of news Stories:** A story either appears on the front page or inside page. As a result, '1' represents an inside/back-page story while '2' represent a front-page story. The page where a news story appears in a newspaper and the volume of space devoted to such story tells how significant the story is to the media as well as to the audience. Newspapers used to put most valuable stories of an edition at the front page to make it salient while other stories are buried inside the inner pages. Where EVD stories appeared in the Nigerian newspapers would constitute one of the measures to determine how salient mass media made the issue portrayed in the stories. This would be achieved by comparing the number of Ebola stories in the front pages with those that were buried inside the inner pages of the newspapers. Another key determinant of the saliency of a news story is the news-hole. News-hole is the amount of space that a news story occupies on a page or pages of a newspaper.

- 6. Sources cited:** This indicates news attribution. A news story is attributed to a specific authority or source to enhance its credibility. Seven sources could be identified from the news stories on EVD and they were coded as: '1' Health professional/experts; '2' Victims/relatives of victims; '3' Organisation/bodies/Interest Group; '4' Government or its officials '5' Health institutions/organisation; '6' Eyewitnesses; '7' News agency or other news media; and '8' No Source. News stories, in which more than one source could be identified, the dominant one would be considered.
- 7. Photograph relevance:** photographs accompany news stories most often tell the stories better. Photographs authenticate news stories. It most importantly emphasises the angle of the news story the media want to make salient. But these supporting roles that photographs or images play depend on how relevant a photograph is to the news story it accompanies and how appropriate such photograph or image is placed in the newspaper. Photographs that accompanied EVD stories in the sampled Nigerian newspapers were coded and analysed in this study as: '1' for 'Highly irrelevant'; '2' for 'Irrelevant'; '3' for 'No photo or image'; '4' for 'Relevant'; and '5' for 'Highly relevant'.
- 8. Central themes/Frames:** the content of a news story determines the type of frame it signifies. Exploratory method was used to identify the most prominent news angles, which are referred to as frames. The coders thematically grouped all the Ebola news items into 10 categories based on the most salient news angles in each of the reports. The contexts of the 840 EVD news stories were classified as: '1' for Awareness frame; '2' for Containment frame; '3' for Fatality frame; '4' for Conspiracy frame; '5' for Political influence frame; '6' for Effect frame; '7' for Mobilization frame; '8' for Support/Aid frame; '9' for Misinformation frame; and '10' for Boycott frame.

3.3.6 Frames and Categories

Media coverage of Ebola was more of health concern. While reporting issues, most especially health related issues, media emphasised certain aspect by placing more attention on such aspect. The purpose for the emphasis is to influence how a news report is interpreted so as to achieve a desired effect in the audience. The degree of attention placed on a news story most often serves as the basis upon which issues are interpreted. It is referred to as framing – a concept that encapsulates news content and influence. There are usually many lock-up angles to every news story through which the need for news framing becomes apparent. As journalists build news contents, the most emphasised of the news angles then becomes the central theme or the frame upon which others news angles revolved.

Owing to many phases through which framing of news stories could be measured, the coding of news stories about Ebola issue in Nigeria was subjected to some frame typologies adapted from previous relevant literature (Hallahan, 1999; McComas & Shanahan, 1999; Nisbet et al., 2003; Shih et al., 2008). Some of the most salient news angles in the sampled news contents that do not fall within the adopted frames were given new frame codes to ensure that all the news reports about EVD outbreak were treated under the same scale.

Table 3.2: Frame Typology for Newspaper Coverage of EVD Outbreak in Nigeria

| S/N | Frame | Definitions | Sources & synonymous frame |
|-----|---------------------|--|--|
| 1 | Awareness | Stories that discuss the origin and mode of transmission of Ebola as well as its signs and symptoms. Majority of the news stories that featured this frame were meant to alert the public of the epidemic and to prepare them for the challenges that the unknown nature of the epidemic tagged along. | Shih (2008: 149) Uncertainty frame |
| 2 | Containment | Stories that discuss how the virus could be prevented from spreading, effort made towards its treatment, and the level of its containment | Shih (2008: 149) Action frame |
| 3 | Fatality | Stories that raised tension as a result of number of infected cases as well as the rise in the EVD death toll and consequences it generated from the members of the public | |
| 4 | Conspiracy | Stories that focus on individuals, bodies or government activities (local or foreign) that disrupt the efforts towards containing the outbreak. It includes reports that lay emphasis on unwholesome way of benefiting from the spread or effect of the outbreak. | Shih (2008: 149) Conflict frame |
| 5 | Political Influence | Reports concerning government activeness or otherwise through its policies, political rivalry, and its international diplomacy or bilateral relations with other governments/countries on Ebola issue | Nisbet et al. (2003: 49); McComas & Shanahan (1999: 41) Political strategy/Domestic politics frame |
| 6 | Effect | Reports on the effect of the outbreak on economic, social elation and cultural interactions, education, health, international relations and diplomacy, sporting activities, entertainment industry and other areas of human development. | Shih (2008: 149) Consequence frame |

Table 3.2 continued

| | | | |
|----|----------------|--|--|
| 7 | Mobilisation | Stories that were reported to educate the public. The stories were also reported with the intent to drive people towards the prevention of the virus and to be conscious of their relationship with other people by being vigilant and ready to report cases or persons with symptoms to the appropriate bodies. Some of the newspaper reports of EVD were deliberately used to stimulate public cooperation and concerted effort towards curbing Ebola pandemic | Shih (2008: 149) Reassurance frame |
| 8 | Support | Reports that discuss the financial and material aids towards the containment of the outbreak. It also includes stories on consolation of the victims and commendation of various contributions to sack the virus | McComas& Shanahan (1999: 41) Economic/cost of remedy frame |
| 9 | Misinformation | Stories that expose the misinformation, lies, rumours, myth, and all forms of information mismanagement about the spread, treatment or effect of the virus, either from social media or from unscrupulous individuals to set the records straight | |
| 10 | Boycott | Stories on the stigmatisation and discrimination against the victims and their relations or reports on the boycott of the affected communities, states or countries | |

3.4 Survey Method

The second method employed in data gathering and processing to answer the other part of the research questions is survey. Survey is an opinion sampling method aiming at knowing the perception, knowledge, understanding as well as acceptance and rejection of an idea, event, policy or a candidate by some selected few respondents (known as sample) from a large group (known as population). In survey, what matter most is what the majority of the 'sample' think; what they perceive or how they perceive; what they accept or reject; who they admire or repel; what they consider good or bad; and what they know or believe. Most often, data got through a sample were used to represent the entire

population of a study. Survey according to Visser, Krosnick, and Lavrakas (2000) tends more towards measuring psychological disposition of people, which is more reflected and displayed in their perceptions, attitudes, knowledge, belief, motivation, behaviour and other individual traits.

Mathiyazhagan and Nandan (2010) define survey as a method of descriptive research used for collecting primary data based on verbal or written communication with a representative sample of individuals or respondents chosen from a target population. This definition emphasises the freshness of the data (primary data), of which its originality gives researchers some level of confidence in making generalisation from findings emanated from the data. Survey, though expensive, time consuming and a bit laborious as pointed out by Stoop and Harrison (2012), its appropriateness, versatility, and efficiency for assessing public opinion make it a relevant method to verify, discuss and answer some of the research questions of this study.

3.4.1 Research Population

Audience of newspapers in Lagos state constitutes the population of this study. It is necessary to emphasise that the characteristics of the population is not limited by sex, race, occupation or professionalism, religion, political affiliation, income level and any other social-demographic variable except age and education. Age was considered a barrier for inclusion and exclusion of newspaper audience in the population of this study because though some of the underage (below 18 years of age) may be literate enough to read newspapers, seriousness and sincerity of purpose may be wanting in their responses to the opinion sampling questions. It appears that education in most cases determines individual's literacy level. Literacy, for the purpose of this study means ability to read and understand in English language since the newspapers upon which audience opinions were sourced publish in English language. It is assumed that anybody whose level of

education is below secondary school may not be able to read and understand newspaper reports and therefore was not included in the population of this study.

Also, the research population is limited to Lagos city where the Ebola rampage predominantly occurred and where the newspapers selected for the framing analysis are based. Lagos is the most populous city in Nigeria and the population of city is representational of Nigerian population because being a commercial centre and the former Federal Capital Territory of Nigeria, all regions, ethnic and religious groups are represented.

3.4.2 Sampling Procedure

Probability sampling gives every unit of a research population equal chance of being selected in a research sample. Its usage erases sampling bias, which may discredit the sample from being a good representation of the population and ensures credible data which could yield results that are generalizable in the population. A form of probability sampling procedure was therefore considered for selecting a sample for this study.

Newspaper audience in Lagos metropolis constitutes the population of this study from which the research sample was drawn. Being a cosmopolitan state, it would be cumbersome to cover the nooks and crannies of Lagos during the exercise. As a result, four Local Government Areas (LGA) out of the twenty that make up Lagos state (constituting 20%), were randomly selected from which the sampled respondents were drawn. The four LGAs, Alimosho, Lagos Island, Ikeja, and Lagos Mainland are among 774 LGAs across Nigeria, which are recognised by Nigerian constitution. Then, equal numbers of respondents were selected from each of the randomly selected LGAs to make up the sample.

This form of probability sampling procedure is regarded as Cluster sampling. Cluster random sampling is done when simple random sampling is almost impossible because of the size of the population (large population, which is not definite and not easily identifiable) or a complete sampling frame does not exist. It is a method where the population is first divided into geographical entities or boundaries (called groups or clusters) out of which some are randomly selected. Equal numbers of respondents are then taken from each of the selected clusters (Hardon, Hodgkin, & Fresle, 2004).

3.4.3 Sample Size and Frame

Research sample is a subset of research population; a proportional representation taking out of the population on which a research is carried out. From the population of newspaper audience in Lagos city, a sample of 400 respondents was selected through cluster probability sampling technique. The sampling frame includes every audience of any of the newspapers selected for this study, who live in Lagos within the period of the exercise. Equal numbers of respondents were surveyed from each of the four LGAs (clusters) that constitute the sample (100 respondents from each). Supplementary questionnaires were administered to fill up unreturned and discarded questionnaires as a result of missing responses in order to have even number of responses across the clusters

Akbayrak (2000) notes that a sample size of 5% to 10% of the population can adequately be used to generalise; the most important thing is not how huge a sample size but rather how representative is the sample to the population. The characteristic of a research population is an important factor when drawing samples. A sample adequately represents a research population if the qualities and characteristics of the sample drawn spread across the population.

Mathiyazhagan and Nandan (2010) also emphasise that sampling design must bring about a truly representative sample, which leads to a minimum sampling error such that the systematic bias can be controlled easily and the result of the research sample can be applied and generalised with a reasonable level of confidence. Since the size of the population was unknown (no specific figure of newspaper readers within Lagos State), it was difficult to calculate the ratio of the sample to the population as well as sampling error. That is why the sample size was enlarged to minimise sampling errors and to increase the level of reliability of the findings. De Leeuw and Dillman (2008: 18) confirm that “Sampling error can be controlled by drawing samples that are large enough to produce the precision wanted.”

3.4.4 Data Collection Instrument

Questionnaire was used to generate data from the media audience. The commonest (but not always) means through which survey data is generated according to Gideon (2012) is questionnaire, which are either directly administered on survey respondents (samples) by an interviewer or completed by the respondents themselves. Self-Administered Questionnaire was the basic tool used in gathering data from the newspaper audience for this exercise. Since the respondents were expected to fill the questionnaires themselves, effort was made to make it simple and friendly in order to ensure a maximum return rate and to avoid the questionnaires being haphazard filled.

Close-ended questionnaire format was employed to curtail the chance of respondents going out of subject matter which would not only be difficult to analyse but also would negatively affect the validity of the findings. The questionnaire was structured in a way that the respondents were provided with all possible responses to every question asked in order to accommodate various opinions on the issues raised. Close-ended

questionnaire format otherwise known as Structured Questionnaire, though limits respondents to certain responses, which sometime might not be exhausted, it makes data coding easier and it ensures reliable analysis of the responses unlike open-ended format.

Visser et al. (2000: 238) concur:

The biggest challenge in using open-ended questions is the task of coding responses. In a survey of 1,000 respondents, nearly 1,000 different answers will be given to the 'most important problem' question if considered word-for-word.

The questionnaire format was structured in form of Multiple Choice Question system (McQuail) as well as Rating Scales or Ranking system. MCQ questions were limited to variables on demographic characteristics of the respondents. Likert's rating scale was adopted for other variables other than demographic. The rating scales was on five-point Likert's scale; from 'Strongly Agree' in one end to 'Strongly Disagree' in the other end to differentiate the respondents' acceptance or rejection of the items used to measure the constructs. All items under the rating scale were formulated in positive statements to ensure a balanced coding system and to avert confusion from respondents' end while answering the questions (see Appendix 4).

As recommended by Visser et al. (2000), wordings of the questionnaire items were made simple and easy for respondents to understand in order to sustain their interests and to minimize boredom. And this was done by using short and simple expressions that are common to express professional terms. Where such terms were unavoidably used, explicit definitions were given. The items were chronological by putting related items for each construct in the same sub-section and arranged from simple to complex in the questionnaire.

3.4.5 Ethical Considerations

Due permissions were sought from the respondents and freewill to participate was ensured while administering the questionnaires. Respondents were not placed on any inducement that might influence their responses. The information on the introductory section of the questionnaire, assured the respondents that in no way would their responses to the items in the questionnaire constitute harm against their personalities and interests. One-on-one persuasive effort was also used to convince when it was noticed that some of the respondents were nurturing fear that the questionnaire might be used to generate data on their EVD status, which invariably might expose them to public alienation, stigmatization or above all lead them to being quarantine.

The anonymity nature of the questionnaire also gave confidence to some of the respondents that their identifications are secured. The questionnaires were not serially numbered until after the responses from the field were collated to avoid suspicion from the respondents that such might be used for identification. Under age were not included among the respondents owing to reasons detailed in chapter four under 'Respondent Age Distribution' sub-heading. As a result, there was no need seeking parents/Guardians' permission while administering the questionnaires. Efforts were also made to give clarifications (when demanded by the questionnaire respondents) concerning the items in the questionnaire irrespective of the education level of the respondents.

3.4.6 Pilot Test

Forty respondents were sampled in the preliminary survey conducted to evaluate the visibility of the entire exercise and to test the respondents understanding of the items structured for each of the variables of the study. It helped to predict the appropriate sample size for the study and also to know from which area to draw the sample. The pre-test was also used to verify how relevant and appropriate the items structured to measure each of

the variables – did they really measure the variable they were intended to measure? The essence for this was to discard the irrelevant items and to restructure items that the audience found difficult to answer. Again, part of the reasons for the pre-test was to checkmate overlapping items (items that generated similar responses from the respondents) or non-discriminating items (items that cannot differentiate the respondents; all respondents are likely to choose the same response), which might likely constitute **Outliers**.

There were variations in the times it took to complete the questionnaire from one respondent to another perhaps partly because of the differences in the education levels of the respondents. The average time it took to complete a questionnaire was calculated to be approximately thirteen minutes. This was considered appropriate as it falls within the time the respondents' interests could be sustained – it does not encroach into a time that respondents usually get bored and as a result answer the questions indiscriminately to save time. It was assumed that an average time of less than ten minute would be achieved during the main survey as some of the ambiguous and non-discriminate items were restructured to ensure clarity and to measure what exactly intended.

Though some of the construct were adapted from literatures, most of the items used for measurement in the studies are not relevant in this context as such studies differ from this study in terms of cases studied, hence the need to conduct validity and reliability test was paramount. Two media experts were allowed to vet the items in order to establish the relevance of the items towards measuring the constructs they were meant to measure. Based on their assessment and recommendations, a significant adjustment was made in rearranging, rewordings, restructuring and even eliminating some of the irrelevances in

the measurement items. This satisfies one of the ways through which content validity of measurement items could be established.

The data collected from the preliminary survey were keyed in to SPSS programme and were analysed to establish the validity and reliability of the items used to generate responses from the sampled respondents. Owing to limited number of respondents and non-parametric nature of the data, SEM/PLS analysis was conducted and the reliability of the constructs as measured by Cronbach's alpha ranges within 0.82 and 0.89. This result satisfies construct reliability test requirement ($\alpha \geq 0.7$) and it is expected to even rise in the analyses of the main data as the sample size swells.

3.4.7 Data Analysis Technique

Due to non-parametric nature of the data generated for the analysis in this study, Smart Partial Least Squares (SmartPLS) Path Model approach to Structure Equation Modelling (SEM) was employed. The model was considered suitable owing to its graphical representation of complex relationships among variables as well as constructs, which could be presented in a simple, convenient, and explanatory way to even those who are always scare of numbers while reading research reports (Monecke & Leisch, 2012). SmartPLS also does not require distribution of assumption by specifying specific sample size or multivariate normality of the data making it suitable and appropriate for analysis of various ranges of data. The programme does not only accommodate small sample size but also ensure more precision with large sample size, which is plausible for the size of sampled respondents in this study. It as well does not assume normality of data; it accommodates and processes data that are not normally distributed such as the type generated for this study.

The method of analysis was also considered satisfactory for this study because it allowed a predictive and exploratory research. The relationships among complex variables could also be described in simple and analytical form. In this study, the descriptions of the relationships (both direct and indirect) among the variables are crucial to answer research questions. In addition, the programme processes any type of data scale (ordinal, interval, and ratio scale), which depict the structure of the data garnered for this study. The data collected were keyed in to SPSS programme and were transformed and transported to SmartPLS for modelling analysis and results. Basic statistics analysis was used to make sense of the data by organising, summarising and doing exploratory analysis of the data. The outputs of the data were also communicated and summarised in form of tables, graphical display of the model and summary statistics.

The analyses were also used to discuss the relationships between the variables; compared the responses from the respondents or show how individuals are distributed with respect to the variables being measured; and show variations in the respondents' views on the subject matter. According to Mathiyazhagan and Nandan (2010: 37) "It also helps reducing data to intelligible and interpretable form so that the relations of research problems can be studied and tested".

PLS analysis was also used to verify loading weights of the latent variables as well as those of observed variables in order to establish how significant the items used to measure them as well as the relationship between the latent and observed variables. This was achieved by running Bootstrapping analysis to uphold items and relationships among variables that are statistically significant while excluding those that did not conform to the model. Blindfolding analysis was also run to establish whether or not the outcomes of the data could be applied to the population.

Correlation Analysis was run to establish the relationships between the variables being measured such as the audience perception of the framed EVD stories in newspapers; the corresponding audience reactions towards the outbreak in Nigeria; audience reading pattern of health stories before, during and after EVD outbreak; and the frequency of the preponderant frames. Attention was paid to the direction of correlation between the variables (whether direct or inverse relationship). It was also used to explain the strength of the relationship between the variables, using the range suggested by Cohen's (1988). The percentage of variance between the variables was also taken into consideration while establishing the relationships. For instance, what percentage of the audience reactions to the outbreak is explained by the audience perception of the framed EVD stories?

Regression relationships among the variables were also established through path effect and mediation to show cause-effect relationships among the variables. The analysis was used to explain what ratio of a particular news frame contributes to the audience attitudinal change during the outbreak in order to establish the contribution of each of the independent variables to the dependent variable (Audience attitudinal change towards EVD Outbreak), which invariably determine the success or failure of the media reports during the outbreak. Predictive relevance of the findings in the population was also tested through Goodness of Fit as well as Cross-Validated Redundancy (CVR) by using Stone-Geisser's (Q^2).

3.5 Chapter Summary

This chapter identified and examined two major methods through which data could be generated, analysed, and discussed. Content analysis, one of the methods was discussed on the basis of its relevance in terms of ensuring data that fulfil parts of the objectives of

this study. Relevance of the method was also substantiated by examining the validity and reliability of coding some newspaper contents by using certain parameters to ensure uniformity in the assessment, which is usually referred to as Inter-Coder Reliability Coefficient. The selection of the two sampled newspapers for the analysis among several others in Nigeria was justified with their circulation ratio advantage, relevance of their edition to the subject matter as well as audience acceptability of duo.

Reasons for employing opinion survey of Nigerian newspaper audience regarding EVD outbreak were explained under survey method. Under the method, processes entail in arriving at substantive quantitative data such as population and sampling frame, sampling procedure and sample size, as well as data collection procedure and instrument were itemised and discussed. Some of the ethical issues taken into consideration as well as some hindrances encountered while gathering the data were spelled out to substantiate the genuineness of the data. Also, discussions on the pilot test conducted, which led to the refinement of some measurement items and constructs makes a sub-session of the chapter. The chapter was rounded off with details on the technique used in analysing the data generated for the study.

CHAPTER 4: DATA ANALYSES AND DISCUSSION

4.1 Introduction

Analyses of the data garnered for this study are multidimensional as the research problems, the objectives as well as the research questions demand. Each of the methodological approaches would first be unilaterally and independently analysed. The

results of the analyses would then be compared to assess the framing patterns from the media end, the perceived framing influence from audience end and the contributions of the duo to the framing effect on the early containment of the Ebola outbreak in Nigeria.

The first aspect of the analyses was based on the content analysis of the newspaper reports of Ebola outbreak in Nigeria. The most salient news angle was used as criteria for classifying newspaper reports into various framing patterns and the quantitative analysis of the preponderant frames was used to discuss the most pronounced media objectives emanating from the reports. Aside the direction of the content of the Ebola news stories, attention was also given to other factors that influence saliency of Ebola news stories such as: News-holes, relevance of the news sources used to authenticate the reports, pages where the stories appeared, as well as the period of the reports within the Ebola rampage scheduled for analysis.

The second aspect is the analysis of opinion survey of newspaper audience, journalists and some medical experts, who were deeply involved in the effort towards containing Ebola in Nigeria. The questionnaire-generated data of the opinion of newspaper audience was used to: examine the audience relationship with media in terms of media choice, stories preference or selection, reading habit, and media and stories evaluation; verify the audience's perceptions of the framed Ebola stories; assess the influence of the framed stories on their reaction towards the outbreak; and justify the effect (containment of the outbreak) on the premises of media and audience factors.

Then, the two forms of data independently analysed were harmonised to answer the research questions raised in chapter one and findings were discussed in reference to the data outputs. The collaboration of the two analyses would be used to generate framing

model that explains the relationships between the variables analysed in the data in order to understand a broader sense of media framing of health issues.

4.2 Analysis of Newspapers' Content

Reports of Ebola issues in two of the most popular daily newspapers in Nigeria (*The Sun* and *The Guardian*) were content analysed. The analysis was limited to the editions of the newspapers published within the periods of Ebola rampage in the country (July 20 to October 20, 2014). The two newspapers selected for this study had extensive coverage of the outbreak. *The Sun*, being referred to as the most circulated newspaper in Nigeria, reported the sum of 330 news stories on Ebola outbreak within the period of rampage. The newspaper, which considers human-angle stories as its priority, featured Ebola stories in various news forms including audience feedback and opinions. *The Guardian* published 510 news stories altogether on Ebola within three months under study.

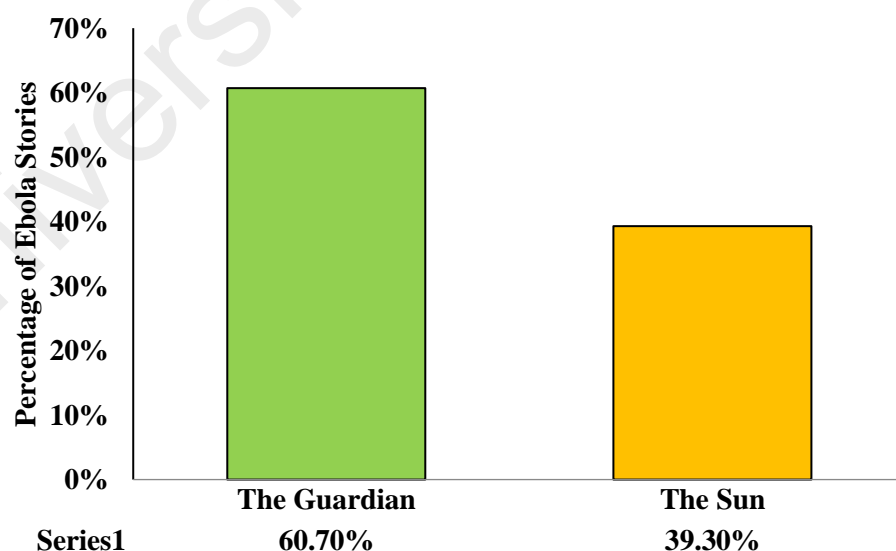


Figure 4.1: Bar chart showing percentage of Newspapers reports of EVD

The margin in the number of the stories published on Ebola between the two newspapers might not be a function of interests, the edge in the ability to nose for news, or the editorial decisions dictated by news judgement but rather the availability of space (news hole) to accommodate more stories as a result of the difference in the average number of pages per daily edition of the newspapers. *The Guardian* is a bulky newspaper with an average number of pages per edition running to eighty. *The Sun* publishes an average of 65 pages per daily edition. This excludes occasional insertions of leaflet, pamphlet or any other form of insertion, which is not in the regular page-planning of the duo newspapers. The average of 15 pages difference between the newspapers is enough to explain the reason why there are more news stories in *The Guardian* than in *The Sun*.

4.2.1 Framing of Ebola in the Newspaper Reports

Three major variables (News-angle, News prominence, and News credibility) with numbers of constructs under each were used to examine how Nigerian newspapers framed Ebola news stories. Most salient news angle has 10 thematic constructs while four constructs were used to measure prominence of the Ebola news stories. News credibility was measured by two constructs as each of the variables contributes to how Ebola reports in Nigeria newspapers were framed. However, the constructs used to depict the most salient news angles were discussed in two of the indices (news proximity and prominence) that are closely related under the same variable. The variables are:

- a) Which news angle is predominant through which the Ebola stories were narrated?
- b) What was the degree of proximity and prominence given to the Ebola stories in terms of frequency of reports, the news holes, size of headlines, and location of the stories in the newspapers?
- c) What news sources and photographs did the newspapers use for the authentication of the Ebola news stories, and how credible are the news sources?

4.2.1.1 Preponderance News Angle

The contextual consideration of the news items shows that ten major frames are identifiable in the newspaper reportage of Ebola issue in Nigeria. The frames are considered in the Ebola stories based on the most emphasised angle (salient) of each story to avoid duplication of frames especially where more than one frame featured in a news story:

1. Awareness frame: news items that fall within this category of the frame discuss the origin and mode of transmission of Ebola, its signs and symptoms as well as alerting members of public the unknown nature of the outbreak. Majority of the news stories that featured this frame were meant to alert the public of the epidemic and to prepare them for the challenges that the epidemic tagged along by framing Ebola stories around public awareness. Nigerian newspapers ringed the news stories in the early stage of the Ebola rampage in Nigeria more around awareness creation about the virus and how it spread than other frames or other themes. Although less than one-tenth of the aggregate EVD stories within the period under consideration were reported in the early stage of the outbreak, more than one-fifth of 58 EVD stories in the early period of the outbreak from sampled newspapers were weaved around awareness and public alertness. The statistic shows that more of the reports on the awareness creation about the virus as well as stories on surveillances of the spread of the virus were during the early period of the outbreak.

Aside the reports on the death of the index case (Patrick Sawyer, Liberian), newspaper reports of EVD outbreak in its early stage were centred more on educating members of public on what the virus is, how contagious and dangerous it is, what havocs it has wrecked in the neighbouring affected countries, and some unknown facts about the virus

at the period. Being a strange disease to Nigerians at the time, Nigerian mass media did not only create awareness but also educated members of public on circumstances that surround contacting the virus.

The early stage Ebola stories were more of agenda setting than framing as stories on EVD were prioritised above other important stories competing for audience attention. Earliest reports of EVD outbreak in Nigeria diverted public attentions away from other pressing issues such as electioneering, corruption cases, Boko Haram insurgency, and fuel price-hike and subsidy saga, to issues surrounding EVD outbreak. A front-page banner headline of the August 23 edition of *The Guardian* confirms the agenda shifting from Boko Haram insurgency to EVD outbreak – “Ebola Distracts Attention from Fight against Insurgency” – the newspaper reported. It was after the issue had become public agenda that making a particular angle of various stories concerning EVD salient were more pronounced.

2. Containment frame: news stories within this category discuss how the virus could be prevented from spreading, effort made towards its treatment, and the level of its containment. This frame dominated the stories that were reported at the tensed stage of EVD in Nigeria. More than one-third of the total stories reported by sampled newspapers within the period under study featured the frame. Some of the stories that focus on the frame addressed various efforts of health experts towards controlling the virus. For example, some of the stories emphasised the discovery of anti-Ebola virus drug (ZMapp), and issues surrounding potency, testing, sharing, hypocrisy and political influences and the likely side-effects of the drug. The opinion news “Hypocrisy of America’s Experimental Ebola Drug” (*The Guardian*, 21 August 2014: 15) is an example of numerous news stories that buttress the saliency of the news angle. Stories on the claims

by native doctors on the discovery and potency of local herbs, leaves and roots to treat EVD are also form parts of the saliency of treatment frame. An example of this could be found in July 31, 2014 edition of *The Sun* with headline “Kolanut can cure Ebola – Prof. Maurice Iwu”, a story that discusses the discovery of the fruit as cure for Ebola Virus. The frame emphasised the efforts in search for the treatment of the virus within and outside the Nigerian territory.

Parts of the stories that emphasised the treatment frame are on personal hygiene, and those news items that famed various health precautions in order to estrange the spread of EVD. Nigerian mass media were able to promote hygienic culture (more significantly, frequent hand-washing with sanitizers) by featuring such in many news stories to achieve saliency for the news angle. A substantial amount of the EVD stories emphasising hygienic theme appeared on the front page of the sample newspapers with banner headline (showing that such is the most important news story of the edition) to reflect the amount of emphasis and importance the newspapers placed on such news stories. For example, the front page of *The Guardian*, 25 August 2014 published a banner headline, “Lagos Hotels, Offices Enforce Hand-washing Rule over Ebola”, in which the significance of hand-washing was prioritised as the main focus of the story.

Besides the promotion of hygienic culture as a measure to EVD spread, newspapers also laid emphasis on issues surrounding control and containment of the virus in Nigeria. The emphasis was more pronounced during the tensed stage of the EVD outbreak such that more than one-third (34.3%) of the 288 news stories featuring the frame, (see Table 4.1) were reported during the stage. Treatment and containment frame were also more featured (28.4%) in EVD newspaper stories towards the tail end of the outbreak in Nigeria. Despite the fact that there was no cure for EVD during the tensed stage of the

virus in Nigeria, making its case synonymous to HIV/AIDs; the patterns of the media reportages took a distinct dimension from those of HIV/AIDs in which emphasis of the news stories during its tensed stage was more on its incurable angle. Testing positive of EVD was not presented in the news as a death sentence, but rather victims are often advised to seek health advice, get diagnosed earlier, go for treatment and are assured of getting over the virus if they comply with medical dictates. This has gone a long way in rewriting the mass media presentation approach to health hazards by emphasising stories angle that better manage the multiplicity of effects such an outbreak may generate.

The focus of the newspaper stories in the early stage of the EVD outbreak was not on treatment and containment but rather on awareness creation thereby making the stories in the period the least salient of the frame. Why? A problem needed to be identified first before solutions are sought. The public were to be better informed about EVD outbreak which was not only new but also very strange during the period. The awareness helped in carrying the public along towards the channels to solution.

3. Fatality frame: this category comprises news stories that raised tension as a result of number of infected cases as well as the rise in the EVD death toll and consequences it generated from members of the public. Saliency of the death angle of EVD stories in the newspapers was though significantly inevitable, it was managed by mass media not to make the outbreak aggravate tensions or make contracting the virus appear a death penalty. The saliency of death in the newspapers reports of EVD was not following regular changes throughout the period of the outbreak in Nigeria. The ups-and-down nature of the changes reflects the low rate of death recorded in Nigeria when compared to other West-African affected countries as well as rate of the survivors among the infected. For example, slightly above one-fifth (21.3%) of the total news stories (840) on EVD reported

by sampled newspapers throughout the outbreak are salient on death or fear theme. The frame was not given much as mass media attentions as treatment and containment frame received, the most prioritised of all the frames. The frame cut across all the stages but without definite structural changes – approximately one-tenth in the early stage, rises to slightly more than two out of every five of the stories at tensed stage, falls to 15.1% at the climax stage, rises again to more than one-quarter at decline stage and the containment stage recorded the least news stories popular of the frame.

The fears generated by the saliency on the death angle of the EVD stories during the early and tensed stages were allayed by stories on treatment and containment during the same stages of the outbreak. How? First, stories in which treatment and containment of EVD are reinforced outnumbered those that projected death and fear. Second, the degree of saliency (in terms of the news proximity or relevance to Nigeria as well as news hole and the relevance of the accompanying photos that substantiated the stories, see Table 4.7) in the news stories that focus on treatment and containment is higher compared to stories that built its theme around fear and death. For instance, in one of the stories that framed EVD on death and fear with headline, “Mystery deaths in Benin, Lagos trigger scare” (*The Guardian*, July 12, 2014: 8), six other news stories on the same page of the same newspaper suppressed the effect the earlier one could have on the audience. The stories with headlines:

- i. Ebola Outbreak: How to Check Spread;
- ii. Ebola Outbreak: NMA Wants Protective Equipment in Hospitals;
- iii. Ebola Outbreak: FCT Sets Up Technical Body on Virus Management;
- iv. Ebola Outbreak: LAWMA Seeks Public Support Against Spread Through Waste Disposal;
- v. Ebola Outbreak: UNILORIN Allays Fears on Foreign Students; and

vi. Ebola Outbreak: Anglican Gets Control Measures Next Month

were not only published to cool the effect of the inevitable reportage of the EVD death tolls but were also made to appear on the same page to enable readers to have equal access and to enliven their chances of surviving the outbreak.

What is deductible from the data featuring fatality frame is that majority of stories that emphasised the frame were reports of the EVD death tolls as well as horror dying states of the victims in foreign countries. Since the magnitude of a foreign occurrence ought to be high before such occurrence could be reported in Nigerian newspapers to make impact in the audience, attentions were given to fatality of the EVD abroad (See Table 4.1 and Table 4.7) to show Nigerians the true picture of the virus and to prepare them for precautionary measures. The percentage of the foreign stories on fear and death theme within the total foreign stories reported surpasses the percentage of local stories depicting the same theme within the total number of local stories reported on EVD:

Total number of local news stories reported on EVD = 579

Total number of local EVD news stories that featured fear & death frame = 119

Percentage of fear & death frame within the local EVD news reported = $\frac{119}{579} \times \frac{100}{1} =$
20.6%

Total number of foreign news stories reported on EVD = 261

Total number of foreign EVD news stories that featured fear & death frame = 60

Percentage of fear & death frame within the foreign EVD news reported = $\frac{60}{261} \times \frac{100}{1} =$
23%

An example of one of the foreign stories depicting fatality frame, “EBOLA: Sierra Leone’s 365 Ebola Deaths Traced Back to One Healer” reported in the (*The Guardian*, August 26, 2014: 77) shows that emphasis was more on death tolls and the details of the

dying states than in similar local story reported. Similarly, in the July 8 edition of *The Sun*, a foreign news story, “Ebola kills high-profile Liberian doctor ...As runaway Sierra Leonean patient dies in ambulance” did not only emphasise on death in the story but also linked other EVD death tolls to the content of the story as quoted in part below:

..... Dr. Samuel Brisbane is the first Liberian doctor to die in an outbreak the World Health Organization said has killed 129 people in the country. A Ugandan doctor working in the country died earlier this month.

The WHO said the outbreak, the largest ever recorded, has also killed 319 people in Guinea and 224 in Sierra Leone.

4. Conspiracy frame: it includes news stories whose contents focus on individuals, bodies or government activities (local or foreign) that disrupt the efforts towards containing the outbreak. It also includes reports that lay emphasis on unwholesome way of benefiting from the spread or effect of the outbreak. The focus of the newspapers in making conspiracy salient in their reports reclines on two thresholds: external conspiracy and internal sabotage. Number of news stories that made this frame to be famous is as low as approximately one out of every twenty stories published (5.1%, see Table 4.1), yet its significant influence on how media audience perceived stories on other frames is highly notable. This news frame is found significant because it helps the public (newspaper readers) to decide what factors are inclusive and exclusive while assessing and interpreting stories on EVD to make decisions.

Reinforcements on conspiracy theme were more frequent during tensed and climax periods of the outbreak than early, decline and containment periods. However, how media reported the first experience of the 2014 EVD outbreak in Nigeria had prepared the minds of the audience on what would be the bases for analysing the follow-up media reports. The media narrations of how the index case, Patrick Sawyer (a Liberian) sneaked into

Nigeria tagged along many suspicions and could be considered the first form of external conspiracy emphasised in the EVD reported stories.

Another angle where media reports of EVD outbreak in Nigeria made attributions to external conspiracy is the lateness in the declaration of the outbreak as Public Health Emergency of International Concern by the WHO. The declaration was made in August 8, 2014 by the then WHO's Director-General, Margaret Chan, couples of months after the virus had done irreparable damages and had gone far beyond short term control. Newspaper stories emphasised the late declaration as deliberate when compared with how WHO responded to similar cases in other continents such as Hantavirus pulmonary syndrome (SARS), anthrax, Mad Cow Disease, H1N1, SARS, and HIV/AIDS which is a global threat.

In addition, foreign aids in form of medical personnel, financial supports and material donations were rendered late as one of the influence of the lateness of the declaration of the outbreak as Public Health Emergency of International Concern. As a result, newspaper stories on EVD placed less emphasis on foreign financial aids perhaps until the war of containment was almost won in Nigeria. Stories on how US denied Nigeria of the trial drug (Mzapp) at a point when the outbreak was at its pick in the country and how the newspapers framed it speak volumes concerning the conspiracy salience of the whole episode. Relating any notice of foreign mischiefs in the media reports of the EVD outbreak with the public experience and mind-set during poliomyelitis in Northern part of the country, where polio vaccines was perceived as a deliberate agenda of the western world to reduce the population of Muslims in Nigeria, the public acceptance of any foreign support towards curbing the outbreak might have been crippled. As mass media were taking precautions to minimise the emphasis placed on news angles relating to

foreign conspiracies, the audience demand for details to corroborate the information shared on social media as well as newspapers quest to meet the demand raised the saliency of the few stories on the conspiracies.

For instance, one of the stories that substantiate the frame, titled “U.S. Exploiting W’ Africa Ebola Outbreak to Establish Military Foothold” (*The Guardian*, October 7, 2014: 3), led to a rumour that the outbreak was a deliberate means by the world power to sustain its domination over Africa using the virus to both exploit and impoverish Africans. The source cited by the newspaper to authenticate the story gives additional weight to the saliency of the news angle. Quoting the WHO to authenticate such story compelled public attentions and induced attaching more importance to it. Again, the story was reported on a full-page of the newspaper pointing to how much the importance the media itself attached to the story.

Locally, the newspapers also focused on the EVD reports on the unwholesome behaviours of some members of the public, who used the opportunity of the outbreak for personal gains. Reports on fake sanitizers were emphasised to expose the saboteurs, who obstructed the effort towards containment of the outbreak for personal economic benefits. The reports helped the public on what to look for when buying hand sanitizers to avoid falling victims of the circumstance. Another internal sabotage was reported in the August 2nd, 2014 edition of *The Sun*. The news story, titled “Ebola: Police foil attempt to remove corpse from mortuary” emphasised an attempt to disrupt the effort towards curbing the spread of the virus. The story exposed the attempt by Nigerians who prioritise burial right as well as protection of family or dissociating from Ebola saga ahead of public interest to contain the virus.

Detailed newspaper reports on those who escaped from Ebola quarantine centres is another sabotaging influence on EVD containment struggles. One of the measures to halt the spread of the virus was to quarantine those who had contact with the victims or who were themselves tested positive of the virus. The reports helped by giving the identities of the fled such that members of public were wary of any form of relationship with them and of cause exposed their hideouts. The reports also detailed the situations of things in the quarantine centres from time to time: how victims were monitored for a specific period and how the infected were responding to treatment in order to encourage others, who noticed any Ebola symptom to go to or inform medical experts.

5. Political influence frame: this frame centres on reports concerning government activeness or otherwise through its policies, political rivalry, and its international diplomacy or bilateral relations with other governments/countries on Ebola issue. News stories that emphasised government influence and involvement are proportionately more than those on conspiracy frame. This frame is at the sixth position in terms of its prevalence in the newspapers report of EVD (see Table 4.1). More of the stories that featured this frame were reported during tensed period than in any of the other stages of the outbreak. It shows that governments were more proactive when the tenacity of the outbreak went haywire. The dominance of governments or their officials in the sources cited to authenticate EVD stories throughout the period of the rampage in Nigeria shows that governments across board were deeply involved.

Despite the fact that two major political interests were at logger head – Lagos state where the outbreak was predominant is being ruled by opposition party, All Progressive Congress (APC) and People Democratic Party (PDP) was controlling the federal government – the media reports of government involvements did not emphasise disunity

of purpose. Rather, the reports showed that the duo played some corresponding roles until the virus was contained. For instance, during the early stage of the outbreak in Nigeria, Lagos State Governor (Raji Fashola)'s relationship with federal government on the front-page of August 2nd edition of *The Guardian*, titled "Ebola: Fashola Urges Federal Government to Shut Borders" was portrayed as cordial. It is one of the indications that the political rivalries over Ebola issue at the heat period of EVD were given less attention by the media perhaps to avoid any distraction from common focus towards containing the virus. The media maintained the status quo towards the tail end of the rampage when saliency was placed on the tussle of who won the Ebola battle (containment) between Lagos State and the Federal government. A similar story in the September 2nd edition of *The Sun*, "We're in control of Ebola – Fashola" confirms the relative coordinated efforts between federal and state government towards containing the virus despite party differences. The story reads in part:

Lagos State Governor, Babatunde Fashola, yesterday assured residents of the state that there is no cause for alarm on the Ebola scourge, saying collaborative efforts of government have brought the disease under control. Meanwhile, the governor has also confirmed receipt of N200 million from the Federal Government to fight the virus.

Similarly, the newspaper reports on the relationship between Nigerian governments and international communities also emphasised the media focus on political influence frame. The newspaper stories reflected the attention that the media gave to government reach-out to foreign governments, relevant international organisations and professional bodies as well as prominent individuals regarding the outbreak in Nigeria. The stories did not only make the government effort prominent but also linked the efforts to the success recorded (the early containment of the virus in Nigeria). The reports helped the public to assess government commitment and proactivity towards containing the virus.

Government's call-outs for foreign supports made significant news angles during the tensed stage of the outbreak. Mass media fanned chunk of stories on government collaborations with international communities on ways to conquer EVD outbreak by emphasising government dealings with foreign countries and how such would benefit the public in the fight against the menace. The major story on the second page of September 2nd edition of *The Sun*, "Ebola: FG applies for Japanese drug" substantiates the frame. The story, like many similar others, explains the government efforts in relation to foreign governments to get anti EVD drugs.

Table 4.1: Examination of preponderant frame in Ebola news stories across stages of the Ebola rampage period in Nigeria

| Emphasised News Angle (Frame) | | Date (Based on stages during the outbreak) | | | | | Total |
|-------------------------------|-------------------------|--|--------------|--------------|---------------|-------------------|-------|
| | | Early stage | Tensed stage | Climax stage | Decline stage | Containment stage | |
| Awareness | Count | 13 | 36 | 4 | 9 | 2 | 64 |
| | % within Dominant frame | 20.3% | 56.2% | 6.2% | 14.1% | 3.1% | 100% |
| | % within Date | 22.4% | 10.9% | 3.3% | 4.0% | 1.9% | 7.6% |
| | % of Total | 1.5% | 4.3% | 0.5% | 1.1% | 0.2% | 7.6% |
| Containment | Count | 10 | 97 | 42 | 81 | 53 | 283 |
| | % within Dominant frame | 3.5% | 34.3% | 14.8% | 28.6% | 18.7% | 100% |
| | % within Date | 17.2% | 29.4% | 34.7% | 36.0% | 50.0% | 33.7% |
| | % of Total | 1.2% | 11.5% | 5.0% | 9.6% | 6.3% | 33.7% |
| Fatality | Count | 18 | 74 | 27 | 48 | 12 | 179 |
| | % within Dominant frame | 10.1% | 41.3% | 15.1% | 26.8% | 6.7% | 100% |
| | % within Date | 31.0% | 22.4% | 22.3% | 21.3% | 11.3% | 21.3% |

| | | | | | | | |
|---------------------|-------------------------|------|-------|-------|-------|-------|-------|
| | % of Total | 2.1% | 8.8% | 3.2% | 5.7% | 1.4% | 21.3% |
| Conspiracy | Count | 2 | 16 | 12 | 7 | 6 | 43 |
| | % within Dominant frame | 4.7% | 37.2% | 27.9% | 16.3% | 14.0% | 100% |
| | % within Date | 3.4% | 4.8% | 9.9% | 3.1% | 5.7% | 5.1% |
| | % of Total | 0.2% | 1.9% | 1.4% | 0.8% | 0.7% | 5.1% |
| Political influence | Count | 2 | 21 | 6 | 10 | 7 | 46 |
| | % within Dominant frame | 4.3% | 45.7% | 13.0% | 21.7% | 15.2% | 100% |
| | % within Date | 3.4% | 6.4% | 5.0% | 4.4% | 6.6% | 5.5% |
| | % of Total | 0.2% | 2.5% | 0.7% | 1.2% | 0.8% | 5.5% |

Table 4.1 continued

| | | | | | | | |
|----------------|-------------------------|------|-------|-------|-------|-------|------|
| Effect | Count | 4 | 28 | 9 | 22 | 10 | 73 |
| | % within Dominant frame | 5.5% | 38.4% | 12.3% | 30.1% | 13.7% | 100% |
| | % within Date | 6.9% | 8.5% | 7.4% | 9.8% | 9.4% | 8.7% |
| | % of Total | 0.5% | 3.3% | 1.1% | 2.6% | 1.2% | 8.7% |
| Mobilisation | Count | 5 | 27 | 6 | 22 | 6 | 66 |
| | % within Dominant frame | 7.6% | 40.9% | 9.1% | 33.3% | 9.1% | 100% |
| | % within Date | 8.6% | 8.2% | 5.0% | 9.8% | 5.7% | 7.9% |
| | % of Total | 0.6% | 3.2% | 0.7% | 2.6% | 0.7% | 7.9% |
| Support/Aid | Count | 1 | 4 | 7 | 14 | 7 | 33 |
| | % within Dominant frame | 3.0% | 12.1% | 21.2% | 42.4% | 21.2% | 100% |
| | % within Date | 1.7% | 1.2% | 5.8% | 6.2% | 6.6% | 3.9% |
| | % of Total | 0.1% | 0.5% | 0.8% | 1.7% | 0.8% | 3.9% |
| Misinformation | Count | 3 | 20 | 5 | 6 | 2 | 36 |
| | % within Dominant frame | 8.3% | 55.6% | 13.9% | 16.7% | 5.6% | 100% |
| | % within Date | 5.2% | 6.1% | 4.1% | 2.7% | 1.9% | 4.3% |
| | % of Total | 0.4% | 2.4% | 0.6% | 0.7% | 0.2% | 4.3% |
| Boycott | Count | 0 | 7 | 3 | 6 | 1 | 17 |
| | % within Dominant frame | 0.0% | 41.2% | 17.6% | 35.3% | 5.9% | 100% |
| | % within Date | 0.0% | 2.1% | 2.5% | 2.7% | 0.9% | 2.0% |
| | % of Total | 0.0% | 0.8% | 0.4% | 0.7% | 0.1% | 2.0% |
| Total | Count | 58 | 330 | 121 | 225 | 106 | 840 |
| | % within Dominant frame | 6.9% | 39.3% | 14.4% | 26.8% | 12.6% | 100% |
| | % within Date | 100% | 100% | 100% | 100% | 100% | 100% |
| | % of Total | 6.9% | 39.3% | 14.4% | 26.8% | 12.6% | 100% |

6. Effect frame: it comprises reports on the effect of the outbreak on economic, social elation and cultural interactions, education, health, international relations and diplomacy, sporting activities, entertainment industry and other areas of human development. More of the newspaper stories during the last part of EVD outbreak in Nigeria were used to reinforce the effect of the outbreak on individuals as well as society at large than during the early stage. Out of the 840 total stories on the outbreak 8.7% of the stories reinforced the effect of EVD. However, out of the 73 (8.7% of the aggregate stories) news stories that emphasised effect frame, 9.8% and 9.4% of the stories were reported within the decline and containment stages of the outbreak respectively. Each of the proportions in the last two stages is more than the percentage of stories that emphasised effect frame in each of other stages; early stage (6.9%), tensed stage (8.5%) and climax stage (7.4%). It means that as the intensity of the outbreak increased, more emphasis was placed on the effects it generated in the subsequent news stories reported.

The emphasis was more on economic consequences of the outbreak both within and outside the county. A lot of allocation from the Nigeria 2014 supplementary budget which could have been used for other developmental purposes was spent on fighting EVD outbreak. For instance, a story on page 30 of the August 21, 2014 edition of *The Guardian*, “Ebola Drains Budget as Treasury Bills Fund Virus Attack”, makes salient the implication the huge amount spent to curtail the spread of Ebola in the country had on other developmental policies which were forgone to make way for Ebola fight. The story confirmed the earlier story in the August 7 edition of *The Sun*, “Jonathan approves N1.9bn intervention fund to fight Ebola”. Another sample story on page 16 of August 17 edition of the same newspaper, “Ebola’s Toll on Nigeria’s Economy: Airlines Lose Millions of Dollars to Emergency” pointed out the huge economic losses in the aviation industry as a measure of general economic loss to the outbreak. Newspaper stories also cast saliency

on economic loss owing to the ban on buying and selling of bush meat, which was proved to be one of the means through which Ebola virus spreads. Some stories also advised members of public to refrain from roasted beef and chicken, popularly known as “Suya”, the common food many Nigerians enjoy. Some of the reports also focused on how the outbreak had paralysed Liberian economy as a warning to Nigeria to intensify her effort towards containing the virus before it could do the same to Nigerian economy. An example of the story in which such emphasis was made could be found on page 30 of September 9 edition of *The Guardian* “Liberian Urges International Assistance to Save Economy”.

The effect on education was highly emphasised in the newspaper coverage of EVD outbreak in Nigeria. Most of the reports emphasising the effect of the outbreak on education focused much on the disruption of school academic calendar as preparatory and secondary school holiday was prolonged far beyond the normal schedule. A story “Ebola and Safe Resumption: Until Last Ebola Case Clears, Schools Should Not Reopen” (*The Guardian*, September 14: pg.18) is one of the many that show how the newspapers portrayed the EVD effect on school academic calendar. Some of the stories also focused on how some academic functions in tertiary institutions were crippled. Some of the stories salient angles were on various academic conferences, seminars and workshops that could not hold as a result of fear of contracting EVD. Similarly, some stories stressed on how Nigerian students abroad suffered discriminations, and how those seeking admissions in foreign institutions were denied admissions, with the reasons linked to Ebola pandemic in West Africa.

Another area in which newspapers portrayed the EVD effect is socio-cultural and religious activities. Many stories on EVD reinforced the limit of socialisation set by the

fear of contacting the virus. Social functions, such as burial, naming, wedding, anniversaries and many others which usually bring people together and ensure body contacts were disapproved by mass media reports to play safe of Ebola spread. The fear some of the stories nurtured to estrange people from handshake planted another form of greeting adopted even beyond the period of the outbreak. Besides the socio-cultural effect, the low attendance of religious congregations and rites, were other areas in which newspaper reports made became important. On August 11, 2014 edition of *The Sun*, the story, “Catholic Church Moves to Check Ebola Spread: Suspends hand to mouth communion, handshake”, made the effect of Ebola on the religious activities of the religious body a big issue.

7. Mobilisation frame: it comprises news stories that were reported to educate the public. The stories were also reported with the intent to drive people towards the prevention of the virus and to be conscious of their relationship with other people by being vigilant and ready to report cases or persons with symptoms to the appropriate bodies. Some of the newspaper reports of EVD were deliberately used to stimulate public cooperation and concerted effort towards curbing Ebola pandemic. The central message in the form of reports clarified issues concerning EVD that could mislead the public towards taking wrong decisions. This frame is ranked the fourth most salient news angle among the ten major frames identified in EVD stories reported in the sampled newspapers. Out of 840 EVD news stories considered, 7.9% emphasised the news angle with more than two out of every five of the stories published during the tensed stage of the outbreak. The reason why more emphasis on sensitisation and mobilisation of the public during tensed stage was perhaps, to abate the tension and to involve all in the struggle for curtailment and containment of the outbreak such that the efforts could reinforce one another. Although, some of the news stories featuring the frame were

presented from the angles of ‘prevention’ and ‘containment’, the central focuses were on the call for public concerted effort and collaboration.

Mobilisation team was also emphasised in many of the stories reported towards the decline stage of the outbreak. Just as the tension started reducing, and the spread of the virus was being gradually curtailed, newspaper reports focused more on this news angle to encourage members of public to keep up with the momentum. As a result, exactly one-third of the total stories centred on this team were published during the decline stage of the outbreak while those during climax and containment stage are at par with each of the duo constituting 9.1%. Only during the early stage of the outbreak was the lowest number of the stories (7.6%) emphasising the frame published (see Table 4.1).

One of the characteristics noted in many of the stories that emphasised sensitisation and mobilisation frame is that the frame was captured in most of the headlines of the stories. Some of the headlines are listed below:

“Ebola: NOA **Sensitised** Bauchi People” (*The Guardian*, August 27, 2014 Pg. 5)

“Hypo Takes Sanitation **Sensitisation** to Hospitals, Home” (*The Guardian*, September 5, 2014 Pg. 51)

“Ebola: Firm Begins School **Sensitization** on Prevention in Lagos, Ogun” (*The Guardian*, September 26, 2014 Pg. 85)

“ECOWAS Ministerial Group Seeks **Mobilisation** of Regional Security Forces to Tackle Ebola” (*The Guardian*, September 29, 2014 Pg. 7)

“Nigerians Utilise U-Report for **Sensitisation** over Ebola Disease” (*The Guardian*, October 2, 2014 Pg. 46)

8. Support/Aid frame: news stories under this category discuss the financial and material aids towards the containment of the outbreak. It also includes stories on consolation of the victims and commendation of various contributions to sack the virus. Stories on either financial or material support towards the fight against Ebola were very scarce at the initial stage of the outbreak in Nigeria perhaps, because the threat was minimal until the first Nigerian primary contact with the index case died. On aggregate, about 4% of the total Ebola news stories under consideration laid much emphasis on consolation and support frame. Stories on monetary donation were more rampant while stories on material donation and voluntary health services also constitute stronghold themes of the frame.

Majority of the stories on support and consolation frame were reported during the climax stage of Ebola outbreak through the decline stage until Nigeria was declared Ebola free and even beyond. About 21% each of the stories emphasising this frame were reported during climax and containment stages while the number of the news stories in the duo stages put together (a little above 42%) were reported during decline stage of the outbreak. It is an indication that donations towards curbing the spread were much more towards the tail end of the outbreak in Nigeria than the earlier stage and as a result the effort in that direction was highly belated.

Consequently, the proportion of newspaper reportage of various supports (from individuals, industries, professional bodies, Non-Governmental Organisations and international bodies) to curb the spread of the outbreak signified that all hands were on deck and the success recorded in terms of early containment of the outbreak buttressed this. Also, mass media acted as the central coordinator of the various efforts; prioritised the most significant aids needed and linked the consequences of various health decisions

to the trends of EVD in order to guide members of public in subsequent health decisions favourable to Ebola curtailment.

9. Misinformation frame: stories grouped in this category are those that expose the misinformation, lies, rumours, myths, and all forms of information mismanagement about the spread, treatment or effect of the virus, either from social media or from unscrupulous individuals and set the records straight. Mass media, particularly newspaper proved that their role is not limited to distribution of information to make an informed society but also to verify, confirm, rewrite, and redistribute information considered untrue or deceptive, which is widespread among people from whatever means. Correcting such untrue information would definitely save media roles from blemishes that might coagulate from having the audience misinformed thereby taking unfavourable health decisions.

The proportion of the stories that make this theme centre of discussions is not significant perhaps because rumours concerning the outbreak were less compared to other forms of health risks that ever broke out in Nigeria. For instance, the major rumour upon which mass media dissipated energy (with sizable number of news stories) to correct is the use of salt solution/therapy as a preventive measure against EVD, which was being circulated through SMS messages and social media. A story titled “Ebola and salted rumours” was published in August 11, 2014 edition of *The Sun* to correct the rumour spreading through SMS messages and social media. Another report, “Ebola: 2 die after drinking salt solution in Makurdi” in August 14, 2014 edition of the same newspaper emphasised the end result for making health decision based on the rumour. August 11, 2014 edition of *The Guardian* also reported similar story, “74-year-old, two others die in

Bauchi after salt-water bath” to emphasise the danger that is inherent in taking health decision based on rumour.

Mass media stories on rumours and misinformation were subject to public reactions to some unverified information. On this, the audience depended on media for verification to ensure information balance. As a result, not more than 4.3% of the aggregate newspaper stories considered in this study centred on rumour and misinformation. The frame based on this ratio is ranked eighth out of the ten major frames under which newspaper stories on Ebola outbreak were grouped. The proportion of news that emphasised the frame surpassed those of ‘Consolation and support/Aid frame’ and ‘Stigmatization/discrimination frame’.

The distribution of newspaper stories on rumour and misinformation frame as shown on Table 4.1 stipulates that stories emphasising the frame were concentrated during the tensed stage of the outbreak. More than half of the stories (approximately 56%) were reported during the stage while slightly above 13% were reported when the outbreak reached its climax stage. The proportion of the stories rose again to 16% when the tension started declining perhaps as a media strategy to keep up with EVD curtailment momentum. Relatedly, very few stories were reported on this theme in the early stage of the outbreak.

10. Boycott frame: this category contains news stories on stigmatisation and discrimination against victims and their relations or reports on the boycott of the affected communities, states or countries. The least proportion of newspaper stories emphasised this theme. Only two per cent of the aggregate newspaper stories considered in this study focused on the frame. It buttresses that the theme is not as significant as others. This

perhaps might be as a result of the low rate at which the virus spread in Nigeria or the measure taken to quarantine all the victims, which restricted direct contact with the victims unlike other health risks.

Out of a total of 17 newspaper stories on the frame, none was reported in the early stage of the outbreak; seven were reported during tensed stage, showing that people had started discriminating or stigmatising before government took quarantine options. Only three were reported during climax stage of the outbreak, indicating that the attention of news media was not on stigmatisation as it didn't constitute threat to the society. The number of the stories rose again during decline stage as six newspaper stories focused on the theme perhaps as a result of the rumour that the outbreak had spread out of Lagos to other states due to some victims who escaped from quarantine centres. The media focus was finally shifted away from the theme towards the last part of the outbreak reign in Nigeria as only one stories related to the theme was reported by sampled newspapers.

4.2.1.2. News Proximity and Prominence

Other indices used to measure how Nigerian newspapers framed Ebola issue are news proximity and prominence. News proximity deals with the degree of preference given to local stories over foreign.

Table 4.2: Frequency Distribution of News Proximity

| Area covered | Frequency | Percentage | Cumulative |
|--------------|-----------|------------|------------|
| Nigeria | 579 | 68.9 | 68.9 |

| | | | |
|--------|-----|-------|-------|
| Africa | 108 | 12.9 | 81.8 |
| Global | 153 | 18.2 | 100.0 |
| Total | 840 | 100.0 | |

The data reflect that overwhelming number of Ebola stories published in newspapers were of local contents. It shows the commitment of the newspapers towards keeping Nigerians informed more of the happenings in Nigeria than in foreign countries by prioritising local news over foreign stories regardless of their prominence except when foreign stories would have certain influences on Nigerians or indirectly affect Nigeria.

Another measure of the framing pattern is news prominence, which is measured by the amount of spaces allotted to the stories and where the stories are placed (page) in the newspapers. A centre-spread, full-page, and half-page story is considered as major news stories while less than half-page news stories including picture/image are considered minor news stories.

Table 4.3: Frequency Distribution of the Degree of News Prominence

| Prominence | Frequency | Percentage | Cumulative |
|------------|-----------|------------|------------|
| Major | 388 | 46.2 | 46.2 |
| Minor | 452 | 53.8 | 100.0 |
| Total | 840 | 100.0 | |

Though there are more minor stories than major, the major Ebola news stories yet have significant impact when its proportion is compared to the aggregate major stories reported. The fact that Ebola news stories were given such proportion of news holes in

both newspapers is a reflection of degree of prominence the newspapers attached to reporting Ebola issues.

News placement is another measurement indicator for the degree of prominence attached to newspaper report of an issue. Much importance is attached to front-page news than news on other pages. Aside the fact that front-page news stories are considered the most important news of an edition, newspapers consider it as a unique selling proposition of the edition because it attracts audience attentions and influence market demand for the edition. This is perhaps one of the reasons why political news stories are more often considered in the front pages of Nigerian newspapers than other news stories. Health news stories are most often than not buried inside inner pages of Nigerian newspapers. Some, if not all Nigerian newspapers, dedicate some inner pages of certain editions to health stories. *The Guardian* for example most often dedicate page 36 of its Wednesday edition to health news stories. The same could also be found most often on page 32 of Thursday edition of *The Sun*.

Table 4.4: Cross-tabulation of Distribution of Newspapers and News Placement on Newspaper Pages

| Newspaper | | News Page | | Total |
|--------------|--------------------|------------|-------------------|--------|
| | | Front page | Inner & back page | |
| The Guardian | Count | 58 | 452 | 510 |
| | % within Newspaper | 11.4% | 88.6% | 100.0% |

| | | | | |
|---------|--------------------|-------|-------|--------|
| | % of Total | 6.9% | 53.8% | 60.7% |
| The Sun | Count | 39 | 291 | 330 |
| | % within Newspaper | 11.8% | 88.2% | 100.0% |
| | % of Total | 4.6% | 34.6% | 39.3% |
| Total | Count | 97 | 743 | 840 |
| | % within Newspaper | 11.5% | 88.5% | 100.0% |
| | % of Total | 11.5% | 88.5% | 100.0% |

Both *The Guardian* and *The Sun* featured almost the same proportion of Ebola reports in the front page of their editions. Each of the newspapers has an average of 45 Ebola reports on the front page within the three months of Ebola rampage in Nigeria under the study. It means that one out of every three editions of each of the newspapers has Ebola issue as front-page stories. It was quite strange to routine page planning and traditional news placement and arrangement of many Nigerian newspapers such that other important issues such as *Boko Haram* insurgency, which was at its apex at the period, and was rigorously competing for the same prominence was not prioritised above Ebola issue.

4.2.1.3 News Sources and photographs

News source is another indicator of how newspaper framed Ebola news stories. What news sources did the newspapers use for the authentication of Ebola news stories, and how credible were the news sources? Journalists attribute their stories to sources in order to confirm the genuineness of the stories to media audience. Journalists also quote sources when reporting stories that require the authentication of the experts or professionals. In an interview with the editor of health desk of the *The Sun* newspaper, Azoma Chikwe (confirmed by Folashade Adebayo, *The Punch* health reporter, in a separate interview)

concerning the influence of sources on the newspaper reportage of Ebola stories during the rampage, he disclosed that there was a coordinated effort from the Government, compelling Nigerian media houses not to report issues related to Ebola until such is certified by Minister of Health in order to have coherent and non-misleading reportage that might expose the effort to contain the outbreak to risks. The policy indeed influenced the proportion of sources that the newspapers used to authenticate stories about Ebola in Nigeria as shown in Table 4.5.

Table 4.5: Frequency Distribution of News-sources use for Ebola stories by Nigerian Newspaper

| News sources | Frequency | Percentage (%) |
|--|------------|----------------|
| Health Professional/Expert | 132 | 15.7 |
| Victims/Relatives of the Victims | 11 | 1.3 |
| Organizations/body/NGOs | 162 | 19.3 |
| Government Officials | 299 | 35.6 |
| National/International Health Organisation | 113 | 13.5 |
| Eyewitnesses | 42 | 5.0 |
| No source | 55 | 6.5 |
| News Agency | 26 | 3.1 |
| Total | 840 | 100.0 |

More than one-third of the aggregate of Ebola stories reported in the newspapers were attributed to the Nigerian government, majorly the Minister of Health as the source. One of the prime health professionals during the outbreak, Sunday Omilabu, Professor of medical virology, who diagnosed the first Ebola case in Nigeria affirmed that Nigerian

government, through the Minister of Health called for joint effort of health experts, the media and governments so as to have a common voice on Ebola related issue. When he was asked whether he did grant media interviews on issue pertaining to Ebola as a medical expert, he confirmed that:

There was always media briefing. The only thing that was put in place was that not everybody was allowed to address the press in order not to give contradictory information. We all agreed that honourable Minister of Health should be addressing the media on the state of Ebola in Nigeria on regular basis. Our own role as experts was to give the media information pertaining to what Nigerian needed to know in order to prevent the spread of the virus.

All these are the justifications for having more of the newspaper stories quoting government officials as news sources.

Among other main sources of Nigerian newspapers on the issue of Ebola were professional organisations such as Airline Operators Association of Nigeria (AOAN), Nigerian Medical Association (NMA) and United Nations Children’s Fund (UNICEF). Others were Non-Governmental organisations, religious bodies and international organisations. All these are used as sources in 19.3 per cent of the aggregate 840 Ebola newspaper stories published within the period under study.

Table 4.6: Cross-tabulation Distribution of News sources in Relation to News Types

| Sources | | Straight News | Editorial/ Opinion | Health-page news | Press Release | Feature | Cartoon | Interview | Research report | Total |
|---------------------|-----------------------|---------------|--------------------|------------------|---------------|---------|---------|-----------|-----------------|-------|
| Health Professional | Count | 83 | 9 | 3 | 1 | 27 | 0 | 5 | 4 | 132 |
| | % within News Sources | 62.9% | 6.8% | 2.3% | 0.8% | 20.5% | 0.0% | 3.8% | 3.0% | 100% |
| | Count | 8 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 11 |

| | | | | | | | | | | |
|--------------------------|------------------------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Victims/Relatives | % within News Sources | 72.7% | 0.0% | 9.1% | 0.0% | 18.2% | 0.0% | 0.0% | 0.0% | 100% |
| Non-health organizations | Count | 151 | 7 | 0 | 0 | 2 | 0 | 1 | 1 | 162 |
| | % within News Sources | 93.2% | 4.3% | 0.0% | 0.0% | 1.2% | 0.0% | 0.6% | 0.6% | 100% |
| Government Officials | Count | 270 | 6 | 2 | 1 | 12 | 1 | 4 | 3 | 299 |
| | % within News Sources | 90.3% | 2.0% | 0.7% | 0.3% | 4.0% | 0.3% | 1.3% | 1.0% | 100% |
| Health Organisation | Count | 80 | 13 | 2 | 1 | 14 | 0 | 1 | 2 | 113 |
| | % within News Sources | 70.8% | 11.6% | 1.8% | 0.9% | 12.4% | 0.0% | 0.9% | 1.8% | 100% |
| Eyewitnesses | Count | 33 | 2 | 0 | 0 | 7 | 0 | 0 | 0 | 42 |
| | % within News Sources | 78.6% | 4.8% | 0.0% | 0.0% | 16.7% | 0.0% | 0.0% | 0.0% | 100% |
| No source | Count | 5 | 29 | 0 | 3 | 5 | 9 | 2 | 2 | 55 |
| | % within News Sources | 9.1% | 52.8% | 0.0% | 5.5% | 9.1% | 16.4% | 3.6% | 3.6% | 100% |
| News Agency | Count | 19 | 3 | 0 | 1 | 3 | 0 | 0 | 0 | 26 |
| | % within News Sources | 73.1% | 11.5% | 0.0% | 3.8% | 11.5% | 0.0% | 0.0% | 0.0% | 100% |
| Total | Count | 649 | 69 | 8 | 7 | 72 | 10 | 13 | 12 | 840 |
| | % within News Sources | 77.3% | 8.2% | 1.0% | 0.8% | 8.6% | 1.2% | 1.5% | 1.4% | 100% |

Health professionals/experts also contribute 15.7% of the sources used to substantiate or authenticate newspaper stories on Ebola. National/International Health Organisations such as World Health Organisation (WHO), and Centre for Disease Control (CDC) contribute 13.5 per cent of the sources while eye witnesses and news agency contribute five per cent and 3.1 per cent respectively. The victims/their relatives were the least of the sources used to authenticate Ebola stories perhaps owing to the unwillingness of victims or their relatives to grant media interview for fear of stigmatisation. Some of the stories were not substantiated with any news-source. Much of the stories in this category are not straight news.

Like news sources, photographs or images that accompanied Ebola reports were not merely used for news authentication but they also emphasised dominant frames that such reports portrayed. Media audience could easily identify EVD stories without even reading the contents or grabbing the headlines. Once they see any photograph that symbolises Ebola virus or its victim, then the quest to know more is aroused, hence, the news story which such photograph accompanied, compels audience attentions and interests. The photographs in Fig. 4.2 and 4.3 for instances, are Ebola virus symbol and signs and symptoms postal respectively, which were used to sensitise, alert or warn people to be careful of the endemic.



Figure 4.2: Ebola Virus Symbol

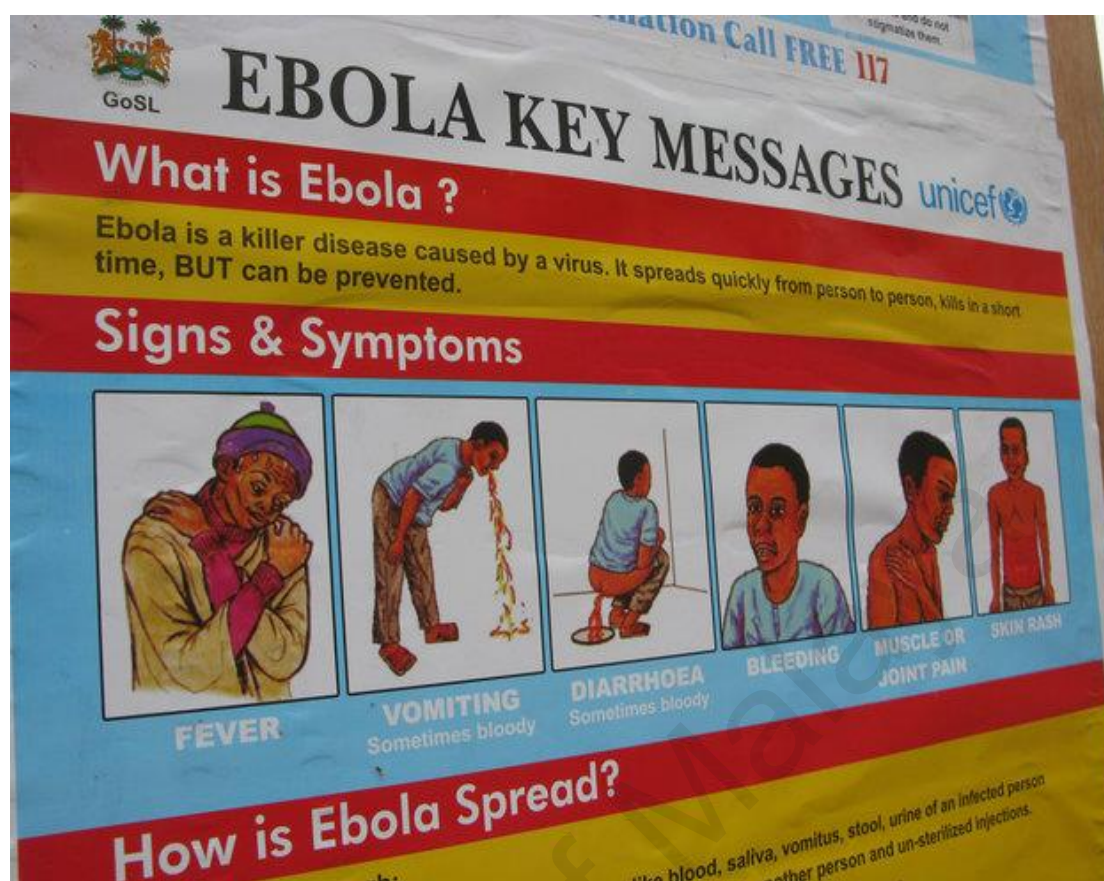


Figure 4.3: Images of EVD Signs and Symptoms

Mass media reports at the early stage of the outbreak were accompanied by such images since the goal was to create awareness rather than fear. Another reason was that Nigeria was yet to record any gory photo of an EVD victim that is newsy in the country, except those that were got from neighbouring Ebola affected countries. As the frame changed from awareness to fatality due to tensed nature of the outbreak in Nigeria, Nigerian newspapers started using photographs that portrayed EVD as a death sentence. Such photographs (see Fig. 4.4 and 4.5), though most were from Liberia and Guinean pathetic scenes, were used to reinforce reports that make fatality frame salient. The aim was to showcase the importance of the earlier messages on prevention by creating fear in Nigerians (Fear appeal) so that they could think and act on the messages in the direction that the media want.



Figure 4.4: Manifest effect of Ebola Virus on an EVD Victim



Figure 4.5: Body of an EVD victim removed from quarantine centre by health workers

Local EVD news stories were much more substantiated with photographs to emphasise the frame that the media intended to make salient than foreign EVD news stories except in fatality frame. As much as newspapers published gory photographs alongside EVD news stories to induce fear appeal, so also they published comic

photographs/images to relieve tension and to achieve frames order than fear as spelled out in Table 4.7. Most of the foreign photographs that the newspapers used to portray dominant frames while reporting the epidemic were adapted from verifiable sources such as international news agencies and WHO websites. The sources were also indicated as by-line of the photographs, making it so much credible to the audience that it influenced their interpretation and understanding of the EVD stories that the photographs accompanied.

Table 4.7: Cross-tabulation Distribution of News Frames in Relation to Accompanied Photographs

| Frames supported by photographs | | Number of photographs/images used to support local & foreign EVD news stories | | |
|---------------------------------|-------------------|---|---------------|-------------|
| | | Local | Foreign | Total |
| Awareness | Count | 36 | 13 | 49 |
| | % of Total | 9.35% | 3.38% | 12.73% |
| Containment | Count | 97 | 10 | 107 |
| | % of Total | 25.19% | 2.60% | 27.79% |
| Fatality | Count | 8 | 42 | 50 |
| | % of Total | 2.08% | 10.91% | 12.99% |
| Conspiracy | Count | 2 | 3 | 5 |
| | % of Total | 0.52% | 0.78% | 1.30% |
| Political influence | Count | 21 | 1 | 22 |
| | % of Total | 5.45% | 0.26% | 5.71% |
| Effect | Count | 28 | 13 | 41 |
| | % of Total | 7.27% | 3.38% | 10.65% |
| Mobilisation | Count | 27 | 5 | 32 |
| | % of Total | 7.01% | 1.30% | 8.31% |
| Support/Aid | Count | 31 | 18 | 49 |
| | % of Total | 8.05% | 4.68% | 12.73% |
| Misinformation | Count | 20 | 3 | 23 |
| | % of Total | 5.19% | 0.78% | 5.97% |
| Boycott | Count | 7 | 0 | 7 |
| | % of Total | 1.82% | 0.00% | 1.82% |
| Total | Count | 277 | 108 | 385 |
| | % of Total | 71.93% | 28.07% | 100% |

The significance of using photographs in making certain aspect of EVD stories salient was concentrated more in the audience expectations from the news contents. Much

of what the media wanted the audience to understand in the EVD news contents were what the accompanied photographs concentrated on particularly when such photographs or images were much relevant to the news stories that they substantiated. It shows that relevant photographs do not only draw attentions to news stories but also pre-empt media motives towards the audience interpretation and understanding of the news stories.

4.2.2 Frequency of the Predominant Frames in Newspaper reports of Ebola

More than one-third (33.7%) of the aggregate 840 news stories on Ebola outbreak that were published in the two Nigerian newspapers under study are on containment frame. It remains the most focus news angle in more than one-third of the news stories; this perhaps was meant to reap the society off the virus. Making the frame predominant in many of the news stories reflects the social responsibility role and the interest of Nigerian newspapers to influence the public behaviour towards controlling the outbreak.

The primary interest of Nigerian newspapers and the general principle of most news media across the globe is “It leads when it bleeds”. This is considered a market strategy, aiming to arouse public interests by writing from negative and hypertensive news angle in order to sell more copies. Although, this strategy was substituted by media social responsibility role in some of the frames emphasised in Ebola news stories, it was more pronounced in some others. Averagely, one-third of the news stories on Ebola during the rampage featured containment frame. The frame dominated straight news and editorials, which are more within the journalists’ absolute control than opinion columns, letters-to-the-editor and interviews, which are audience-generated stories.

Table 4.8: Cross-tabulation Distribution of the Dominant Frame and Area Covered in the News

| Dominant frame/theme | | Area focus in the News | | | Total |
|----------------------|------------|------------------------|--------|--------|--------|
| | | Nigeria | Africa | Global | |
| Awareness | Count | 51 | 10 | 3 | 64 |
| | % of Total | 6.1% | 1.2% | 0.4% | 7.6% |
| Containment | Count | 197 | 31 | 55 | 283 |
| | % of Total | 23.5% | 3.7% | 6.5% | 33.7% |
| Fatality | Count | 119 | 26 | 34 | 179 |
| | % of Total | 14.2% | 3.1% | 4.0% | 21.3% |
| Conspiracy | Count | 20 | 11 | 12 | 43 |
| | % of Total | 2.4% | 1.3% | 1.4% | 5.1% |
| Political influence | Count | 34 | 9 | 3 | 46 |
| | % of Total | 4.0% | 1.1% | 0.4% | 5.5% |
| Effect | Count | 38 | 20 | 15 | 73 |
| | % of Total | 4.5% | 2.4% | 1.8% | 8.7% |
| Mobilization | Count | 57 | 1 | 8 | 66 |
| | % of Total | 6.8% | 0.1% | 1.0% | 7.9% |
| Support/Aid | Count | 20 | 0 | 13 | 33 |
| | % of Total | 2.4% | 0.0% | 1.5% | 3.9% |
| Misinformation | Count | 31 | 0 | 5 | 36 |
| | % of Total | 3.7% | 0.0% | 0.6% | 4.3% |
| Boycott | Count | 12 | 0 | 5 | 17 |
| | % of Total | 1.4% | 0.0% | 0.6% | 2.0% |
| Total | Count | 579 | 108 | 153 | 840 |
| | % of Total | 68.9% | 12.9% | 18.2% | 100.0% |

Many of the stories reported on EVD also focused on the effect of the outbreak on both human and the environment. The effect frame, which recorded 8.7% of the total stories analysed substantively tends towards negative than positive frame. Others frames that were featured are: mobilization (7.9%); awareness (7.6%); political influence (5.5%); conspiracy (5.1%); misinformation (4.3%); and support/Aid (3.9%) in that order of magnitude. The least featured among the dominant frames is boycott, with just two per cent of the total stories analysed.

More than two-third of the Ebola stories reported was on Nigeria while the remaining (less than one-third) focused on other countries most especially the affected West-African countries and the global environment. This reveals that Nigerian newspapers took cognisance of news proximity value when reporting EVD by looking more inward in their news coverage. They did not allow foreign stories to dominate local stories on the issue despite the fact that the situation of EVD was more critical in some foreign nations most especially in Liberia and Guinea. Newspapers focus on Nigeria as regard issues pertaining to Ebola goes beyond satisfying the readers' interests but also satisfying media social responsibility to ensure that the country was safe from the world-threatening outbreak.

4.3 Analyses of Survey Data

The responses from 400 newspaper readers were used to verify audience perceptions of EVD stories reported in Nigerian newspapers and their correspondent attitudinal change towards Ebola curtailment. The data generated from the exercise were used to answer the last three of the five research questions set to fulfil the objectives of this study. Resulting from the pilot test conducted, five major variables were considered appropriate for

generating relevant data that would answer research question three, four and five. The variables are:

- a. Social Demographic variables: Four constructs (Sex, Age, Education level and income level) were measured
- b. Audience newspaper reading habit
- c. Audience rating of frequency of each frame identified in EVD news stories
- d. Audience perception of framed EVD news stories
- e. Audience reaction towards EVD outbreak

Details regarding validity and reliability of the variables have been discussed in chapter three of this work in line with the parameters highlighted under the sub-heading, “Data Analysis”.

4.3.1 Survey Responses Analyses

The opinion survey was conducted to generate data from 400 respondents, who were evenly distributed among four Local Government Areas (LGAs) that were randomly selected (100 respondents from each). Having foreseen that 100 per cent return rate might not be realistic, supplementary copies of questionnaires were provided to make up for those that might be considered invalid as a result of incomplete information or missing responses to items in the questionnaire. The target was to have equal representation of respondents from each stratum (LGA) in order to ensure that audience opinions were not skewed to certain audience characteristics at the expense of others.

4.3.2 Response Rate and Supplementary Data

The return rate of the questionnaires varied across the four LGAs. There was 94 per cent return rate in Alimosho LGA out of which two questionnaires were considered invalid;

97 per cent return rate each from Lagos Island and Ikeja LGAs with one questionnaire considered invalid apiece; and 99 per cent return rate from Lagos Mainland LGA and all considered valid. Supplementary questionnaires were administered to make up for the unreturned and invalid questionnaires in order to achieve equal representative data across the areas where samples were selected. Additional eight questionnaires were administered in Alimosho, four each in Lagos Island and Ikeja, and one in Lagos Mainland to have a total target of 400 respondents evenly distributed across the LGAs.

4.3.3 Analyses of Social Demographic Variables of the Respondent

Four demographic variables concerning the respondents' characteristics were analysed to justify the suitability of the sample selected and the relevance of the data got from the respondents. Gender distribution of the respondents was represented by two items (Male and female) while age distribution reflected three items: youth (between 18 and 38 years old); adult (between 39 and 59 years old); and aged category (60 years old and above). Education level of the respondents was also distributed among three items (Secondary, tertiary and post-tertiary categories) while respondents' income level (based on respondents' monthly income) was distributed among: very low-income earners (Below ₦30,000); low income earners (₦30,000 to ₦59,000); average or moderate-income earners (₦60,000 to ₦89,000); high-income earners (₦90,000 to ₦119,000); and very high-income earners (₦120,000 and above).

4.3.3.1 Gender Distribution

Gender of the respondents is not evenly distributed as there were more males in the sample than females. More than half of the 400 respondents were male while a little less than half were female as shown in figure 4.2. This does not replicate the gender structure of the population or in any way establish that there are more male newspaper audience

than female in Nigeria. It rather reflects the availability and willingness of the respondents to participate in the survey exercise.

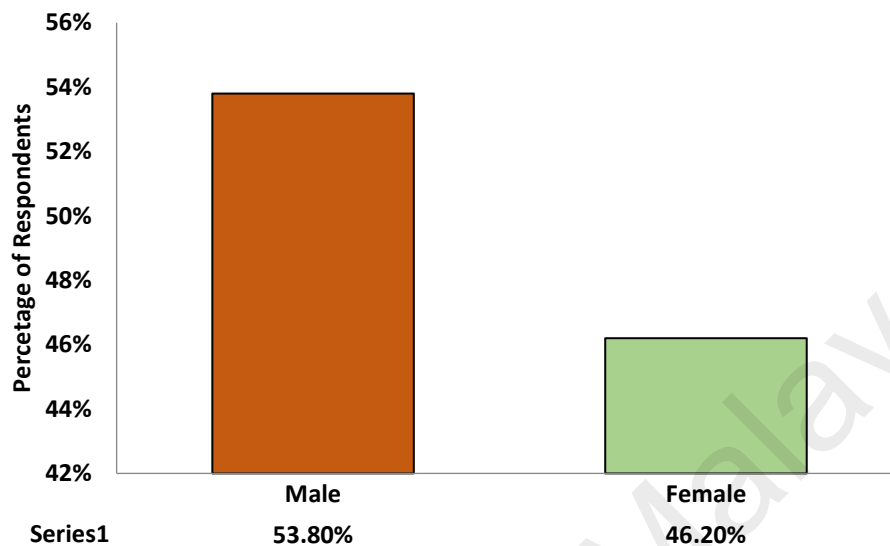


Figure 4.6: Bar Chart Showing Gender Distribution of the Respondents

4.3.3.2 Age Distribution

More than half of the respondents fell within what this study considers as adult age. This set of age grade adds weight to the data generated because they majorly constitute the working class, whose economic independent eases their access to both online and offline newspaper reports. Their maturity and experience are also added values while they were evaluating the newspaper reports of Ebola outbreak in Nigeria. The number of youth in the sample is a bit higher than one-third of the total respondents (37.5%). Though, youth exuberant is a factor considered likely to influence the group's evaluation of the reports on Ebola, the internet-driven characteristic of the group, which helps them to access newspaper reports at no cost remains a superior justification for having a significant ratio of the group in the sample. Aged category constitutes about one-tenth of the sample size, far less in ratio to other two categories. The group perception of the reports is also valuable considering their experiences and advisory role in Nigerian social system.

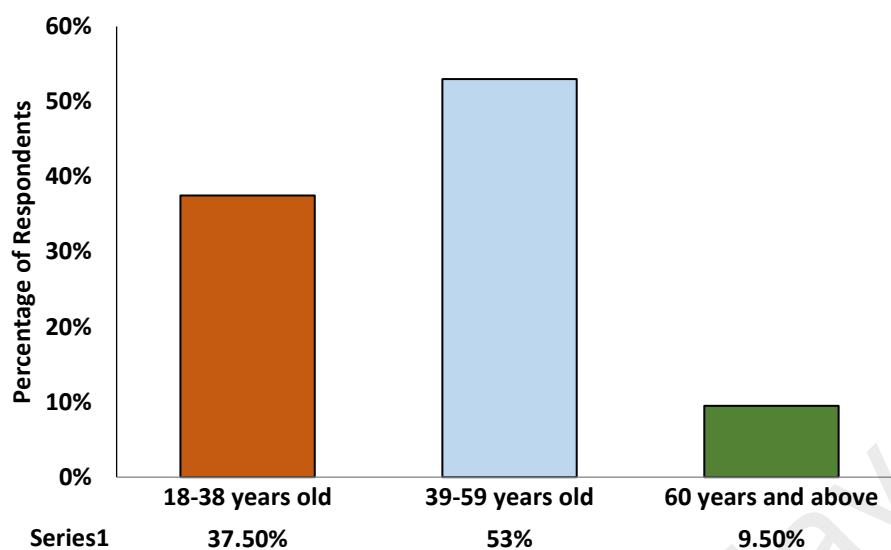


Figure 4.7: Bar Chart Showing the Percentage Age Distributions of the Respondents

4.3.3.3 Education Distribution

The literacy level of the respondents played a crucial role in the authenticity of the data got from the respondents as reading, understanding, and interpretation of newspaper reports largely depend on literacy level of the audience. As a result, respondents with education attainment lower than secondary school were not included in the sample. Approximately two out of every five of the respondents (40.2%) are in tertiary or have completed their tertiary education. Tertiary education in this study refers to post-secondary level such as Ordinary National Diploma (OND), National Certificate in Education (NCE), Higher National Diploma (HND), and or University First Degree as well as any other equivalent post-secondary school qualification. The category constitutes most of the respondents in the sample, adding value to the data got. Respondents with post-tertiary education qualification also known as post-graduate qualifications are close to one-third of the sampled respondents (31%). This group constitutes respondents with master in academic and professional programme, academic doctoral qualification (PhD), and other equivalent qualifications.

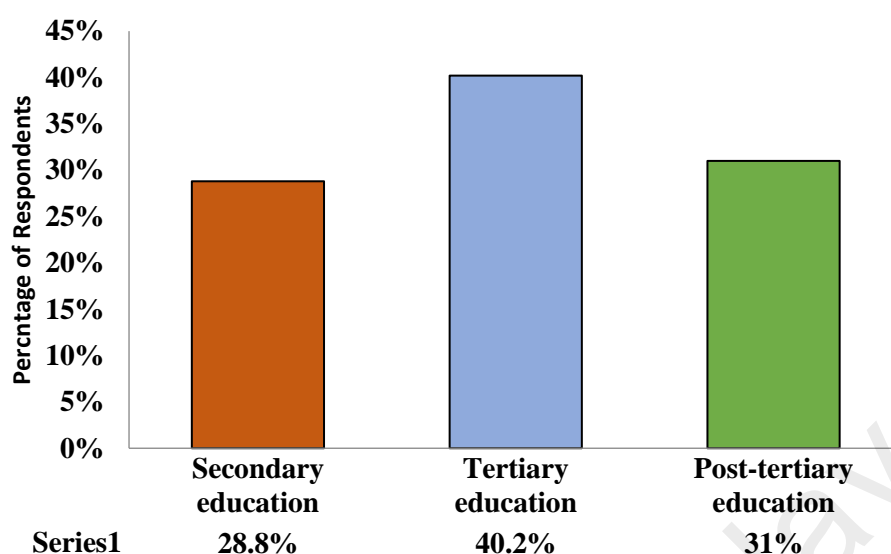


Figure 4.8: Bar Chart Showing Distribution of Respondents According to Education Levels

4.3.3.4 Income Distribution

Respondents' income size is relatively a factor that affects affordability of newspaper copies as well as subscription to internet facility, where online newspaper editions could be accessed. Middle or moderate-income earners category of respondents, whose monthly income ranges between ₦60,000 and ₦89,000 inclusive, dominated the sample and represents 29.2 per cent of the total respondents. Low income earners whose monthly income ranges between ₦30,000 to ₦59,000 were lesser represented in the sample than middle income earners. The group constitutes 28.8 per cent of the total sample. High income earners category among the respondents is a bit higher than one-fifth of the total sample (21.2%) with the monthly income ranging from ₦90,000 to ₦119,000. The combination of the two extreme respondents' income levels (very-low and very-high) constitutes about one-fifth of the sample with very-low income earners contributing a lion share (18.8%) while those in very high category are least represented with just two per cent of the total sample as shown in Table 4.8.

Table 4.9: Income Level Distributions of the Respondents

| Income Level | Frequency | Percentage | Cumulative Percentage |
|----------------------|------------|--------------|-----------------------|
| Below ₦30,000 | 75 | 18.8 | 18.8 |
| ₦30,000 to ₦59,000 | 115 | 28.8 | 47.5 |
| ₦60,000 to ₦89,000 | 117 | 29.2 | 76.8 |
| ₦90,000 to ₦1199,000 | 85 | 21.2 | 98.0 |
| ₦120,000 and above | 8 | 2.0 | 100.0 |
| Total | 400 | 100.0 | |

The respondents' income distributions cumulative shows that very few of the respondents (2%) fall among high income earners while the remaining 98% of the respondents earn lesser income. The distribution also shows that low income earners and moderate-income earners are almost of the same proportion; both constitute the bulk of the respondents as shown in Figure 4.5. The income level of the newspaper audience could be relatively a factor determining access to mass media, particularly the print edition.

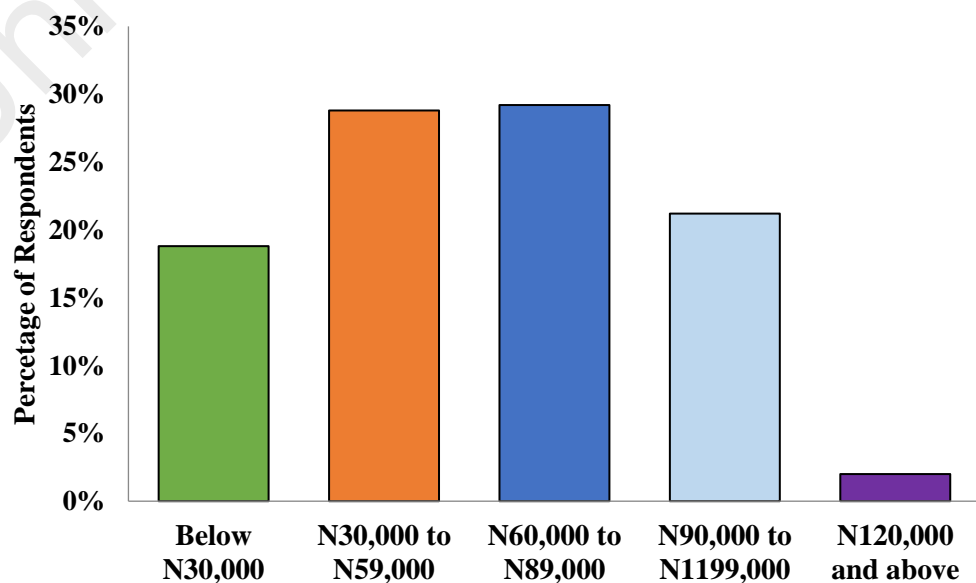


Figure 4.9: Bar Chart Showing Distributions of the Respondents According to Monthly Income Level

4.3.3.5 Respondent rating of preponderant frames in newspaper reports of EVD outbreak

As earlier emphasised while discussing the theoretical assumptions of agenda-setting and framing concerning what the media want people to think about and how the media want people to think about what they want people to think about, the assumption will be fulfilled once the audience consider the news angle that the media make salient most valuable information needed on the issue reported. The content analysis segment shows that containment and fatality frames were the most emphasised in the newspaper reports of EVD outbreak. Did audience also consider the news angles (frames) the most frequent and influential of their reaction towards the outbreak? The audience ability to remember the news angle is a pointer to how significant they considered the frames. It is a form of selective retention in the audience information processing and attitudinal change, which leads to decision and action towards the issue reported as discussed in Rosenberry and Vicker (2009).

Table 4.10: Respondent Rating of Preponderant Frames

| Frames | N | Min | Max | Sum | Mean | Decision | Rank |
|--------------------------|-----|-----|-----|------|------|---------------|------------------|
| Awareness | 400 | 1 | 5 | 1560 | 3.90 | More frequent | 2 nd |
| Containment | 400 | 1 | 5 | 1648 | 4.12 | Most frequent | 1 st |
| Fatality | 400 | 1 | 5 | 1458 | 3.64 | More frequent | 3 rd |
| Conspiracy | 400 | 1 | 5 | 960 | 2.40 | Less frequent | 10 th |
| Gov./political influence | 400 | 1 | 5 | 1179 | 2.95 | Less frequent | 7 th |

| | | | | | | | |
|----------------|-----|---|---|------|------|---------------|-----------------|
| Effect | 400 | 1 | 5 | 1178 | 2.94 | Less Frequent | 8 th |
| Mobilisation | 400 | 1 | 5 | 1432 | 3.58 | More frequent | 4 th |
| Support/Aid | 400 | 1 | 5 | 1423 | 3.56 | More frequent | 5 th |
| Misinformation | 400 | 1 | 5 | 1222 | 3.06 | Frequent | 6 th |
| Boycott | 400 | 1 | 5 | 1156 | 2.89 | Less Frequent | 9 th |

The audience rating of containment frame as the most frequent frame featured in the newspaper reports of EVD confirms the content analysis result earlier discussed. It means that what the media made salient was also what the audience perceived the most important in the media report of the EVD outbreak in Nigeria. There is insignificant difference in the ranking of some of the other frames between the content analysis output and the audience rating of the frequency of the frames in the newspaper reports. For example, fatality frame appeared the second most featured in the content analysis result but the audience considered awareness frame as the second most featured in the EVD reports as shown on Table 4.9.

4.3.4 Measurement Refinement and Initial Analyses

It is essential that the preliminary analyses of data are conducted to ensure that the results from the data are reliably adoptable. The first aspect of the preliminary analyses is to subject the data to the requirements of the method of analysis, so as to ensure the method is suitable, exploratory, and justifiable for the kind of results expected. After it has been certified that the data met the conditions stipulated for employing SmartPLS as discussed

in chapter three under the sub-topic, “data analysis techniques”, the next focus is to test for the validity and reliability of the measurements items as well as the responses.

4.3.4.1 Validity and Reliability

Exploratory Factor Analysis (EFA) test is required for the additional items developed to establish the relevance (validity) of the measurement items to the constructs they measure. In reflective model of SmartPLS analysis, cross-loadings measures of the items tell which construct an item best described. The items (B6a, D7 and E9) that have cross-loading values of less than 0.5 across the constructs were deleted. Items E11 and E12 that double loaded on two or more constructs were also deleted while item E9, which did not load well in its respective construct; loaded across a construct order than expected, was renamed into the construct in which it loaded. Table 4.10 presents the detail of the EFA analysis.

Table 4.11: Cross Loading Weights of the Measurement Items

| Items Code | Items Label | Effect | Perception | Reading Pattern |
|------------------|-----------------------------|--------|------------|-----------------|
| B6a ^b | Perceived news exposure | 0.168 | 0.045 | 0.268 |
| B6b | Perceived Reading frequency | 0.781 | 0.378 | 0.893 |
| B6c | Perceived Reading attention | 0.704 | 0.349 | 0.946 |
| B6d | Perceived reading retention | 0.643 | 0.322 | 0.915 |

| | | | | |
|-----------------|--|-------|-------|-------|
| D1 | Informative | 0.425 | 0.745 | 0.325 |
| D2 | Simple-to-understand | 0.478 | 0.809 | 0.357 |
| D3 | Credible | 0.335 | 0.718 | 0.249 |
| D4 | Conspiracy-free | 0.135 | 0.531 | 0.134 |
| D5 | Sensationalism-free | 0.321 | 0.697 | 0.228 |
| D6 | Solution-oriented | 0.173 | 0.512 | 0.086 |
| D7 ^b | Political propaganda-free | 0.188 | 0.410 | 0.201 |
| D8 | Objective | 0.372 | 0.737 | 0.298 |
| D9 | Well-researched | 0.339 | 0.649 | 0.267 |
| D10 | Adequate | 0.236 | 0.502 | 0.168 |
| D11 | Tension-free | 0.232 | 0.562 | 0.136 |
| E1 | Newspaper reports of Ebola helped in making health decision during outbreak | 0.671 | 0.318 | 0.479 |
| E2 | I totally acted in accordance with newspapers messages during Ebola | 0.625 | 0.242 | 0.436 |
| E3 | Ebola newspapers stories positively influenced my health consciousness. | 0.564 | 0.147 | 0.390 |
| E4 | Ebola newspapers reports influenced my behavioural relationship towards people around me | 0.552 | 0.245 | 0.366 |
| E5 | I put to use all Ebola precautionary measure discussed in newspapers reports. | 0.744 | 0.448 | 0.481 |
| E6 | Newspaper reports on Ebola helped me to disregard all rumours about the virus. | 0.754 | 0.379 | 0.526 |

Table 4.11 continued

| | | | | |
|-----------------|---|-------|-------|-------|
| E7 | I was better educated about Ebola with newspapers reports. | 0.688 | 0.427 | 0.467 |
| E8 | Based on newspapers reports of Ebola, I tried to avoid public gatherings. | 0.672 | 0.462 | 0.442 |
| E9 ^b | Based on newspapers reports of Ebola I cautioned my family from mingling with people. | 0.319 | 0.156 | 0.264 |

| | | | | |
|------------------|---|-------|-------|-------|
| E10 ^a | Based on newspapers reports of Ebola, I always washed my hand as a safety measure. | 0.454 | 0.182 | 0.516 |
| E11 ^c | Based on newspapers reports of Ebola, I consulted health expert whenever I noticed any symptom of Ebola | 0.531 | 0.271 | 0.551 |
| E12 ^c | In overall, reading newspapers stories on Ebola saved me from contacting the virus. | 0.532 | 0.204 | 0.564 |

^aItem E10 loaded across reading pattern and was renamed B6f

^b Item loading less than 0.5 across the construct are deleted

^c Item loaded into two or more constructs are deleted

However, a Confirmatory Factor Analysis (CFA) for validity and reliability tests depends on the type of measurement model used. There are two types of measurement models PLS-SEM: reflective and formative measurement models. While formative model requires measurement items that are theoretically grounded to explain constructs, reflective model does not because a change in a construct is as a result of changes in its indicators (items) (Henseler et al., 2009). The measurement items in this study satisfied the requirements of a reflexive measurement model and as such there was a dire need to carry out validity and reliability tests. There are three steps towards testing validity and reliability in a reflexive model: convergent validity, discriminant validity, and internal consistency reliability.

4.3.4.2 Convergent Validity

Convergent Validity is achieved when all measurements in a model are statistically significant. Thus, the factor loadings (outer loading) for every measurement item must be 0.5 or above in order to have Average Variance Extracted (AVE) of the model greater than 0.5, which is the minimum requirement. All items that are not statistically significant are deleted and the outer loadings of the model shows in Table 4.11 contain the items loading above 0.5 retained.

Table 4.12: Outer Loadings of the Measurement Items

| Items | Effect | Perception | Reading Pattern |
|-------|--------|------------|-----------------|
| B6b | | | 0.902 |
| B6c | | | 0.945 |
| B6d | | | 0.914 |
| D1 | | 0.763 | |
| D2 | | 0.822 | |
| D3 | | 0.731 | |
| D5 | | 0.695 | |
| D8 | | 0.767 | |
| D9 | | 0.672 | |
| E1 | 0.736 | | |
| E2 | 0.696 | | |
| E3 | 0.657 | | |
| E4 | 0.646 | | |
| E5 | 0.788 | | |
| E6 | 0.785 | | |
| E7 | 0.743 | | |
| E8 | 0.719 | | |

*Loadings less than 0.5 were suppressed.

Item E10, which cross-loaded and recoded as B6f, was deleted among others that are not statistically significant. Other items that are not significant and as a result deleted are D4, D6, D10, and D11. After the confirmation of the significance of the items through outer loadings, algorithm analysis was conducted to establish convergent validity, discriminant validity, and internal consistency reliability. Framing effect of Ebola reports on audience is statistically significant ($AVE = 0.52$), which is a bit higher than the minimum recommended (Monecke & Leisch, 2012). Similarly, the audience perception

of the framed Ebola reports is also significant with AVE (0.55) a bit higher than that of framing effect. The construct that measures the audience reading pattern of Ebola reports during the outbreak is highly significant as its AVE (0.85) surpasses other two constructs as shown in Table 4.12. The convergent validities of the constructs are therefore good for the measurement model of the study since AVE above 0.5 for a construct could be interpreted as such construct is having more than 50 per cent of its variation explained by its measurement items.

Table 4.13: Algorithm Results for Validity and Reliability of the Constructs

| Construct | AVE | Composite Reliability | Cronbachs Alpha | Communality |
|------------|------|-----------------------|-----------------|-------------|
| Effect | 0.52 | 0.89 | 0.87 | 0.52 |
| Perception | 0.55 | 0.88 | 0.84 | 0.55 |
| Reading | 0.85 | 0.94 | 0.91 | 0.85 |

4.3.4.3 Internal Consistency Reliability

Cronbach's alpha is commonly used in social science studies to test for internal consistence reliability, as for PLS-SEM, its suitability is not satisfactory. It assumes that all indicator loadings are equal in the population, which is strange in PLS-SEM algorithm that "prioritises the indicators based on their individual reliabilities during model estimation" (Hair et al., 2014, p. 111). Also, its sensitivity to the number of items in the scale undermines internal consistency reliability. Therefore, composite reliability test, which does not fall short of the conditions, is considered a substitute for Cronbach's alpha in measuring internal consistency reliability in this study.

The composite reliability value (0.89) for the effect of framed Ebola reports on audience as shown on Table 4.12 fulfilled the internal consistency reliability assumption

(Composite ≥ 0.7). Audience perception of the framed Ebola reports with a composite reliability value 0.88 greater than 0.7, which is the benchmark, also fulfilled the internal consistency reliability assumption. Similarly, the composite reliability value of the readership pattern of the framed Ebola reports (Readership = 0.94) fulfilled the internal consistency reliability assumption (Composite ≥ 0.7) (Wong, 2013).

4.3.4.4 Discriminant Validity

Two means were used to test the discriminant validity of the data. The first assumption indicates that the square root value of AVE for each construct must be greater than the correlation value of the construct with another construct. The square root of AVE for Effect (0.72) is greater than its correlation with Perception (0.48) and Readership (0.63). Also, the square root of AVE for Perception (0.74) is greater than its correlation with Effect (0.48) and Readership (0.39). Likewise, square root of AVE for Readership (0.92) is greater than its correlation with Effect (0.63) and Perception (0.39). The second assumption emphasises that items must load higher in the construct they measure than in other constructs. The cross-loading analysis on Table 4.10 shows that each of the measurement items has highest loading value across the construct they measure. Although cross loading values were noticed, they were considered insignificant since none of the construct has a correlation value greater or equal to 0.9 with another construct as shown in Table 4.13.

Table 4.14: Latent Variable Correlations

| Construct | Effect | Perception | Readership |
|------------|--------------|--------------|--------------|
| Effect | 0.723 | | |
| Perception | 0.497 | 0.743 | |
| Readership | 0.632 | 0.396 | 0.920 |

Since the constructs have significant level of freedom from one another with each having a strongest relationship with its own indicators (items) than any other, and none of the constructs correlate with another with a value equal or greater than 0.9, which is the benchmark (Hair et al., 2014), the assumptions for discriminant validity test were satisfied. As a result, constructs as well as the measurement items were considered valid and appropriate for the analysis and the measurement model of the study.

4.3.5 Structural Model Evaluation

Three latent variables were estimated in the structural model of this study. After the PLS algorithm was used to certify the loadings of their indicators, bootstrapping procedure for the 400 cases and with 5000 re-samples was used to assess the significant of the relationship among the latent variables in the model. Based on the bootstrapping results, all the relationships among the variables are statistically significant. The relationship between the readership pattern of framed Ebola reports and the audience perception of the framed Ebola reports is significant (Readership \rightarrow Perception, $t=8.3$, $p < 0.001$). Similarly, the relationship between readership pattern of framed Ebola reports and the effect of the framed Ebola reports on audience is significant (Readership \rightarrow Effect, $t=9.8$, $p < 0.001$). Also, the relationship between the audience perception of the framed Ebola reports and the effect of the framed Ebola reports on audience follows the same trend, (Perception \rightarrow Effect, $t=4.9$, $p < 0.001$).

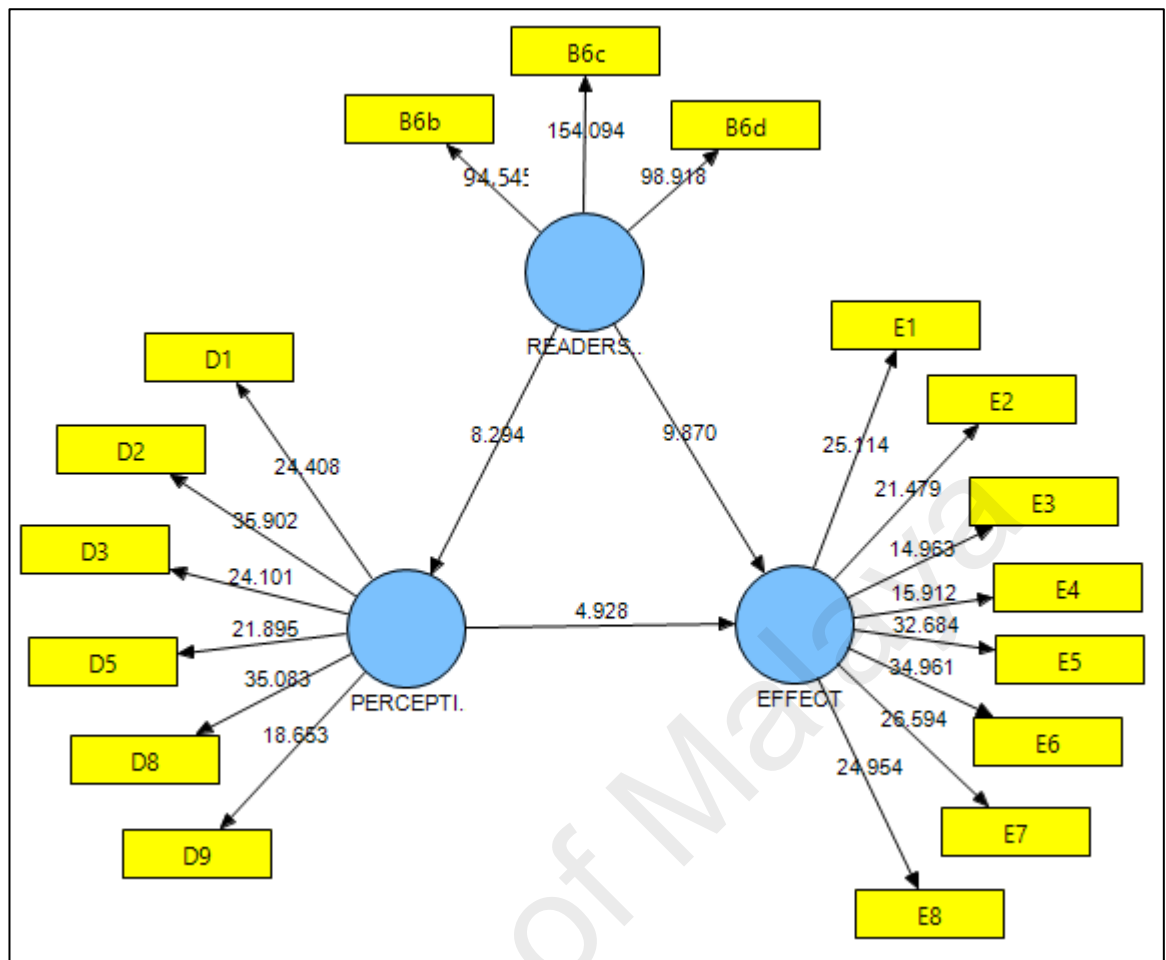


Figure 4.10: Bootstrapping Analysis of the Structural Model

4.3.6 Path Effects and Mediation Analysis

Since all the relationships are significant, then audience readership pattern of the framed Ebola reports is a significant factor or predictor of how audience perceive the framed Ebola reports ($\beta = 0.39$) and the manifested effects of the reports in the audience reactions towards the outbreak ($\beta = 0.52$). So also, the audience perception of the framed Ebola reports is a significant factor or predictor of the manifested effects of the reports in audience reactions ($\beta = 0.29$). This shows that audience readership pattern of the framed Ebola reports has large effect size on the manifested effects of the reports in the audience reactions towards the outbreak as well as on the audience perception of the framed Ebola reports (as $\beta > 0.35$ in both cases) (Wong, 2013). However, the audience perception of

framed Ebola reports has medium effect on the audience perceptions of the framed reports ($\beta > 0.15 < 0.35$).

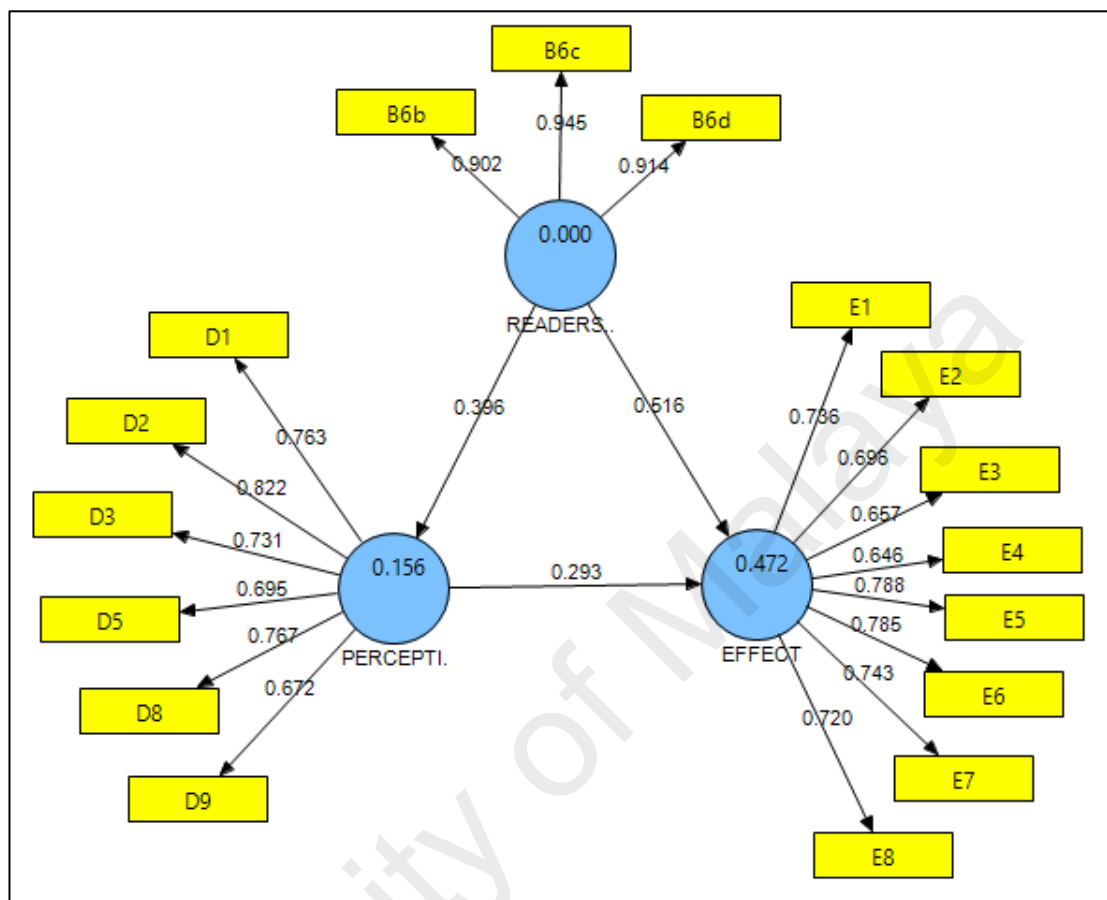


Figure 4.11: Algorithm Analysis of the Structural Model

The result shows that 47 per cent of the manifested effect of framed Ebola reports on audience is as a result of the audience readership pattern of the framed Ebola reports as well as their perception of the reports ($R^2 = 0.472$) while the remaining 53 per cent is as a result of other factors not investigated by this study. Also, 16 per cent of the audience perceptions of the framed Ebola reports is caused by the audience readership pattern of the newspaper reports on Ebola during the outbreak ($R^2 = 0.156$) while the remaining percentage is as a result of other factors.

However, audience perception of the framed Ebola reports (Perception) is a mediating factor between the audience readership pattern of the framed Ebola reports (IV) and the

manifested effects of the framed Ebola reports on audience (DV) since all the relationships in the model are significant. There is direct effect as well as partial mediating effect between Readership pattern of Ebola reports and the manifested Effect on audience through audience Perception of the framed Ebola reports. Sobel Test (z) was used to verify the significance of the mediating effect (Perception) between the independent variable (Readership pattern) and the dependent variable (Effects) using the formula:

$$z = \frac{ab}{\sqrt{(b^2 SE_a^2) + (a^2 SE_b^2)}}$$

Where a is the regression coefficient for the relationship between the independent variable and the mediator ($\beta = 0.396$), b is the regression coefficient for the relationship between the mediator and the dependent variable ($\beta = 0.293$), SE_a is the standard error of the relationship between the independent variable and the mediator ($SE = 0.0477$), and SE_b is the standard error of the relationship between the mediator variable and the dependent variable ($SE = 0.0595$). The mediating effect is statistically significant as ($z = 4.235$) satisfies the Sobel test assumption ($z \geq \pm 1.96$).

4.3.7 Model Fitness and Predictive Relevance

One of the ways through which model quality could be assessed is Goodness of Fit (Hair et al., 2012). Since the structural model is reflective and the latent variables are multi-items, it is safe to measure the model quality with GoF. It is calculated based on the relationship between mean of communality and R^2 as thus:

$$\sqrt{(Average\ Communality) \times (Average\ R^2)}$$

$$\sqrt{(0.6407) \times (0.3145)} = 0.4489$$

$$GoF = 0.45$$

Based on the categorisation of GoF values as: Small ($\text{GoF} \geq 0.1 < 0.25$); Medium ($\text{GoF} \geq 0.25 < 0.36$); and Big ($\text{GoF} \geq 0.36$) by Cohen (1988) when 0.5 cut-off point is used for AVE, the goodness of fit for the structural model is big ($\text{GoF} = 0.45$). As a result, the quality of the model is validated.

Cross-Validated Redundancy (CVR) was checked as another means to access the model quality. CVR is used to examine the predictive value of the data, through Stone-Geisser's (Q^2), cross-validated redundancy measures. It is obtained through Blindfolding procedure in SmartPLS using the formula:

$$Q^2 = 1 - \frac{SSE}{SSO}$$

- * SSE = Some of square prediction Error
SSO = Some of Square of Observation

Table 4.15: Cross-Validated Redundancy (Stone-Geisser's (Q^2))

| Total | SSO | SSE | 1-SSE/SSO (Q^2) |
|------------|------|----------|---------------------|
| EFFECT | 3200 | 2445.883 | 0.2357* |
| PERCEPTION | 2400 | 2207.194 | 0.0803* |

* $Q^2 > 0$ results in predictive relevance in the population

In the blindfolding analysis, Omission Distance (OD) was set at seven since ($OD \geq 5 \leq 10$) according to Hair et al. (2012). The assumption that the Q^2 must be greater than Zero value to ensure that the data have predictive relevance in the population is satisfied. The two latent constructs, Effect and Perception have cross validated redundancy values above zero (Effect $\rightarrow Q^2 = 0.24$) and (Perception $\rightarrow Q^2 = 0.08$) respectively as shown in table 4.14. It indicates that the model can be used to predict the manifest effect of the

framed health reports triggered by readership pattern and audience perception of the reports.

4.4 Major Findings

Based on the output of the data presented earlier in this chapter, Having the objectives and problem that this study aims to solve in mind, some questions earlier identified needed to be answered by the study to give direction towards solving the research problems. There are variations in the way mass media frame news items depending on the types of news story, the target audience, the times of report, the central issue or key subject upon which the stories revolved and the interests bade to be protected in the story. All these contribute to how a media report is being framed and that leads to the first research question:

4.4.1 Answering Research Question One

***RQ1:** How did Nigerian newspapers framed news stories concerning 2014 Ebola outbreak in Nigeria?*

In the content analysis segment of data analysis in chapter four, three variables were used to assess how newspaper framed Ebola reports: news direction, proximity and prominence of the reports, and the credibility of the reports. The variables were structured in question forms to exhume answers for the research question.

The variables are:

- a) What directions do the content of the reports take in terms of central (news angles) around which Ebola reports were narrated?
- b) What was the degree of proximity and prominence given to the Ebola stories in terms of frequency of reports, the news holes, size of headlines, and location of the stories in the newspapers?

- c) What news sources and photographs did the newspapers use for the authentication of the Ebola news stories, and how credible are the news sources?

This study found out that ten major frames were consistently employed by the newspapers, *The Guardian* and *The Sun*, while reporting Ebola outbreak in Nigeria. The frames are the central news angles through which the newspapers presented and tried to influence the readers' interpretations and understanding of the reports. Each of the news angles is therefore regarded as a frame such as: awareness, containment, fatality, conspiracy and political influence. Others are; effect, mobilization, support/aid, misinformation, and boycott frames. The newspapers shifted central focus from one theme (frame) to the other as the intensity of every stage of the outbreak demanded. Only two out of the ten frames identified in the Nigerian newspaper reports of Ebola are newly generated while the remaining eight correspond with framed employed in other health issues by some newspapers of other countries as established in (McComas & Shanahan (1999); Nisbet et al. (2003); Shih et al. (2008)). It shows that there is not much difference between how Ebola reports in the Nigerian newspapers were framed and how other health issues were framed in many newspapers across the globe.

Aside the content framing, proximity and prominence of the reports are other indices that were used to assess how Nigerian newspapers framed Ebola issue. Although the two indices have less influence on the news angles emphasised in a report, they serve as aiding factors to the emphasis that a news angle enjoys. Proximity in this context connotes the preference given to the reportage of local issues over foreign issues while prominence is the degree of importance attached to an issue over others. As 2014 Ebola outbreak was an international health issue, it demanded the concerns of all nations of the world including their media. However, the status of the outbreak in each country determined the

level of involvement of its media in relation to ratio of local to foreign contents reported. Newspapers' reports during the window period of Ebola in Nigeria framed the outbreak as imported virus born out of conspiracy to compel global attention towards finding solution to the health hazards. The frame was built around how the index case of the virus in Nigeria, Patrick Sawyer smuggled into the country from neighbouring Ebola infested country, Liberia. The content analysis of newspaper reports of Ebola within the period of the rampage therefore shows that much more attention was given to local news angles of the reports than foreign despite the fact that Ebola cases elsewhere were newsworthy than the cases in Nigeria. Most of the reports framed Nigeria as proactive towards the outbreak (though could be considered as a frame from government side) by comparing the level of managing the situation with other affected countries.

Also, much of the reports on Ebola were framed important than other pressing issues (Boko-Haram and General Election) in Nigerian at the time by Nigerian newspapers. More spaces allotted to some of Ebola stories than usual ratio of health reports to allow detail treatment of interest news angles is an indication of framing strategy. Again, unusual of health issues in Nigerian newspapers is a front-page advantage, which Ebola stories enjoyed even at the expense of political and security issues. An average of one Ebola report appeared on the front page in every three editions of a Nigerian newspaper during the rampage.

Media also frame issues by authenticating the news angle they want to emphasize with credible sources, more importantly expert in order to influence the level of importance that audience attach to the report (Jung Oh et al., 2012; Lee, 2014). More than one-quarter of the reports on Ebola were authenticated by health experts including health agencies to ensure that audience apportion the expected importance to the reports.

Quoting or citing the health experts was also strategic to lay emphasis on some news angles, most often on preventive measures, containment mechanisms as well as on setting the record straight regarding misinformation about the virus and the statistics surrounding its spread and fatality. However, government also constitutes the bulk of the news sources as a justification for the vested interest of the government to overcome the outbreak. This correlates with the finding in Nisbet et al. (2003), which explained that framing of health issues favours the vested interests that are used as sources of the reports on the issue, most often, governments.

If news media frame news items differently as verified by the findings to the first research question, there must be purpose(s) why media frame issues. The interest that media bade to protect determines which frame is more preponderant than others while reporting an issue. The reason why news items are framed differently linked the first research question to the second:

4.4.2 Answering Research Question Two

RQ2: Which frame is more preponderant than others while reporting Ebola issue during the outbreak in Nigeria?

Out of the ten major news angles identified in the newspaper reports of Ebola outbreak in Nigeria, two are most outstanding; containment and fatality frames predominantly emphasised in more than 50 per cent of all the reports. Issue concerning containment of the outbreak was the most predominantly emphasised in the reports. It reflected in and was made salient in more than one-third of all the reports regarding Ebola outbreak within the period selected for the study. The highest numbers of the health experts used to authenticate some of the Ebola reports were cited to emphasise containment frame and make it much important an aspect of the reports for audience considerations and

interpretations. The emphasis on the frame also cut across all the stages of the outbreak (from when it was first diagnosed till when Nigeria was declared Ebola free) though more predominant during the tensed and climax stages. This is consistent with the findings of Shih et al. (2008), which emphasised that framing regarding health outbreaks do change across various faces of the period of an outbreak or across various epidemics. Much of the reports in which the news angle is predominant are on the front-page, a pointer to the significance the media attached to the news angle.

Fatality frame was found to be second most emphasised news angle in the content analysis of the newspapers reports of Ebola outbreak. It was difficult for the media to hide the horrific dying state of the infected; not with the purpose of aggravating tension but rather to ensure the audience were fully aware of how perilous the virus was. Fatality frame featured averagely in one out of every five newspaper reports on Ebola. Newspapers emphasised the frame by using health experts including health organisation, research reports as well as eyewitness to authenticate the related news angles. This study also shows that the emphasis on fatality news angle is more in the reports of the state of Ebola in other affected countries than in Nigeria.

None of the other frames could feature in up to ten per cent of the total reports on Ebola issue. The saliency placed on the news angles that featured other frames was not as frequent in the newspaper reports of Ebola as containment and fatality frames. There are statistical variations in the frequency of their occurrences in the reports; for instance, effect frame ranked third while mobilisations and awareness frame followed in that highest order. News reports that emphasised the frames were less authenticated with health experts but rather more with eyewitnesses, non-health organisations as well as government officials. The last set of the dominant frames, political influence, conspiracy,

misinformation, support/aid and boycott frames in that highest order were far less authenticated with credible sources and health experts. They also constitute majority of the reports that are regarded as minor as a result of limited spaces allotted to them in the newspapers, which did not allow for an in-depth treatment of the news angles. On a similar note, reports in which the frames are predominant were more of inside-page stories.

4.4.3 Answering Research Question Three

***RQ3** Is there a significant relationship between the audience reading pattern of newspaper health reports during EVD outbreak and their behavioural responses towards the outbreak? And (if any), what kind of relationship exists between them (direct or inverse)?*

The statistical relationship between the audience reading patterns of newspaper health reports, Ebola stories to be specific, and the audience or public reactions to Ebola outbreak was found to be significant at ($t=9.8$, $p < 0.001$). The relationship between the constructs is positive, which means a change in one would cause a change in the other. There is direct as well as indirect effect between the Readership patterns and Framing effect: Direct effect (From readership pattern to Framing effect) ($\beta = 0.52$); Indirect effect (From readership pattern through Audience perceptions to Framing effect) $= 0.39 * 0.29 = 0.11$; and Total Effect (Direct effect + Indirect effect) $= 0.55 + 0.11 = 0.66$. Since the total effect from Readership pattern to Framing effect is ($\beta = 0.66$), therefore, a unit change in readership pattern of Ebola reports would cause 0.66 change in the audience reactions to the outbreak. It implies that there is a very strong positive relationship between the readership pattern of newspaper Ebola reports and the audience reaction towards Ebola outbreak.

4.4.4 Answering Research Question Four

***RQ4:** Is there a significant relationship between how newspaper audience perceived the framed EVD stories and their reaction towards Ebola outbreak? And (if any), what kind of relationship (direct or inverse)?*

Statistical relationship between audience perceptions of the framed newspaper reports of Ebola outbreak and the audience reaction towards the outbreak was found to be significant at ($t=4.9$, $p < 0.001$). Direct relationship exists between the audience perception of the framed reports and the framed effect on the audience ($\beta = 0.29$), which means that a unit change in audience perception of the framed Ebola reports would cause 0.29 change in the audience reaction towards the Ebola outbreak. Audience perception of the framed Ebola reports is also a significant mediator between the readership patterns of the Ebola reports and the audience reactions towards the Ebola outbreak. It positively influenced the relationship between the readership pattern and the effect.

4.4.5 Answering Research Question Five

***RQ5:** How much of the variance in the audience reactions towards Ebola outbreak is as a result of perceived influence of framed Ebola stories and the Audience reading pattern of health news during the outbreak in Nigerians? Which is the best predictor?*

Based on the calculation of R^2 (0.472) in the algorithm analysis in chapter four, readership patterns of health reports during Ebola outbreak and the audience perception of the framed Ebola reports are both found factors that influenced public reactions towards the outbreak. Both constitute major factors that influenced audience reactions towards the outbreak as 47 per cent of the audience reactions are as a result of the duo predictor. It implies that

the audience reactions to the outbreak (Effect) largely depend on how much people read about the outbreak and how they perceived the reports they read about the outbreak based on how the reports were framed.

However, readership patterns of EVD outbreak was found to have much more influence on the audience reactions towards the outbreak than the audience perceptions of the framed EVD reports. The number of Ebola stories the audience were exposed to and how the stories were framed in terms of words choice, the angles emphasised in the reports, the sources used for authentication, the volume of space apportioned to the reports for detail treatment, as well as the frequency of front-page advantage made a significant influence in public reactions towards the outbreak as well as how the reports were perceived.

4.5 Chapter Summary

Two sets of data were analysed in this section; newspaper contents of Ebola reports and the opinion survey of the audience perceptions of the framed Ebola reports. Preliminary tests were conducted on each of the sets of the data generated to establish validities and reliabilities of the data before embarking on the analyses and discussions. Both data sets satisfied validity and reliability assumptions and were put forward for quantitative analyses. In the first segment, newspaper contents of Ebola reports were codified and analysed through SPSS descriptive statistics. Frequency tables were employed to summarise the data and cross-tabulations of variables were also used to compare relationships between variables.

SmartPLS was used to analyse the second segment of the data generated. Significance of both structural model and measurement model of the analysis were

verified and the degrees of relationship among latent variables were established. Relationships between the independent variable(s) and the dependent variable were calculated using R^2 and all were found significant. Effect sizes (direct, mediating and total) were also calculated and found to be significantly large in the first two and moderate in the last respectively after the significance of the mediating effect had been established through Sobel Test (z). The fitness of the model based on the GoF calculation was also found big (Highly appropriate) and the blindfolding analysis was used to assess the predictive relevance of the data in the population using Stone-Geisser's (Q^2) Cross-Validated Redundancy.

Major findings of the study were then discussed based on the outcome of the data analysed. Answers to each of the research questions from either of the two sets of the data presented or both, where relevant to ensure that the research questions were satisfactorily answered.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 Overview

The central focus of this study has been to synthesise the audience perceptions of framed Ebola reports in Nigerian newspapers with the influence such reports had on the audience health related decisions during the outbreak. To achieve this, two sets of data were generated and analysed appropriately in the previous chapter to explain the newspaper framing pattern on one part and the audience perception of the framed reports and its

influence on the audience health behaviours on another part. Some validated health frames were adapted as variables from previous related studies in the content analysis segment of the data analyses to explain how the newspapers framed Ebola outbreak. Few other frames were generated from the content of Ebola reports to explain the themes that were not captured by the adapted frames. The frames frequencies of occurrence in the newspaper Ebola reports were also examined and were corroborated with audience rating of the frames preponderance in the opinion survey segment. SmartPLS method was used to analyse the opinion survey part of the data so as to establish, explain, and represent the relationships between the newspaper framing of, audience perception of, and audience reaction to Ebola outbreak in Nigeria in a structural model.

This section therefore focuses on the summary of major findings extracted from the two sets of data analysed in chapter four of this study. The findings, which were itemised based on the relevance of the data analysed towards answering research questions of the study in the preceding chapter would be summarised. Some common framing model cited would be harmonised with the one proposed in line with the findings of this study. This section would also focus on the implications that the findings of this study are likely to generate if its findings are applied to a related health outbreak. Some setbacks to the study, which might constitute some limitations to the application of its findings would also be discussed and suggestions to redress such in further studies would be suggested.

5.2 Summary of Findings

The study found that Nigerian newspapers used ten major frames out of which containment frame was predominant while reporting Ebola outbreak. It further established that there are significant relationships between newspaper framing, audience reading pattern, audience perceptions, and audience reactions to Health crises (Ebola

outbreak). It again emphasised that Audience reading habit of newspaper health reports during outbreaks and their perceptions of the framed health reports are factors responsible for their reactions towards the health crisis. But audience reading habit of framed health reports has more significant influence on the audience reactions to the health outbreaks than their perceptions of the framing of the reports.

5.3 Models Harmonisation and Theoretical Implications

There are some differences in the existing framing model by Scheufele (1999), the model proposed in this study and the structural model of the analysis output. Each of the models explains a continuous process that shows a cycle interactions between the media and the audience through various activities that determine the nature of the message, message values and message effects. Scheufele's framing model (Fig. 2.3) for instance, focuses on what becomes of a message at input, processes, and output levels of interaction between media and audience, while the model proposed focuses on exchange roles between media and audience (Fig. 2.4). Since the model from path analysis confirmed that media framing is partly triggered by audience press for information (newspaper reading pattern) and the nature of issue covered, the influence of the framing on audience reactions therefore relatively depend on the issue that prompted audience information need as well as how media framing of the issue is perceived.

5.4 Findings Implications and Contributions to Knowledge

Since total absenteeism of health crisis in a social environment seems inexplicable, coverage of health issues would continue to remain a critical area of media focus and one of the key areas through which mass media reports influence the public. Also, as long as members of public look towards mass media for information on health as well as information out of health crises, media-audience relationship will continue to depend on

the structure of media messages and the effects of the messages. The structure of media messages constitutes all the elements that media put into consideration while producing reports which result to media agenda-setting and framing on the issues reported. The effects on the other hand are the influences that certain pattern of messages generate in the audience based on the audience reactions towards the issue reported. The fact that health crises differ in all circumstances including the symptoms, modes of spread, pathogenic effects, and control or measures signifies that mass media also use different approaches (framing patterns) while reporting them. As various media framing patterns yield different results in the audience reactions to the issue reported, the change in the framing pattern will require studies that link media coverage of emerging health issues with message influence on audience and explain new framing patterns (if any) employed by mass media.

It is not important when a new study establishes that media use certain frames (new or known) while reporting emerging health issues, but it becomes significant when such frames generate different effects. As one of the findings of this study established that containment of Ebola was the most predominant frame employed by Nigeria newspapers while reporting the outbreak, it was linked to a positive influence of audience reaction towards the containment of the outbreak. Therefore, since the frame(s) that the media considered important and as a result made salient while reporting Ebola is also what the audience also considered significant and upon which their reactions are based, media contributions to the early containment of the outbreak in Nigeria is admirable. The implication is that whenever mass media select appropriate frames for different phases of health issue while reporting, its influence will aid medical approach towards the health goals.

Similarly, this study established that the tenacity of health crises pushes audience to mass media for useful information on the outbreak. The structure of newspaper reports on EVD outbreak, first by setting agenda on the issue and second by making certain news angles salient to entice the audience and to tell them how to think about the issue determines not only how the audience perceive the health issue but also how they act towards resolving it. It is when information provided by mass media is well conceived by audience and reflected in their reactions towards every health issue that the claim by former WHO Director General, Dr. Jong-wook Lee, “.... but we have only recently come to understand that communications are as critical to outbreak control as laboratory analyses or epidemiology” would be true of media influence during health outbreaks.

5.5 Limitations and Recommendations for Further Studies

There are some limitations to this study that may define the application of its findings. First, the research setting is Lagos, a state in Nigeria where Ebola broke out and had a stronger influence on the people than elsewhere in the country. As a result, the influence perhaps might have pressed the respondents that constituted the sample more towards media information than people elsewhere in the country. Lagos is a cosmopolitan state, where more than 70% of national newspapers in Nigeria are published; the characteristics of media audience in the state in terms of access to media, literacy level, economic standard, and information curiosity also differ from those of other states. Research Sample was limited to the people of Lagos in order to overcome multiplicity of data, which might widen the scope of the study beyond the limit set. Subsequent studies may expand the sampling structure to incorporate audience of divergent socio-economic structures across states or countries, which may enhance the applicability of the findings.

Second, the focus of this study was on newspaper framing of Ebola outbreak; broadcast media (television and radio) were not included because there is a lot of difficulties in getting broadcast messages on EVD outbreak in Nigeria documented. Audience relationships with other form of media also differ from that of newspaper in terms of usage or exposure, message selectivity, message and media credibility, how media frame issues, and how the media reports are perceived by audience. Therefore, the findings may not be applicable to other forms of media other than newspaper. Upcoming studies may approach framing of health crises and its influence on public reactions towards health issues from broadcast or social media perspectives. Findings in such studies combine with those in this study will project a holistic body of knowledge and analysis of theoretical justifications for media framing influence during health crises.

Third, since some parts of the data generated for this study are more of perceptual measures of certain variables through self-administered questionnaires, the findings might have been susceptible to response bias. Again, some of the measured variables are more of behavioural effect of the framed EVD reports on audience, factors more than media messages contribute to audience reactions towards health issues, making human behaviours not predictable in similar cases. Therefore, there might be a slight difference in the framing influence achieved if the same framing patterns are employed in a different environment, period, health issue, and set of audience. On this note, future researches may consider comparing the influence of similar newspaper framing patterns on multiple set of audiences to establish the variance in human behaviours triggered by framed reports on health crises.

Fourth, the model used in this study might not be all-encompassing as many other factors responsible for the audience reactions towards Ebola outbreak were not

accommodated in the analysis. The model mainly focuses on some media-audience relationship factors and the quota of influence such media-audience relationship induced factors have on audience perceptions and reactions to the outbreak. Again, the model did not consider moderating effects of the socio-demographic variables and some influences such perhaps could have in the effect of audience readership pattern of the framed newspaper reports of Ebola. Subsequent studies may consider the perspectives to establish the significance of the relationships among the latent constructs with and without the effect of the socio-demographic variables.

Among the factors not verified, further studies can analyse what factors are responsible for how media structure reports of health crises and how such factors are reflected in media reports of Ebola stories in Nigeria or elsewhere. Phenomenological theory and social construction theory may be used to explore how media journalists and practitioners have constructed what health issues were printed in which page (of printed newspaper) or reported in what programme (of radio or television), and based on what reasons, assuming that people are active as agents instead of being passive audience, whose behaviours are caused by external factors.

Even based on the positivist perspective (by conducting survey as its main method), future research may be carried out to find out readers or viewers' perception of more specific reporting rubrics or radio or television programmes whether they are beneficial or effective to enhance their knowledge, and change attitudes and behaviours. A quantitative study may also be conducted to find out whether there are correlations between the frequency, intensity, and duration of media messages concerning diseases and the significance/danger of the diseases.

5.6 Conclusion

Media framing of health crises could be identified as one of the ways through which mass media exhibit their importance as an indispensable element of a social structure. The media influence on health issues is achieved when media set agenda on and frame an issue while reporting and such reports have significant impact on audience responses towards the issue reported. The relationships between media and audience, when media suggest to audience not only what to think about but also how to think about what the media considered important, is defined by how audience consider and accept the media suggestions. How media set agenda on and frame various health epidemics across the world has received and still receiving much research attentions, but establishing a relationship between framing and framing effect will make the focus and the findings of this study fill some knowledge gaps.

While media coverage of health epidemics is important, research interest or focus is growing beyond mere coverage of the issues into what impact does media coverage of epidemics have on the public health consciousness. To achieve this objective, this study combined a content analysis of the newspaper framing patterns employed during Ebola outbreak in Nigeria with survey analysis of audience perceptions of the framed newspaper reports about the outbreak and the triggered audience reactions towards the outbreak. Data generated were statistically analysed to answer the research questions set in an attempt to fill a knowledge gap by providing solution to the research problem identified.

Pre-existing theories on media agenda-setting and framing were critically examined to ascertain how much they explain media-audience relationships on the premises of message influence on audience reactions to issues reported. Drawing from pools of relevant contents of agenda-setting and framing researches, this study conceptualised a

triangulated framing model that lays more emphasis on effect of framing on audience as well as audience reaction to the framed messages. The framing model explains the significance of audience reactions to Ebola outbreak, which was triggered by audience exposure to and audience perceptions of the media frame of the issue.

Based on these findings, theoretical and practical implications that may result from applying the model to media framing of other health epidemics or media framing of the same health epidemic but in different environment were discussed taking some limitations of this study into cognisance. Suggestions were then made for future studies to explore some areas that could enrich the scope of media framing of as well as audience relationship with (framed reports) health epidemics, which are not covered by this study. Conclusively, the findings of this study advance the existing knowledge most especially in the area of framing effect of health crises on audience.

REFERENCES

- Adams, J. (2009). Bodies of change: A comparative analysis of media representations of body modification practices. *Sociological Perspectives*, 52(1), 103-129. doi: DOI 10.1525/sop.2009.52.1.103
- Aday, S. (2006). The framesetting effects of news: an experimental test of advocacy versus objectivist frames. *Journalism & Mass Communication Quarterly*, 83(4), 767-784.
- Adelakun, L. A. (2014). Finding justifications for the practice of peace journalism: A public assessment of media roles towards peace promotion in Nigeria. *Mass Communication and Journalism*, 4, 193. doi: 10.412/2156-7912.1000193
- Adelakun, L. A., & Adnan, H. (2017). Between Ebola epidemics and Boko-Haram insurgency: Media agenda transition interplay. *SHS Web Conf.*, 33, 00055.
- Adesonaye, F. (1990). On mass communication and mass incommunication in Nigeria. *Africa Media Review*, 4(1), 60-74.
- Adeyanju, C. T., & Oriola, T. (2010). 'Not in Canada': The non-Ebola panic and media misrepresentation of the black community. *African Journal of Criminology and Justice Studies*, 4(1), 32-54.
- Agbaje, A. (1990). Freedom of the Press and party politics in Nigeria: precepts, retrospect and prospects. *African Affairs*, 205-226.
- Aimufua, E. (2007). *Press and national integration: Analysis of the role of the Nigerian press in the promotion of Nigerian national identity*. School of Journalism, Media

and Cultural Studies, (PhD) Cardiff University. Ann Arbor, Proquest LLC (U584258).

- Akanda, A., & Haque, M. (2013). Newspaper reading habits of university graduate students in Bangladesh: A case study. *International Journal of Research in Applied, Natural and Social Sciences (IMPACT: IJRANSS)*, 1(3), 1-8.
- Alabi, O. (2011). Readership pattern of indigenous language newspapers among selected Nigerian. *Cross-Cultural Communication*, 7(4), 121-126.
- Aliagan, I. (2011). Newspaper readership pattern in Ilorin. *Interdisciplinary Journal of Contemporary Research in Business*, 3(5), 451-466.
- Alicino, C., et al. (2015). Assessing Ebola-related web search behaviour: Insights and implications from an analytical study of Google Trends-based query volumes. *Infectious Diseases of Poverty*, 4. doi: 10.1186/s40249-015-0090-9
- An, S. K., & Gower, K. K. (2009). How do the news media frame crises? A content analysis of crisis news coverage. *Public Relations Review*, 35(2), 107-112. doi: DOI 10.1016/j.pubrev.2009.01.010
- Andrus, J. K., et al. (2010). Global health security and the international health regulation. *BMC Public Health*, 10(Suppl 1), S2. <http://doi.org/10.1186/1471-2458-10-S1-S2>
- Andsager, J. L., et al. (2015). Nutrition information in community newspapers: Goal framing, story origins, and topics. *Health Communication*, 30(10), 1013-1021. doi: 10.1080/10410236.2014.914620
- Atiq, E. (2011). Crisis communication in the context of the Pakistan floods 2010. In: M. Löffelholz & A. Schwarz (Eds.), *Working papers of the International Research Group on Crisis Communication* (Vol. 1). Ilmenau, Germany: Ilmenau University of Technology/Department of Media Studies.
- Atkin, C., & Wallack, L. (1993). Mass communication and public health: Complexities and conflicts. Newbury Park, California: SAGE Publication.
- Bangura, J. B. (2016). Hope in the midst of death: Charismatic spirituality, healing evangelists and the Ebola crisis in Sierra Leone. *Missionalia*, 44(1), 2-18.
- Bantimaroudis, P., Zyglidopoulos, S., & Symeou, P. C. (2010). Greek museum media visibility and museum visitation: An exploration of cultural agenda setting. *Journal of Communication*, 60(4), 743-U377. doi: 10.1111/j.1460-2466.2010.01512.x
- Baran, S. J., & Davis, D. K. (2010). *Mass communication theory: Foundation, ferment and future*. Boston, MA: Wadsworth Cengage Learning.
- Baruch, F. (1995). Risk perception and communication unplugged: Twenty years of process. *Risk Analysis*, 15(2), 137-145.
- Basnyat, I., & Lee, S. T. (2015). Framing of Influenza A (H1N1) pandemic in a Singaporean newspaper. *Health Promotion International*, 30(4), 942-953. doi: 10.1093/heapro/dau028

- Bateson, G. (1955). A theory of play and fantasy: A report on theoretical aspects of the project for the study of the role of paradoxes of abstraction. *Psychology Research Report*, 2.
- Becker, L. B., Vlad, T., & Nusser, N. (2007). An evaluation of press freedom indicators. *International Communication Gazette*, 69(1), 5-28.
- Bell, C. V., & Entman, R. M. (2011). The media's role in America's exceptional politics of inequality framing the Bush tax cuts of 2001 and 2003. *The International Journal of Press/Politics*, 16(4), 548-572.
- Benefo, K. D. (2004). The mass media and HIV/AIDS prevention in Ghana. *Journal of Health and Population in Developing Countries*, 1-18. URL: <http://www.jhpdnc.unc.edu>.
- Berger, P. L., & Luckmann, T. (1967). *The social construction of reality: A treatise in the sociology of knowledge*. New York: Anchor.
- Bernhardt, J. M. (2004). Communication at the core of effective public health. *American Journal of Public Health*, 94(12), 2051-2053.
- Besiou, M., Hunter, M. L., & Van Wassenhove, L. N. (2013). A web of watchdogs: Stakeholder media networks and agenda-setting in response to corporate initiatives. *Journal of Business Ethics*, 118(4), 709-729. doi: 10.1007/s10551-013-1956-z
- Bineham, J. L. (1988). A historical account of the hypodermic model in mass communication. *Communications Monographs*, 55(3), 230-246.
- Bleich, S. (2007). Is it all inword? The effect of issue framing on public support for U.S. spending on HIV/AIDS in developing countries. *The Harvard International Journal of Press/Politics*, 12(2), 120-132. doi: 10.1177/1081180X07299797
- Bloch-Elkon, Y. (2007). Studying the media, public opinion, and foreign policy in international crises: The United States and the Bosnian crisis, 1992—1995. *The Harvard International Journal of Press/Politics*, 12(4), 20-51.
- Boone, W. J., Staver, J. R., & Yale, M. S. (2014). *Rasch analysis in the human sciences*. New York, London: Springer Dordrecht Heidelberg.
- Borah, P. (2008). Examining media content: A case study of newspaper coverage of dowry in India, 1999–2006. *Asian Journal of Communication*, 18(4), 379-395.
- Boyce, C., & Neale, P. (2006). *Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input*. Watertown, MA: Pathfinder International.
- Brajawidagda, U., Chatfield, A. T., & Reddick, C. G. (2015). *The imperative of government transparency in crisis communication: the case of AirAsia QZ8501 crash*. Paper presented at the Proceedings of the 16th Annual International Conference on Digital Government Research.
- Brantner, C., Lobinger, K., & Wetzstein, I. (2011). Effects of visual framing on emotional responses and evaluations of news stories about the Gaza conflict 2009. *Journalism & Mass Communication Quarterly*, 88(3), 523-540.

- Bratić, V. (2006). Media effects during violent conflict: Evaluating media contributions to peace building. *Conflict & Communication Online*, 5(1), 1-11.
- Brewer, P. R., Graf, J., & Willnat, L. (2003). Priming or framing media influence on attitudes toward foreign countries. *Gazette*, 65(6), 493-508.
- Brodie, M., et al. (2004). AIDS at 21: Media coverage of the HIV epidemic 1981-2002. *Columbia Journalism Review*, 42(6), A1.
- Bruce, B., & Berg, M. (2001). *Qualitative research methods for the social sciences*. Needham Heights, MA: Allyn and Bacon.
- Burns, K. K., Richter, S., & Kant, J. C. (2013). Portraits of people who are homeless in the canadian media: Investigating the journalists behind the stories. *Studies in Media and Communication*, 1(2), 96-108.
- Caliendo, S. M., & McIlwain, C. D. (2006). Minority candidates, media framing, and racial cues in the 2004 election. *Harvard International Journal of Press-Politics*, 11(4), 45-69. doi: Doi 10.1177/1081180x06293551
- Callaghan, K., & Schnell, F. (2001). Assessing the democratic debate: How the news media frame elite policy discourse. *Political Communication*, 18(2), 183-212. doi: Doi 10.1080/105846001750322970
- Cappella, J. N., & Jamieson, K. H. (1997). *Spiral of cynicism: The press and the public good*. New York (NY): Oxford University Press.
- Carter, M. J. (2013). The hermeneutics of frames and framing: An examination of the media's construction of reality. *SAGE Open* (3). doi: 10.1177/2158244013487915
- Catalán-Matamoros, D. (2011). *The role of mass media communication in public health*. In K. Smigorski (Ed.), *Health management - Different approaches and solutions*, (pp. 399-414). INTECH Open Access Publisher: <http://www.intechopen.com>.
- Cenite, M., et al. (2008). Perpetual development journalism? Balance and framing in the 2006 Singapore election coverage. *Asian Journal of Communication*, 18(3), 280-295.
- Chadee, D., & Ditton, J. (2005). Fear of crime and the media: Assessing the lack of relationship. *Crime, Media, Culture*, 1(3), 322-332.
- Chen, C. H. (2005). Framing Falun Gong: Xinhua news agency's coverage of the new religious movement in China. *Asian Journal of Communication*, 15(1), 16-36.
- Chong, D., & Druckman, J. N. (2007). Framing theory. *Annual Review in Political Science*, 10, 103-126.
- Christian, N. G. (2014). The pervasiveness of Ebola Virus Disease in Africa: Implication for economy, ecology and socio-religious dynamics. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 19(11), 69-77.
- Chyi, H. I., & McCombs, M. (2004). Media salience and the process of framing: Coverage of the Columbine school shootings. *Journalism & Mass Communication Quarterly*, 81(1), 22-35.

- Clawson, R. A., Clawson, R., & Waltenburg, E. (2008). *Legacy and legitimacy: Black Americans and the supreme court*. Philadelphia: Temple University Press.
- Cline, R. J. W., & Haynes, K. M. (2001). Consumer health information seeking on the internet: The state of the art. *Oxford Journal of Health Education Research*, 16(6), 671-692.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences*. 2nd edn. Hillsdale, New Jersey: L. Erlbaum.
- Coleman, R., et al. (2009). *Agenda setting*. In: R.T. Craig (Eds.), *The handbook of journalism studies*, (pp. 147-160). New York: Routledge.
- Coombs, D. S. (2013). *Last man standing: Media, framing, and the 2012 republican primaries*. New Haven: Rowman & Littlefield.
- Coombs, W. T. (2007). Protecting organization reputations during a crisis: The development and application of situational crisis communication theory. *Corporate Reputation Review*, 10(3).
- Curtin, P. A. (1999). Reevaluating public relations information subsidies: Market-driven journalism and agenda-building theory and practice. *Journal of Public Relations Research*, 11(1), 53-90.
- D'Angelo, P. (2011). Studying framing in political communication with an integrative approach. *American Behavioral Scientist*, 20(10) 353, 1-12. doi: 0002764211426332
- Dai, J., & Hyun, K. (2010). Global risk, domestic framing: Coverage of the North Korean nuclear test by US, Chinese, and South Korean news agencies. *Asian Journal of Communication*, 20(3), 299-317.
- David, C. C., Atun, J. M. L., & La Viña, A. G. (2010). Framing the population debate: A comparison of source and news frames in the Philippines. *Asian Journal of Communication*, 20(3), 337-353.
- De Leeuw, E. D., & Dillman, D. A. (2008). *International handbook of survey methodology*. New York: Taylor & Francis.
- De Vreese, C. H. (2005). News framing: Theory and typology. *Information Design Journal+ Document Design*, 13(1), 51-62.
- De Vreese, C. H., Boomgaarden, H. G., & Semetko, H. A. (2011). (In)direct framing effects: The effects of news media framing on public support for Turkish membership in the European Union. *Communication Research*, 38(2), 179-205.
- De Vreese, C. H., Peter, J., & Semetko, H. A. (2001). Framing politics at the launch of the Euro: A cross-national comparative study of frames in the news. *Political Communication*, 18(2), 107-122.
- Druckman, J. N. (2001). The implications of framing effects for citizen competence. *Political Behavior*, 23(3), 225-256.
- Duriau, V. J., Reger, R. K., & Pfarrer, M. D. (2007). A content analysis of the content analysis literature in organization studies: Research themes, data sources, and methodological refinements. *Organizational Research Methods*, 10(1), 5-34.

- Duyile, D. (1979). *Media and mass communication in Nigeria*. Ibadan: Sketch Publishing Company.
- Edegoh, L. O., Ezech, N. C., & Samson, A. C. (2015). Evaluation of newspaper reading habits of youths in Anambra State, Nigeria. *New Media and Mass Communication*, 37, 63-71.
- Edelman, M. (1993). Contestable categories and public opinion. *Political Communication*, 10(3), 231-242.
- Entman, R. M. (1991). Framing US coverage of international news: Contrasts in Narratives of the KAL and Iran air incidents. *Journal of Communication*, 41(4), 6-27).
- Entman, R. M. (1993). Framing: Towards clarification of a fractured paradigm. *Journal of Communication*, 43(4) 51-58.
- Entman, R. M. (2007). Framing bias: Media in the distribution of power. *Journal of Communication*, 57(1), 163-173.
- Ette, M. (2000). Agent of change or stability? The Nigerian press undermines democracy. *The Harvard International Journal of Press/Politics*, 5(3), 67-86.
- Fischhoff, B. (1995). Risk perception and communication unplugged: Twenty years of process1. *Risk Analysis*, 15(2), 137-145.
- Freelon, D. (2013). ReCal OIR: Ordinal, interval, and ratio intercoder reliability as a web service. *International Journal of Internet Science*, 8(1), 10-16.
- Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, 95(1), 1-37.
- Gerth, M. A., & Siegert, G. (2012). Patterns of consistence and constriction: How news media frame the coverage of direct democratic campaigns. *American Behavioral Scientist*, 56(3), 279-299. doi: Doi 10.1177/0002764211426326
- Gitlin, T. (1980). *The whole world is watching: Mass media in the making & unmaking of the new left*. Berkeley: University of California Press.
- Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. Cambridge: Harvard University Press.
- Gostin, L. O., Lucey, D., & Phelan, A. (2014). The Ebola epidemic: A global health emergency. *Jornal of American Medical Association*, 312(11), 1095-1096. doi: 10.1001/jama.2014.11176
- Griffiths, W., & Knutson, A. L. (1960). The role of mass media in public health. *American Journal of Public Health and the Nations Health*, 50(4), 515-523.
- Hackett, R. I. (1998). Charismatic/Pentecostal appropriation of media technologies in Nigeria and Ghana. *Journal of Religion in Africa*, 28(3), 258-277.
- Hair, J. F., et al. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.

- Hair, J. F., et al. (2014). Partial least squares structural equation modeling (PLS-SEM): An emerging tool in business research. *European Business Review*, 26(2), 106-121.
- Hall, S. (1982). Rediscovery of "Ideology": Return of the repressed in media studies. In: M. Gurevitch, T. Bennet, J. Curran & J. Wollacott (Eds.), *Culture, society and the media*. London: Metheun.
- Hallahan, K. (1999). Seven models of framing: Implications for public relations. *Journal of Public Relations Research*, 11(3), 205-242.
- Hardon, A., Hodgkin, C., & Fresle, D. (2004). *Cómo investigar el uso de medicamentos por parte de los consumidores*. Geneva: Organización Mundial de la Salud.
- Hassan, I., Latiff, M. N., & Atek, E. S. (2015). Reader's motivations towards online newspaper reading in North-Western Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 5(8), 197-209.
- Hawn, C. (2009). Take two aspirin and tweet me in the morning: How Twitter, Facebook, and other social media are reshaping health care. *Health Affairs*, 28(2), 361-368.
- Henkel, H. (2010). Fundamentally Danish?: The Muhammad cartoon crisis as transitional drama. *Human Architecture: Journal of the Sociology of Self-Knowledge*, 8(2), 67-81.
- Henn, M., Weinstein, M., & Foard, N. (2005). *A short introduction to social research*: London: Sage.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*, 20(1), 277-319.
- Hotchkiss, N. (2010). Globalizing security? Media framing of national security in France and the United States from the Cold War through 11 September. *International Journal of Comparative Sociology*, 51(5), 366-386. doi: Doi 10.1177/0020715210376867
- Hove, T., Paek, H.-J., Yun, M., & Jwa, B. (2015). How newspapers represent environmental risk: the case of carcinogenic hazards in South Korea. *Journal of Risk Research*, 18(10), 1320-1336. doi: 10.1080/13669877.2014.923025
- Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Hughes, S., & Malila, I. S. (1999). Media and the African context of the social construction of HIV/AIDS. In: R.K. Hope (ed) *AIDS and development in Africa: A social science perspective*, (pp. 109-133). New York: Haworth Press.
- Igbeka, J., & Ola, C. O. (2010). Use of newspapers by Nigerian university students: The case of Delta State University, Anwai Campus. *Library Philosophy and Practice*: <http://digitalcommons.unl.edu/libphilprac>
- Iyengar, S. (1990). Framing responsibility for political issues: The case of poverty. *Political Behavior*, 12(1), 19-40.

- Iyengar, S. (1994). *Is anyone responsible?: How television frames political issues*. Chicago: University of Chicago Press.
- Iyengar, S., & Kinder, D. R. (1987). *News that matters: Agenda setting and priming in a television age*. Chicago: University of Chicago Press.
- Jacobs, S., & Johnson, K. (2007). Media, social movements and the state: Competing images of HIV/AIDS in South Africa. *African Studies Quarterly*, 9(4), 128-152.
- Jarlenski, M., & Barry, C. L. (2012). News media coverage of trans fat: Health risks and policy responses. *Health Communication*, 28(3), 209-216. doi: 10.1080/10410236.2012.669670
- Jegede, A. S. (2007). What led to the Nigerian boycott of the polio vaccination campaign? *PLoS Med*, 4(3), e73.
- Jewkes, Y., & Letherby, G. (2002). *Criminology: A reader*. London: SAGE.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24(4), 602-611.
- Joffe, H., & Haarhoff, G. (2002). Representations of far-flung illnesses: The case of Ebola in Britain. *Social Science & Medicine*, 54(6), 955-969.
- Johnson, B., et al. (2011). Framing asthma: A content analysis in US newspapers. *Journal of Asthma & Allergy Educators*, 10(10). doi: 10.1177/2150129710397659
- Johnston, A. (2003). Press bias and politics: How the media frame controversial issues. *Journalism & Mass Communication Quarterly*, 80(3), 758-760.
- Ju, Y. (2006). Policy or politics? A study of the priming of media frames of the South Korean president in the public mind. *International Journal of Public Opinion Research*, 18(1), 49-66. doi: 10.1093/ijpor/edh074
- Jung Oh, H., et al. (2012). Attention cycles and the H1N1 pandemic: a cross-national study of US and Korean newspaper coverage. *Asian Journal of Communication*, 22(2), 214-232.
- Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica: Journal of the Econometric Society*, 47(2), 263-291.
- Kahneman, D., & Tversky, A. (1984). Choices, values, and frames. *American Psychologist*, 39(4), 341-350.
- Kaufhold, K., Valenzuela, S., & De Zúñiga, H. G. (2010). Citizen journalism and democracy: How user-generated news use relates to political knowledge and participation. *Journalism & Mass Communication Quarterly*, 87(3-4), 515-529.
- Kim, S. H., Han, M., & Scheufele, D. A. (2010). Think about him this way: Priming, news media, and South Koreans' evaluation of the president. *International Journal of Public Opinion Research*, 22(3), 299-319. doi: 10.1093/ijpor/edpo57
- Kim, S. H., Scheufele, D. A., & Shanahan, J. (2002). Think about it this way: Attribute agenda-setting function of the press and the public's evaluation of a local issue. *Journalism & Mass Communication Quarterly*, 79(1), 7-25.

- Kim, Y.-M. (2015). Is seeking health information online different from seeking general information online? *Journal of Information Science*, 41(2), 228-241. doi: 10.1177/0165551514561669
- Kiousis, S., & McCombs, M. (2004). Agenda-Setting effects and attitude strength political figures during the 1996 presidential election. *Communication Research*, 31(1), 36-57.
- Kondracki, N. L., Wellman, N. S., & Amundson, D. R. (2002). Content analysis: Review of methods and their applications in nutrition education. *Journal of Nutrition Education and Behavior*, 34(4), 224-230.
- Kurtz, M. E., et al. (2001). Sources of information on the health effects of environmental tobacco smoke among African-American children and adolescents. *Journal of Adolescent Health*, 28(6), 458-464.
- Larkin, J., & Regeister, M. (2005). *Risk issues and crisis management: A casebook of best practice*. London: Kogan Page Ltd.
- Larson, J. F. (1984). *Television's window on the world: An international affairs coverage on the U.S. networks*. Norwood, NJ: Ablex Publishing.
- Leaug, D. K., et al. (2010). Ebola virus VP35 is a multifunctional virulence factor. *Virulence*, 1(6), 526-531.
- Lee, N. Y. (2014). The influence of business strategies on the frames of health news: A comparison of health news in two Korean newspapers. *Asian Journal of Communication*, 24(2), 173-188.
- Legard, R., Keegan, J., & Ward, K. (2003). *In-depth interviews*. In: R. Jane and L. Jane (ed),. *Qualitative research practice: A guide for social science students and researchers* (pp. 138-169). London: SAGE
- Luntz, F. I. (2007). *Words that work: It's not what you say, it's what people hear*. New York, NY: Hyperion.
- Ma, R. (2005). Media, crisis, and sars: An introduction. *Asian Journal of Communication*, 15(3), 241-246. doi: 10.1080/01292980500260656
- Madathil, K. C., et al. (2015). Healthcare information on YouTube: A systematic review. *Health Informatics Journal*, 21(3), 173-194. doi: 10.1177/1460458213512220
- Magnuson, A. (2003). *The Implications of Capitalism for Media: How Democracy Suffers*. Stanford University
- Malhotra, N., & Krosnick, J. A. (2007). Retrospective and prospective performance assessments during the 2004 election campaign: Tests of mediation and news media priming. *Political Behavior*, 29(2), 249-278. doi: 10.1007/s11109-007-9027-8
- Mathiyazhagan, T., & Nandan, D. (2010). Survey Research Method. *Media Mimansa*4(1), 34-45.
- Matthes, J. (2009). What's in a frame? A content analysis of media framing studies in the world's leading communication journals, 1990-2005. *Journalism & Mass Communication Quarterly*, 86(2), 349-367.

- McComas, K., & Shanahan, J. (1999). Telling stories about global climate change measuring the impact of narratives on issue cycles. *Communication Research*, 26(1), 30-57.
- McCombs, M. E., & Shaw, D. L. (1993). The evolution of agenda-setting research: Twenty-five years in the marketplace of ideas. *Journal of Communication*, 43, 58-58.
- McQuail, D. (2005). *Mass communication theory* (5th Ed.). London: Sage.
- Modood, T., et al. (2006). The Danish cartoon affair: free speech, racism, Islamism, and integration. *International Migration*, 44(5), 3-62.
- Mohamad, E. (2011). Strategies to improve health communications for breastfeeding: Examining the relationship between media producers and news sources in Malaysia. *The Innovation Journal: The Public Sector Innovation Journal*, 16(3).
- Monecke, A., & Leisch, F. (2012). SemPLS: Structural Equation Modeling using partial least squares. *Journal of Statistical Software*, 48(3)
- Moon, S. J. (2013). Attention, attitude, and behavior: Second-level agenda-setting effects as a mediator of media use and political participation. *Communication Research*, 40(5), 698-719. doi: 10.1177/0093650211423021
- Mustapha, L. K. (2012). Agenda-setting theory: A reflective and visionary analysis. In N. T. Ekeanyanwu, S. N. Ngoa & I. A. Sobowale (Eds.), *Critique and application of communication theories* (pp. 105-132). Ota, Nigeria: Covenant University Press.
- Myers, M., Harford, N., & Skuse, A. (2000). *Evaluation of the BBC Great Lakes Lifeline Service*. Study conducted for BBC, African Greater Horn Department, Department of International Development.
- Nelson, T. E., Clawson, R. A., & Oxley, Z. M. (1997). Media framing of a civil liberties conflict and its effect on tolerance. *American Political Science Review*, 91(03), 567-583.
- Nerlich, B., & Halliday, C. (2007). Avian flu: The creation of expectations in the interplay between science and the media. *Sociology of Health & Illness*, 29(1), 46-65.
- Ngoa, S. N. (2012). Agenda-Setting: A theory in progress. In N. T. Ekeanyanwu, S. N. Ngoa & I. A. Sobowale (Eds.), *Critique and application of communication theories* (pp. 1-27). Ota, Nigeria: Covenant University Press.
- Nisbet, M. C., Brossard, D., & Kroepsch, A. (2003). Framing science the stem cell controversy in an age of press/politics. *The International Journal of Press/Politics*, 8(2), 36-70.
- Nutbeam, D. (2000). Health literacy as a public health goal: A challenge for contemporary health education and communication strategies into the 21st century. *Oxford Journals of Health Promotion International*, 15(3), 259-267.
- Nwanne, U. (2014). Media reportage of the Ebola crisis: Lessons from Nigeria. *Global Journal of Arts, Humanity and Social Sciences*, 2(10), 30-38.
- Odone, A., Ferrari, A., Spagnoli, F., Visciarelli, S., Shefer, A., Pasquarella, C., & Signorelli, C. (2015). Effectiveness of interventions that apply new media to

- improve vaccine uptake and vaccine coverage A systematic review. *Human Vaccines & Immunotherapeutics*, 11(1), 72-82. doi: 10.4161/hv.34313
- Ogunbanjo, G. (2014). Ebola virus disease in West Africa: Outbreak or epidemic? *South African Family Practice*, 56(3), DOI: 10.1080/20786190.2014.954367
- Ogwueleka, T. C. (2010). Municipal solid waste characteristics and management in Nigeria. *Iran Journal of Environmental Health Science Engineering*, 6(3), 173-180.
- Ojo, E. O. (2003). The mass media and the challenges of sustainable democratic values in Nigeria: Possibilities and limitations. *Media, Culture & Society*, 25(6), 821-840.
- Olsen, W. (2004). Triangulation in social research: Qualitative and quantitative methods can really be mixed. *Developments in Sociology*, 20, 103-118.
- Olukotun, A. (2002). Authoritarian state, crisis of democratization and the underground media in Nigeria. *African Affairs*, 101(404), 317-342.
- Omenugha, K. A., (2004). The Nigerian press and the politics of difference: An analysis of the newspaper reports of the Yoruba/Hausa ethnic clash of 1st–3rd February 2002. In J. Hands, & E. Siapera (eds), *At the interface: Continuity and transformation in culture and politics*, (pp. 61-79). Amsterdam, New York: Rodopi.
- Omu, F. I. (1968). The dilemma of press freedom in colonial Africa: The West African example. *The Journal of African History*, 9(02), 279-298.
- Omu, F. I. (1978). *Press and politics in Nigeria, 1880-1937*. Atlantic Highlands NJ: Humanities Press.
- Onunaiju, C. (2016, May 20, 2016). Consequences of Shiites' persecution, *Vanguard*. Retrieved from <http://www.vanguardngr.com/2016/05/consequences-of-shiites-persecution/>
- Orewere, B. (1991). Possible implications of modern mass media for traditional communication in a Nigerian rural setting. *Africa Media Review*, 5(3), 28-39.
- Oso, L. (1991). The commercialization of the Nigerian press: Development and implications. *Africa Media Review*, 5(3), 41-51.
- Pan, Z., & Kosicki, G. M. (1993). Framing analysis: An approach to news discourse. *Political Communication*, 10(1), 55-75.
- Pan-American Health Organisation (2007). Risk communication: building capacity under IHR. Pan-American Health Organisation. Retrieved from <http://cursos.campusvirtualsp.org/course/view.php?id=139&pageid=3058>
- Park, J. (2003). Contrasts in the coverage of Korea and Japan by US television networks: A frame analysis. *Gazette*, 65(2), 145-164.
- Patterson, C., et al. (2015). A quantitative content analysis of UK newsprint coverage of proposed legislation to prohibit smoking in private vehicles carrying children. *BMC Public Health*, 15. doi: 10.1186/s12889-015-2110-x

- Piotrow, P. T., et al. (1990). Mass media family planning promotion in three Nigerian cities. *Studies in Family Planning*, 21(5), 265-274.
- Plasser, F. (2005). From hard to soft news standards? How political journalists in different media systems evaluate the shifting quality of news. *The Harvard International Journal of Press/Politics*, 10(2), 47-68.
- Price, V., & Tewksbury, D. (1997). *News values and public opinion: A theoretical account of media priming and framing*. In G.A. Barrett & F.A. Boster (Eds.) *Progress in communication sciences: Advances in persuasion* (Vol. 13, pp. 173-212). Greenwich, CT: Ablex.
- Propper, R. E., Stickgold, R., Keeley, R., & Christman, S. D. (2007). Is television traumatic?: Dreams, stress, and media exposure in the aftermath of September 11, 2001. *Psychological Science*, 18(4), 334-340.
- Ragas, M. W., & Roberts, M. S. (2009). Agenda setting and agenda melding in an age of horizontal and vertical media: A new theoretical lens for virtual brand communities. *Journalism & Mass Communication Quarterly*, 86(1), 45-64.
- Rane, H., Ewart, J., & Martinkus, J. (2014). *Media framing of the Muslim world: Conflicts, crises and contexts*. New York: Palgrave Macmillan.
- Reese, S. D. (2001). Prologue--Framing public life: A bridging model for media research. In S. Reese, O. Gandy & A. Grant (Eds.), *Framing public life: Perspectives on media and our understanding of the social world*. Mahwah, Lawrence Erlbaum: Routledge.
- Riff, D., Lacy, S., & Fico, F. (2014). *Analyzing media messages: Using quantitative content analysis in research*. New York: Routledge.
- Rosas-Moreno, T. C., & Harp, D. (2013). A comparative analysis of a shared (inter) national story: How Brazilian and US presses covered Sean Goldman's recovery. *Studies in Media and Communication*, 1(1), 150-163.
- Rosenberry, J., & Vicker, L. A. (2009). *Applied mass communication theory: A guide for media practitioners*. New York: Pearson Allyn and Bacon.
- Salawu, A. (2004). Social status as a factor for the readership of Yoruba newspapers in Nigeria. *Nordic Journal of African Studies*, 13(2), 200-215.
- Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication*, 49(1), 103-122. doi: DOI 10.1111/j.1460-2466.1999.tb02784.x
- Scheufele, D. A., & Tewksbury, D. (2007). Framing, agenda setting, and priming: The evolution of three media effects models. *Journal of Communication*, 57(1), 9-20. doi: 10.1111/j.1460-2466.2006.00326.x
- Schramm, W., Siebert, F. S., & Peterson, T. (1956). *Four theories of the press*. Urbana: University of Illinois Press.
- Schwartz, L. (2014). 8 mistakes we're making about Ebola that we also made when aids appeared. Retrieved 28 November 2015 <https://www.laetusinpraesens.org/docs10s/ebola.php>

- Schwitzer, G., et al. (2005). What are the roles and responsibilities of the media in disseminating health information? *PLOS Medicine*, 2(7), e215.
- Scotland, J. (2012). Exploring the philosophical underpinnings of research: Relating ontology and epistemology to the methodology and methods of the scientific, interpretive, and critical research paradigms. *English Language Teaching*, 5(9), 9.
- Shaw, D. L., et al. (1999). Individuals, groups, and agenda melding: A theory of social dissonance. *International Journal of Public Opinion Research*, 11(1), 2-24.
- Sheafer, T. (2008). The media and economic voting in Israel. *International Journal of Public Opinion Research*, 20(1), 33-51. doi: Doi 10.1093/Ijpor/Edn004
- Sheafer, T., & Dvir-Gvirsman, S. (2010). The spoiler effect: Framing attitudes and expectations toward peace. *Journal of Peace Research*, 47(2), 205-215. doi: Doi 10.1177/0022343309353110
- Shih, T. J., Wijaya, R., & Brossard, D. (2008). Media coverage of public health epidemics: Linking framing and issue attention cycle toward an integrated theory of print news coverage of epidemics. *Mass Communication and Society*, 11(2), 141-160. doi: Doi 10.1080/15205430701668121
- Shoemaker, P. J., & Reese, S. D. (1996). *Mediating the message*. White Plains, NY: Longman.
- Sieff, E. (2003). Media frame of mental illnesses: The potential impact of negative frames. *Journal of Mental Health*, 12(3), 259-269.
- Silverman, D. (2012). *Research and theory*. London: SAGE Publications.
- Skuse, A. (2004). *Radio broadcasting for health: an issues paper*. London: Department of International Development
- Smith, K. C. (2014). News media analysis: Influence on community health behaviours and practices. In J. Burke & S. Albert (Eds.), *Methods for community public health research: Integrated and engaged approaches*. New York: Springer Publishing Company.
- Sobel, M. R. (2014). Chronicling a crisis: media framing of human trafficking in India, Thailand, and the USA. *Asian Journal of Communication*, 24(4), 315. doi: 10.1080/01292986.2014.903425
- Sontag, S. (1989). *AIDS and its metaphors*. New York: Farrar, Straus and Giroux.
- Stevens, D., et al. (2011). Priming time for Blair? Media priming, Iraq, and leadership evaluations in Britain. *Electoral Studies*, 30(3), 546-560. doi: 10.1016/j.electstud.2011.04.001
- Stoop, I., & Harrison, E. (2012). *Classification of surveys*. In L. Gideon (ed), *Handbook of survey methodology for the social sciences* (pp. 7-21), New York, NY: Springer.
- Tabachnick, B., & Fidell, L. (2007). *Using multivariate statistics.*, 5th edn. Boston, MA: Pearson.

- Thesen, G. (2014). Political agenda setting as mediatized politics? Media-politics interactions from a party and issue competition perspective. *International Journal of Press-Politics*, 19(2), 181-201. doi: 10.1177/1940161213515756
- Thuesen, M. (2010). Crisis communication - in organisational crises with intense media attention. (Master of Arts in Corporate Communication), Aarhus School of Business.
- Tian, Y., & Stewart, C. M. (2005). Framing the sars crisis: A computer-assisted text analysis of cnn and bbc online news reports of sars. *Asian Journal of Communication*, 15(3), 289-301. doi: 10.1080/01292980500261605
- Torwell, V., & Rodney, C. (2010). Newspaper coverage of health issues in Nigeria. *African Communications Research*, 3, 235-252.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453-458.
- Uche, L. U. (1989). *Mass media, people, and politics in Nigeria*. New Delhi: Concept Publishing Company.
- Udoudo, A., Nwanmereni, D., & Ire, E. (2015). National crisis and insecurity: An analysis of the front-page headlines on Boko Haram and Ebola disease in two selected Nigerian newspapers. *Journal of Communication and Media Research*, 7(1).
- Ungar, S. (1998). Hot crises and media reassurance: A comparison of emerging diseases and Ebola Zaire. *The British Journal of Sociology*, 49(1), 36-55.
- Van der Brug, W., Semetko, H. A., & Valkenburg, P. M. (2007). Media priming in a multi-party context: A controlled naturalistic study in political communication. *Political Behavior*, 29(1), 115-141. doi: 10.1007/s11109-006-9020-7
- Visser, P. S., Krosnick, J. A., & Lavrakas, P. J. (2000). Survey research. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research: Methods in social and personality psychology*. Cambridge, UK: Cambridge University Press.
- Vliegenthart, R., & van Zoonen, L. (2011). Power to the frame: Bringing sociology back to frame analysis. *European Journal of Communication*, 26(2), 101-115.
- Vliegenthart, R., & Walgrave, S. (2011). When the media matter for politics: Partisan moderators of the mass media's agenda-setting influence on parliament in Belgium. *Party Politics*, 17(3), 321-342. doi: 10.1177/1354068810366016
- Wen, N., Chia, S. C., & Hao, X. (2015). What do social media say about makeovers? A content analysis of cosmetic surgery videos and viewers' responses on YouTube. *Health Communication*, 30(9), 933-942. doi: 10.1080/10410236.2014.913220
- Westwood, B., & Westwood, G. (1999). Assessment of newspaper reporting of public health and the medical model: a methodological case study. *Health Promotion International*, 14(1), 53-64.
- Wete, F. N. (1988). Mass communication and development: Impact depends on strategies. *Africa Media Review*, 3(1), 34-45.
- Wong, K. K.-K. (2013). Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*, 24(1), 1-32.

- World Health Organization. (2007). *Effective media communication during public health emergencies*. Geneva, Switzerland: WHO Press.
- World Health Organization. (2014a). Ebola virus disease fact sheet. (103). Retrieved from <http://www.who.int/mediacentre/factsheets/fs103/en/>
- World Health Organization. (2014b). Ebola virus disease, West Africa: Update. Retrieved from <http://www.who.int/csr/don/>
- Wu, M. (2006). Framing AIDS in China: A comparative analysis of US and Chinese wire news coverage of HIV/AIDS in China. *Asian Journal of Communication*, 16(3), 251-272. doi: 10.1080/01292980600857781
- Yahya, M. (2007). Polio vaccines—"no thank you!" barriers to polio eradication in Northern Nigeria. *African Affairs*, 106(423), 185-204.
- Yusha'u, M. J. (2011). News framing of the 'Detroit Bomber' in the Nigerian press. *Global Media and Communication*, 7(3), 281-286.

LIST OF PUBLICATIONS AND PAPERS PRESENTED

Adelakun L.A. & Hamed A. (2016). Communicating health: Framing Ebola outbreak in Nigerian newspapers. *Malaysian Journal of Communication*, 32(2)

Adelakun, L.A.& Adnan, H. (2017). Between Ebola epidemics and Boko-Haram insurgency: Media agenda transition interplay. *SHS Web Conf.*, 33, 00055.doi=10.1051/shsconf/20173300055