

**THE COMMUNICATIVE ADEQUACY OF HEADLINES FROM TWO
ONLINE NEWSPAPERS IN TANZANIA**

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DECLARATION

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DEDICATION

This research undertaking is dedicated to the memory of my late father, Al Haji Musa Juma Kalokola who passed away on 27th April 2018 at Bugando Referral Hospital in Mwanza, Tanzania. May Allah rest his soul in eternal peace.

ABSTRACT

The advent of internet has made it possible for people to read online newspapers rather than their print versions. It is expected that a newspaper headline should be optimised to meet the communicative expectations of its online readers. However, some newspaper headlines do not communicate adequately in the digital environment. This study sought to examine the communicative adequacy of headlines in two online newspapers in Tanzania. The objectives of this study were to: determine the communicative functions of newspaper headlines in the digital setting; examine the communicative principles of newspaper headline design in the digital setting; explain the clickbait features which online newspaper editorial teams use to design headlines for their digital publications and determine the online newspaper headline clickbait features with the significant impact on news selection and readership. This study was guided by the Relevance Theory by Sperber and Wilson (1986/1995) that defined a newspaper headline as the relevance optimiser of its story. The research employed the mixed research method and analytical cross-sectional research design. The study involved the population of 10 online newspapers in Tanzania and 31,000 online newspaper readers. From the population, the study used the sample of 2 online newspapers and 100 online newspaper readers. The current enquiry used the computerized systematic random sampling to obtain a sample of 259 front page headlines from 730 headlines that had been published by *The Citizen* and *Mwananchi* online newspapers from July 2017 to June 2018. The researcher used a guided questionnaire and a checklist in the course of data collection. The Statistical Package for Social Sciences (SPSS) version 20 was used to analyse the quantitative data whereas thematic analysis was used for qualitative data. In this study there were four major findings. First, the study revealed that 69.9% of the two online newspaper headlines examined performed the primary communicative function by summarising the articles they represented. Secondly, it was revealed that the editors of the two newspapers under this study largely observed the principles of designing the appropriate newspaper headlines. Thirdly, it was revealed that the editorial teams exploited the standard words length per headline with short headlines but they rarely exploited the clickbaits of question, negative sentimental words, and self-referencing. Lastly, it was revealed that headlines with negative and positive sentimental words, concepts and names of high news-value, and headlines without signal words had the significant impact on newspaper readership in the digital environment. However, readability, literal and non-literal constructions, and characters of headlines had no significant impact on newspaper readership. This study was significant to linguists, online journalists, bloggers, website designers and marketers as these fields deal with communication. The quantitative approach and analysis made it the first study to explicate the communicative adequacy of headlines from two online newspapers in Tanzania. The study recommended the online editorial teams of the two Tanzania newspapers to design their headlines by putting into consideration of the environment of their digital publications. From this study, it was concluded that *The Citizen* and *Mwananchi* newspaper headlines could not adequately communicate with their headlines because they were still observing the traditional functions and principles of printed newspapers in the digital environment.

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ABBREVIATIONS AND ACRONYMS

ANOVA	Analysis of Variance
ARI	Automated Readability Index
ASL	Average Sentence Length
ASW	Average Number of Syllables per Word
CHADEMA	Chama cha Demokrasia na Maendeleo
CLI	Coleman Liau Index
CP	Cooperative Principle
CTR	Click Through Rate
DC	District Commissioner
D.F	Degree of Freedom
FRE-	Flesch Readability Ease Index
GFI	Gunning Fog Index
HESLB	Higher Education Students' Loans Board
IMF	International Monetary Fund
IPP	Industrial Project Promotion
IPPMG	IPP Media Group
IRNA	Iranian News Agency
IT	Information Technology
JPM	John Pombe Magufuli
MCL	Mwananchi Communications Limited
MCT	Media Council of Tanzania
MMR	Mixed Methods Research
NHC	National Housing Cooperation
NMG	National Media Group

MOM	Media Ownership Monitor
RC	Regional Commissioner
RE	Reading Ease
SAUT	St. Augustine University of Tanzania
SEO	Search Engine Optimisation
SGI	Smog Grading Index
SPSS	Statistical Package for Social Sciences
TCRA	Tanzania Communications Regulatory Authority
TLS	Tanganyika Law Society
TZ	Tanzania
UK	United Kingdom
US	United States of America

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

A newspaper is one of the popular ways of communicating for it provides readers with the most recent information they need. Owing to the importance of it in disseminating information, this study, therefore, examined the communicative adequacy of headlines from two online newspapers in Tanzania. This chapter covers the background of the study, statement of the problem, research objectives, hypotheses, significance and justification of the study, scope, limitations of the study, theoretical framework, conclusion and definitions of key operational terms.

1.2 Background to the Study

The Internet use has significantly changed the traditional ways of designing, publishing and consuming newspaper headlines (Dick, 2011; Tandoc, 2014; Tenenboim & Cohen, 2015; Benedetto & Tedeschi, 2016; Kuiken et al., 2017). The advent of digital media, particularly online newspapers, has posed a challenge to existence of the printed newspapers. Now, the news consumers are increasingly turning to the Internet for digital newspapers and social media which are significantly faster than the printed papers. As a result, the presentday digital newspaper editions in the world, Tanzania in particular, are gradually replacing printed newspapers where news consumers can easily access information on social platforms free of charge (Baresch et al., 2011; Hermida et al., 2012; Purdy & Wong, 2016; Lotriet, 2018). For example, 104 US based newspapers have reduced their publishing frequency between 2004 and 2018. The decision to reduce printed newspapers has been motivated by the desire to cut expenditures for immediate financial survival (Kalim, 2019).

The Tanzanian newspapers have also introduced the online version of their papers to widen the scope of readership. This implies that newspaper communication has shifted from print to electronic communication to compete with other news outlets. Since digital newspaper publication is a new development in Tanzania, there is a need to evaluate the communicative adequacy of news published in the digital setting.

Conventionally, print newspaper headlines have had the function of summarising the articles they introduce (VanDijk, 1988). However, studies (Bell, 1991; Nir, 1993; Ifantidou, 2009; Conroy & Rubin, 2015) have confirmed that today's online newspaper headlines tend to incorporate clickbait features such as sentimental words, self-referencing and concepts of high news-value to provoke more online news consumers to click on the headline containing the story. The use of clickbait in online newspaper headlines is now attributed to the fact that, in the digital age, Internet has made it possible to know the exact number of people who appear to click and read the news published (Atterer, Wnuk, & Schmidt, 2006; Tenenboim & Cohen, 2015). As a result, Click-Through Rates (CTR) on the newspaper's website has become the standard measure of the newspaper consumers' preference (Kuiken et al., 2017). According to Blom and Hansen (2015) and Tenenboim and Cohen (2015), the need for a provocative newspaper headline that can attract more clicks is growing tremendously. As a result, newspaper headline designers are optimising the relevance of news content to attract clicks, maximise web ranking and visibility on the internet. Consequently, the online newspaper headlines communication is becoming an area that seems to motivate the cross-cutting research in Cognitive Linguistics, Journalism, Information Technology and Marketing.

Even though the headlines with clickbaits seem to violate the primary functional definition that requires headlines to be information rich, the pragmatic function of a newspaper that incorporate less informative and emotional rich headlines have been the focus of digital journalists (Kuiken et al., 2017). Since newspaper headlines use language to convey information to readers, it is the high time for researchers to come out with linguistic aspects of newspapers that make headlines more communicative in the digital environment.

1.2.1 The Communicative Adequacy of Newspaper Headlines

Usually, a newspaper communication involves the transfer of information from the writer to the reader and the communicated information involves facts, concepts, ideas, opinions, attitudes and emotions. Through newspaper communication people can effectively share important matters in a given community. In journalism life, it is communication that helps media practitioners to build healthy relations and credibility with news audiences. People reading newspapers normally start by scanning headlines before accessing full articles (Holmqvist et al., 2003) In this regard; the communication made via headline becomes very important as it determines people who are going to read the newspaper article. Based on this fact, the headline should communicate adequately that it attains its goals.

Headline is one of the major ways through which a newspaper writer communicates ideas, feelings and concepts to the readers (Ifantidou, 2009). Studies by Dor (2003), Holmqvist et al. (2003) and Cillizza (2014) have shown that editorial teams select the best headlines for their online newspapers for readers tend to scan headlines first before getting into the full articles. In this regard, the adequately communicative newspaper headline is expected to briefly communicate the central idea of the article to its readers at the same time drawing the attention of the readers to take their time to read the article

introduced (Dor, 2003; Saxena, 2006). Thus, the communicative headline achieves its communicative goals by meeting expectations of its readers. According to Ifantidou (2009, p.279), the headline designers make use of a wide “range of language devices to make their headlines more attractive and interesting in communication with readers”. Thus, the best communicative newspaper headline should not only summarise the story but it should also attract readers. Based on this fact, the first objective under this study examined the communicative functions of online newspaper headlines.

Communicative adequacy is an important construct in newspaper headline design because the fundamental objective of newspapers is to successfully communicate in real-world settings (Révész, Ekiert & Torgersen, 2014). Effective headlines are regarded as an enthralling shortcut to the substance of newspapers in journalism and desktop publishing textbooks (Bowles & Borden, 2000; Ellis, 2001; Saxena, 2006). This means that, in general, effective headlines aim to do two things: (a) summarize and (b) draw attention to the full-text newspaper article. If copy editors want to adequately communicate news, they have to design a headline that will hook readers, interest them, and capture their attention so that they disregard all other distractions and read to find out more.

Dor's (2003) taxonomy exemplifies newspaper-editing practices in terms of the following aspects that contribute to adequate communication:

[1] be as short as possible; [2] be clear, easy to understand, and unambiguous [3] be interesting; [4] contain new information; [5] not presuppose information unknown to the readers; [6] include names and concepts with high ‘news value’ for the readers [7] not contain names and concepts with low ‘news value’ for the readers; [8] ‘connect’ the story to previously known facts and events; [9] ‘connect the story’ to prior expectations and assumptions; and [10] ‘frame’ the story in an appropriate fashion (Dor, 2003:708–716).

A newspaper headline that is likely to communicate adequately should at least meet the maximum number of principles suggested in Dor's (2003) taxonomy. The headline designer for online publication, however, needs also to consider Search Engine Optimization (SEO) of browsers such as Yahoo and Google, and Bing and searchable words or phrases to increase web ranking and visibility (Rogers, 2013). The present study adopted the above criteria to determine principles that can make newspaper headlines perform better in the digital setting.

1.2.2 History of Newspapers in Tanzania

According to Sturmer (1998), Tanzania's newspaper industry and other media at large have gone through four significant stages. First, there were German colonial media (1890 to 1916) developed to fulfill the German administration's communication goals. Secondly, there was the British administration's media (1916 to 1961), which was developed as a propaganda weapon to support the colonial regime, and later the nationalists' media, which was established to campaign for self-governance and respect for human rights. Fourthly, there was a post-colonial period (from 1961 to 1992) when the then-socialist dictatorship of independent Tanzania attempted to "Tanzanianize" the media in order to suppress criticism and support the development of socialistic values. The media history explained above did not involve the online newspapers. This study dealt with communicative adequacy newspapers which are digitally published in Tanzania.

By 2017, Tanzania had around 433 registered print newspapers and magazines (The Citizen, 2017). Afterwards, the 1976 newspaper Act was repealed and no newspaper or magazine could publish without registering under the novel Tanzania Media Service Act of 2016 (Daily Nation, 2017).

Kolumbia (2017) reports that by the end of October 2017, there were more than 109 newly registered government and private print newspapers in Tanzania, the majority of which had their publications in Swahili; the Lingua-Franca in the country spoken by 90% of Tanzanians. That is to say, very few newspapers were published in English in the country by then.

The 2006 African Media Development Initiative Report indicates that the pre-existing print newspaper industry was facing a significant challenge of circulation to the various parts of Tanzania. This report shows that the distribution of printed papers was mostly limited to the urban centres in the key regions such as Morogoro, Dodoma, Arusha, Moshi, Mbeya, Zanzibar, and Mwanza and the most widely read newspapers are printed and distributed from the largest city of Dar es Salaam. Thus, there was limited communication via newspapers. In the digital phase of the Tanzanian media history, a good number of online news consumers are increasingly reading digital articles on the internet (Baresch et al., 2011; Hermida et al., 2012). In this regard, the news consumers in Tanzania sometimes read online news articles from the newspapers' websites or online social networks. To widen the scope of readership, some of the newspapers in the world have introduced virtual editions to make sure that readers access news on the internet across the world. Now, *The Citizen* and *Mwananchi*, which were previously available in hard copies, established their online editions to broaden the reach of reading, which can be viewed via the newspaper company's websites. Since online newspaper communication is a recent phenomenon in Tanzania, the impetus for this research was the unique Tanzanian online newspapers.

Unlike the past, the commonly read newspapers nowadays in Tanzania are available in both print and soft copies. Skogerbø and Winsvold (2011) argue that print newspapers are traditional ones; people read them as hard copies whereas online newspapers have

electronic readership on the internet. Based on this fact, this study therefore considered electronic newspapers that had their online publications in Tanzania. The online newspapers under this study were in the 5th phase of the media history of Tanzania. In this digital phase, newspapers were obliged to register with Tanzania Communications Regulatory Authority (TCRA) before they could operate in the country (TCRA, 2018). The 2018 TCRA report showed that the online newspapers under IPP Media Group (IPPMG) and National Media Group (NMG) had received the online publications licenses from TCRA. This was possible under the new conditions of the electronic and postal communications (online content) regulations Act of 2018 in Tanzania. This study was therefore based on the novel online newspapers that had contributed to the transformation of the media history in Tanzania as well as media audiences, globally, nationally and locally (Skogerbø & Winsvold, 2011). That is why this research had its focus on the Tanzanian newspapers that had been registered by TCRA to deliver online content. In this case, *Mwananchi* and *The Citizen* were the basis for the current research.

1.2.3 The Trends of Newspaper Readership

In the recent years the world has witnessed the fast decline in print newspaper readership and the growth of online newspaper production and consumption (Benedetto & Tedeschi, 2016; Purdy & Wong, 2016). The shift from print to electronic media readership has been associated with the rise of the internet use in the world (Hassan & Atek, 2015). Unlike the print media, the online news headlines, which instantly contain new or updated content, are often offered free of charge on the internet through smartphones and computer applications, and social networks (Baresch et al., 2011; Hermida et al., 2012). As a result, the online headlines seem to have lured many readers away from print media, resulting in falling newspaper circulation in countries like USA

(Purdy & Wong, 2016) and South Africa (Lotriet, 2018). For instance, in the short four-year period between 2012 and 2016, the number of print daily newspapers in the United States fell from 1,425 in 2012 to 1,286 in 2016. This implies that the fall of print media readership and the rise of electronic media have negatively affected readership of printed newspapers in the USA.

Similarly, Edmonds, Guskin, Rosenstiel and Mitchell (2010) assert that 34% of people in the USA read news online as opposed to 31% who favour print newspapers. Almost half of Americans get at least some of their news on mobile devices or tablets. This implies that people can easily access newspapers online as compared to print media. Because of free access, Hassan and Atek (2015) argue that most of the newspaper readers read less printed copies of the newspapers because of the access they have to the free online papers.

Tewari (2016) on the other hand has warned that the print papers may not have readers in future because social media such as Facebook, Twitter, WhatsApp and Instagram have a great impact on young people's lives in different ways. Therefore, the need for an online version of the newspaper to compete with social media is becoming imperative to the media owners. The 2015 Global Newspaper Circulation and Advertising Trends show that more than 2.7 billion people worldwide read print newspapers, and the World Association of Newspapers and News Publishers (WAN-IFRA) estimates that at least 40% of global internet users read newspapers online (Kumar, 2017; Chyi & Tenenboim, 2019). This observed trend in newspaper readership implies that newspaper communication and readership may shift from print to online editions soon. The increased number of online news consumers has opened a wide range of research on how digital journalists should adequately communicate via headlines in digital settings. That is why this study focused on the online newspaper

headlines communication in Tanzania where more and more people are increasingly accessing electronic newspapers.

According to Lister (2016), the past four decades of print newspapers, there have been rapid digital revolution and novel media technologies gaining impetus. Lister (ibid) suggests that “the survival of traditional media, print in particular, will be more contingent than ever before on journalistic excellence and connectivity with audiences” (par.1). Lister (2016) warns that there are instances of already falling newspaper revenues and sales in the developing countries. The dwindling newspaper revenue is one of the factors that have made digital papers replace the print papers for the digital papers are cost effective.

The print media in Tanzania has come out as a struggling industry, which throughout 2017/18 suffered massive setbacks including operating under a tense political environment dominated by repressive laws (The State of the Media in Tanzania, 2017/2018). The 2019 Media Ownership Monitor (MOM) in Tanzania reports that up to September 2018, HABARI MAELEZO had registered 175 print outlets. This is contrary to the past two years where more than 400 print newspapers were on the market. This fast decline is not only associated with the fall of revenue from adverts, reduced circulation and the government deregistration of some newspapers by 50%, it is also connected to the increasing advertisements through online media (MCT, 2019). This shows that there is a declining readership and advertising in the print media industry, hence disrupting its development and sustainability. MCT (2019) report shows that the decline of newspaper readership in Tanzania is associated with the tense political environment. The 2019 State of the Media Report has attested that online platforms have become powerful in terms of accessibility and readership. Thus, then only option the newspapers can survive in the competition is establishment of online versions of

their papers. Therefore, *The Citizen* and *Mwananchi* are good examples of the newly established digital newspapers in Tanzania. In light of this view, this study examined the communicative effectiveness of Tanzanian online newspaper headlines because there were limited studies which had explicated the how adequately the online newspapers headlines communicate.

The Media Council of Tanzania (MCT) reports that Mwananchi Communication Limited newspapers (*The Citizen* and *Mwananchi*) which are under the National Media Group (NMG) of Kenya are the mostly read print newspapers in Tanzania, followed by the IPP Media Group (IPPMG) and New Habari Corporation (Media Council of Tanzania, 2018). However, MCT (2018) reports that in terms of readership, the online forums such as JAMII MEDIA Company Limited was leading followed by AYO TV TZA Company Limited, Michuzi Media Group, and Muungwana Blog (MCT, 2018). The MCT report shows that online platforms are more powerful in terms of access and readership. MCL newspapers were the only online newspapers, which had managed to have reliable records of their online readers from 2016 to 2018. For that reason, the current study tracked the records of online newspaper readership by examining how clickbaits affected readership of Tanzanian online newspapers.

The digital age has also shaped the way people read newspapers (Tenenboim & Cohen, 2015; Kuiken et al., 2017). In printed newspapers, the news consumers would buy a copy, read it from page to page while scanning headlines and reading articles of their interests (Holmqvist et al., 2003). Unlike the print newspaper readers, the present-day newspaper consumers have more opportunities to read articles online and share the news on the social platforms free of charge (Baresch et al., 2011). This type of readership has changed the newspaper consumption and most readers of news articles today are from social media platforms such as Facebook and Twitter (Mitchell & Page,

2015). Consequently, the need for journalists to design online newspaper headlines that deliver the most clicks keeps on growing globally. This change on readership calls for more studies on how effectively such online newspaper headlines communicate in the digital world. It is this fact that motivated the current study to examine the communicative adequacy of the online newspaper headlines.

Probably, the only way the media houses may survive in the digital age is to establish digital newspapers. Currently, many media houses in the world, Tanzania in particular, have developed an option of creating digital editions of their papers. In Tanzania, the owners of the online newspapers have to register their papers with the Tanzania Communication Regulatory Authority (TCRA). TCRA as an independent regulatory authority, established by Act No.12 of 2003, regulates the postal, broadcasting, and electronic communications sectors in Tanzania. The records show that up to 21st June 2018, the authority had issued 61 online content services licenses (TCRA, 2018). The issuance of online service providers in Tanzania is another indication of the growing online communication in the country. Since newspapers are also published online, the question of their interactivity and the ability of online newspapers to communicate remains an area that needs more research (Kenney, Gorelik & Mwangi, 2000).

The new Tanzanian online newspapers fall under the weblog licence category. According to the TCRA report (2018), 10 newspapers had received a web/blog online content license to operate in Tanzania by 21st June 2018. Under Online Content Services Licences issued by TCRA (Number 6), it appears that IPP Media Group (IPPMG) and Mwananchi Communication Limited (MCL) were the only newspaper companies licensed for online content delivery. Despite being registered, IPPMG newspapers had not started producing their online specific newspaper editions. Instead, all the online editions were published under IPPMG news on the company's websites.

Unlike IPPMG newspapers, three MCL newspapers (*Mwananchi*, *The Citizen* and *Mwanaspoti*) were accessible online. Readers could legally access these newspapers either in their print formats or online for internet users. Most of the headlines for both print and digital papers were almost the same and it was not clear whether both headlines for digital and print were adequately communicating in the digital environment. This study, therefore, sought to examine whether the two registered MCL Tanzanian online dailies headlines were communicating adequately in the digital environment.

The increased internet use and online service providers have paved the way for the establishment of online newspapers in Tanzania. For example, the number of internet users in Tanzania rose by 16% by the end of 2017 to 23 million, with the majority of those using their handsets to go online (TCRA, 2017). The increased number of internet users and online platforms in Tanzania projects that more people are likely to access newspaper electronically than it is in their hard copies. In light of this projection, this increase has made some media houses such as Mwananchi Communications Limited to launch the digital papers to widen the scope of information access in Tanzania and the world at large.

1.2.4 Newspaper Headlines Design

A newspaper headline is one of the most distinctive features of the press that requires journalistic writing and creativity (Crystal, 1987). In some aspects, it is a kind of poetry for it borrows extensively from its stylistic devices. Owing to the significance of a newspaper headline, Brown and Simpson (2002) have stressed that headline designers should be the best writers who can write comprehensible, attractive and provocative headlines for their daily or weekly newspaper. For this reason, headlines should attract the newspaper readers' attention and lure the news consumers into opening the article

(Chen, Conroy & Rubin, 2015). Thus, designing an online newspaper requires creativity and knowledge of features that work better in the digital setting. According to Chen et al. (2015), the eye-catching, creative, imaginative headline and its layout styles have made the newspaper headline the most widely and commonly read part of a newspaper for a typical online news consumer starts with viewing the headline of the story and ends up reading the full article. Cillizza (2014) holds that even Americans read headlines and not much else; the people buying newspapers normally scan headlines first before reading the entire article. Benz, Willcoxon, Tompson and Rosenstiel (2014) affirm Cillizza's (2014) argument that the average newsreader in the US is a headline reader. In light of this fact, this study focused on the communicative adequacy of the headline which is the commonly read section of a newspaper discourse.

Moreover, a number of scholars (Perfetti et al., 1987; Ifantidou, 2009; Leon, 1997) argue that the form of a newspaper headline affects its performance. Leon (1997) demonstrates that newspaper headlines which are informative and in summary form tend to facilitate news comprehension and recall. In addition, a newspaper headline acts as a news bulletin or summary stating in skeleton form the most important content of the article (Watanabe, Hare & Lomax, 1984). Therefore, a well-designed newspaper headline provides the person who reads it with an idea of what the article is all about. This is contrary to those newspaper headlines which are less informative as they are unclear and readers require context for interpretation. Through its first specific objective, this study, therefore, sought to examine the communicative functions of the online newspaper headline.

Ifantidou (2009) claims that creative and less informative headlines are preferred by readers as they are "guided by expectations of relevance and interpret headlines by creating occasion-specific ad hoc concepts and ad hoc contexts in an overall attempt to

optimally ration processing effort with cognitive effect” (p. 699–720). This is in concurrence with the fact that a newspaper can be less informative linguistically and difficult to understand but an effective tool of mass media communication. In newspaper writing for example, the less informative, ambiguous and vague headlines are said to be effective ways of drawing the attention of readers. A well-designed newspaper headline is creative and it must draw its readers’ attention to know what the article is about (Chen, Conroy, & Rubin, 2015; Sperber & Wilson, 1986). Thus, for a headline to achieve its communicative goals, the designer should ensure that it is informative, provoking and eye-catching. The current study therefore examined the type of headlines that editorial teams create to achieve their communicative goals on the internet.

This study is based on the fact that achieving newspaper’s communicative goals, journalists are therefore obliged to design headlines depending on the context of their publications (Ifantidou, 2009). They consider the headlines that are searchable on the web and which are likely to go viral on the social networks. The headline for a print newspaper should be designed with the print copy readers in mind. In this case, the newspaper edition determines the form of its headline. Kuiken, Schuth, Spitters and Marx (2017) for example, have shown that in *BLENDLE NEWSLETTER*, the editors had to re-write the original print newsletter headlines to suit their digital newsletters (See Table 1.1 below).

Table 1.1

A Sample of Three Original–rewritten Headline Pairs in Blendle Newsletters

Original Headline (Print)	Re-written headline (online)
How predictable is the weather?	Why is the weather forecast so often wrong?
A hero does not think, he does	Why two Dutch marines received high awards for their exceptional courage?

Source: Kuiken, Schuth, Spitters, and Marx (2017)

From the examples given in table 1.1 above, it is evident that the headlines for print newsletters are different from those for an online version where each headline design suits its context of publications. The headlines for the print newsletter (see Table 1.1) are in declarative form whereas headlines for online publication are in interrogative forms. The online versions considered the Search Engine Optimisation (SEO) in their designs. "...phrasing headlines as questions is a tactic employed by newspapers that do not "have the facts required to buttress the nut graph" (Berthon et al., 2019, p. 257). Thus, the newspaper headline designers can optimise the relevance of their headlines to suit the context of their publications. This implies that the variation comes from the fact that journalists consider the news consumers' needs and interpretations. The online newspaper headlines designers normally target internet news consumers whereas print newspaper headlines designers target hard copy readers. This study, therefore, sought to examine how online editorial teams optimise the relevance of their online newspaper headlines to suit the context of the online publications.

To achieve their communicative goals, digital journalists normally use headlines to entice the readers to click on the headline containing the whole story. Chen, Conroy and Rubin (2015) state that online journalists exploit clickbaits which appear to perform

well in the digital setting. These clickbait features enable newspaper writers to compete with other news sources such as Facebook and Twitter (Chen et al., 2015). According to Mitchell and Page (2015), the consumers of online news articles hail from the social networks such as Twitter and Facebook. Therefore, online news providers have to compete with each other to attract the same readers on the internet. This has made the traditional print media adopt the marketing strategies that seem to have good records of attracting online news consumers. In Kuiken et al. (2017) framework, some of the frequently exploited strategies and techniques are the use of headlines which are in question form, self-referencing, signal words, negative sentimental words, passive constructions and spectacularisation. In technical terms, these are online marketing strategies, which in digital journalism apply as clickbait features. Thus, the third objective under this study examined the clickbait features that the editorial teams of the two online newspapers used to attract their customers.

Frampton (2015) defines clickbait features as the exaggerated headlines whose main motive is probably to entice the reader to click on the link and increase page views. According to Ifantidou (2009), clickbaits fall under the pragmatic function of a newspaper headline which requires readers to infer the meaning conveyed. In Relevance Theoretical framework by Sperber and Wilson (1986), clickbaits are ostensive inferential communication that writers use to draw the attention of readers. However, in digital journalism and marketing, the name clickbait is used pejoratively to describe sensationalized headlines, and that turn out to be adverts or are simply misleading (Bickham, Howard & Simmons, 2018). In this study, clickbaits were defined as the communicative tactics that online journalists used to draw the attention of their readers. Frampton (2015) believes that the world of content advertising and marketing assumes that the best strategy, both for attracting more readers and for creating a better online

environment, is to generate the best content possible. This is why journalism teaches students of newspaper writing to create headline content that may grab the readers' attention. Frampton (ibid) in the *Columbia Journalism Review* highlights the case of online magazine *Slant*, which pays writers \$100 per month, plus \$5 for every 500 clicks on their stories. This proposes that online journalists compete to make sure that their headlines are searchable and shared on social media. Bickham et al. (2018) and Wasserman and Madrid-Morales (2019) hold that the clickbait business models contribute to the 'fake news' narrative which has significantly affected trust in the media. The use of clickbait seems to have been perceived both positively and negatively. Roelofs and Gallien (2017) illustrate the controversy of deliberately provocative articles that have managed to hack academia, and privilege clicks and attention over rigour in research. Based on this fact, this study sought to study the communicative clickbait features which the Tanzanian online journalists used to construct headlines for their electronic papers and their communicative impact on news readership.

Normally, any newspaper must have its readers who are always on target. Therefore, the writers of newspapers create headlines that they assume to be relevant to their readers. One of the aspects that newspaper writers have to consider is the readability of their news. In Tanzania, online newspapers have their targetted audiences who can not reach printed newspapers. Therefore, there was a need to study the readability of Tanzanian online newspapers and the impact of readability on news readership. This study sought to examine the readability indices and levels of online newspaper headlines. According to Dale and Chall (1949), readability is defined as:

The total (including all the interactions) of all those elements within a given piece of printed materials that affect the success a group of readers have with it.

The success is the extent to which they understand it, read it at an optimal speed, and finding it interesting (Dale & Chall, 1949, p. 148).

Dale and Chall's (1949) definition indicates that online newspaper headline elements affect the readers' comprehension. Readability results from the interaction between several aspects that render a newspaper headline comprehensible. Langan (1993) on the other hand reports that the number of difficult words in a given discourse determines its level of difficulty or ease. Graves and Graves (2003) mention aspects of readability that affect the readability of a text such as vocabulary complexity, sentence and text structure, elaboration and coherence, and familiarity as factors. This study was based on the assumption that online newspapers must have a certain difficulty index and level of readability that must be addressed. In this regard, the current study sought to test readability indices and levels of online newspaper headlines. This study used different readability formulas such as Flesch-Kincaid to test the readability indices and levels of the virtual newspaper headlines of *Mwananchi* and *The Citizen*. This would help the newspaper headline designers to consider the levels of readers' comprehension of the news they produce.

1.3 Statement of the Problem

The advent of internet has made it possible for people to read online newspapers rather than their print versions. As a result of this shift of newspaper readership, the communicative functional definitions of a newspaper's headline and principles of appropriate headline design seem to have significantly changed to suit the context of digital papers. Clickbaits are more used with newspaper headlines to attract readers' attention to click and open the article.

It is expected that a newspaper headline should optimise relevance to meet the communicative expectations of its online readers. This comes from the fact that communicative adequacy is a key construct in any newspaper headline design for the primary goal of a newspaper is to communicate adequately in real-world situations. However, some newspaper headlines do not communicate adequately in the digital environment and little is known in literature about what contributes to the communicative adequacy of headlines. This study, therefore, sought to examine the communicative adequacy of headlines from two online newspapers in Tanzania.

1.4 Study Objectives

This study was guided by the general and specific objectives.

1.4.1 General Objective

This research sought to examine the communicative adequacy of headlines in two online newspaper in Tanzania

1.4.2 Specific Objectives

In examining the communicative adequacy of headlines, the study formulated four specific objectives listed hereunder.

- i. To determine the communicative functions of newspaper headlines in the digital setting.
- ii. To analyse the communicative principles of newspaper headline design in the digital setting.
- iii. To examine the clickbait features which online newspaper editorial teams use to design headlines for their digital publications.
- iv. To determine the online newspaper headline clickbait features with the significant impact on news selection and readership.

1.5 Research Hypotheses

The study had the following seven hypotheses stated hereunder.

- i. (H₁) Longer newspaper headlines (>55 characters per word) are preferred to shorter headlines (≤55 characters).

(H₀): The readership preference is the same between newspaper headlines with shorter words (≤ 55 characters per word) and newspaper headlines with longer words (>55 characters per word)

- ii. (H₁): Headlines without complex words are more preferred to the headlines that contain complex words.

(H₀): The readership preference is the same between newspaper headlines without complex words and newspaper headlines with complex words.

- iii. H₁: Headlines with one or more signal words are more preferred to headlines that do not.

H₀: The preference is the same between headlines with one or more signal words and headlines that do not have signal words.

- iv. H₁: Headlines with one or more positive or negative sentimental words are preferred to headlines that do not have the features.

H₀: The preference is the same between headlines with one or more positive or negative sentimental words and headlines with neutral sentimental words.

- v. H₁: Headlines with literal constructions are more preferred to headlines which are non-literal constructions.

H₀: The preference is the same between headlines with literal constructions and headlines with non-literal constructions.

- vi. H1: The preference is not the same between headlines with names and concepts with high news-value over headlines with names and concepts with low news-value.
H0: The preference is the same between headlines with names and concepts with high news-value and headlines with names and concepts with low news-value
- vii. (H₁) Very easy to read headlines (91-100 score) are more preferred to headlines that are very difficult to read (00-30 score).
H0: The preference is the same between very easy to read headlines (91-100 score) and headlines that are very difficult to read (00-30 score).

1.6 Justification and Significance of the Study

This section presents the justification and significance and of the study.

1.6.1 Justification of the Study

In the following aspects, we can make justification for the current study. First, while the clickbait phenomena has been studied in the past, its actual influence on online newspapers has not been given a significant attention in Tanzania. Furthermore, the majority of studies on newspaper headlines have been qualitative or small-scale quantitative and this study was largely quantitative. It used to be difficult, if not impossible, to collect data on newspaper headlines readership. As previously stated, obtaining the data required to conduct a large-scale quantitative investigation on this headlines has just lately been possible. As far as one can tell, this study could be the first to conduct a large-scale quantitative analysis of the headlines from online newspapers in Tanzania. Despite the fact that this study's analysis was limited to English and Kiswahili speakers, we feel the findings are more broadly applicable to other languages and cultures.

1.6.2 Significance of the Study

The study on the communicative adequacy of Tanzanian online newspaper headlines is significant as it takes a linguistic perspective to explicate the nature of digital communication. It provided the newspaper writers with a good understanding of the theoretical and practical communicative functions of newspaper headlines in the digital environment, the effectiveness of the communicative tactics that the digital newspapers use to design their headlines and their impact on newspaper readership. This study was not only significant to linguists and journalists, but also to bloggers, website designers and marketers as these fields deal with communication. What made this study more significant is that it adopted the multidisciplinary approach to address the communicative adequacy of online newspaper headlines.

1.7 Scope and Limitations of the Study

This study had the scope and limitations.

1.7.1 Scope of the Study

The study was based on two online daily newspapers which were registered by TCRA in Tanzania. This research excluded printed newspapers and included the papers with online versions. The study was based on quality and standard newspapers and avoided tabloids and sensational newspapers that were famous for writing rumours. Moreover, the current research considered the major headlines appearing on front pages of the *The Citizen* and *Mwananchi* newspapers from July 2017 to June 2018. The selection of *Mwananchi* and *The Citizen* under this study considered the accessibility and reliability of readership web metrics of online newspapers. The study focused on clickbait features and thus ignored other aspects such as topic and genre that would equally affect the performance of the online newspaper headlines.

1.7.2 Limitations of the Study

The readability analysis of some features were limited to readability formulas that would work better with English language where English is spoken natively. Readability in this regard, some aspects of Kiswahili newspaper headlines which could not be addressed by the readability were tracked manually with Microsoft Office and Word Readability Checker. The explanation of the reasons for headline performance was based on the existing literature of newspaper headline discourse.

1.8 Theoretical Framework

The study on the communicative adequacy of Tanzanian online newspaper headlines was governed by the Relevance Theory of Dan Sperber and Deirdre Wilson of 1986 which was revised in 1995. The Relevance Theory is anchored on the relevance definition of two principles: “the cognitive principle that human cognition is geared to the maximisation of relevance, and the communicative principle that utterances create expectations of optimal relevance” (Sperber & Wilson 1995:250). This presumption of Relevance Theory was originally inspired by Paul Grice’s (1975) Cooperative Principle and its four maxims (quality, quantity, relevance and manner) and developed out of Grice’s ideas but has since become a pragmatic theory on its own (Grice, 1989). In principle, the theory has been an endeavour to have a comprehensive understanding of relevance, which is one of Grice’s maxims of the Cooperative Principle.

1.8.1 Major Tenets of Relevance Theory

As noted earlier, Sperber and Wilson’s theory (1985, 1986, 1995, 1998, Wilson & Sperber, 2002) is anchored in two principles of relevance: (1) the cognitive principle that human cognition is geared to the maximisation of relevance, and (2) the communicative principle that utterances create expectations of optimal relevance). The principles help

to understand how the writers' communicative intentions are achieved and readers understand the intended communication.

1.8.1.1 Cognitive Principle of Relevance

Sperber and Wilson (1995, p. 260) in the cognitive principle of relevance assert that "human cognition tends to be geared to the maximisation of relevance of an input." According to Sperber and Wilson (ibid), this cognitive principle restricts itself to coding and decoding whereby the addressor encodes his or her intended message into a signal, which later the audience decodes using an identical copy of the code. Therefore, Sperber and Wilson (1995) argue that an input is relevant to a person when and only when its processing in a given set of existing assumptions produces 'a positive cognitive effect' and this effect is a valuable difference to the people's representation of the world – a true conclusion. However, false deductions are cognitive effects that are not worth having, as they are not positive ones (Sperber and Wilson, 1995). In Wilson and Sperber (2002) standings, "...other things being equal, the greater the processing effort required, the less relevant the input will be" (p.252). Therefore, the cognitive effects and processing efforts are the ways of assessing the relevance of an input. The statement hereunder explains the positive cognitive effects and processing efforts.

- Other things being equal, the greater the positive cognitive effects achieved by processing an input, the greater the relevance of the input to the individual at that time. Other things being equal, the greater the processing effort expended, the lower the relevance of the input to the individual at that time (Wilson & Sperber, 2002, p.250).

1.8.1.2 Communicative Principle

The second or the inferential communication principle takes place against the cognitive background (Sperber & Wilson, 1995). Contrary to the cognitive principle, communicative principle is an inferential and pragmatic one (Wilson & Sperber, 2002). That is, the audience needs to recover the intended meaning from what the newspaper writer communicates from the context of communication, the mutual cognitive environment between the writer or speaker and reader/hearer. In other words, the headline designer writes just enough to communicate what they intend with expectations that the audience will fill out the details they did not overtly communicate in the digital newspaper headline. This argument considers the fact that human communication is very complex; and it requires context and other factors such as the author's intentions, the relationship between participants, and the shared knowledge to process an input.

In the communicative principle by Wilson and Sperber (2002), there is an ostensive-inferential communication that requires two intentions: The informative intention which is the intention to inform the audience of something and the communicative intention which is the intention to inform the audience. The latter is an overt ostensive stimulus by the communicator "designed to attract an audience's attention and focus it on the communicator's meaning." (p. 611). Interesting headlines may indeed aim to trigger the reader's optimal ratio between contextual effects and processing (Ifantidou, 2009).

The communicative intention is achieved when the audience perceives the informative intention of the communicator. The achievement of the informative intention itself rests on the trust that the hearers or readers have towards the source of the information. The ostensive-inferential communication employs the use of an ostensive stimulus, intended to draw the audience's attention and its main thrust is on the communicator's meaning.

If it happens headlines are less informative for the article presented, their role to attract attention may be more promising as a goal to fulfil (Ifantidou, 2009). Ifantidou, couched with Relevance Theory by Sperber and Wilson, 1986/95; Wilson and Sperber, 2004; Wilson and Carston, 2007; Sperber & Wilson, 2008), proposed that readers select texts, headlines in this context, directed by expectations of relevance and make interpretation of headlines by constructing occasion-specific ad hoc concepts and ad hoc contexts in an overall endeavour to optimally ration processing effort with cognitive effects. The art of headline production consists of formulating the headline, which meets the maximal number of the above conditions, thus providing the reader with the optimal ratio between contextual effect and processing effort.’’ (Dor, 2003, p.716).

1.8.2 Application of the Theory

The Relevance Theory by Sperber and Wilson (1985, 1986, 1995, 1998) and Wilson and Sperber (2002) is broad and rich in explaining the concepts in the field of linguistics and communication. Several studies have applied the Relevance Theory to explain the concept of communication. The communication and linguistic studies by Ifantidou(2009) and Dor (2003) for example, were grounded on the Relevance Theory of Sperber and Wilson, (1986/95); Wilson and Sperber, (2004); Wilson and Carston, (2007); Sperber and Wilson, (2008) The above-mentioned studies opened up the possibility of using the Theory to explain the communicative adequacy of the online headlines from *The Citizen* and *Mwananchi* from Tanzania.

The theory is applicable to the first objective that sought to examine the communicative functions of online newspaper headlines. In Relevance Theoretical framework, the two communicative functions of a headline can be interpreted through the two ostensive inferential communicative layers: the informative intention and communicative intention. In order to meet the first intention the headline designer should intend to

inform readers of something. By so doing, the designer performs the primary function of a newspaper headline by making it clear and informative enough to the readers. They show this communicative intention by making the headlines more informative as the strategy to achieve their communicative goals.

In cognitive principle of the relevance theory, an informative headline tends to reduce the readers' processing efforts and maximise the positive cognitive effects. In other words, the informative headlines are easy for readers to understand thus allowing them to skip reading the full story. The informative headlines in this study were defined as those that required the less processing efforts, clear, short, readable, unambiguous and not blurred.

In light of showing their communicative intention the online newspaper writers employ pragmatic features such as ambiguity and vague constructions, metaphors and other stylistic features to draw the attention of their readers. In this regard, the less informative, vague, ambiguous and metaphorical newspaper headlines are said to perform the second and the pragmatic function of a newspaper headline.

The second objective was based on the principles of designing appropriate newspaper headlines. According to the theory of relevancy, headlines are relevance optimisers. In this regard, the editorial teams were expected to optimise relevance of their headlines for their newspaper articles with optimal length, new information, presupposing unknown facts, the concepts and names of high news-value, clear and informative and interesting headlines. By so doing, the headline designers provide readers with the optimal ratio between contextual effect and processing effort, and direct readers to construct the optimal context for interpretation (Dor, 2003, p. 696).

The third objective was based on the clickbait features that the editorial teams used to design online headlines. This was grounded on Wilson and Sperber's (1986/1995) two layers ostensive inferential communication. The informative intention (the intention to inform an audience of something) and the communicative intention (the intention to inform the audience of one's informative intention). Based on the first layer of communication, it was assumed that when the writers created online newspaper headlines, they intend to convey news to their readers via headlines. They show their informative intention through the second layer of communication, by applying overt linguistic features in headlines, technically known as clickbaits to attract online newsreaders. Thus, clickbait features such as self-referencing, numbers, brevity, sentimental words, question headlines are inferential communication devices and strategies that could make headlines perform better on the internet and social platforms (Outbrain & Hubspot, 2015; Blom & Hansen, 2015). Thus, readers could only understand the headlines through ad hoc concept and ad hoc context or click to open the link containing the headline to read the full article.

The last objective which sought to determine the impact of clickbait features on newspaper readership was centred on Wilson and Sperber's (2002) relevance cognitive principle that human cognition is geared to the maximisation of relevance. This study sought to make a claim that newspaper headlines are relevance optimisers for they are intended to raise the relevance of their articles for their news consumers. The assumption on this objective was that clickbait features of online newspaper headlines would significantly affect the readers' processing effects. Newspaper headline writers aim to maximise the relevance of their headlines by making readers retrieve as many positive cognitive effects as possible and use low processing effort (Wilson & Sperber, 2004). In this regard, a headline which is informative and interesting to read

would require little processing efforts thus creating the positive cognitive effects by having more readers and the less interesting or less informative headline would need more processing effort thus hindering comprehension. In other words, the most interesting newspaper headlines would have more clicks than the least interesting headlines in the digital environment. Thus, the headline with more Click Through Rate(CTR) implied that the headline with a certain feature was ostensive enough to attract readers on the newspaper website.

1.9 Conclusion

The main goal of this research was to examine the communicative adequacy of Tanzanian online newspaper headlines. This chapter presented the background to the study, the communicative adequacy of newspaper headlines, the history of newspapers in Tanzania, the current trend of newspaper readership in Tanzania and the world at large, newspaper headline design, problem statement, objectives, hypothesis formulation, significance and justification of the study.

1.10 Definitions of Key Operational Terms

- **Communicative Adequacy:** A newspaper headline is communicatively adequate when it meets the expectations of its readers. In relevance theoretical framework, newspaper headlines are said to communicate adequately when they provide the readers with the optimal ratio between contextual effect and processing effort, and direct readers to construct the optimal context for interpretation.
- **Clickbaits:** An umbrella term, used to describe many different techniques, all with the common goal of attracting attention and invoking curiosity to get the reader to click on a headline. Often attributed to clickbait is the use of questions, numbers, forward referencing, sentimental words, and hyphens.

- **Signal words** are clickbait features such as “this,” “why” or “what” and are used for forward referencing in newspaper headline design.
- **Click Through Rate (CTR)** is the number of people that clicked on an item divided by the number of people that have seen that item. The CTR under this study was used as the metric to evaluate performance of *Mwananchi* and *The Citizen* newspaper headlines on the Internet.
- **Headline** is the title of a newspaper story, printed in large letters at the top of the story, especially on front page.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The literature review in this chapter sums up the current state of research on communicative adequacy of newspaper headlines in the digital environment. The first section of the chapter reviews the present literature on the communicative functions whereas the second one critically reviews the principles of designing online newspaper headlines. The third section presents literature on the clickbait features that journalists use to create headlines, and the last section touches on how the clickbait features affect the selection and readership of newspaper stories on the Internet.

2.2 The Communicative Functions of Newspaper Headlines

This section is an endeavour to critically review the basic question of the communicative functions of newspaper headlines. First, the section highlights the functional definition of a newspaper headline and in the following part; the critical empirical literature review is done on the communicative functions of newspaper headlines globally and locally.

2.2.1 Defining a Newspaper Headline and its Functions

Headlines have been defined in different ways by different scholars. Saxena (2006) defines a headline as the title of the news report set in big and bold letters. From the definition by Saxena (2006), it is evident that a newspaper should have a headline which is the abstract of the news article whose words are written in bold upper case at top of the newspaper. Scholars (Ifantidou, 2009; Dor, 2003; Van Dijk, 1988; Saxena, 2006) argue that such a definition falls under the primary function of a headline that introduces an article represented. Apart from introducing the story it represents, a newspaper

headline can be defined in terms of the pragmatic function where a headline seeks to attract readers by telling them interestingly what the story is about (Bell, 1991 & Nir, 1993). A newspaper headline is therefore defined as an obligatory element which has two basic functions—summarising the article introduced and drawing the attention of the readers. This study considered the above-mentioned functions as the determinants of a headline that adequately communicate in the digital setting. In this regard, a newspaper headline is defined as the relevance optimizer because it is designed to optimize the relevance of the news for the online readers. In this study, the function of a newspaper headline was based on both semantic and pragmatic oriented interpretations.

Writing a good newspaper headline which adequately communicates the intended information can be very challenging. For example, the headline designers have to select few words to express the main point of an article. In print media, the designers may consider the space available, choice of word and clarity (Culpeper et al., 2009). However, in the digital age, headline designers consider searchable words, SEO and clickbaits to lure readers to click and to read more on the internet (Morgan, 2009). Thus, this study examined how the newspaper designers optimised relevance of their newspapers to achieve their communicative goals in the digital environment.

A number of studies have shown that journalists view headlines as a riveting shortcut to the contents of newspapers (Saxena, 2006; Dor, 2003; Van Dijk, 1988) and perform two basic functions: (1) summarising and (2) drawing the attention of the readers to read the fulltext of the newspaper article. This suggests that a newspaper headline has the double functions.

Van Dijk (1988) in his discourse analytic framework stresses that news items in the media must have headings that recap the stories they represent. However, some studies (Dor, 2003; Bell, 1991; Nir, 1993) hold that headlines do not always recap the stories they represent. In other words, they give little or no attention to the primary function of a newspaper headline. Surprisingly, even the classical newspaper front-page headlines in 'quality newspapers', rarely recap the articles they introduce (Dor, 2009). As a result, their headlines just highlight one aspect obtained out of the story or provide a heading with a quotation to promote the materials that are out of the news article itself. Owing to this fact, Bell (1991) makes a distinction between a headline that acts as an abstract of the article it introduces and a headline with the focal point on a less important incident or aspect. Just like Bell (1991), Nir (1993) provides a dichotomy of newspaper headlines: (1) headlines that summarise the story and (2) headlines that promote one of the details of the story. Lindeman (1990), on the other hand, notices that sensational and tabloid newspaper headlines do not only just summarise articles they introduce, they also make use of poetic terms. Therefore, the same headline may perform different functions depending on the purpose, content and style of writing in a given newspaper. The following paragraphs highlight the literature on the functions of newspaper headlines.

Dor (2003) conducted a study in the newsroom of a single daily newspaper to propose a functional explanatory characterisation of newspaper headlines. Within the context of Sperber and Wilson's (1986) relevance theory, the study found out that headlines were meant to maximise the relevance of their content to their readers: Headlines offered readers with the ideal ratio of contextual effect to processing effort, and they directed readers to create the optimal context for interpretation. The findings demonstrated that the set of natural professional intuitions shared by news editors and copy editors governed the selection of function of headlines for specific stories. However, Dor

(2003) explained the communicative functions in print media. So, the current study's first objective sought to examine the communicative functions of newspaper headlines in the digital context.

Bucaria (2006) and Alagbe (2009) studies on ambiguity of print newspaper headlines and Marquez (1980) on tabloid newspapers revealed that newspaper headline designers exploited syntactic and lexical ambiguity and journalists distort the meaning by designing unclear and vague headlines. However, they failed to explain if ambiguous headlines would equally with online headlines. That's why the current study studied ambiguity as the secondary function of a newspaper headline in the digital setting.

Nwala's (2017) study on the meaning of Nigerian newspaper headlines found out that newspaper headline was a kind of in-house journalistic readership promotion strategy and readers could only interpret the newspaper headlines after reading the full article was read. However, Khamahani and Tahirov (2013) claim that in linguistics, ambiguity is a problem, but in newspaper headline discourse, ambiguity provided value as it was the device that was used by editorial teams to draw the attention of the newsreaders. This study therefore used the relevance Theory by Sperber and Wilson (1986) to understand whether ambiguity was strategy to attract readers or a bottleneck to understanding of a headline by online newspaper readers.

The above mentioned studies under this paragraph have shown that ambiguity is the pragmatic device with the second function of drawing the attention of newspapers. In relevance theoretical framework by Sperber and Wilson (1986), ambiguity seems to be an ostensive inferential communication device of drawing attention of readers. However, none of the above studies has had its focus on online newspaper headlines and they are limited to ambiguity only. The present study was based on the online

newspaper discourse, whereby ambiguity was defined as the clickbait feature that the digital journalists used to attract more clicks.

Pan (2012) used Grice's Cooperative Principle and its maxims to analyse English newspapers with the intention to show that vague language could effectively stand out the accuracy of the English newspapers. The study found out that despite flouting the maxims, the unclear and blurred language facilitated and strengthened the creative and imaginative effects of the news items, which newspaper journalists could not directly express in detailed information. Pan's study bears a resemblance to the current study as it touches on the communicative adequacy of newspaper items. Unlike Pan's (2012) study, the current study's first objective sought to employ the Relevance Theory by Sperber and Wilson (1986) to investigate the communicative functions of the Tanzanian online newspaper headlines.

In their study that aimed at learning to identify ambiguous and misleading news headlines, Wei and Wan (2017) extracted features based on the congruence between headlines and the newspaper articles they introduced. Then, the study used classifiers to identify incorrect headlines crawled from different sources for data analysis. Finally, the study observed that newspapers always employed attractive headlines, which lured online newspaper readers to click on the headline. Some of these headlines were imprecise, vague and fuzzy or confusing. As a result, the study concluded that identifying imprecise news headlines was an aspect that should have been studied in future. The study by Wei and Wan (ibid) bears some similarities with the current study as they both deal with the communicative aspects of online newspaper headlines. Unlike Wei and Wan (2017) research, which dealt with news accuracy, the current study used the Relevance Theory by Sperber and Wilson (1986) to examine the communicative functions of the Tanzanian online newspaper headlines.

Ifantidou (2009) used Sperber and Wilson (1986) Relevance Theory to conduct research that questioned the standards that journalists used to construct newspaper headlines. The study examined whether the proper headlines from the journalistic perspectives converged or diverged with the proper headlines from the news consumers' perspectives. Using 137 readers' responses to a selection of papers corpus in the US and UK, the study observed that readers of the headlines tended to ignore the standard norms of length and clarity of information. The readers preferred the headlines that drew their attention in terms of creative and imaginative styles and they did not consider the indeterminacy of semantic senses. Ifantidou (2009) study is in one way or another similar to the current study as they both sought to analyse the communicative functions of newspaper headlines. Unlike Ifantidou (ibid) that was based on print media, the current study sought to examine whether the pre-existing print newspaper headlines principles of creating headlines were still applicable to the contemporary online newspaper headlines. Moreover, unlike Ifantidou, this study sought to know which features journalists employed in designing headlines and their impact on newspaper readership.

Haiyan (2013) also attempted to explore the occurrence of metaphorisation in English newspaper headlines. Couched with Relevancy Theory by Sperber and Wilson (1985/6), the study pointed out that metaphor was the stimulus adopted by journalists to achieve optimal relevance in the ostensive communication and fulfil their writing purpose. Both, the present study and that of Haiyan (2013) sought to examine some of the communicative aspects of creative language in newspaper headlines. Unlike the study by Haiyan (2013), the present study sought to explore metaphors plus other pragmatic aspects that journalists used to construct online newspaper headlines. In other words, this study examined several linguistic variables that newspaper writers adopted in

designing headlines for online newspaper publications and their impact on news readership.

From the above literature, we have noted that the newspaper literature covers a wide range of theoretical and empirical subject matters, which are the grammar of headlines, effects of headlines on news comprehension, and recall. The studies showed that the newspaper headlines recap the stories they introduce and use a number of linguistic devices to attract readers. Nevertheless, the literatures that dealt with the communicative functions of newspaper headlines in the digital environment are rather sparse. This is supported by Dor (2003) and Kuiken et al. (2007) argument that the literature of newspaper discourses hardly explicates the nature of the communicative act that a headline performs. This study, therefore, sought to explicate the communicative functions that Tanzanian newspaper headlines perform in the digital environment.

2.3 Principles of Appropriate Newspaper Headline Design

This section critically reviews the principles of a newspaper headline. According to Dor (2003), there are principles of print newspaper headlines. Using the Relevance Theory by Sperber and Wilson (1986), Dor (2003) conducted an empirical study in one of the news desk newspaper to suggest the functional characteristics of appropriate newspaper headlines. The study by Dor (2003) found out that the design of an appropriate newspaper headline required a good understanding of the state of knowledge of newsreaders, cognitive styles, expectations and beliefs. The study also revealed that skilled news consumers spent most of their time scanning the newspaper headlines rather than reading the stories. In the end, the study presented ten properties of the appropriate headlines. The study concluded by submitting a list of ten (10) principles of effective headlines as an accurate rendition of the set of implicit intuitions shared by experienced news editors. However, the study cautioned that appropriate headlines

could not fit all of the principles at the same time and the art of headline creation involved creating a headline that would fulfill the greatest number of the parameters listed above, thereby giving the readers with the best balance of contextual effects and processing efforts (Sperber & Wilson, 1986; Dor, 2003). It was this fact that made the current study examined the extent to which *Mwananchi* and *The Citizen* newspaper headlines optimized relevance of their news with the principles of appropriate newspaper headlines suggested by Dor (2003). Although Dor used the journalistic professional intuitions acquired from her field, the study failed to seriously address the optimization of appropriate newspaper headline principles in the digital environment. The current study takes linguistic principles to define the communicative functions of newspaper headline in the digital environment. Since the principles were set for print newspaper headlines, the current research sought to test the applicability of the principles in the digital setting. The principles adopted from Dor (2003) were:

[1] be as short as possible; [2] be clear, easy to understand, and unambiguous [3] be interesting; [4] contain new information; [5] not presuppose information unknown to the readers; [6] include names and concepts with high 'news value' for the readers; [7] not contain names and concepts with low 'news value' for the readers; [8] 'connect' the story to previously known facts and events; [9] 'connect the story' to prior expectations and assumptions; [10] 'frame' the story in an appropriate fashion (Dor, 2003:708–716).

When employing appropriate headline principles list, a number of questions arise (Ifantidou, 2009). Is there a single unifying principle that works better in the digital setting? Property [3] for example appears to be comprehensive and central enough that the rest either explain it, [4], [6], or must be broken to preserve it, for example [2], [5]. Should 'interesting' headlines, on the other hand, be constructed to meet all principles?

Is there a structure for prioritizing recommended principles, if so? Is it, for example, thought that 'short length' [1] and 'clarity' [2] are more significant than '(raising) interest'? So, there was a need to find out the appropriate principles that journalists would use to design online headlines as the above-mentioned were designed for print media.

Ifantidou (2009) conducted a study to address the topic of newspaper headline interpretation. The main questions investigated were whether 'appropriate headlines' from the writer's perspective converged with 'effective headlines' from the reader's perspective, and whether there was a pragmatic heuristic that can explain the way headlines are selected and interpreted by newspaper readers in psychologically plausible terms. Based on the reactions of 137 readers to a selection of UK/US newspaper headlines and a corpus of 1310 reader-selected headlines, it was demonstrated that people who read headlines disregarded classic norms such as length, clarity, and information as long as headlines riveted their attention in terms of creative style regardless of underdetermined semantic meaning. Once again, the study by Ifantidou (2009) was based on print newspapers.

2.4 Clickbaits Employed by Editorial Teams to Design Online Newspaper Headlines

On the Internet, news producers fight much more intensely for readers' attention (Chen, Conroy & Rubin, 2015). As more people read news on social media platforms such as Facebook and Twitter (Mitchell & Page, 2015), the need for a good headline that attracts the most clicks grows. According to Kuiken et al. (2017), this has frequently led to an unclear headline that piques readers' attention and is then utilised to attract them to click on the headline. This is technically known as a clickbait. The third objective of this study examined clickbait features that journalists used to attract online news

consumers to click on the newspaper headlines. In relevance theoretical framework under this study, clickbaits are ostensive inferential communication devices that editorial teams use to show their informative intentions.

There is no single, succinct definition of a clickbait in the literature. On one hand, many of the strategies commonly utilized for clickbait, on the other hand, they have been defined and researched. As a result, clickbait may be best viewed as an umbrella phrase, used to encompass a variety of approaches, all with the common purpose of capturing attention and instilling curiosity in order to entice the reader to click on a headline (Kuiken et al., 2017).

Clickbait is frequently associated with simplification, spectacularization, negativity, and provocative content (Blom & Hansen 2015; Rowe, 2011; Tenenboim & Cohen, 2015). Forward reference (Blom & Hansen, 2015) is another stylistic trait found in many clickbaits headlines. Forward referencing, signal words such as "why," "this," or "what" are frequently utilized. Clickbait headlines have also been connected to the usage of questions (Lai & Farbroth, 2014; Tenenboim & Cohen, 2015) and numbers (Safran, 2013). The second objective under this study sought to identify clickbaits that editorial teams of *Mwananchi* and *The Citizen* used to create headlines in the digital environment. Since most clickbaits have been studied in other languages and cultures like English, the Kiswahili clickbaits could provide a good understanding of the Swahili clickbaits in Tanzanian culture.

The previous studies showed the hard to trace readership in print media. In this study it was significantly easier to trace user involvement and activity on the internet than it is with physical newspapers (Atterer, Wnuk, & Schmidt, 2006). The metrics play an important role in online journalism since they have become determining elements in

news production. Decisions are based less on intuition and more on actual data (Anderson, 2011; MacGregor 2007). Lee and Lewis (2012) discovered that these statistics had a statistically significant influence on the decisions that editors make. The fourth objective under this study was to study clickbait features and their impact on *Mwananchi* and *The Citizen* online newspaper readership.

Lai and Farbroth (2014) conducted two field experiments to investigate the effect of using question headlines to enhance readership in computer-mediated communication. The findings of the first experiment revealed that in all of the cases observed, regardless of the topic communicated, question headlines generated higher interest in the target message compared to non-question (control) headlines. The second experiment indicated that question headlines with self-referencing cues were particularly effective and generated higher readership than question headlines without self-referencing cues and rhetorical question headlines. The problem with Lai and Farbroth (ibid) study is that it relied much on question headlines and ignored other aspects of effective online headlines. Unlike Lai and Farbroth (2014), the current study sought to incorporate a variety of features such as signal words, sentimental words, question headlines and self-referencing and readability properties to determine their effectiveness on newspaper readership in the digital context.

Chen, Conroy, and Rubin (2015) examined the potential approaches for automatically detecting clickbaits as a form of deception in newspaper headlines. The study surveyed the methods of measuring both textual and non-textual click-baiting clues and observed that a hybrid approach yielded the best results. In addition, the study discovered that the online news headlines, which yielded the best results, were characterised with tabloid journalism where headlines designers exaggerated, sensationalised, scared, and produced misleading headlines. The present study sought to examine other newspaper

headlines features which were not covered by Chen et al. (2015) to achieve their communicative goals in the digital setting.

Some studies have shown that commercialization and tabloidization have led to forward-reference in online news headlines (Blom & Hansen, 2015; Chen, Conroy, & Rubin, 2015). Blom and Hansen (2015) conducted a study that mapped the usage of forward-referring headlines in online news journalism by analysing 100,000 headlines from 10 different Danish news websites. The study findings indicated that commercialization and tabloidization appeared to result in regular use of forward-reference in Danish virtual news headlines. Besides, the study contributed to Reference Theory “by expanding previous models on phoricity to include multimodal references on the web” (Blom & Hansen, 2015, p. 87). Forward-reference appeared to be the common clickbait feature in news headlines that occurred in cataphoric and discourse deictic expressions. Like Blom and Hansen (ibid), the current study sought to examine clickbait features that newspaper writers employed to design headlines for the digital setting. However, unlike Blom and Hansen (ibid) who focused on forward referencing in headlines as the clickbait feature, the present research sought to go beyond by determining self-referencing and other clickbait features that had never been addressed.

Outbrain and Hubspot (2015) study on titles and headlines analysed over 3.3 million paid English language links and revealed that the headlines with bracketed clarifications performed better than those without. Besides, the researchers observed that headlines with a colon or hyphen performed better than the ones without, presumably because the punctuation mark indicates a subtitle that includes more information. The study by Outbrain and Hubspot (ibid) dealt with blogs titles and limited itself to brackets, colons and hyphens as headline clickbait features. Like Outbrain and Hubspot (2015), the current study sought to examine hyphens, colons, and their impact on news readership.

Apart from brackets, colons and hyphens, the current study sought to examine more online headline clickbait features (sentimental words, complex words, signal words, readability) that the previous study did not address.

Like other previous researchers, Krumholz (2016) researched on how to write effective headlines with Co-schedule, The Online Headline Analyser and observed that certain type of content such as “how-to” and “list posts” consistently outperformed others. The study concluded that ‘wh-’ heading constructions (how, why, who, when) performed well in digital journalism. The above-mentioned clickbait features initiated the process or action of clicking on the headline. The explanation given for their performance was that they were effective for organic traffic because most of the internet users would start their search terms with “how to” when looking for answers to their questions in search engines. In addition, the study by Krumholz (2016) revealed that the headlines with the second personal pronouns such as “you” or “your” performed well and were more preferred because the person address added a personal touch and made the readers feel more directly involved with the content of the headline. Just like Krumholz (2016), the present study sought to examine the above-mentioned features and their impact on news readership. Unlike Krumholz (2016), the present study pursued to determine more clickbait features (not addressed before) with the focus on Tanzanian online newspaper headlines and test through hypothesis the existing relationship between the clickbait features and readership.

Moore and Rayson (2017) analysed over 100 million headlines on the Internet to measure their popularity based on the average number of engagement on social platforms. The study revealed that the linking phrase “will make you” and “this is what” received a substantial amount of engagement and popularity. Moreover, the optimum length of a headline appeared to be the factor for designing a headline. The optimum

length of a newspaper headline was also among the features that the current study sought to address because it was still controversial in the literature of newspaper headlines. Online media professionals such as Loranger and Nielsen (2017), and Dor (2003) had maintained that the best headlines for news sites should be very short. For example, Loranger and Nielsen (2017) argued for as short as 5 words or less than 40 characters. Lee (2015) on the other hand proposed that a blog post headline of 6 words or less than 50 characters was ideal. By contrast, the study from Outbrain (2017) which surveyed 100,000 headlines posted online had proposed 16 to 18 words or 80 to 110 characters was ideal for driving engagement. The view on how long a newspaper headline should be is still disputed in the field of journalism. The current study, therefore, sought to clear this controversy by examining the communicative adequacy of headline length to determine the ideal headline post for online newspapers. Apart from addressing online newspaper headline length, the current study sought to examine other headline features such as, emotional words, and signal words, and their impact on news readership on the internet.

A further study by Buzzsumo (2017) analysed the number of words in headlines from more than 100 million headlines of articles that gained the most Facebook engagements. The study revealed that on average, headlines between 12 and 18 words produced the highest level of Facebook engagement. The study also showed that adjective headlines performed well as they had the function of modifying nouns. In headlines, adjectives normally put emphasis on the point, added emotional weight, and increased the power of the headline. As it was for Buzzsumo (2017), the current study sought to analyse the number of words per headline and broadly analyse the communicative adequacy of several newspaper headline features such as characters, complex words, emotional words, self-referencing and number of words per online newspaper headline that were

not analysed in the previous study. Unlike Buzzsumo's (2017) study, which focused on the numbers of words in English Facebook posts, the current research sought to fill out existing gaps by analysing a wide range of features of an online newspaper headline from both English and Swahili newspapers.

Lastly, Kuiken, et al. (2017) examined the impact of newspaper headlines on click-through rates (CTR) in print and online newsletter headlines. The study employed documented and stylistic features that were in most cases associated with clickbait, which many media houses used to create headlines for newsletters. The study used the data containing original print headlines, rewritten online headlines, and the click-through rate of the rewritten headline from a Newsletter "KIOSK BLENDLE" in the UK. The intention was to determine if the clickbait features in headlines achieved what they were supposed to achieve. The study observed that *Blendle Newsletter* editors frequently employed clickbait features in re-written headlines and the features used had a significant arithmetical impact on the number of clicks on the headlines. The present study adopted most of the features that Kuiken et al. (2017) used in his study. However, the current study differs from that of Kuiken et al. (ibid) in that it sought to analyse *Mwananchi* and *The Citizen* whereas the previous study sought to analyse the re-written *Blendle Newsletter* headlines in the digital environment. Secondly, the study by Kuiken et al (2017) used experimental (re-written headlines) and control groups (print headlines) to study the Newsletter posts in the UK. Unlike Kuiken et al. (2017), the third objective of the current study was to examine the extent to which the editorial teams of *The Citizen* and *Mwananchi* of Tanzania employed clickbait to design their headlines.

2.5 Impact of Newspaper Headline Features on News Selection and Readership

According to *Longman Online Dictionary*, readership is defined as the number of all persons who read a newspaper or magazine regularly. Although the notion of readership is hard to define, it is commonly connected to newspapers, magazines and all kinds of periodicals (Layefa, Johnson & Taiwo, 2016). In this study, newspaper readership referred to the number of individuals who read a particular newspaper regularly. Readership under this study was defined as the number of people who click or view the newspaper headline. Newspaper editors consider headlines that can have a wide readership. As a result, to widen the scope of their news; online journalists make use of clickbaits which are emotionally rich to draw the attention of their readers. Headline clickbait features affect news comprehension and readership (Burgoon & Burgoon, 1980; DuBay, 2004; Layefa, Johnson & Taiwo, 2016). The review was based on the assumption that headline features influence newspaper selection, and readership. Therefore, this part highlights the relationship between a newspaper design feature and its readership. In addition, it reviews the literature by highlighting different studies that have tried to research on how headline-designing strategies affect news selection and readership on the internet.

Some studies have shown that there are different determinants of newspaper selection and readership. Burgoon and Burgoon (1980) conducted a study on predictors of newspaper readership and revealed that age and income were significant predictors of newspaper readership. That is, readers with more income read newspaper often and readership tend to increase with age. Both the present study and that of Burgoon and Burgoon (1980) sought to examine what determines the readership of newspapers. However, unlike Burgoon and Burgoon (1980) who focused on social and functional aspects of demographic profiles of newspaper readers (age and income) as determinants

of readership, the present study took a different approach by examining the structural and linguistic aspects (number of words, sentimental words) of online newspaper headlines that also affect readership. Unlike Burgoon and Burgoon who used a survey to study readership for newspapers, this study focused on the webmetrics that were measured by CTR.

The findings by Burgoon and Burgoon (1980) motivated the current study to examine the features that affect the performance of online newspaper headlines in Tanzania. It should be noted that the previous study by Burgoon was based on a 1977 ANPA News Research Centre review of 469 studies. The study revealed that 37% of researchers on newspaper readership had their focus on social aspects [age and income] whereas 36% dealt with functional aspects such as “how readers use a newspaper, what gratification it fulfils, how it fits in their life styles, what attitudes, and psychological attributes might underlie their behaviour” (p.589). In other words, few studies on newspaper readership have addressed the structural aspects of newspaper headlines. In light of this, the third objective under the current study sought to address the structural aspects of newspaper headline (headline features such as content, lexical choice, question headlines, sentimental words, self referencing) and functional that seemed to determine readership in the digital environment.

Apart from Burgoon and Burgoon (1980), Chan and Goldthorpe (2007) used the multinomial logistic regression model to determine the relationship between social statuses and newspaper readership. The study observed that there was a close and systematic relationship between readers’ statuses and newspaper readership. It was also revealed that statuses of newspaper readers had a significant impact on news readership. Even though the two studies share the aspect of readership, the current study sought to examine the clickbait features that editorial teams used and their impact on

readership diverge. The current study was quite different from Burgoon and Burgoon (1980) as it sought to test the relationship between clickbait features and readership quantitatively with different regression models.

Schramm (1947) interviewed 600 people to measure newspaper readership in the US. In the study, Schramm observed that the content characteristics of a paper determined the readership of a newspaper. In addition, the above mentioned study observed that other structural factors such as format, typography, headlines, page placement, topic, and geographical significance seemed to influence readership. Unlike Schramm (1947) who used the interview to determine readership of print newspapers, the current study examined the communicative adequacy of the online newspaper headlines by measuring headline readership through web metrics from the *Mwananchi* and *The Citizen* websites. The newspaper webmetrics were used as the new approach for online audience to determine the number of people who either visited or clicked on the newspaper page link to read the full version of the article.

Lagun and Lagun (2016) conducted a study with the aim of understanding user attention and engagement in online news reading and suggested a set of user engagement classes along with new user engagement metrics to mirror correctly the user experience with the content. Lagun and Lagun's (2016) study identified four metrics to capture different levels of engagement, ranging from bounce, shallow, deep to complete, providing clear and interpretable characterizations of user engagement with online news. Lagun and Lagun's study recommends the used webmetrics as they were relatively easier to envisage from the content of the story. Also, Lagun and Lalmas claimed that although users often remained in the initial part of a news story, some users found the news article interesting enough to spend more time at the last part of the news story, and even to interact with the comments. Thus, time was an important tool for measuring the level

of online engagement. Lagun and Lagun (2016) sought to examine news readership by considering time spent on the news, the current study took a different approach to capture the metrics of newspaper readership by considering just the number of readers who viewed the page and clicked to open the news. Unlike Lagun and Lagun, the study employed the Click Through Rate (CTR) to examine the impact of a newspaper feature on newspaper headline readership.

Hoskins (1973) describes readability as the “ease of reading, which in turn is determined by several elements, including typography, readers’ interest, and writing style” (p.360). If a newspaper text is readable, it becomes interesting and enjoyable to read, and easy to comprehend. Klare (1963) on the other hand describes readability as the ease of understanding or comprehending a text due to the style of writing. The description has its focus on the style of writing as the single aspect of readability and leaves out issues such as coherence, organisation, and content. Hargis et al. (1998) state that readability is attributed to clarity and ease of reading. McLaughlin (1969) however, describes readability as the degree to which a group of people find a certain reading text compelling and comprehensible. This description emphasises the interface between the text and the readers’ characteristics such as motivation, skills of reading, and background knowledge (Dubay, 2004). The concept of readability was based on the most comprehensive definition by Dale and Chall’s (1949) that readability is:

The sum (including all the interactions) of all those elements within a given piece of printed material that affect the success a group of readers have with it. The success is the extent to which they understand it, read it at an optimal speed, and find it interesting (Dalle & Chall, 1949, p. 23).

The study also based on Withington (2015) argument that readability is an imperative aspect of the formula for developing strong and comprehensible news writing as it plays the most important role in readers' perception of the newspaper articles and it can even shape the way future news is written. This would help to understand how newspaper headlines readability would determine news comprehension. Since readability is strongly related to reading comprehension (DuBay, 2004), it was valuable to spend time to understand the nuances of readability before going to the studies that were done previously. The subsequent section gives a short account of readability formulas from the 1920s to the present days.

Gray and Leary (1935) in the book *What Makes a Book Readable* tried to learn the features that would make texts readable for adults with limited reading skills. Gray and Leary collected a sample of around 100 words from magazines, books, and newspapers, which were widely read by grown-up people. Their study sought to establish the ease or difficulty of the words through a reading comprehension test prepared and administered to 800 adults to test their ability to get the main idea of the text and observed that the content, style, format and features of an organization significantly affected readability of the passages. However, the study could not statistically measure content, format, or organization of texts. Unlike Gray and Leary (1935) who used a qualitative approach to study readability of passages, the current study sought to use the quantitative approach to test the readability of online newspaper headlines.

Murphy (1947) used a split run with an article written at the 9th-grade level on one run and on at the 6th-grade level on the other run. The study established that increasing readability increased readership of the article by 18%. In the second experiment, the study did not change anything except for readability, illustrations, keeping headlines, subject matter and the position of the same. The study observed that readership

increased by 45% for a nylon article and 60% for a corn article. Therefore, there was a close relationship between readership and readability. Unlike Murphy (1947) study of articles readership, the present study sought to examine the communicative adequacy of online newspaper headlines. The fourth objective under the current study sought to examine the readability features plus other clickbait features and their impact on news readership in the digital environment.

Abubakari and Ameer (2011) examined the readability of corporate social responsibility (CSR) communication for a sample of registered firms in Malaysia. Using the readability formula, the study found that the extent of syntactic complexity made it hard to understand the CSR communication of the registered corporations for it varied from very difficult reading to fairly difficult reading levels. The study observed that there was a relationship between the readability of CSR communication and firms' performance. The findings suggest that the management of companies, which are poorly performing, deliberately opted for a difficult language in CSR communication. Unlike Abubakar and Ameer's (2011) study that dealt with the readability of corporate social responsibility communication, the current study sought to analyse the readability of online newspaper headlines and explain how it could affect readership in the digital setting. This would help to understand whether the headlines published were on the accepted reading levels.

The majority of research in the field of journalism has also found a substantial relationship between reader persistence and readability (DuBay, 2004). Withington (2015) conducted a study on the readability of newspapers in Arkansas to compare it with other regional papers in the US. The study employed Coleman-Liau Index, Gunning Fog Index, Flesch-Kincaid Reading Ease, the SMOG Index and the New Dale-Chall Readability Formula to calculate the readability of the selected newspapers. The study found that Arkansas newspapers contained articles that were under the average

reading level of newspapers around other parts of the nation. On the other hand, the readability of newspapers was still above the reading level of the public who read at a high school reading level or lower. The current study converges with Withington (2015) study for it sought to test the readability levels of newspaper headline discourse. Contrary to Withington (2015), this study sought to examine whether the digital newspapers of *Mwananchi* and *The Citizen* headlines readability scores and grade levels were above or below the average reading levels of their targeted readers. This would help to understand whether the language of newspaper headlines matched with their readers' levels or not.

Wasike (2018) examined the relationship between readability, story type, literacy, and demographics concerning the local newspaper content complexity. Wasike's study analysed literacy data of the US Census Bureau's 2014 American Community Survey and readability data from a content analysis of a random sample of 400-newspaper articles of county level in Texas. Couched by the Flesch–Kincaid grade reading level and the Flesch reading ease scale, the study revealed that the newspaper articles were at 11.63-grade level and a 47.78 ease level. The findings suggested that the news articles were at the level marginally comprehensible to many potential readers. Moreover, business news articles were at a 12.32-grade level making it even less understandable to a good number of prospective newspaper readers. Hard news was at 11.98 grade level, which was the second most difficult story category. Generally, people aged 65 and above had the lowermost comprehension threshold, despite being readers of newspapers on an everyday basis. Just like Wasike (2018), the present study adopted the same readability formulas to examine the reading levels of newspapers. However, Waskike (2018) who focused on the whole newspaper articles, the present study sought to examine the readability of newspaper headlines and their impact on news readership.

2.6 Conclusion

This chapter reviewed literature pertaining to the communicative adequacy of newspaper headlines. The literature reviewed were about the communicative functions of newspaper headlines, the communicative principles of designing appropriate headlines, the clickbaits features and their impact on newspaper readership. From the literature above, it was depicted that none of the above literature managed to explicate the communicative adequacy of headlines from *Mwananchi* and *The Citizen* in Tanzania and most literature were based on print newspapers. So, this study was the first to address the concept of communicative adequacy of Kiswahili and English newspaper headlines in Tanzania.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter discusses the research design, study area, population, sample size and sampling procedures, data collection tools, piloting, data analysis and presentation. Finally, the chapter describes the ethical issues guiding the current research.

3.2 Research Design

This study used both the mixed methods research (MMR) and analytical cross-sectional design. In general, MMR entails collecting, analysing, and interpreting quantitative and qualitative data in a single study or a series of studies that investigate the same underlying issue (Onwuegbuzie, 2008). According to Andrew and Halcomb (2006), the primary purpose of MMR is to obtain convergent findings where the study uses different strengths for each method to investigate the same phenomenon and compare the results. The other underpinning philosophy of the MMR is that it makes a study comprehensive in terms of coverage and it connects methods so that one method contributes to the performance of another (complementarism). In this regard, the study used MMR to compare quantitative and qualitative findings from *The Citizen* and *Mwananchi* online headlines to widen the scope of coverage of newspaper and connect the findings to have a conclusion. In general, the goal of mixed methods research is not just to replace either methods of research, but to extract the benefits and overcome the limitations of both methodologies within one study (Andrew & Halcomb, 2006). According to Jogulu and Pansiri (2011), the underpinning philosophy of mixed methods research is that it mixes paradigms, allowing exploration from both the inductive and deductive perspectives, and thus allowing researchers to combine theory production and hypothesis testing within a single study.

Apart from using the mixed approach, the study also used the analytical cross-sectional research design. An analytical cross-sectional study is a type of quantitative, non-experimental research design. Such kinds of studies seek to "gather data from a group of subjects at only one point in time" (Schmidt & Brown, 2019, p. 206). Since this study was an attempt to analyse online newspaper headlines and compare each headline variables with readership, it was therefore considered as the best design to apply under this study. Analytical cross-sectional research design is a combination of two research designs (analytical and cross-sectional). The cross-sectional design explains what is taking place at a particular period in time. This study was therefore cross-sectional in nature as it was designed to analyse the online newspaper headline data that had been collected online from the newspaper publications at a particular point of time. The analytical research design involves critical thinking skills and the evaluation of facts and information that relate to the research and endeavours to quantify the relationship between two variables. The analytical-cross-sectional research design was also important in collecting and compiling facts that are relevant to the study.

3.3 Study Area

This study was conducted in Tanzania where *Mwananchi* and *The Citizen* newspapers are published. By 2018, the figures show that Tanzania had more than 109 registered print and electronic newspapers (Kolumbia, 2017). According to TCRA report on Internet usage, the Internet users in Tanzania rose by 16 percent by the end of 2017 to 23 million; 82 percent going online via smartphones. The other reason for choosing Tanzania as the area of study was due to Kiswahili Newspapers. In Tanzania, there are over a hundred languages spoken but Kiswahili is spoken by 90% of the nation. The growing popularity of the language inside and outside Tanzania has been associated with its importance as the lingua franca in East and Central Africa. In this regard, there

was a need to research on the communicative adequacy of the Tanzanian online Swahili newspaper headlines because the results would be more generally applicable to other Bantu languages in Africa.

3.4 Study Population, Sampling Procedures and Sample Size

This section covers the study population, sampling procedures and sample size.

3.4.1 Population

In this study there were two types of population involved. First, the study population involved 10 online newspapers, which had already been registered by Tanzania Commission of Regulatory Authority (TCRA) by 21st June 2018. Secondly, the human population involved 31,000 online newspaper readers.

Regarding online newspapers, by 2018, TCRA, through its website, had issued the online content services (Web/Blog) licences to 10 Newspaper websites and blog owners (TCRA, 2018). Out of the ten (10) online content service providers, IPP MediaGroup and Mwananchi Communications Limited (MCL), which is under Nation Media Group of Kenya, were the only registered media companies that had been licensed to publish online content. IPP Media Group Company was the publisher of *Nipashe*, *The Guardian*, *Alasiri Online*, and *Financial Times* newspapers whereas Mwananchi Communications brand was the publisher of *Mwananchi*, *Mwanaspoti*, and *The Citizen* newspapers. However, by 2018 there were other unregistered online newspaper editions such as the pro-government *Daily News* and *Habari Leo* which were published by *Daily News* Media Group, *Express Online*, and the weekly newspaper published by Media Holdings (T) Ltd 1997, and *Mtanzania Online* by New Habari (Electronic Newspapers of Africa by Country, Columbia University Library).

As we noted earlier, the second category of population involved 31,000 online newspaper readers of the respective newspapers. Since the population of the online newspaper readers was hard to determine, the study considered the webmetrics of *Mwananchi* and *The Citizen* newspapers that showed that online newspapers had 31,000 readers worldwide on the average. So, this was taken as the population that would be used for delivering the online newspaper readership.

3.4.2 Sampling Procedures

Sampling procedures entail picking individuals or objects from a population such that a given group contains elements with representative characteristics of the whole group (Orodho & Kombo, 2012). This study, therefore, employed purposive sampling to select newspapers and systematic random sampling procedures to select online newspaper headlines. The study purposively selected *Mwananchi* and *The Citizen* online dailies from the. The selection of the two newspapers considered language, quality, content coverage and popularity of the newspapers. English and Swahili digital papers were included in the sample for they enjoyed a wide readership in Tanzania. Concerning the quality of the news, and popularity, the two daily newspapers were chosen because of being reputable, popular and they enjoyed mass readership in Tanzania (MCT, 2010). The other very important reason for this sampling was that the above-mentioned online papers were the only publications that were licensed to operate online in Tanzania. The study left out *Mwanaspoti*, which is the third newspaper under Mwananchi Communication Limited because of its limited coverage of sports news only.

The study employed the systematic random sampling of 259 newspaper headlines out of 730 headlines, which was equivalent to 129.5 headlines for each newspaper published from July 2017 to June 2018. The study extracted headlines from the sampled newspapers websites and then put them into a Computer-Based Systematic Random-

Sampling program. The study expected 259 newspaper headlines to be automatically sampled from the sampling frame of 730 headlines. Also, there was a convenient sampling for online newspaper readers as it could be hard to access them around the world.

Thirdly, there was a convenient sampling of 31,000 online newspaper readers who would fill in the questionnaires. Normally, convenient sampling involves using respondents who are convenient to the researcher. So, the online questionnaires were prepared and shared via social platforms for respondents who were online newspaper readers. Only online newspapers were required to respond. The researcher kept on tracking the responses until the required sample size of 100 respondents was reached.

3.4.3 Sample Size

The study obtained the sample size of 259 out of 730 front page online headlines which had been published by *The Citizen* and *Mwananchi* from July 2017 to June 2018. The selection of sample size for headlines was based on the sample size formula suggested by Yamane (1967). The selection of the formula considered the fact by Yamane (1967: 886) that it could work well with a finite or known population. The formula used for calculating the population sample size is placed hereunder.

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

$$n = 730 / (1 + 730(0.5)^2)$$

$$n = 730 / (1 + 730(0.0025))$$

$$n = 730 / (1 + 1.825)$$

$$n = 730 / (2.825)$$

$$n = 259 \sim$$

Where: n = sample size, N = population (newspapers), $e = (0.5)$ sampling error (level of accuracy)

Population in this formula was the number of the newspapers' published online in 365 days, which would be equivalent to 730 headlines. The confidence level of 95% was chosen and it was equivalent to 0.5 significance level. The 95% level of accuracy in sampling is always adequate to make the optimal sample size. The sampled size suggested by the formula was 259 headlines, that is, 128.5 (~130) headlines for each newspaper. The sample size involved two Tanzanian online newspapers of *Mwananchi* and *The Citizen* that are Swahili and English newspapers respectively. MCL Digital newspapers had their headquarters in Dar es Salaam, Tanzania. Table 3.1 presents the data for digital papers involved in this research.

Table 3.1

Number of Digital Newspaper Headlines

	Frequency Percent		Valid Percent	Cumulative Percent
<i>Mwananchi</i>	129	49.8	49.8	49.8
<i>The Citizen</i>	130	50.2	50.2	100.0
Total	259	100.0	100.0	

Table 3.1 shows that 50.2% of all sampled newspapers came from *The Citizen* and 49.8% came from *Mwananchi* from July 2017 to June 2018. This sample suggests that the two digital papers had almost equal representation in the study. Thus, the study results were enough to conclude the findings on the communicative adequacy of Tanzanian online newspaper headlines.

Regarding Newspapers' year of publication, the study considered the two dailies publications from July 2017 to June 2018. This duration was chosen because the

headlines published were likely to have been expired to most of readers because very few people could click on the old news. This was equivalent to all newspapers published in one year. Figure 3.1 below indicates that 44.40% of all sampled newspapers were published in 2018 whereas 55.60% of the newspapers were published in 2017. This implies that the year 2018 had a slightly higher representation of newspaper headlines. However, this did not affect the results of this research. Figure 3.1 below shows the sample of online newspapers' publications considered under this study.

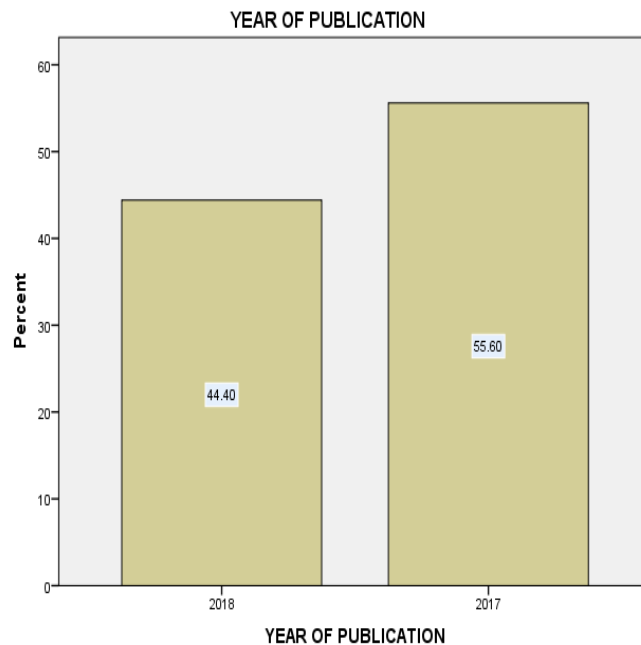


Figure 3.1: *Online Newspaper's Year of Publication*

To have equal representation, the sample for each newspaper headline publication in a month was important to this study. The study involved a total of twelve months (12) newspaper headline publications from July 2017 to June 2018. Table 3.2 presents the number of newspapers sampled per month.

Table 3.2

Month of Publication

Month	Frequency	Percent	Valid Percent	Cumulative Percent
January	13	5.0	5.0	5.0
February	15	5.8	5.8	10.8
March	11	4.2	4.2	15.1
April	21	8.1	8.1	23.2
May	30	11.6	11.6	34.7
June	24	9.3	9.3	44.0
July	13	5.0	5.0	49.0
August	23	8.9	8.9	57.9
September	50	19.3	19.3	77.2
October	19	7.3	7.3	84.6
November	27	10.4	10.4	95.0
December	13	5.0	5.0	100.0
Total	259	100.0	100.0	

Source: Field data (2019)

September had the highest representation of the sampled newspapers at 19.3%, followed by May with 11.6%, November with (10.4%), June (9.3%), August (8.9%), April (8.1%), October (7.3%), February (5.8%), July (5.0%), December (5.0%), January (5.0%) and March (4.2%). The researcher sampled newspaper headlines for all months in the frame (from July 2017 to June 2018). March had the smallest representation and September had the highest newspaper representation. The random sampling seems to be the cause of this varied representation. Despite these variations, the analysis represented all the papers published in all months. The sample size for newspaper readers was based on the average readership webmetrics obtained from the newspaper websites.

Lastly, the population sample size of newspaper readers was based on webmetrics of readers of *Mwananchi* and *The Citizen*. In a pilot study of people who had read both newspapers by 2018 June was 31,000 people. The sample size in this case was based on the published table by Yamane (1967) sample size determination. Thus, the sample size of 100 newspaper readers, which was at 90 percent confidence level, was enough to

validate the results. The newspaper readers had to respond to the questions posted online and share in social media for two weeks.

Table 3.3

Published Sample Size Table

Table 1. Sample size for $\pm 3\%$, $\pm 5\%$, $\pm 7\%$ and $\pm 10\%$ Precision Levels Where Confidence Level is 95% and $P=.5$.

Size of Population	Sample Size (n) for Precision (e) of:			
	$\pm 3\%$	$\pm 5\%$	$\pm 7\%$	$\pm 10\%$
500	a	222	145	83
600	a	240	152	86
700	a	255	158	88
800	a	267	163	89
900	a	277	166	90
1,000	a	286	169	91
2,000	714	333	185	95
3,000	811	353	191	97
4,000	870	364	194	98
5,000	909	370	196	98
6,000	938	375	197	98
7,000	959	378	198	99
8,000	976	381	199	99
9,000	989	383	200	99
10,000	1,000	385	200	99
15,000	1,034	390	201	99
20,000	1,053	392	204	100
25,000	1,064	394	204	100
50,000	1,087	397	204	100
100,000	1,099	398	204	100
>100,000	1,111	400	204	100

a = Assumption of normal population is poor (Yamane, 1967). The entire population should be sampled.

Source: Yamane (1967)

3.5 Data Collection Techniques

This study used three tools to collect data from *Mwananchi* and *The Citizen* onlinenewspapers. The study used the researcher's guided checklist, documentary analysis and online questionnaires to collect data. The selection of the data collection

tools considered their advantages and disadvantages on the nature of research like this one.

3.5.1 Document Analysis

The study used a documentary review to obtain newspapers' headline clickbait features from the existing literature and readership web metrics from the websites of the papers under study. This data collection tool was more applicable to all specific objectives. The researcher created a sample list of 259 newspaper headlines from *The Citizen* and *Mwananchi* digital papers published from July 2017 up to June 2018, when the online newspapers had started to register withdrawal under the new Media Service Act of 2016. The most recent data on newspaper readership could not give the correct results as the readership data were at that time not stable and the views and clicks were still increasing. Document analysis provided information about what other scholars have written on newspaper headlines.

On the communicative functions and principles of newspaper headlines, the content analysis considered the two major functions of a newspaper headline (summarising the article introduced and drawing the attention of the headline readers) which were available in the literature. The documentary review also considered Dor (2003) properties of newspaper headline design. These properties state that the newspaper headline should be as short as possible, clear and easy to understand, and unambiguous, attractive and interesting, contain new information, not presuppose information unknown to the reader and include names and concepts with high 'news value' for the readers. The study sought to examine if the online newspaper headlines writers complied with the traditional print newspaper headline communicative functions. For convenience, Kuiken *et al.* (2017) clickbait of headlines features and readability formulas were the basis for collecting data.

3.5.2 Checklist

The first part of the checklist contained the preliminary information of the newspapers and headlines. The checklist items consisted of the code number for each headline (1-259), type of newspaper (1= *Mwananchi* or 2 = *The Citizen*), the year of publication (1=2017 or 2=2018), and month of publication (listed from January to December). With the structured checklist, the researcher prepared a list of checklist items based on the two communicative functions of a newspaper headline by Saxena (2006) and Dor (2003). A list of selected four principles of appropriate headlines was adopted from Dor. This formed eight (8) checklist items for objective one. The checklist items contained close-ended questions that required the researcher to validate the data from the headlines sampled. The researcher had the task of validating each headline based on the variables set for each question.

The subsequent checklist item aimed at rating the newspaper headline lengths on a 5-level Likert scale of word-count of five variables where: variables: (very short = 1–3 words, very short = 4–6 words, moderate = 7–9 words, long = 10–12 words, very long= 13+). The researcher had the task of validating the word counts for each headline using Microsoft Office Word Count. The other question item intended to assess whether the headline contained new information, update or old information. The question was grounded on Dor's (2003) principle that a good headline should contain a piece of new information. The researcher had to indicate whether the headline contained new, updated, or old information with reference to the descriptors set.

The other question item was based on the principle that a headline should not presuppose the unknown information. In this question, there were two variables: (1) = familiar information and (2) = unfamiliar information. The last question for objective one considered the fact that a good headline should contain concepts and names of high

news value. In this question, there were two polar variables: (1) high news-value and (2) low news-value. All these variables were given descriptors adopted from Dor (2003) to assist in making judgement.

The question items for objective three considered the features suggested in Kuiken et al.'s (2017) study. The question item tracked the word count statistics such as number of words, and words length characters, paragraphs, number of syllables, number of complex words and number of sentences from Microsoft Office Word Count and readability indices could capture other readability features. Most of the above-mentioned features came from Gunning Fog Index, Flesch-Kincaid Readability Ease Index, and Co Schedule Free Headline Analyser. All the data collected helped to fill out the checklist items. Figure 3.2 below presents the sample of features, which were captured by the Microsoft office Word Count 2016 computer program.

Readability Statistics		?	:
Counts			
Words		25	
Characters		132	
Paragraphs		1	
Sentences		1	
Averages			
Sentences per Paragraph		1.0	
Words per Sentence		25.0	
Characters per Word		5.1	
Readability			
Passive Sentences		100%	
Flesch Reading Ease		35.9	
Flesch-Kincaid Grade Level		14.4	

Figure 3.2: A sample of Readability Features from Microsoft Office Word Count

The question item also assessed the average sentences per headline, average words per sentence, and characters per word. Finally, the questions aimed at capturing readability statistics of passive sentences, Flesch Reading Ease, and Flesch-Kincaid Grade Level. The statistics were automatically obtained via computer programs (See Figure 3.2 above). The Flesch Reading Ease Test automatically generated variables for newspaper

headlines online. The variables generated under this category were characters, syllables, average word length, number of sentences, and sentimental words. In addition, the added checklist items tracked newspaper headlines with signal words, hyphens and colons, self-referencing, numbers, and figurative language. The study was able to capture the above features from the sample of the online newspaper headline from *Mwananchi* and *The Citizen*.

The checklist items for the third objective were designed specifically to examine the practical use for the newly found knowledge in objective three that aimed at examining the clickbait features that the journalists used to design headlines so as to envisage the headline features performed well in terms of readership on the internet. In this study, there was a general assumption that the performance of a newspaper headlines was related to the number of people that viewed and clicked on the headline. Click Through Rates (CTR), which is the ratio between the views and clicks, determined and described the performance of online headlines. In other words, it tested whether the headline with certain a feature performed better than the headline that did not have the feature.

The intention of the headline designer has always been to provoke readers to click on the headline and read the article. That is, the more people click, the more people are triggered by the headline, and the more effective it is. Kuiken et al. (2017) defined CTR as the number of people that clicked on a heading divided by the number of people that had seen that headline. The CTR was used to determine the number of readers and viewers of a headline as well as the performance of a given headline in the newspaper websites. The study used CTR because it was the most reliable and commonly used metric for evaluating the performance of internet documents (Konig, Gamon & Wu, 2009; Richardson, Dominowska & Ragno, 2007). In this study, therefore, the readership

web-metrics of *The Citizen* and *Mwananchi* assisted to provide the varying degrees of readership of headlines.

3.5.3 Online Questionnaire

The online newspaper readers had to indicate whether the headline was informative and creative, creative but not informative, neither creative nor informative, or both creative and informative. Each variable was given a descriptor for validation. The online questionnaire also contained a question item for testing the levels of interest for headlines published by *Mwananchi* and *The Citizen*. A Likert scale with five variables of interest ranging from 1-5 was created to allow the readers to rate the levels of interest. The variables were (1 = very interesting, 2= somewhat interesting, 4 = moderately interesting, 4 = less interesting, and 5 = not interesting at all). Each variable was given the descriptor for objectivity.

A creative headline was defined as playful, entertaining, humorous, punning, using figurative language, rhyming, using implicit rather than explicit meaning and exhausting literary styles. An informative headline, on the other hand, was defined as clear, unambiguous, precise, short and relevant, hence allowing skipping newspaper story reading. A non-informative headline was defined as confusing, deceiving, less informative, and logically irrelevant, hence attracting news story reading. A headline that was not creative was defined as using plain and explicit language, and there was no use of literary devices.

There was another question that intended to validate the readability score obtained from readability formulas. This study employed triangulation method to analyse data using multiple sources to enhance the credibility of readability results under this study. Therefore, there was a need to use the reader response to test whether the newspaper

headlines were readable or not. The variable of readability was equalled to Tanzanian Education System (see Flesch=Kincaid readability formula).

3.6 Piloting

Piloting in this study was done as a small version of the complete study and a specific test of research instruments of a checklist. Van Teijlingen and Hundley (2002) and Kothari (2004) argue that piloting is very important in the preliminary survey for the study. In light of this research, it was imperative to have a pilot study because it was a crucial aspect of high-quality study design, as it would increase the chances of success. In piloting, the study involved 60 front-page newspaper headlines from 1st January 2019 to 30th January 2019. In this piloting, 30 headlines were sampled from *Mwananchi* digital newspaper and the other 30 from *The Citizen* newspaper. It should be noted that the headlines used in piloting were not part of the study. This piloting helped to detect difficulties that would be encountered during the actual study. After getting the sample of newspaper headlines, the tools for data collection from *Mwananchi* and *The Citizen* digital papers were tested for improvement. The researcher used the findings of piloting to determine the reliability and validity of the research instruments and results as presented in sub-sections 3.6.1 and 3.6.2 below:

3.6.1 Validity and Reliability

It should be noted that the quality of any study relies on the way the researcher designs his research instruments as well as the application of the tools in data collection in the field. The best ways of judging the quality of any empirical research are validity and reliability (Eswaran & Singh, 2010). Therefore, this study tested the validity and reliability of its instruments before using them.

The study carried out the validity of the checklist items to determine the extent to which the instruments employed measured what they were supposed to measure. In principle, there are three types of validity or validating techniques to be applied, that is, content, construct, and criterion-related validity. This study adopted a content validity technique. Under content validation, the study measured the degree to which data collected using a tool represented a particular domain of indicators or content of a particular concept. Content validity was used to check whether the checklistadequately covered the topics and reliably represented the sample of the newspaper headlines. To test this validity, the researcher used a panel of experts in linguistics, Journalism, and IT to give their comments on the instrument design. Their task was to assess the concepts in the checklistand questionnaire whether they measured and determined the set of items accurately represented the concepts under study or not.

After piloting, the study found out that Flesh-Kincaid Readability score intervals could not fit the SPSS data analysis. Initially, the intervals were (100-90 very easy to read), (90-80- easy to read), (80-70-easy to read), (70-60-fairly easy to read), (60-50-Plain English), (50-30- difficult to read) and (30-00- very difficult to read). In the above intervals, the same number appears in more than one group. Therefore, the intervals were revisited and slight changes were made to suit the context of SPSS data coding. The new interval scale for Flesch-Kincaid Grade level in the checklistwas (100-91-very easy to read), (90-81- easy to read), (80-71-easy to read), (70-61-fairly easy to read), (60-51-plain English), (50-31- difficult to read) and (30-00- very difficult to read). The change on the interval scale helped to test the newspaper headlines reading levels. This was also done for Flesch Reading Ease Index intervals.

In addition, the click-through rate question items were not set in the interval scale. In light of the analysis in SPSS, the data could not be analysed without using syntax

application. Since the data entering in the program was not based on SPSS syntax, the data intervals were re-designed to suit the context of SPSS coding. The CTR's checklist values were 1. (00-20%=very low), 2. (21-40= low), 3. (41- 60=average), 4. (61-80= high) and 5. (81-100=very high). The higher CTR proposed that the headline performed well on the newspaper website. The other question items were set to track data of the newspaper headlines. Therefore, there was no need of making any changes on the question items as they measured what the study was supposed to measure.

The testing of validity and reliability continued for two weeks, trying to analyse the consistency of the instruments with *Mwananchi* Newspaper headlines. Fraenkel and Wallen (2006) argue that the stability of scores over two weeks is sufficient evidence of test-retest reliability. After testing the instruments several times, the researcher was confident that the kind of results to be obtained in the actual study would be valid and reliable.

3.7 Data Analysis and Presentation

In this research, there was data analysis and presentation of what had been collected from the newspaper headlines. This helped the researcher to make deductions and inferences. The research recorded and analysed data using different techniques depending on the nature of data for each objective. Regarding objective one about communicative functions of online newspaper headlines, the researcher recorded the data from the questionnaire and analysed them by Multinomial Logistic Regression. Since this objective involved analysis of communication functions of online newspaper headlines, multinomial logistic regression was relevant as it would allow for more than two categories of the dependent or outcome variable. Multinomial logistic regression uses maximum likelihood estimation to evaluate the probability of categorical membership.

$$score(x_i, k) = \beta_k \cdot x_i \dots \dots \dots (1)$$

Where x is the vector of explanatory variables (function of online newspaper headlines) describing observation i , β_k is a vector of weights (or regression coefficients) corresponding to outcome k , and $score(\mathbf{X}_i, k)$ is the score associated with assigning observation i to category k .

The first objective aimed at examining the communicative functions of online newspaper headlines. The Questionnaire items and checklist variables were coded and inserted into SPSS for analysis. The statistical package commands automatically generated charts, figures and tables. Then, the researcher concluded the data generated after relating the findings with the existing literature and the Relevance Theory by Sperber and Wilson (1986).

The third objective required the researcher to determine the extent to which the editorial teams used clickbaits to attract newspaper readers on the internet. The structured checklist helped to capture these features for each headline. The features on readability statistics such as number of sentences in the headline, number words, number and percentage of complex words, number of syllables, number of characters were automatically generated via readability software available online. Flesch-Kincaid Readability Ease and Grade Level were the basic readability tools for this analysis. The other tools involved were Microsoft Office Word Count 2016, the Gunning Fog Index, Smog Index, and Automated Readability tool. In addition, Co Schedule, the Online Headline Analyser was used to determine the positive, negative and neutral sentimental words in newspaper headlines. Thereafter, the researcher coded and inserted the data into SPSS for quantitative analysis. The basic descriptive statistics (frequency,

percentage) and inferential statistics assisted in drawing inferences on the online newspaper headlines. Other features that readability tools could not trace were manually recorded in the guided checklist and put into the SPSS for quantitative analysis.

The fourth objective that sought to analyse the impact of headlines features on news readership required tracking the web-metrics of the most impressive and clicked online newspaper headline links. The study sought to test whether the headline features observed in the third objective had an impact on click-Through Rate (CTR). The features such as headline length, characters, and syllables, to mention a few, were assumed to significantly affect news selectivity and readership. The purpose of this analysis was to compare the headlines features with readership (CTR) in the digital environment. The IT expert and statisticians from *Mwananchi* and *The Citizen* digital newspapers helped the researcher to collect and compute data with the aid of the checklist guide designed by the researcher. Then, the researcher inserted the readership data into the program (SPSS) for analysis. The analysis was based on the hypotheses formulated in the first chapter.

Finally, different models for predicting the relationship between the headline features and online readership of news were suggested for each hypothesis depending on the nature of the data. Before predicting the performance of a feature, there was hypothesis formulation from objective two for testing the impact of each feature on newspaper headline readership. The One Way Analysis of Variance (ANOVA), Logistic Regression Analysis, and Chi-square test were used to suggest the relationship between the headline performance (CTR) and its features.

In CTR, each word in a newspaper headline carries an intrinsic click-value depending on current trends and interest manifested in online users, which is mainly revealed in click information. The formula for CTR is:

$$CTR = \frac{\text{Number of Clicks}(x)}{\text{Number of impressions \{Views\}}(x)}$$

Where:

- Views or impressions (x): The number of times a news article x is shown to users
- Clicks (x): The number of times article x is actually clicked on.

This study used the above CTR formula to determine readership for each online newspaper headline. The other analysis used the readability formula to determine the level of comprehension for each newspaper headlines. The readability formulas by Rudolf Flesch and J. Peter Kincaid were used to measure readability and grade level. The readability scores obtained from these formulas were those that had been widely and regularly used in measuring texts readability. The two tests intended to show how difficult or ease a text in English is to comprehend. In the formula, the scores range from 0-100. In this test, the higher score indicates that the content is easier to read (Flesch, 2007).

$$\text{Flesch reading ease formula is } RE = 206.835 - (1.015 \times ASL) - (84.6 \times ASL)$$

Where: RE = Readability Ease, ASL =Average sentence Length (i.e. the number of words divided by the number of sentences) and ASW= average number of syllables per word (the number of syllables divided by the number of words). This analysis was done

by inserting each headline in the search box for the readability test. This online software managed to generate the readability index for each headline.

Table 3.4

Summary of Data Analysis Techniques

S/n	Research Objectives	Analytical tool	Type of information
1.	Communicative functions of online newspaper headlines	Thematic Analysis and Descriptive Statistics (percentages). Questionnaire analysis with SPSS	Summarising and attracting functions of newspaper headlines
2.	The communicative principles of designing appropriate online newspaper headlines	Checklist and questionnaire Descriptive Statistics (percentages) with SPSS	Clear and short headlines, interesting headlines, new information, presupposing unknown facts, names and concepts of high news-value
3.	Clickbait features that journalists used to produce viral and heroic newspaper headlines on the internet	Flesch-Kincaid Readability Ease and Grade Level tools Co schedule, the headline analyser, A automatated Readability Index, Smog	Number of sentences in the headline, number words, number and percentage of complex words, number of syllables, number of characters.
4.	To determine the effects of clickbait features on news selectivity and readership.	Analysis of Variance (ANOVA), Logistic Regression Analysis, and Chi-square test	The relationship between the headline performance (CTR) and its features.

3.8 Ethical Considerations

As a researcher, there was a need to be genuinely concerned about other people's quality of life. Therefore, the study observed integrity by using information taken for study purposes only and not for personal gains. The researcher acknowledged all sources to avoid plagiarism. The results obtained through this study would be open for public access. In addition, the researcher received the official permission from Rongo University to collect data, which was later submitted to the National Commission for Science, Technology and Innovation of Kenya (NACOSTI) to obtain the research permit. Since the research was carried outside of Kenya, the research permit letter from NACOSTI was not used as an introductory letter to the Regional Administrative Secretary of Dar es Salaam (RAS) Tanzania, the region where the newspapers under this study were published. Instead, the Dar es Salaam RAS office had to issue another research permit to submit to Ilala District Executive Director (DED). Finally, The DED office issued another research permit that introduced the researcher to Mwananchi Communication Limited, which is the publisher of *Mwananchi* and *The Citizen* digital newspapers. In light of this, all procedures of data collection were observed. The respondents were ensured of confidentiality of the information that they would give for this study.

3.9 Conclusion

This chapter presented the research design, area of study, population, sampling procedures and sample size. It also covered the tools used to collect data, analysis method, piloting and ethical consideration. In general, the chapter provided the methods and their underpinning philosophies to study the communicative adequacy of *The Citizen* and *Mwananchi* newspaper headlines.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 Introduction

This chapter makes the presentation, analysis and discussion of the research data regarding the communicative adequacy of headlines from *The Citizen* and *Mwananchi* newspapers in Tanzania. The data to be presented under this chapter were obtained from online questionnaire, checklist, and document analysis. Then, they were collected and grouped according to the study objectives themes. In this chapter, there are data presentation, analysis and discussion about the communicative functions of headlines from *The Citizen* and *Mwananchi*, the communicative principles that editorial team of the newspapers under study used to draft their headlines for digital environment, the clickbaits employed by editorial teams and their impact on newspaper readership.

4.2 Data Presentation

This section presents the data on the communicative adequacy of Tanzanian online newspaper headlines with reference to four specific objectives and 7 hypotheses suggested in chapter one.

4.2.1 The Communicative Functions of Online Newspaper Headlines

The first objective under this study sought to analyse the communicative functions of online newspaper headlines. This objective relied on the fact that a newspaper headline pursues two basic functions; to summarise the article it represents, and to draw the attention of newspaper readers. The study used a questionnaire to determine the communicative functions of a newspaper headline. The online questionnaire was shared to 100 respondents via social platforms of WhatsApp. To address the issue of newspaper headline communicative functions, the study created four variables in the questionnaire.

Variable one [1] was for headlines that were informative but not creative; variable two [2] was for creative, but not informative headlines, variable [3] was for headlines that were both creative and informative, and variable [4] for headlines that were neither creative nor informative. Then, all 259-newspaper headlines were examined with reference to the four variables stated above. Thereafter, the variables were coded, recorded and analysed with SPSS version 20. Table 4.1 presents the frequencies and percentages of variables used to determine the communicative functions of online newspaper headlines.

Table 4.1

The Communicative Functions of The Citizen and Mwananchi Headlines

Newspaper Headlines	Frequency	Percent	Valid Percent	Cumulative Percent
informative but not creative	181	69.9	69.9	69.9
creative but not informative	26	10.0	10.0	79.9
both creative and informative	12	4.6	4.6	84.6
neither creative nor informative	40	15.4	15.4	100.0
Total	259	100.0	100.0	

Table 4.1 indicates that 69.9% of 259 online newspaper headlines were informative but not creative, 10% were creative but not informative, 4.6% were both creative and informative, and 15.4 % were neither creative nor informative. The results concluded that the majority of online newspaper headlines (69.9%) published by *Mwananchi* and *The Citizen* performed the primary function of newspaper headline of summarising the articles introduced as they were more informative. In other words, the headlines used plain, clear, and explicit language that readers would not require a context or reading the full articles introduced.

The results presented in Table 4.1 above shows that only 10% of all newspaper headlines were creative and imaginative but less informative. That is, a limited number

of headlines were ambiguous, vague, and metaphorically designed. This implies that the pragmatic function of the newspaper headlines was not considered by *The Citizen* and *Mwananchi* editorial teams. The analysis section will explore more on a few creative and pragmatic features which were observed. From this section, we can say that most headlines performed the primary function of a newspaper by recapping the stories introduced.

4.2.2 Principles of Designing Appropriate Online Newspaper Headlines

The second objective under this study sought to analyse the communicative principles that editorial teams used to craft appropriate newspaper headlines for digital setting. This study, therefore, sought determine the extent to which editorial teams observed the canonical principles set for designing appropriate newspaper headlines in the digital setting. The study used a questionnaire for 100 online newspaper readers and a checklist to obtain the data. The four properties of effective newspaper headline design are list hereunder.

- [1] be interesting
 - [2] contain new information
 - [3] not presuppose information unknown to the readers
 - [4] include names and concepts with high news-value for the readers
- (Dor, 2003:708–716)

4.2.2.1 Level of Interests in Digital Newspaper Headlines

This section was based on Dor's (2003) assumption that newspaper headlines ought to be interesting. To examine the levels of headline interests, the study used a checklist to illustrate the headlines of the newspapers through four interest level variables: (1) very interesting [76-100%] (2) somewhat interesting, (3) moderately interesting [51-75%], (4) less interesting [26-50%], and (5) not interesting at all [0-25%]. By using the web metric data of readership, the researcher rated the levels of interests for each newspaper

headline regarding readership webmetrics. In other words, the headlines with more readers (CTR) were the most interesting whereas the headlines with few readers were less interesting. Table 4.2 below presents the results.

Table 4.2

Levels of Interest in Digital Newspaper Headlines

	Frequency	Percent	Valid Percent	Cumulative Percent
Very interesting	85	32.8	32.8	32.8
Somewhat interesting	88	34.0	34.0	66.8
Moderately interesting	57	22.0	22.0	88.8
Somewhat not interesting	27	10.4	10.4	99.2
Not interesting at all	2	0.8	0.8	100.0
Total	259	100.0	100.0	

Table 4.2 above shows that 32.8% of all headlines assessed were very interesting, 34% were somewhat interesting, 22% were moderately interesting, 10.4% were less interesting, and 0.8% were not interesting at all. Even though 34% of 259 headlines were the only very interesting headlines, the cumulative percentage in table 4.2 suggests that 88.8% of all headlines were interesting on the above-average interest level. Therefore, the headline designers observed the principle that an effective headline should arouse the interests of their readers (Dor, 2003; Saxena, 2006).

4.2.2.2 New Information in Digital Newspaper Headlines

This section was based on the canonical principle of a newspaper headline design that it should convey new information (Dor, 2003). A headline which does not contain novel assumptions cannot bring about contextual effects, and is thus irrelevant. Therefore, the editorial teams of newspapers have to optimise the relevance of their headlines by incorporating information that their readers did not know before. In this section, the study sought to assess if the newspaper headlines published online included new

information. A checklist item with three variables was designed to examine whether all the 259 newspaper headlines contained new information, updated information or old information. With a guided checklist descriptors adopted from Dor (2003), the researcher validated 259 front-page headlines from the two Tanzania newspapers with respect to three variables (1= new, 2= updated and 3 = old information). New Information: The new information was not in line with the existing assumptions, updated information as the information which was in line with some existing assumptions and old information as the information which is not new to readers. Since the researcher was coming from Tanzania, it was easy to determine the new, updated and old information. Then, the researcher coded and inserted the variables into SPSS for quantitative descriptive analysis. Table 4.3 below presents the findings.

Table 4.3

New, Updated and Old Information in Digital Newspaper Headlines

	Frequency	Percent	Valid Percent	Cumulative Percent
New Information	222	85.7	85.7	85.7
Updated Information	34	13.1	13.1	98.8
Old Information	3	1.2	1.2	100.0
Total	259	100.0	100.0	

Table 4.3 above shows that 85.7% out of 259 the digital newspaper headlines analysed conveyed new information, 13% conveyed updated information and 1.2% conveyed old information. This implies that the majority of the newspaper headlines analysed under this study contained information that had never been published before.

4.2.2.3 Presupposition in Digital Newspaper Headlines

According to Culpeper et al. (2009), the concept of presupposition inhibits semantics and pragmatics fields in equal measure for they both deal with linguistic forms and

pragmatic inferences. Semantics presupposition stems from philosophy and linguistics—in the work of the logician and philosopher Frege (1892), whose primary interested was to develop an account of the sentence logical form with the focus on the truth-value of the declarative statements. On the contrary, the pragmatic presupposition deals with inferences that a hearer makes from the grammatical forms of the sentence. This approach concurs with Levinson (1983) who technically use the term presupposition to refer to “pragmatic inferences or assumptions [which] seem at least to be built into linguistic expressions and which can be isolated using specific linguistics tests” (p.168). This linguistic test is known as constancy under negation.

Based on the pragmatic presupposition, this study, therefore, sought to analyse presuppositions which seemed to be built into online newspaper headlines. In order to analyse presupposition in newspaper headlines, the researcher used a checklist item on presupposition to validate whether 259 front-page newspaper headlines sampled presupposed the already known information or unknown information (new information). Since there were two variables, the headline would either be presupposing new information or old information. Table 4.4 presents the findings of presupposition.

Table 4.4

Presuppositions in Digital Newspaper Headlines

	Freq.	Percent	Valid Percent	Cumulative Percent
Presupposed new information	18	6.9	6.9	6.9
Presupposed old information	241	93.1	93.1	100.0
Total	259	100.0	100.0	

Table 4.4 above shows that out of 259 the headlines analysed, 93.1% presupposed the known facts or familiar information whereas a small number of 6.1% presupposed the

unknown facts. This suggests that *Mwananchi* and *The Citizen* digital newspaper writers complied with the principle that newspaper headlines should presuppose the information known to the readers.

4.2.2.4 Names and Concepts of High News-Value

This section is based on Dor (2003) assertion that, “headlines should include concepts and names of ‘high news’ value for readers” (p.712). Thus, the knowledgeable and experienced journalists would create concepts and names of high news value when designing headlines. Based on this fact, the study analysed 259 newspaper headlines to determine the extent to which journalists exploited the names and concepts of high news value in *Mwananchi* and *The Citizen* newspapers. The two variables: (1=headlines with names and concepts of high news value and 2= headlines with names and concepts of low news value) were created in a checklist. The high news-value headlines were determined by the number of clicks and views of the headline and descriptors adopted from Dor (2003). Thus, the headline with high-news value was defined as the headline with a good number of readers which above average of CTR. Then, the data were coded and analysed via SPSS. Table 4.5 below presents the summary of findings.

Table 4.5

Names and Concepts with High News-Value in Digital Newspapers

	Frequency	Percent	Valid Percent	Cumulative Percent
High news value	152	58.7	58.7	58.7
Low news value	107	41.3	41.3	100.0
Total	259	100.0	100.0	

The data presented in table 4.5 above shows that 58.7% of all 259 headlines analysed contained names and concepts of high news value whereas 41.3% contained concepts and names of low news value. Therefore, the finding in this section agrees with the canonical principle that headlines should convey valuable information to readers.

4.2.3 Clickbait Features Employed in Digital Newspaper Headlines

The third objective under this study sought to examine the clickbait features that journalists used to create headlines so as to maximise online readership. The study adopted the existing literature of clickbait features such as Kuiken et al. (2017), Co Schedule online headline analyser, and readability formulas to identify specific variables for analysis under this section. Different readability tests such as Flesch-Kincaid, Gunning Fog, Smog, Coleman Liau, and Automated Readability Index were of great help to obtain reliable data. The number of sentences; number words per headline, number of characters per headline; the number of complex words per headline and average word length (Kuiken et al., 2017), number sentimental words, self-referencing, and signal words were also the basis for this study.

4.2.3.1 Readability Indices and Grade Levels of Online Newspaper Headlines

Readability is a technical term that is used to measure how hard or easy a manuscript is to read (Klare, 1963; McLaughlin, 1969; Hoskins, 1973). This section presents readability features from the newspaper headlines. According to Withington (2015), readability is an imperative aspect of the formula for developing strong and comprehensible news writing. In light of this fact, this section sought to test whether the newspaper headlines under this study were too hard or easy to read among its targeted readers. Besides, the use of the readability indices would help the researcher know the reading difficulty and grade-level of the newspaper headlines. Since the aforementioned

readability formulas worked better for English texts, the test and analysis under this study were limited to English newspaper, which was *The Citizen*.

Thereafter, the newspaper headlines were combined to form a single paragraph in word document format because the readability formulas would work better for a text with more than 100 words. A full stop was inserted at the end of each headline to create a demarcation between one headline and another. Thereafter, the researcher copied and pasted headlines into automated readability index formula for analysis. The scores obtained were quantitatively analysed by SPSS. Table 4.6 presents readability scores for five readability formulas.

Table 4.6

Readability Scores from The Citizen Headlines

S/N	Readability Index	Score
1.	Flesch Kincaid Reading Ease	49
2.	Flesch Kincaid Grade Level	8.4
3.	Gunning Fog Score	8.8
4.	SMOG Index	7.6
5.	Coleman Liau Index	14.5
6.	Automated Readability Index	6.8

Table 4.6 shows that all *The Citizen* newspaper headlines analysed with the formulas had 49 readability score in Flesch-Kincaid Reading Ease. However, the same digital paper headlines had 8.4 score in the Flesch Kincaid Grade Level. In the Gunning Fog Index, the headlines had a score of 8.8 and Smog Index was 7.6. Conversely, the Coleman Liau Index was 14.5 and the Automated Readability Index was 6.8. Each readability formula had its own calculations and interpretation.

The online analysis of readability would only be done with *The Citizen*, as it was the only English digital paper. The Flesch-Kincaid formula would not be done on Swahili texts readability because it was designed for English texts analysis only. As noted earlier, the general readability index for *The Citizen* newspaper headlines was 49 (see Table 4.6 above). According to this formula, the readability index of 30 to 50 scores suggests that the text is difficult to read. Since 49 readability score falls into 30-50 score interval, it is an indicator that 130 headlines published by *The Citizen* digital paper were difficult to read on the average.

This study sought to know the distribution of readability scores across headlines. Seven (7) variables were designed in a checklist to capture readability scores for each headline. The variable descriptors were adopted from the Flesch readability Index (with slight changes) to facilitate data analysis with SPSS version 20. The headline readability variables were (0-30 score = very difficult), (31-50 scores= difficult to read), (51-60 scores = difficult), 61-70 score = plain English), (71-80 score= fairly easy), (81-90 = easy to read), and (91-100= very easy to read). Each headline was analysed to test its readability index with FRE. Thereafter, the researcher recorded the scores in SPSS for analysis. Table 4.7 below presents the summary of the findings from SPSS analysis.

Table 4.7

Flesch-Kincaid Reading Ease Index in the Citizen Digital Newspaper Headline

Reading Ease Index	Frequency	Percent	Valid Percent	Cumulative Percent
100-91 Very easy	5	1.9	3.8	3.8
90- 81 Easy to read	8	3.1	6.2	10.0
80-71 Fairly easy	17	6.6	13.1	23.1
70-61 Plain English	15	5.8	11.5	34.6
60-51 Fairly difficult	19	7.3	14.6	49.2
50-31 Difficult to read	29	11.2	22.3	71.5
30-00 Very difficult	37	14.3	28.5	100.0
Total	130	50.2	100.0	

The analysis showed that 3.8% of 130 English newspaper headlines were very easy to read, 6.2% were easy to read, 13.1% were fairly easy to read, 11.5% contained plain English, 14.6% were fairly difficult to read, 22.3% were difficulty to ready, and 28.5% were very difficult to read. The data shows that 50.8 % of the headlines had greater degrees of difficulty index. According to the readability formula the newspaper headlines analysed were difficulty to read.

Flesch Grade Level was another index that was used to measure the grade level of the newspaper headline under this study. The headlines were inserted into the online software (Flesch-Kincaid grade level) for analysis.

Table 4.8

Flesch-Kincaid Reading Ease and Grade Level

Score	Grade (USA)	Level	Remarks
100-90	5 th grade		Very easy to read. Easily understood by an average 11 year old student
90-80	6 th grade		Easy to read. Conversational English for consumers
80-70	7 th grade		Fairly easy to read
70-60	8 th and 9 th grades		Plain English. Easily understood by 13-to 15 year old student
60-50	10 th to 12 th grades		Fairly difficult to read
50-30	College		Difficult to read
30-00	College graduate		Very difficult to read

The analysis showed that all 130 headlines from *The Citizen* had 8.4 score on average (see Table 4.8). According to the formula, the score of 8.4 falls between 0-30 and this suggests that the text was very difficult to understand and the college graduates in the US were the only people who could read and understand the headlines. In Tanzania, the score of 8.4 (college graduate grade) suggests that students in primary and secondary schools could not read and understand *The Citizen* newspaper headlines for they would be above their reading levels. According to LinkedIn, the social platform for

Mwananchi newspapers, the target population age of readers for *The Citizen Newspaper* is young between (18-45 years). This paper has a circulation of 25,000 hard copies and a readership of 800,000 per day (MCL, 2019) who are likely to be graduates.

4.2.3.2 Number of Sentences per Headline

The study used Microsoft *Office Readability and word count* and Automated Readability Index to analyse the number of sentences per headline. However, it should be noted that some headlines were not typical sentences as they did not have subjects and predicates respectively. In other words, some headlines did not have complete thoughts. Since the software could not differentiate a sentence with complete or incomplete thought all headlines were judged as complete sentences as long as they were separated by a dot. Table 4.9 presents the statistical summary of features from headlines.

Table 4.9

Number of Sentences per Headline

Number	of	Freq.	Percent	Valid	Cumulative
Sentences				Percent	Percent
1 sentence		259	100.0	100.0	100.0

After analysing all the headlines, the study observed that 259 (100%) headlines in both newspapers contained just one sentence on the average. In other words, all newspaper headlines were in form of one simple sentence structure.

4.2.3.3 Number of Words per Newspaper Headline

The study sought to identify the number of words per headline by using checklist. It used interval scales of (1-3 words), (4-6 words), (7-9 words), (10-12 words), (13-15

words) and (16+ words) in SPSS. Table 4.10 presents a summary of the number of words per headline.

Table 4.10

Number of Words per Headline

	Frequency	Percent	Valid Percent	Cumulative Percent
1-3 very short	7	2.7	2.7	2.7
4-6 short	112	43.2	43.2	45.9
7-9 moderate	112	43.2	43.2	89.2
10-12 long	27	10.4	10.4	99.6
13+ 15 very long	1	0.4	0.4	100.0
Total	259	100.0	100.0	

The study revealed that 2.7% out of 259 *The Citizen* and *Mwanachi* headlines analysed constituted 1-3 words, 43.2% had 4-6 words, 43.3% had 7-9 words, 10.4% had 10-12 words, and 0.4% had 13-15 words. Cumulatively, the results show that the majority of headlines (89%) contained 1-9 words on average. According to Co Schedule software available free online at <https://coschedule.com/headline-analyzer>, headlines with approximate six (6) words tend to earn the highest number of Click-Through Rates (CTR). Therefore, 43.2% represents the headlines, which could earn the highest number of clicks. In line with Co Schedule (ibid), the online headline analyser software, most of the headlines were at the right lengths ranging from short to moderate (4 to 9 words).

4.2.3.4 Number of Complex Words per Headline

This section sought to examine the use of complex words with newspaper headlines. Fanselow (1985) asserts that in grammar and morphology, a complex word is comprised of two or more syllables. As stated by Fanselow (ibid), a complex word may entail one base (or root) and one or more affixes or (2) more than one root in a compound word. This study used the Gunning Fog Index (GFI) to determine the complexity of words

used in headlines. Gunning Fog Index test was used to gauge complexity of words in all headlines. The GFI formula stated hereunder was the basis for complexity analysis under this section.

$$0.4 \left[\left(\frac{\text{words}}{\text{sentences}} \right) + 100 \left(\frac{\text{complex words}}{\text{words}} \right) \right]$$

The number of complex words was determined after inserting all the headlines in FGI online software. After checking, the algorithm computed syllables and affirmed each word as complex if it had more than two syllables. Then, the GFI displayed all the complex words in blue colour, identified punctuation marks, and several words in each headline. The researcher manually counted the number of complex words in each headline. The variables of headlines complexity in a checklist were coded according to the number complex words: [1] one complex word, [2] two complex words, [3] three complex words, [4] complex words, [5] five complex words, [6] more than six complex words. Table 4.11 below presents the findings on the number of complex words per headline.

Table 4.11

Number of Complex Words per Headline

	Frequency	Percent	Valid Percent	Cumulative Percent
None	16	6.2	6.2	6.2
1 complex word	50	19.3	19.3	25.5
2 complex words	68	26.3	26.3	51.7
3 complex words	65	25.1	25.1	76.8
4 complex words	33	12.7	12.7	89.6
5 complex words	20	7.7	7.7	97.3
6 complex words	6	2.3	2.3	99.6
7 complex words	1	0.4	0.4	100.0
Total	259	100.0	100.0	

The GFI analysis showed that 6.2 % out of 259 *Mwananchi* and *The Citizen* online headlines did not have complex words, 19.3% contained 1 complex word, 26.3% contained 2 complex words, 25.1% contained 3 complex words, 12.7% contained 4 complex words, 7.7% contained 5 complex words, 2.3% contained 6 complex words, and 0.4% contained 1 complex word. Thus, the majority of headlines (72.3%) consisted of at least one or two complex words and few headlines did not have any complex words. This proposes that the designers of the headlines understudy preferred headlines with more than one syllable.

4.2.3.5 Average Word Length per Headline

This section sought to analyse the number of words that a newspaper headline would have on average. A number of 259 headlines were analysed with the basis of the number of words they had. This feature of average word length had five interval variables of (0-5), (6-10), (11-15), and (16+) in the checklist. The data were coded and recorded in the SPSS for analysis. Table 4.12 below presents the findings.

Table 4.12

Average Words Length per Headline

Interval	Frequency	Percent	Valid Percent	Cumulative Percent
0-5 very short	66	25.5	25.5	25.5
6-10 short	177	68.3	68.3	93.8
11-15 long	15	5.8	5.8	99.6
16 + very long	1	0.4	0.4	100.0
Total	259	100.0	100.0	

The study found out that 25.5% of 259 headlines examined had 0 to 5 words on average, 68.3% had 6 to 10 words, 5.8% had 11-15 words, and 0.4% had 16 words plus.

That is to say, many headlines (68.3%) had average 6 to 10 words. The newspaper writers preferred headlines with 6 to 10 words (short) on the average.

4.2.3.6 Number of Characters per Headline

This section presents the headline length with reference to the number of characters. This is because the number of characters in a newspaper headline affects its performance on the internet (Lee, 2014; Co schedule, 2015). In an attempt to analyse the number of characters per headline, this study set a number of five variables in the interval scales of (0-15), (16-30), (31-45), (46-60) and (60+) in questionnaire. This study employed Microsoft Word Office readability tool and Co schedule software available at <https://coschedule.com/headline-analyzer> to calculate the number of characters per headline. Then, the researcher coded and recorded the outputs into SPSS for quantitative analysis. Table 4.13 summarises the number of characters from online newspaper headlines of *Mwananchi* and *The Citizen*

Table 4.13

Number of Characters per Digital Newspaper Headline

Characters	Frequency	Percent	Valid Percent	Cumulative Percent
16-30	56	21.6	21.6	21.6
31-45	144	55.6	55.6	77.2
46-60	52	20.1	20.1	97.3
61+	7	2.7	2.7	100.0
Total	259	100.0	100.0	

The data presented above shows that 21.6% of 259 headlines analysed contained 16 to 30 characters, 55.6% contained 31 to 45 characters, 20.1% contained 46-60 characters, and 2.7 contained over 61 characters. This suggests that journalists in respective newspapers preferred headlines with 31 to 45 characters.

4.2.3.7 Question Headlines

This section sought to analyse newspaper headline concerning sentence structures. In other words, headlines were the presupposed sentences. According to Yule (1996), most languages have a set of three sentence structures: declarative, interrogatives, and imperatives. In this regard, a set of four variables, which are interrogatives, declarative, imperatives, and exclamation, were the basis for the analysis of headline structures. This would help the researcher to observe the headline structures that the writers of *Mwananchi* and *The Citizen* used to construct headlines for digital publications. This section, therefore, sought to examine the extent to which headline designers exploit different headline structures in their digital papers. The headline analysis of headlines in SPSS involved four codes of variables for the sentence forms: (1) declarative (2) imperative, (3) interrogative, and (4) none of the above. Table 4.14 presents a summary of headline structures from *The Citizen* and *Mwananchi*.

Table 4.14

Question Headlines

	Frequency	Percent	Valid Percent	Cumulative Percent
Interrogative	4	1.5	1.5	1.5
Declarative	242	93.4	93.4	95.0
Imperative	9	3.5	3.5	98.5
None of the above	4	1.5	1.5	100.0
Total	259	100.0	100.0	

The study found out that 93.4% out of 259 online newspaper headlines were declarative, 1.5% interrogative, 3.5% were imperatives, and 1.5% could not be classified as sentences. This finding shows that the majority of headlines were in declarative form. In other words, the two newspapers under this study rarely exploited question headlines to design online headlines.

4.2.3.8 Hyphenation and Colons

This section sought to examine the headlines that employed hyphens or colons as the clickbait feature. The Hubspot and Outbrain (2015) study reports that a hyphen or a colon on a headline can increase click-through rates by 9%. Based on this fact, the section sought to examine the extent to which digital journalists applied hyphens and colons to design headline for their papers. The questionnaire item with two variables—1= with hyphens or colons and 2 = without hyphens or colons—were formulated. Table 4.20 below quantitatively summarises the findings regarding the use of hyphens and colons from *Mwananchi* and *The Citizen* online newspapers.

Table 4.15: Hyphens and Colons in Digital Newspaper Headlines

	Frequency	Percent	Valid Percent	Cumulative Percent
with hyphens	16	6.2	6.2	6.2
without hyphens	243	93.8	93.8	100.0
Total	259	100.0	100.0	

This study found out that out of 259 headlines published by the two digital papers 93.8 % did not have hyphens whereas 6.2 % of the headlines were either hyphenated or with colons. This entails that most of the headlines could not maximise visibility and ranking on the newspaper website.

4.2.3.9 Sentimental Words

According to Co Schedule online headline analyser (2016), feeling, sensibility, or emotional idealism mark sentimental words or expressions. Newspaper writers employ sentimental words in headlines as the marketing strategy (Kuiken et al., 2017). This study was interested to know the extent to which *Mwananchi* and *The Citizen* newspaper writers employed sentimental or emotional words in designing headlines. This study examined 259 headlines from *Mwananchi* and *The Citizen* digital newspapers in terms

of sentiments they used. The analysis considered the assumption that emotional words normally trigger emotional responses to the newspaper readers. This would help the researcher understand how headlines with certain sentimental words would drive clicks and shares on the internet.

A set of three variables in the checklist item were created and coded (1= negative sentimental, 2 = positive sentimental and 3 = neutral sentimental) for SPSS analysis. Each headline was copied into the Headline analyser (Co schedule) for analysis. This online headline analyser could automatically analyse and tell whether the headline contained one of the three variables mentioned above. Table 4.16 presents the summary for the finding.

Table 4.16

Sentimental Words in Digital Newspaper Headlines

Type of Sentimental words	Frequency	Percent	Valid Percent	Cumulative Percent
Negative sentimental	61	23.6	23.6	23.6
Positive sentimental	25	9.7	9.7	33.2
Neutral sentimental	173	66.8	66.8	100.0
Total	259	100.0	100.0	

The study revealed that 23.6% of 259 online newspaper headlines analysed contained negative sentimental words, 9.7% conveyed positive sentimental words and the majority of headlines (66.8%) conveyed neutral sentiments. According to Co Schedule, the online headline analysersoftware, most of the headlines (66.8%) could not easily impress readers on the internet because they neither contained positive nor negative sentimental words. Under this analysis, the headlines with negative or positive sentimental words tend to perform better online than those without.

4.2.3.10 Self-Referencing

This section explores whether the online newspaper question headlines with self-referencing cues were still the case in the digital setting. The study explored all question headlines with self-referencing cues from *The Citizen* and *Mwananchi*. This section, therefore, was interested to know the extent to which question headline designers considered this clickbait of self-referencing. The researcher had the task of finding out the question headlines that contained self-referencing cues. Two variables (1 = self-referencing question headline and non-self-referencing headlines) in a checklist were the basis for analysis in this section. So, all non-question headlines were ignored in this case. Table 4.17 below summarises self-referencing use in the two digital newspaper headlines.

Table 4.17

Self-Referencing in Virtual Newspaper Headlines

Headlines	Frequency	Percent	Valid Percent	Cumulative Percent
Self-referencing cues	29	11.2	11.2	11.2
No self-referencing cues	230	88.8	88.8	100.0
Total	259	100.0	100.0	

The study revealed that 11.2% of 259 digital newspaper headlines contained self-referencing whereas 88.8% did not contain any self-referencing at all. The finding suggests that *The Citizen* and *Mwananchi* digital journalists rarely used self-referencing to design their headlines.

4.2.3.11 Non-Literal Language Use in Digital Newspapers Headlines

This section presents the figurative language devices from online newspaper headlines that normally deviate from the conventional meaning to convey a complicated meaning, colourful writing, clarity, and evocative comparison. This study explored several types

of figurative constructions that the editorial teams used with the online newspaper headline writing. The figurative language used included simile, metaphor, hyperbole, personification, and synecdoche. The researcher had to validate with a checklist whether the 259 online headlines from *The Citizen* and *Mwananchi* were non-literal or literal. The two variables (1= literal and 2 = non-literal) were the basis for SPSS analysis. The non-literal and literal headlines were recorded and coded for quantitative analysis with the program. Thereafter, the SPSS frequency and percentage commands were run. Table 4.18 presents the summary of findings on the use of literal and non-literal newspaper headlines.

Table 4.18

Literal vs. Non literal Language Use in Digital Newspaper Headlines

		Language Use		Total
		Literal language	Non-literal language	
Newspaper	<i>The Citizen</i>	112 43.2%	18 6.9%	130 50.2%
	<i>Mwananchi</i>	121 46.7%	8 3.1%	129 49.8%
Total		233 90.0%	26 10.0%	259 100.0%

The study observed that 90% of the 259 headlines contained literal meanings whereas 10% headlines were non-literal. This observation suggests that headlines editors of the two newspapers preferred non-literal headlines.

4.2.3.12 Signal Words in Digital Newspaper Headlines

The study sought to examine whether digital journalists considered signal words in designing headlines for their papers. The study checked whether the newspaper headlines samples incorporated signal words such as *this, these, therefore, how, why, when, which, who*, and their equivalents in Swahili newspaper such as *hii, hizi, hivi*,

jinsi, kwa nini, lini, kipi, and nani. In this study, there was an assumption that the presence of signal words in a headline would contribute to its performance on the digital environment (Kuiken et al., 2017). To analyse the signal words, two variables (1= with signal words and 2 = without signal words) were created in a questionnaire for SPSS quantitative analysis. Then, the researcher went through 259 online headlines and checked whether the headlines incorporated signal words or not. Thereafter, there was a recording and coding of signal words for SPSS analysis. Table 4.19 below presents the summary of headlines that incorporated signal words from *The Citizen* and *Mwananchi*.

Table 4.19

Signal Words in Digital Newspaper Headlines

	Frequency	Percent	Valid Percent	Cumulative Percent
With signal words	38	14.7	14.7	14.7
No signal words	221	85.3	85.3	100.0
Total	259	100.0	100.0	

The SPSS analysis showed that 85.3% of all headlines lacked signal words whereas 14.7% contained signal words. This suggests that the digital newspaper editors of the two papers preferred headlines that did not have signal words.

4.2.3.13 Incorporating Numbers in Digital Newspaper Headlines

This section examined the extent to which newspaper writers of *Mwananchi* and *The Citizen* exploited numbers in constructing online headlines. The idea behind number headlines considered the fact that headlines containing numbers perform better on the internet than those which do not (Safran, 2013; Kuiken *et al.*, 2017). In this regard, two variables were analysed in accordance with (1= headlines with numbers and 2= headlines without numbers). The researcher went through 259 headlines and noted all headlines incorporating numbers. Then, data recorded were coded and put into SPSS for

quantitative analysis. Table 4.20 below summarises the use of numbers in digital papers of *Mwananchi* and *The Citizen*

Table 4.20:

Incorporating Numbers in Digital Newspaper Headlines

Newspaper Headlines	Frequency	Percent	Valid Percent
With number(s)	20	7.7	7.7
Without number(s)	239	93.3	93.3
Total	259	100.0	100.0

The analysis showed that 93.3% of 259 headlines did not incorporate numbers whereas 7.7% of the headlines incorporated numbers. The absence of numbers in the majority of the headlines suggests that online headlines could not perform well on the internet.

4.2.4 The Impact of Clickbait Features on News selection and Readership

The fourth objective under this study sought to investigate how the click bait features identified in objective three of this study impacted readership of *Mwananchi* and *The Citizen* headlines. According to Pan et al. (2016), click-through rate is the ratio of internet users who click on a specific news link to the number of total internet users who happened to view a page, email, or advertisement. In this study, the click-through rate was equal to the number of clicks that the newspaper headlines had received divided by the number of times the headlines were shown (impressions) on the newspaper app or website: (clicks ÷ impressions = CTR).

For example, if there were 10 clicks on the newspaper headline and 100 impressions (views), then the newspaper headline click-through rate would be 10%. The present

study employed click-through rate formula for it was the most applied metric in calculating the performance of headlines on the digital environment

Seven (7) selected newspaper click bait features identified in objective three were correlated with readership (CTR). This was the measure of how well the newspaper headlines under this study were performing on the newspaper websites and apps. The CTR formula calculated the performance of online headlines and tested if the headlines with certain features would perform significantly better than the headline that did not have the features. The high CTR was the standard measure of more readers' interest in that newspaper headline, whereas a low CTR suggested that headlines might not be as important. The high CTRs was significant in showing that the more news consumers were clicking through the newspaper headline links on the website, but then again they were good as well for other factors.

4.2.4.1 Click Through Rate for Newspaper Headlines

The checklist item with four variables was prepared to capture the CTR for each headline. The researcher evaluated the newspaper headlines in terms of clicks divided by views multiplied by 100%. The number of viewers and clicks were obtained from *Mwananchi* and *The Citizen* newspapers' web metrics. Views under this study referred to the number of people who happened to visit the website page containing the headline by from July 2017 to June 2018. Clicks, on the other hand, referred to the number of people who had both viewed and clicked on the headline link up to that particular time set. The websites of *Mwananchi* and *The Citizen* were the sources of readership web metrics by ranking top viewed and clicked headline for the time set.

The CTR variables in the questionnaire item were coded in interval scales of very low (0-20%), low (21-40), average (41-60), high (61-80) and very high (81-100). Then, the

SPSS analysed the data to determine the headlines with a high click-through rate. Table 4.21 presents a summary of the CTR of 259-newspaper headlines.

Table 4.21

Click Through Rate for Newspaper Headlines

CTR	Frequency	Percent	Valid Percent	Cumulative Percent
very low	37	14.3	14.3	14.3
Low	22	8.5	8.5	22.8
average	31	12.0	12.0	34.7
high	25	9.7	9.7	44.4
very high	144	55.6	55.6	100.0
Total	259	100.0	100.0	

The data show that 55.6% of 259 The Citizen and Mwananchi headlines analysed under this study had a very high click-through rate, 9.7% had a high click-through rate, 12% had an average click-through rate, 8.5% had a low click-through rate, and 14.3% had a very low click-through rate. This suggests that the majority of the headlines were above average click-through rate. In other words, 65.3% of all headlines had 60-100% of CTR.

4.2.4.2 The Impact of Characters per Headline on News Readership

The analysis on the number of character variables per headline was centred on the pre-existing general assumption (Dor, 2003); Bullas, 2013; Farnsworth, 2012) that in journalism headline length matters when it comes to effective online communication. The analysis under this section was also motivated by the debate on the optimal online newspaper headline length, form and its composition. This section, therefore, sought to examine how the number of characters per headline affected news readership on the newspapers' website. In order to measure the length of each headline, the number of

characters for each headline was determined by Co Schedule online headline analyser and 2016 Microsoft Office Word Count.

The two hypotheses (null and alternative) were developed. There was an alternative hypothesis that shorter newspaper headlines with equal or less than 55 characters were preferred over the longer headlines with more than 55 characters and the null hypothesis that there was a similar preference between shorter headlines with equal or less than 55 characters and longer headlines with more than 55 characters. The hypotheses are stated hereunder:

H₁: Online newspaper readers prefer shorter headlines (≤ 55 characters per headline) to longer headlines (> 55 characters per headline).

H₀: There is a similar preference in readership between longer headlines (> 55 characters per headline) and shorter headlines (≤ 55 characters per headline).

The data used for this analysis came from the *Mwananchi* and *The Citizen* Digital headlines readership web metrics from July 2017 to 2018. The CTR (readership) calculations considered the number of views divided by the number of clicks on the headline link. Then, the percentages were calculated by SPSS. In this analysis, the dependent variable was the click-through rate (CTR) and the independent variable was the number of characters per newspaper headline. The newspaper headline characters were correlated with readership (CTR). The character variables used were coded purposely to get the intended information. The characters for each newspaper headline were defined with label values (1 = 1-15 characters), (2 = 16-30 characters), (3 = 31-45 characters), (4 = 46-60 characters), and (5 = 61+) whereas the CTR's assessments values were (1 = very low), (2 = low), (3 = average), (4 = high) and 5 = very high). It should put in mind that the CTR (readership) under this research was the dependent variable whereas characters were independent variables.

Statistical Method: Concerning the hypothesis, there was a need to focus on the variation among group means (≤ 55 characters and < 55 characters). Considering the nature of the research data, a one-way ANOVA fitted for the analysis because of the dependent variables, which were arranged in intervals. The independent variable (characters) consisted of two or more categories. In this regard, there was an independent observation, a normal distribution of independent variables and homogeneity of variance testing through *Laverne's Test*. The analysis of the relationship between characters and readership employed SPSS version 20. The null and alternative hypotheses of one-way ANOVA can be expressed as follows:

$H_0: \mu_1 = \mu_2 = \mu_3 = \dots = \mu_{CTR}$ (preference in readership of a headline (CTR) means between ≤ 55 characters are equal).

H_1 : At least one preference (CTR) means between ≤ 55 characters is not equal.)

After testing the significance, a *post hoc test* was also run in SPSS to compare dependent variable (readership) and independent variable (number of characters per headline). *The post hoc test* applied as the means of analysing the results of experimental data under this study. In this research, the *post hoc* analysis consisted of the statistical analysis of data that was not specified in advance. The equal variance assumed for this comparison was based on the most common post-hoc tests namely *Bonferroni* and *Dunnnett test* (2-sided). Table 4.22 presents the findings.

Table 4.22

ANOVA Click Through Rate

	Sum of Squares	d.f	Mean Square	F	Sig.
Between Groups	10.775	3	3.592	1.583	0.194
Within Groups	578.414	255	2.268		
Total	589.189	258			

Analysis outputs: The analysis with ANOVA on significance in Table 4.22 shows that there was no statistical significant difference in readership preference between longer headlines (>55 characters) over shorter headlines (≤ 55 characters) since $F(3,255) = 3.583$, $\rho = 0.194$ and $\alpha = 0.05$ at two-tailed. This means, an increase of one character of the headline, reduces readers between groups by 19.4%. This finding accepted the null hypothesis that “there was a similar preference in readership between longer headlines (>55 characters per headline) and shorter headlines ≤ 55 characters per headline)” and rejected the alternative hypothesis that “shorter headlines (≤ 55 characters) were preferred over shorter headlines (≤ 55 characters)”. This observation proposes that headlines length is not the only factor that determines a high click-through rate because there were headlines of different lengths in terms of characters with similar click-through rates. Table 4.23 presents another analysis of multiple comparisons

Table 4.23

Dependent Variable: Click through Rate Percentage

Dependent Variable: Click through Rate %							
(I) Number of Characters		Mean	Std.	Sig.	95% Confidence Interval		
		Difference (I-J)	Error		Lower Bound	Upper Bound	
Bonferroni	16-30	31-45	0.348	0.237	0.860	-0.28	0.98
		46-60	0.622	0.290	0.197	-0.15	1.39
		61+	0.161	0.604	1.000	-1.44	1.77
	31-45	16-30	-0.348	0.237	.860	-0.98	0.28
		46-60	0.274	0.244	1.000	-0.37	0.92
		61+	-0.188	0.583	1.000	-1.74	1.36
	46-60	16-30	-0.622	0.290	0.197	-1.39	0.15
		31-45	-0.274	0.244	1.000	-0.92	0.37
		61+	-0.462	0.606	1.000	-2.07	1.15
	61+	16-30	-0.161	0.604	1.000	-1.77	1.44
		31-45	0.188	0.583	1.000	-1.36	1.74
		46-60	0.462	0.606	1.000	-1.15	2.07
Dunnnett t (2-sided) ^a	16-30	61+	0.161	0.604	0.951	-1.16	1.48
	31-45	61+	-0.188	0.583	0.921	-1.46	1.09
	46-60	61+	-0.462	0.606	0.607	-1.79	0.87

a. Dunnnett t-tests treat one group as a control, and compare all other groups against it.

The results show that the independent variables (characters) ranging from (16-30), (31-45) and (46-60) were significant (at 16-30 $p \leq 0.951$; 31-45 $p \leq 0.921$; 46-60 $p \leq 0.607$). P-values helped to determine the significance of the study results. In principle, a p-value is a number between 0-1 which is interpreted as a small p-value (usually ≤ 0.05). It indicates a strong proof against the null hypothesis that it should be rejected. This means that the newspaper headline click-through rate was high when the number of the characters was between (16-30) characters, (61+) characters, and reduced when the number of characters was between (31-45) characters. In other words, an increase of character of the newspaper headlines between (16- 30), between (31- 45) and between

(46-60) characters reduces the number of clicks by 95.1%, 92.1% and 60.6% respectively. Since the p-value was so high (>0.05), the null hypothesis was accepted and the alternative hypothesis was rejected. This finding again is similar to that of Dor (2003) and Saxena (2006) that headlines which are short tend to increase readership. This again implies that there was a similar preference in readership between short and long headlines.

In running the one-way ANOVA, the means of independent variables (characters) and dependent variables click through rate were also assessed using the *means plot* in Figure 4.1. Figure 4.1 below graphically presents the preference of newspaper headlines in an interval scale measurement.

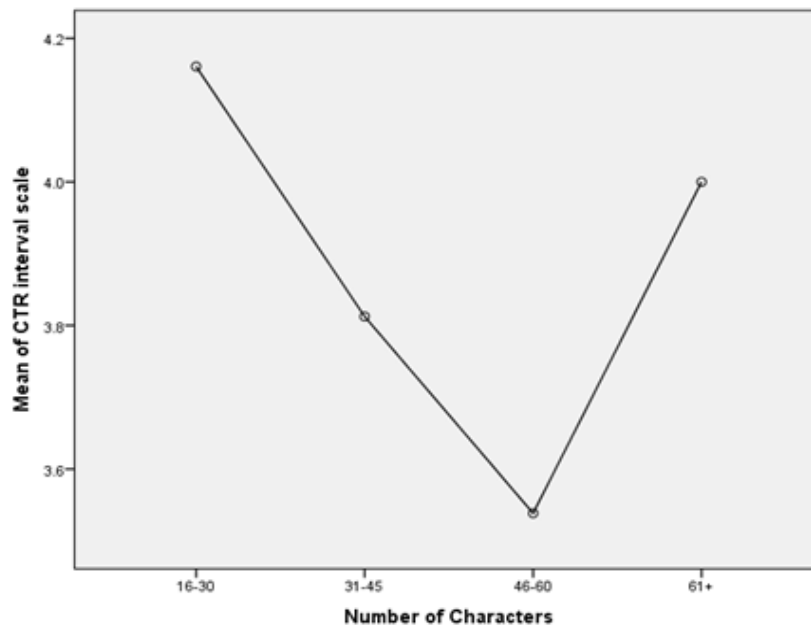


Figure 4.1: *The Means Plot for Headline Characters and Readership (CTR)*

The plot indicates that the readership was very high when the headline characters were between (16-45) such as *Court allows police to question* and very low when the characters were between (46-60) such as *TanESCO told to open offices in remote areas to improve power supply* in data set [32a-b] below. However, the readership was again

very high when the headlines characters were 61 and above as headline *Opposition leaders are not the enemy, Kikwete tells African ruling parties* (see data set 32) below. The line graph below confirms that readership was very high when the headlines characters were 61 plus.

4.2.4.3 The Impact of Sentimental Words on News Readership

This section compares newspaper headlines with reference to sentimental headlines with their readership. The study used a checklist collect data for each online newspaper headline variables *positive, negative, or neutral*. A newspaper headline was considered positive sentimental if it conveyed good news, negative sentimental for bad news, and neutral for non-aligned news. Co Schedule, the online headline analyser assisted in identifying and classifying the online newspaper headline sentiments. Then, the two hypotheses were developed.

"H1" Newspaper readers prefer headlines that incorporate words that are more sentimental to headlines that do not incorporate sentimental words.

"H₀" The preference is the same between headlines that incorporate one or more sentimental words and the headline that have neutral sentimental words.

A One Way ANOVA analysis was run in SPSS to test if headlines that contained one or more sentimental words were preferred over headlines that did not. The headlines with sentimental words were coded as (1 = negative sentimental headlines, 2 = positive sentimental headlines, and 3 = neutral sentimental headlines). Table 4.24 summarises ANOVA results that tested the relationship between readership (CTR) and sentimental headlines.

Table 4.24

Click Through Rate Table in ANOVA

Groups		Sum	of df	Mean	F	Sig.
		Squares		Square		
	(Combined)	13.342	2	6.671	2.966	0.053
Between Groups	Unweighted	8.037	1	8.037	3.573	0.060
	Linear Term Weighted	5.811	1	5.811	2.583	0.109
	Deviation	7.531	1	7.531	3.348	0.068
Within Groups		575.847	256	2.249		
Total		589.189	258			

After the analysis with ANOVA, the result showed that $p = 0.053$, which was greater than (>0.05) (see table 4.34). Therefore, the greater p-value (>0.05) results accepted the null hypothesis that there was a statistical difference in the means of explanatory variables (negative sentimental words, positive sentimental words and neutral sentimental words).

Then, two *post hoc* tests was also run (see Table 4.25) to determine the difference in the means over the dependent variable CTR. The *Bonferroni* test was carried out in multiple comparisons intentionally to prevent the lowering of the alpha value. The study carried out a *Dunnet* test to compare the variation among the negative and positive sentimental headlines.

Table 4.25

Multiple Comparisons

		Dependent Variable: CTR Interval Scale			95% Confidence Interval			
			Mean Difference (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound	
(I) Sentimental words	Bonferroni	Negative sentimental words	Positive sentimental words	0.797	0.356	0.078	-0.06	1.66
			Neutral sentimental words	0.422	0.223	0.180	-0.12	0.96
		Positive sentimental words	Negative sentimental words	-0.797	0.356	0.078	-1.66	0.06
			Neutral sentimental words	-0.375	0.321	0.733	-1.15	0.40
		Neutral sentimental words	Negative sentimental words	-0.422	0.223	0.180	-0.96	0.12
			Positive sentimental words	0.375	0.321	0.733	-0.40	1.15
	Dunnett t (2-sided) ^a	Negative sentimental words	Neutral sentimental words	0.422	0.223	0.115	-0.08	0.92
		Positive sentimental words	Neutral sentimental words	-0.375	0.321	0.425	-1.10	0.35

a. Dunnett t-test treats one group as a control, and compares all other groups against it.

The test showed that positive and negative headlines had the same significance results $\rho \leq 0.078$ whereas and neutral sentimental headlines had the significance results of ($\rho \leq 0.180$). The results under this section showed that the newspaper headlines with negative sentimental words had the lower value ($\rho \leq 0.115$) thus; increase of sentimental words reduces the readership rate at 11.5% only whereas the headlines with positive

sentimental words were attributed to higher value ($\rho \leq 0.425$) thus, and the increase of positive sentimental words reduces the readership rate at 42.5%. This is because, the low value is more significant than the higher one. In this regard, the headlines with negative sentimental words were more preferred than the positive sentimental headlines, $\alpha=0.05$ at 2-tailed

4.2.4.4 The Impact of Headlines' Complexity on News Readership

This presents the data on the assumption that the words' complexity determines the readership and comprehension of a given text (DuBay, 2004). The Gunning Fog Index (GFI), which is the readability tool that categorises words complexity according to the number of syllables they have. Under this tool, a word with more than two syllables is categorised as complex and simple when it is monosyllabic. From the above-mentioned argument, this study, therefore, managed to formulate two hypotheses (alternative and null) hereunder to test if there was any significant difference in readership between headlines complexity words and readership.

(H1) Newspaper headlines that contain one or more complex words are more preferred to the headlines that do not contain complex words.

(H₀) Thereadership preference is the same between newspaper headlines that do not contain complex words and the headlines that contain complex words.

Statistical method: A binary logistic regression analysis was run in SPSS to test the null hypothesis that 'it makes no difference in preference between headlines that do not contain complex words and the headlines that contain complex words'. The click-through rate (readership) as the dependent variable was the categorical variable since it was recorded as (0 = low) and (1= high). The independent variables were continuous variables coded as (1 = with 1 complex word, 2 = with 2 complex words, 3= with 3 complex words, 4= with 4 complex words, 5= with 5 complex words, 6=6 complex

words, 7=7 complex words and 8= 8 complex words+) in the questionnaire item. Depending on the nature of the data (categorical and continuous), the binary logistic was the best option for running the data, $\alpha=0.005$. The binary logistic regression was very important to predict the effect of a categorical dependent variable with reference to one or more predictor variables (Yuksel, 2014). Table 4.26 presents the *Omnibus Tests of Model Coefficients*.

Table 4.26

Omnibus Tests of Model Coefficients

	Chi-square	Df.	Sig.
Step	9.768	1	0.002
Block	9.768	1	0.002
Model	9.768	1	0.002

Analysis Outputs: The given Chi-Square table 4.36 has 1 degree of freedom; it gives a significance of ($p \leq 0.002$), a condition which allows continuing with the model. It should be noted that calculating the correct number of degrees of freedom is imperative to determine the critical value at which the hypothesis was to be accepted or rejected (Cortina, Green, Keeler & Vandenberg, 2017). Therefore, the calculation of the degree of freedom (1) helped to attain the anticipated confidence level ($p \leq 0.002$) (See Table 4.26). The degree of freedom enabled to point out the number of independent values that would vary in this analysis without violation of any constraints. The degrees of freedom indicated the number of independent values that could vary in an analysis without breaking any constraints. This was very essential in hypothesis testing and regression analysis (Cortina *et al.*, 2017).

The study used the Nagelkerke R Square and Cox and Snell R Square values to show the amount of variation in the dependent variable (readership) explained by the model. Table 4.27 presents the models summary.

Table 4.27: Models Summary

Step	-2 likelihood	LogCox and Snell Square	RNagelkerke R Square
1	324.798 ^a	0.37	0.51

The Cox and Snell R Square models in table 4.27 show $p \leq 0.37$ significance and Nagelkerke R Square (0.51). The variation of R square ranges from zero value (0) to the value of about one (1). Thus, the R^2 of a model value of 0.50 suggests that the model's inputs could explain about half of the observed variations. Since the R^2 value for the model was (0.51), it proposed that the model was fit to run a simple regression analysis. This variation in the model was between 37% and 51%. The variation in such kind of interval was enough and thus the condition allowed the next step of interpretation

The model classification in table 4.28 shows how the model predicted the dependent variable. It managed to correctly predict the high readership (CTR) of 94.7%, which is a known sensitivity of the model, and low CTR (readership) of 7.8%, which is also a known specificity of the model.

Table 4.28

Classification Model

Observed		Predicted		
		Click Through Rate		Percentage Correct
		Low	High	
CTR	Low	7	83	7.8
	High	9	160	94.7
Overall %				64.5

a. The cut value is .500

The variables in the equation table 4.28 show the contribution of the independent variables (complex words). The results indicated the statistical significance of $p \leq 0.003$, which was below α . The significance which is less than ($p \leq 0.005$) normally rejects the null hypothesis and accepts the alternative one. Thus, this study rejected the null hypothesis and accepted the alternative hypothesis that there were significant differences in readership preference between headlines that contained complex words over headlines that did not. Table 4.29 presents the variables in the equation.

Table 4.29

Variables in the Equation

	β	S.E.	Wald	Df.	Sig.	Exp(β)
Step 1 ^a						
C33	0.295	0.098	9.126	1	0.003	1.344
Constant	-0.089	0.265	0.114	1	0.736	0.914

a. Variable(s) entered on step 1:

The positive β - value (0.295) in Table 4.29 shows that the increase of value could also lead to an increase of headline readership (CTR) at 1.344 times Exp (β). This proposes

that readers preferred headlines that did not contain complex words to headlines that at least contain one complex word.

4.2.4.5 The Impact of Literal and non-Literal Headlines on Digital News Readership

This section sought to analyse the impact of non-literal and non-literal newspaper headlines on news readership. The analysis under this section was based on the assumption that headline designers use both non-literal and non-literal language to convey information to their readers. Of interest in this section was to observe which category of the headline had a significant impact on news selection and readership. The headlines with pragmatic interpretations were defined as non-literal whereas headlines with semantic interpretation were defined as literal headlines in the checklist. The researcher went through all 259 headlines to determine literal and non-literal headlines. To determine the relationship between literal/non-literal headlines and news readership, the study had to formulate two hypotheses: alternative hypothesis and null hypothesis.

(H1) Literal headlines are more viewed and clicked on than those headlines, which are non-literal.

(H0) There is no significant difference in readership between literal headlines and non-literal headlines.

Statistical Method: A regression model was run to test whether there was a linear relationship between headlines with literal language and headlines with non-literal language against readership (CTR). Readership (CTR), which was the dependent variable was coded (1 = very low, 2 = low, 3=average, 4=high, and 5=very high) whereas the independent variable was categorical (dummy or binary variable) coded

(1=literal-headlines 2= non-literal headlines). These variables fitted the condition for the regression model. Table 4.30 presents the Models Summary

Table 4.30

Models Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.058 ^a	0.003	-0.001	1.512

a. Predictors: (Constant), non-literal language use

b. Dependent Variable: Click through Rate

Analysis Output: The model summary in Table 4.30 shows the R square of 0.003. This score means the model explained only 0.3% variation of the variables. The regression model also shows that the difference between R square and Adjusted R square was attributable to the smallest sample and therefore, the model was appropriate for interpretation.

A one-way ANOVA test determined if the study results were significant or not. This analysis helped to figure out if there was a need to reject the null hypothesis or accept the alternate hypothesis. In other words, the test sought to see whether there was a significant difference in readership between headlines with literal meaning and headlines with non-literal meaning. See table 4.31.

Table 4.31

One-way ANOVA

Model	Sum of Squares	df.	Mean Square	F	Sig.
Regression	1.967	1	1.967	0.861	0.354^b
Residual	587.222	257	2.285		
Total	589.189	258			

a. Dependent Variable: CTR

b. Predictors: (Constant), non-literal language use

The ANOVA Table 4.31 indicates the results to be significant $p=0.354$ which is greater than $\alpha=0.05$. Therefore, the null hypothesis was accepted, as there was a confidence to conclude that one explanatory variable had no significant impact on the click-through rate (readership). In other words, the analysis revealed that there was no significant difference in readership between headlines with literal meanings and headlines with non-literal meanings.

Since there was a significant difference in readership, a cross-tabulation was carried out to see which variable between Literal and non-literal headlines had a high click-through rate. Table 4.32 summarises is the cross tabulation of literal and non-literal constructions against readership

Table 4.32

*CTR * Non-literal Language Use: Cross-Tabulation*

		Figurative language use		Total
		Literal language	Non-Literal language	
Readership	very low	31 _a 12.0%	6 _a 2.3%	37 14.3%
	Low	20 _a 7.7%	2 _a 0.8%	22 8.5%
	Average	28 _a 10.8%	3 _a 1.2%	31 12.0%
	High	24 _a 9.3%	1 _a 0.4%	25 9.7%
	very high	130 _a 50.2%	14 _a 5.4%	144 55.6%
Total		233 90.0%	26 10.0%	259 100.0%

The results indicated that out of 259 newspaper headlines analysed, 50.2% of literal headlines had a very high click-through rate, 9.3% had a high click-through rate, 10.8% had an average click-through rate, 7.7% had a low click-through rate, and 12% had a very low click-through rate. On the other hand, 5.4% of non-literal headlines had a very click-through rate, 0.4% had a high click-through rate, 12 had an average click-through rate, 0.8% had a low click-through rate and 2.3% had a very low click-through rate..

The study showed that out of 259 headlines analysed, 90% were literal whereas 10% were non-literal. In that way, the designers of the two newspaper headlines understudy preferred literal headlines. The literal headlines had a very high click-through rate (readership) by 50.2% whereas non-literal had only 5.4% click-through rates. Thus, the literal headlines outperformed the non-literal ones in readership.

4.2.4.6 The Impact of Names and Concepts of High News-Value on News Readership

After realising the preference of journalists of names and concepts of high value, this section sought to present the findings on how readers read newspaper headlines with reference to concepts and names. In this section, the assumption was that an experienced newspaper writer would design a headline by incorporating the concepts and names of high news value. This study managed to track the web-metrics of headlines readership from *Mwananchi* and *The Citizen* newspaper websites. From the websites, the number of views and clicks were recorded in a data sheet. Then, the CTR for each news headline was calculated and correlated with names and concepts of high news value. The determinants of news-value were based on literature for factors that help define news value by Beale (2016) and Dor (2003)

- I. Timeliness: does the headline contain current information
- II. Surprise: Is the development surprising or unusual?
- III. Contrarian elements: Does the headline point to something that's counter intuitive or goes against conventional wisdom?
- IV. Trendiness. Does the headline exemplify an important trend, or—as noted above—does it contradict a well-publicized trend?
- V. Conflict: Does the headline information involve opposing forces?
- VI. Human interest. Is there an interesting, relatable person at the heart of the story?
- VII. Humor. Is there something just plain funny about the story? Beale (2016)

Then, the study formulated null hypothesis to test if there was a significant relationship between headlines with names and concepts of high news value and readership (CTR).

Suggested hypotheses:

H1: The preference is not the same between headlines with names and concepts with high news values over those headlines with low news-value.

H0: The preference is the same between headlines with names and concepts with high and those headlines with concepts and names of low news-value.

Statistical Methods: A Chi-square test was run to test the null hypothesis, which stated that the preference between headlines with names and concepts with high news values and headlines with names and concepts with low news value was the same. Before operations, the study under this section observed the condition for the Chi-square test. Both independent and dependent variables were put in a form of categorical variables. The independent variable was coded (1 =High new value and 2= low new value). The test was at $\alpha=0.05$ at two-sided. Table 4.33 presents the results of the Chi-square test.

Table 4.33

Chi-Square Tests

	Value	Df.	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.336 ^a	4	0.000
Likelihood Ratio	28.581	4	0.000
Linear-by-Linear Association	27.369	1	0.000
N of Valid Cases	259		

a. 0 cells (.0%) have expected count less than 5.

b. The minimum expected count is 9.09.

Analysis outputs: After running the Chi-square test; the results available in table 4.34 showed $p=0.000$, $df. =4$ and Pearson-Chi-Square 28.336 which might be written in the equation as $(X^2 (4, N=259) = 28.336, p<0.05)$. Therefore, the null hypothesis was

rejected ($p < \alpha$). This entailed that the preference was not the same between headlines with names and concepts with high news values and headlines with names and concepts with low news value. To understand the variation in headlines preference, a cross-tabulation was run in SPSS. See (table 4.34).

Table 4.34

Cross tabulation: Names and Concepts of High and Low News-value

Readership		Names and Concepts of News-Value		Total
		High-News Value	Low-News Value	
Readership (CTR)	very low	12	25	37
	CTR	4.60%	9.70%	14.30%
	Low CTR	8	14	22
		3.10%	5.40%	8.50%
	Average	14	17	31
	CTR	5.40%	6.60%	12.00%
	High CTR	14	11	25
		5.40%	4.20%	9.70%
Very High	104	40	144	
CTR	40.20%	15.40%	55.60%	
		152	107	259
Total		58.70%	41.30%	100.00%

The cross-tabulation results in Table 4.34 showed that headlines with high news values had a very high CTR at 40.20% compared with headlines with names and concepts of low news value, which had 15.40% CTR. The presence of high news value proposes that online newspaper readers tend to click on headlines that convey concepts and names of high news value than those headlines that incorporate concepts and names of low news value

4.2.4.7 The Impact of Signal Words on News Selection and Readership

This section sought to examine the impact of headline signal words on newspaper readership. The choice of the headline with signal words was based on the dearth of

literature on this area. Headline with signal words such as *this, these, therefore, how, why, when, which, who*, and the like were the focus under this section. There was an assumption that adopted from (Mitchell & Page, 2015; Kuiken, *et al.*, 2017) that signal words determine the headline performance on the web. To test the relationship between headlines with signal words and readership, the study had to formulate the alternative hypothesis and null hypothesis stated hereunder.

Suggested hypotheses

H1 At least the readership preference is different between online newspaper headlines that contain one or more signal words over that do not.

H0 Readership preference is similar between online newspaper headlines that contain one or more signal words over that do not.

Statistical Methods: A means test was used to test the null hypothesis that readership preference was similar between online newspaper headlines that contain one or more signal words over that do not. A number of 259 newspaper headlines were involved in the SPSS analysis (table 4.35). The dependent variables were in the continuous scale of (1= very low, 2 = low, 3 = average, 4=high and 5=very high), meaning that as the number increases from one, the click-through rate (readership) also increases. The independent variables were categorical variables measured as (1 = with signal words and 2=without signal words). (See table 4.35)

Table 4.35

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
CTR interval scale *	259	100.0%	0	0.0%	259	100.0%
Signal words						

Looking at the means and standard deviations in Table 4.35, the study noted that those headlines with signal words were attributed to the highest mean of 4.35 and the lowest standard deviation of 1.032 whereas those headlines without signal words had 3.71 mean and the highest standard deviation of 5.548. However, looking at the total mean (3.84) and standard deviation (1.511), headlines without signal words dispersion was around the mean. This means that headlines without signal words were attributed to having more relationship with high click-through rate compared to headlines with signal words. Table 4.36 presents the standard deviation of signal headlines and readership (CTR).

Table 4.36:*Standard Deviation of Signal Words and Click through Rate*

Signal words	Mean	N	Std. Deviation	Std. Error of Mean	Variance	% of Total N	Median
With signal words	4.55	38	1.032	0.167	1.065	14.7%	5.00
Without signal words	3.71	221	1.548	0.104	2.396	85.3%	5.00
Total	3.84	259	1.511	0.094	2.284	100.0%	5.00

A Means test was used to test the relationship between the headlines with signal words and news click-through rate (readership). The null hypothesis stated that readership preference is similar between online newspaper headlines that contain one or more signal words over that do not. Table 4.37 presents a summary of the findings.

Table 4.37

ANOVA Table

		Sum of Squares	Df.	Mean Square	F	Sig.
CTR	Between (Combined) Groups	22.754	1	22.754	10.324	0.001
interval scale *	Within Groups	566.435	257	2.204		
Signal words	Total	589.189	258			

The result indicated that the p-value was 0.001; thus, the analysis rejected the null hypothesis, $p < \alpha$ hence there was a statistically significant difference between headlines that contained one or more signal words over that did not.

The ETA test (see Table 4.38 below) was carried out to test the association between click-through rate (readership) and headlines with signal words.

Table 4.38

Measures of Association

	Eta	Eta Squared
CTR * Signal words	0.197	0.039

The results showed a high association of 39% between the dependent variable (CTR) and independent variable (headlines signal word).

In addition, the study carried out a logistic regression analysis to test if readership preference was similar between headlines that contained one or more signal words over those which did not. The dependent variable (CTR) or readership was recorded into dichotomous categorical variables (variable1=very low=0, 2= low=0,3=average=0, 4=high=1 and 5=very high=1) in order to fit the model), this means 0=low CTR and 1=high CTR. The dependent variable (headline signal words) was coded 0 =with signal words and 1= without signal words.

Table 4.39

Omnibus Tests of Model Coefficients

		Chi-square	Df.	Sig.
	Step	7.881	1	0.005
Step 1	Block	7.881	1	0.005
	Model	7.881	1	0.005

The model outputs: After the analysis, *Omnibus Tests* of model coefficients Table 4.49 indicated that the model was fit to continue with the null hypothesis testing since $p=0.005$ was below 0.05 (α). The *Omnibus* statistically tested whether the explained variance in the set of data was significantly larger than the unexplained variance.

During the analysis, the *Hosmer-Lemeshow* test had to be run in SPSS. The *Hosmer-Lemeshow* tested goodness of fit for logistic regression models.

Table 4.40

Contingency Table for Hosmer and Lameshow Test

		Click Through Rate = Low		Click Through Rate = High		Total
		Observed	Expected	Observed	Expected	
Step 1	1	84	84.000	137	137.000	221
	2	6	6.000	32	32.000	38

The test showed that the logistic model was able to predict all dependent variables expected in the analysis, a condition that allowed continuing with the model interpretation.

Table 4.41:

Variables in the Equation

		B	S.E.	Wald	df.	Sig.	Exp. (B)	95% C.I. for EXP(B)	
								Lower	Upper
Step	SIGNAL	1.185	.466	6.465	1	.011	3.270	1.312	8.151
1 ^a	W(1)								
	Constant	.489	.139	12.460	1	.000	1.631		

a. Variable(s) entered on step 1: SIGNALW

The results in Table 4.41 shows the variables in the equation were $p=0.011$, which is below 0.05 (α) therefore, the null hypothesis, was rejected. The model concluded that at least the preference was not similar between a headline that contains one or more signal words over that do not. To see the variation of headlines (with signal words, without signal words) over CTR, the B-column was concerned. The B-column showed positive values and this value meant headlines without signal words could predict more the CTR (the coding was 0 = headline with signal words and 1-without signal words). Looking at the Exp. (B), headlines without signal words are 3.270 times likely to predict the readership (CTR).

4.2.4.8 The Impact of Readability on Digital Newspaper Readership

Under this section, the study focused on the assumed relationship between headline readability and readership on the internet. Readability of the digital newspaper headline was calculated by considering Flesch-Kincaid Readability score in interval scales from

0-100 (See table 2.1). However, the interval scales of Flesch-Kincaid readability was slightly changed to suit SPSS analysis. Then, the questionnaire item recorded the readability of each headline. Thereafter, the CTR in interval scale of very low (0-20%), low (21-40), moderate (41-60), high (61-80) and (81-100) very high was set in the questionnaire. To test the relationship between headlines readability and readership, the study formulated two hypotheses:

H_I: Readers prefer headlines that are easy to read (91-100) to headlines that are difficult to read (00-30).

H₀: There is no exact readership of preference between headlines which are very easy to read (100-91) over headlines that are very difficult to read (30-00).

Table 4.42 presents the results on the impact of a headline difficulty on newspaper readership.

Table 4.42

Click Through Rate (CTR)

		ANOVA TABLE				
		Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	(Combined)	12477.215	6	2079.536	1.847	.095
	Linear Term	168.719	1	168.719	.150	.699
	Weighted	414.622	1	414.622	.368	.545
	Deviation	12062.592	5	2412.518	2.143	.065
Within Groups		138476.178	123	1125.823		
Total		150953.392	129			

Data Output and Interpretation: The SPSS analysis of the one-way ANOVA output table 4.42 showed $p=0.095$ which was less than $\alpha=0.05$ and this meant the null hypothesis was accepted ($p>\alpha$). Therefore, there was no exact readership of preference between headlines, which are very easy to read (100-91) over headlines that are very difficult to read (30-00).

Looking at the multiple comparison curve (ANOVA output) Figure 4.43 the results showed that there were some variations in Flesh Kincaid Reading Ease. For example, the CTR was low at 90-80 easy to read and 50-30 difficult to read and; on the other hand, the CTR was high at 100-90 easy to read and very high at 60-51 fairly difficult to read. This implies that the newspaper readers read all the headlines regardless of their reading ease levels. Figure 4.43 is the multiple comparison curve showing reading variations with reference to Flesh-Kincaid Reading Ease and levels. It presents the summary of readership and click through rate of *Mwananchi* and *The Citizen* newspaper headlines.

Table 4.43

*Flesch-Kincaid Reading Ease *CTR interval scale Cross-tabulation*

		Click Through Rate					Total
		very low	low	average	high	very high	
FRE	100-91 Very easy to read	1 0.8%	0 0.0%	0 0.0%	4 3.1%	5 3.8%	
	90-81 Easy to read	2 1.5%	1 0.8%	2 1.5%	0 0.0%	3 2.3%	8 6.2%
	80-71 Fairly easy to read	6 4.6%	1 0.8%	0 0.0%	0 0.0%	10 7.7%	17 13.1%
	70-61 Plain English	3 2.3%	2 1.5%	1 0.8%	1 0.8%	8 6.2%	15 11.5%
	60-51 Fairly	1 0.8%	2 1.5%	0 0.0%	0 0.0%	16 12.3%	19 14.6%

	difficulty to read						
	50-31	9	8	0	2	10	29
	Difficult to read	6.9%	6.2%	0.0%	1.5%	7.7%	22.3%
	30-00 very difficult to read	11	2	2	1	21	37
		8.5%	1.5%	1.5%	0.8%	16.2%	28.5%
Total		33	16	5	4	72	130
		25.4%	12.3%	3.8%	3.1%	55.4%	100.0%

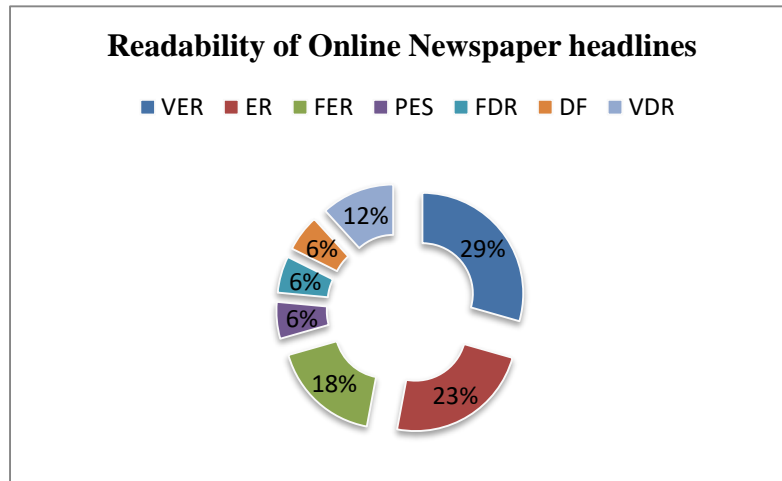
In Table 4.43, the cross tabulation data shows that 55.4% of 259 analysed headlines had the very high readership rate, 3.1% had high readership, 3.8% had moderate readership, 12.3% had low readership and 25.4% had very low readership. Results in table 4.53 suggest that headlines that were very difficult to read (28.5%) received more clicks than the headlines that were easy to read (3.8%). This is contrary to the headline designer's expectations that the news consumers would easily process digital headlines that are easy to read. Based on this analysis, we can conclude that headlines that are difficult to read (0-30) in FRE receive more clicks than headlines that do not. However, there were some cases when readership was so high and the headline were in the second variable (easy to read). From this section we can conclude that the majority of headline features analysed had a significant statistical impact on news readership on the internet.

4.2.4.7.1 Readers Responses on Readability of Newspaper Headlines

Since the results on the impact of newspaper headlines readability on readership was based on readability formulas, there was a need to validate the results from this software. First, the readers were asked to determine the ease or difficulty of the newspaper headlines and their state their reading grade levels in Tanzania educational system.

a) Readability Ease or Difficulty of Online Newspaper Headlines

In this case, the newspaper readers were asked to validate 259 newspaper headlines' ease or difficulty.



- VER = Very Easy to read
- ER: = Easy to read
- FER = Fairly easy to read
- PES = Plain English/Swahili
- FDR = Fairly difficult to read
- DF = Difficult to read
- VDR = Very Difficult to read

Figure 4.2: Responses from Readers on Newspaper Headlines Readability

The results showed that 29% of the headlines surveyed were fairly easy to read, 23% were easy to read, 18% were fairly easy to read, 6% contained plain language, 6% were fairly difficult to read, 6% were difficult to read and 12% were very difficult to read. This suggests that the majority (47%) of 259 newspaper headlines surveyed would be read with ease. The reader response on readability of newspaper headlines was contrary to Flesch Readability Formula that showed that a good number of the newspaper headlines were difficulty to read. However, GFI, SMOG, CLI and ARI readability formulas seem to concur with readers that a good number of readers would easily understand the headlines published. The marked difference with the formula can be

associated with the language differences as reader responses were based on both English and Kiswahili Newspapers. It should be remembered that the readability formulas such as Flesch-Kincaid works better for English texts only.

b) Newspaper Headlines Reading Grade Levels

To determine the reading levels, the online newspapers readers were asked to state the reading grade level of 259 newspaper headlines with reference to Tanzanian Education system. A number of six reading level variables were designed to capture the responses from readers. The newspaper readers were provided with the newspaper headlines questionnaire numbered (1-259). Then, they were asked to study each headline and validate their reading grade levels. Therefore, they were asked to validate each headline as either being very difficult to read or easy to read or fairly easy to read or plain language or fairly difficult to read or difficult to read or very difficult to read.

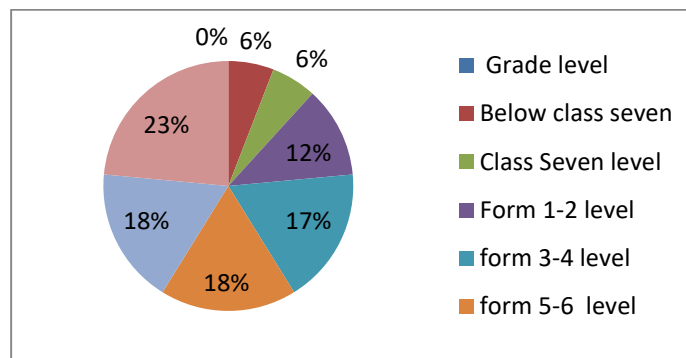


Figure 4.3: Responses of Readers on Reading Levels

Responses from 100 online newspaper readers showed that 23% of the headlines surveyed were at the graduate level, 18% at the university level, 18% at form five to six levels, 17% were at form three to four levels, 12% were at form one and two levels, 6% were at standard seven level and 6% were below standard seven levels. This suggests that the majority of newspaper headlines surveyed could easily be understood by high school students, university students and graduates in Tanzania. In other words, the

students in ordinary secondary school and primary levels would face some difficulties in understanding the online newspaper headlines. This finding concurs with the *Flesch-Kincaid Grade* level results that the majority of online newspaper headlines could easily be understood by the University Graduates.

4.2.4.9 Summary on the Impact of Newspaper Features on Headlines Readership

This section summarises a statistical test of seven (7) hypotheses in order to determine whether there was a close relationship between a headline feature and newspaper readership or not. Out of seven (7) hypotheses tested, five (3) hypotheses attested that there was a statistical difference in readership between a headline feature and its performance whereas three (4) hypotheses proved that there was a similar preference in readership between features and headline performance on the internet. The significant statistical differences in readership were revealed in sentimental words, names and concepts of high news value and signal words. On the other hand, the hypotheses about characters, non-literal headlines, readability ease, and headline complexity did not show any significant statistical difference in newspaper readership.

4.3 Analysis

This section analyses the data presented on the communicative adequacy of Tanzanian online newspaper headlines with reference to specific objectives and hypotheses formulated.

4.3.1 The Communicative Functions of Newspaper Headlines

This section analyses the data presented on the communicative functions of *Mwananchi* and *The Citizen* headlines. It should be remembered that a newspaper performs two basic functions of summarising the story and drawing the attention of readers. The first

part of this section analyses the primary function whereas the second one analyses the second function.

4.3.1.1 The Primary Function of Online Newspaper Headlines

The data presented earlier showed that most headlines from *The Citizen* and *Mwananchi* performed the primary function of headlines by being informative and not creative. According to the descriptors of informativeness in the questionnaire, such headlines could allow readers to read a headline alone and skip reading the full story. This means *Mwananchi* and *The Citizen* newspapers editors preferred plain, clear and explicit languages. The online newspaper headlines acted as the abstract of the entire articles they represented. The data set presented in [1a-b] below is an illustration of the informative headlines extracted from *The Citizen* newspaper.

- [1] a. Magufuli urges Tanzanians to emulate Nyerere's patriotism.
(*The Citizen*, October 14, 2017)
- b. President Magufuli appoints Dr Slaa new ambassador.
(*The Citizen*, November 24, 2017)

Headlines in the data set [1.a-b] above are informative as they are self explanatory and contain plain, clear and explicit languages. Apart from using clear and explicit language, they have complete thoughts. Since the headlines in the data set above are informative, they may not attract readers to click and read the full article they summarise. The language of two online newspaper headlines in the data set in [1a-b] is very clear, precise, and relevant to the articles they introduce. Thus, the majority of newspaper headlines under study observed the primary function of the print newspaper headlines that requires a newspaper headline to summarise the story. In Cognitive principle by Sperber and Wilson (1986), the informative headlines tend to maximise relevance of the story with clear constructions. Thus, the story is captured in a clear,

simple and unambiguous fashion. As a result, informativeness reduces processing effort to the necessary minimum— and optimizes the relevance of the story.

4.3.1.2 The Secondary Function of Online Newspaper Headlines

The section presents the analysis of the second function of a newspaper headline which is to attract people to click and read the news containing the headline. In this regard, the copy editors use different linguistic devices such as ambiguity, vagueness, metaphors and the like to attract readers to click and read the full story. Although the study finding shows that there was limited exploitation of the pragmatic function, this section will briefly analyse ambiguity, vagueness and metaphors as the observed linguistic features that online newspaper headlines use to design online newspaper headlines.

4.3.1.2.1 Ambiguity in Online Headlines from *The Citizen* and *Mwananchi*

In linguistics terms, ambiguity refers to the phenomena whereby some linguistic expressions allow more than one interpretation. In most cases, ambiguity can be used in at least two senses. It refers to uncertainty (dubiousness) or a sign bearing several meanings. In this study, an ambiguous headline is that which enjoys multiple interpretations. In newspaper headline design, ambiguity was interpreted as the device that is used to attract the interest of online news consumers and performed the pragmatic function of the newspaper headline. The data set in [2] below is an illustration of the less informative but creative headlines extracted from *The Citizen* and *Mwananchi* online newspapers.

[2] a. TRA yatishia kuuza mali za makonda. (*Mwananchi*, May 17, 2018)
(TRA threatens to auction makonda's property.)

b. Putin ataka kuachana na matumizi ya dola. (*Mwananchi*, May 9, 2018)
(Putin wants to renounce the use of dollars or Putin wants to get away with dollar use)

The Kiswahili newspaper headline in the data set [2.a] above is ambiguous and less informative and pragmatically it could be a device that is used to arouse the interest of newspaper readers. In the Tanzanian context where the Kiswahili language is dominant, the word *Makonda* can either refer to the name of the former Dar es Salaam Regional Commissioner (RC), Honourable Paul Makonda or the short form of bus conductors. This ambiguity stems from the Swahili word *Makonda*. The word *makonda* has multiple encodings that allow news consumers to go ahead and read the full article so as to reduce ambiguity or use contextual background knowledge to process the meaning. The readers with contextual information about *Makonda* could easily understand the headline. The designer seems to have purposively created an ambiguous online newspaper headline to confuse and attract readers to continue reading the entire article.

The analysis of ambiguity in this study relied heavily on the available literature on the types of ambiguity. Therefore, six different types of ambiguity: lexical ambiguity, structural ambiguity, phonological ambiguity, referential ambiguity, scope ambiguity and pragmatic ambiguity (Handke, 2013; Sennet, 2016) were the basis for the classification. When going through the Tanzanian online newspapers, the study observed that some of the ambiguities appeared in the digital newspaper headline discourse.

a. *Lexical Ambiguity:*

The study observed several lexical ambiguities in *The Citizen* and *Mwananchi* headlines. According to Handke (2013) and Sennet (2016), a lexical item may contain homophonous entries or even co-spelt, but with different meanings. For example, the Kiswahili word *dola* in the data set (2b) is a homophonous entry with different senses. According to the *Online Oxford Living Dictionaries, Kamusi ya Kiswahili*, the Kiswahili noun *dola* can either refer to the currency (\$) used in nations such as the USA,

Canada, and other countries or supremacy (rule) in a certain nation. Therefore, the headline could either mean the current Russian president (Vladimir Putin) wishes to stop using the Dollar (\$) currency or end exercising the power vested on him as the president of Russia. According to Ifantidou (2009), to understand the actual meaning of the headline, a reader would need to use the contextual background knowledge or read the whole article that follows the headline. After reading the full version of the article, the headline was about the Russian president who had vowed to stop the use of the U.S. currency in trade in response to the U.S. sanctions.

The *Mwananchi* newspaper headline writers probably intended to confuse newspaper readers with multiple encodings so that they could not skip reading the whole article. The word *dola* was not only ambiguous but also vague. The headline designer deliberately failed to specify *dola* as many countries such as Canada, Zimbabwe and the USA use the dollar as their currency as well. To reduce ambiguity, the news consumers had either to read the whole article represented by the headline or use the contextual background knowledge to understand the intended meaning. In ostensive inferential communication layers (Sperber & Wilson, 1995), the writer of the headline had an intention to inform the readers of something and used ambiguity as the strategy to entice readers to read the full version of the article. Since the above-mentioned headline was optimised to be relevant, the readers would easily infer meaning through the context.

b. *Structural ambiguity:*

The other type of ambiguity observed under this study was structural ambiguity. In structural ambiguity, the multiple meanings of the whole sentence depend on the structure of it (Handke, 2013; Sennet, 2016). In newspaper writing, it is common to find journalists using the headlines, which are structurally ambiguous. In this study, the

structural ambiguity in newspaper headlines design was observed. The data set in [3] is an illustration of structural ambiguity in some newspaper headlines.

- [3] a. Uokoaji wa helikopta waanza Mlima Kilimanjaro. (*Mwananchi*, April 4, 2018)
(The helicopter rescue services begin at Mount Kilimanjaro.)

The *Mwananchi* headline in the data set [3.a] is structurally and syntactically ambiguous because the whole headline has two sentential grammatical interpretations that: (1) the process of rescuing a helicopter had begun at Mt. Kilimanjaro and (2) the services of rescuing people in confinement or danger with the help of a helicopter at Mt. Kilimanjaro had begun. The *Mwananchi* editorial teams seemed to have intentionally tried to confuse readers with structural ambiguity in newspaper headline so that they could proceed reading the entire story.

c. *Scope Ambiguity:*

Scope ambiguity was another form of ambiguity observed under this study. The scope ambiguity occurs when two quantifiers or similar words take the scope over each other in different ways in the meaning of a sentence (Handke, 2003). This section presents some of the headlines examples with this kind of ambiguity. Such kind of ambiguity was observed to be common in headlines with quantifiers, negatives and modals or certain adverbs. The data set in [4] is an illustration of scope ambiguity as evidenced in *The Citizen* and *Mwananchi* online newspaper headlines.

- [4] a. Anyone against Stiegler's Gorge project will be jailed, says Minister.
(*The Citizen*, May 22, 2018)
- b. Tanzania **inaweza** kuzalisha akina Amadou Gallo. (*Mwananchi*, June 4, 2018)
(Tanzania can produce people like Amadou Gallo).

The first interpretation in the headline in the data set [4a] is that whoever tries to go against Stigler's Gorge project would go to prison and some people might have been likely to go against the project in future. The minister's statement would have an illocutionary speech act of a warning. The second meaning, on the other hand, is that the minister promised to jail opponents of the project. By designing such kind of headline, the newspaper headline designer assumed that the newspaper readers would understand the concept after reading the article or considering the context of its publication. It is therefore likely that ambiguity often happened on purpose. In Relevance Theoretical terms by Sperber and Wilson (1995), the writer of the above headline had an intention to inform readers, but he/she used ambiguity strategy to show his informative intention and the information would be interpreted through context.

In the data set [4b], the use of "inaweza" (it can) implies probability or ability. For that reason, the headline could mean that Tanzania can possibly produce people like Amadou Gallo or Tanzania has the ability to create people like Gallo. The first meaning is more on the possibility and suggests that producing people like Amadou Gallo is not a guarantee whereas the second one suggests that Tanzania has the ability to produce people like Amadou Gallo. Therefore, the context determines the meaning of the headline for people with background knowledge or they need to read the whole article in the newspaper.

According to Handke (2013), pragmatic ambiguity appears when the utterance has one clear sense but with a different sense in a context. The headline designers sometimes create headlines, which can have both literal and non-literal interpretations. The data set in [5] below is an illustration of pragmatic ambiguity as observed in some of the *Mwananchi* online newspaper headlines.

- [5] a. Mawaziri wanne watemwa. (*Mwananchi*, July 10, 2017)
(Four cabinet ministers have been sacked.)
- b. Mkazi Dar Kaa chonjo (*Mwananchi*, January 29, 2018)
(Dar resident, be careful!)

In Kiswahili, the headlines in the data set [5] have two interpretations. In headline [5a], the literal translation meaning is to spit out the four ministers out of the mouth as someone spits saliva out of his mouth. Logically, it is impossible to spit someone out of someone's mouth regarding the size of the mouth. The second and probably the intended meaning in this context is to sack the four cabinet ministers. For a newspaper reader to understand the real meaning, he or she should use the occasional ad hoc concept plus the ad hoc context of the headline. Similarly, the headline in data set [5b] is ambiguous because it has both literal and non-literal meanings. According to the article introduced by the headline, the writer of the headline was giving a warning to Dar es Salaam residents about theft that was going on at that time. 'Kaa chonjo' is a literary device that was used to estrange the language of the newspaper headline so that readers can spend their time to click and read the article or use context to disambiguate the headline. Even though the sentences in data set [5b] are semantically ambiguous, the readers can easily use the pragmatic inferences to understand the intended meaning.

d. *Referential Ambiguity*

According to Handke (2003), referential ambiguity is the type of ambiguity that happens when an expression in a specific headline denotes two or more properties. The referential ambiguity hails from the confusion between two potential referents in the newspaper headline (Fayyadh, Hameed & Abed, 2011). In referential ambiguity, the meaning intended is sometimes contextually clear. However, this is not always true. The

data set in [6] is an illustration of pragmatic ambiguity observed in *The Citizen* newspaper headlines.

[6] a. Mkuchika outlines *his* priorities. (*The Citizen*, October 9, 2017)

b. US president torn between *his* job and *his* business. (*The Citizen*, April 4, 2018)

The headlines in the data set [6] above have the referential ambiguities: The first meaning in [6a] is that “Mkuchika outlines his *own* priorities and the second one means, “Mkuchika outlines the priorities of someone else”. In this context, the possessive pronoun *his* has the anaphoric reference to Mkuchika and in another context; the same pronoun refers to someone else. Likewise, the possessive pronoun *his* in headline “US president torn between *his* job and his business” has referential ambiguity. If the newspaper reader wants to understand the information of a person whose priorities outlined without reading the article, he/she needs to use the background knowledge or read the article that follows the headline. In relevance theoretical framework (Sperber & Wilson, 1995), referential ambiguity was an ostensive inferential communication where the writer intended to inform the audience but he intentionally used to referential ambiguity marketing device of attracting readers to read the full story.

4.3.1.2.2 Vagueness in Digital Newspaper Headlines

Vague expressions or utterances are normally unspecified about their meanings (Handke, 2013; Sabet & Zhang, 2016). In this regard, vagueness allows unspecified meanings and creates a broad space for interpretation among readers (Kempson, 1977; Frawley, 2013). In vagueness, the meaning is always fuzzy, unclear, unspecified and blurred (Frawley, 2013; Handke, 2013). Some of the newspaper headlines observed in this study had some kind of vagueness. The data set in [7] below is an illustration of vagueness as observed in *Mwananchi* and *The Citizen* online newspaper headlines.

- [7] a. Now govt takes back Manji's land (*The Citizen*, April 26, 2018).
- b. CHADEMA: Police are on the way to search Lisu's house (*The Citizen*, August 23, 2017).

The above headline in the data set [7a] does not specify the government that took Manji's land. It could be the government of Kenya, USA, Singapore and so forth. Besides, the land that the headline designer addresses is not specified. Manji is a proper name, there are so many people with the same name, and those people (with the name Manji) could be having many lands as well. Therefore, the land that the journalist is referring to is still unspecified. For newspaper readers to understand the communication of the headline, they should either click and read the whole article in a newspaper or use the ad hoc context of the expression to get the real meaning. Similarly, the headline in the data set [7b] is vague. The possessive construction 'Lisu's house' is underspecified. It can be describing the house that Lisu owns, the house that Lisu lives in, the house that Lisu likes, the house that Lisu built and so forth. In this study, the analysis of vagueness in online newspaper headlines adopted Kempson (1977) and Handke (2013) taxonomy of vagueness which are referential, indeterminacy, lack of specification, and disjunction.

a. Referential Vagueness

The first category of vague lexical items considered newspaper headlines with referential vagueness. The headlines with referential vagueness have lexical items that are clear enough but it might be hard to decide whether the lexical item applies to certain objects or not (Kempson, 1977). Thus, in referential vagueness, it is hard to find a borderline of the object that an individual is trying to refer to. Among the online newspaper headlines, samples that the study observed had some lexical items which Kempson (1977) calls referential vagueness. The data set in [8] below is an illustration of referential vagueness from *Mwananchi* and *The Citizen* online newspaper headlines.

- [8] a. Askofu aandika waraka **mzitokwa** Lissu (*Mwananchi*, September 12, 2017). (Bishop writes a weighty message for Lissu)
- b. Two lucky winners gain **big** from M-Bet draw (*The Citizen*, June 29, 2018)

The Swahili lexical item *mzito* (weighty) has a fuzzy boundary. It is very difficult to differentiate what is “weighty” and “not weighty”. *Mzito* (weighty) is an adjective of degree with the meaning that is always in a scale. Different readers could define the weighty message to Lisu at different degrees of weight. Even the lexical item *Askofu* (Bishop) is underspecified. There are so many Bishops in Tanzania and the world at large. Therefore, using the lexical item *Askofu* would force the newspaper headline readers to read the remaining parts of the article or use the contextual and inferential meaning to comprehend the headline.

The headline *Two lucky winners gain **big** from M-Bet draw* in data set [8b] contains a lexical item *big* which is underspecified. Under normal condition, it is not easy to show the borderline between what is big and not big as it is on a degree (positive, comparative and superlative). This adjective of degree ‘big’ refers to the size or amount greater than average of its kind. In relevance theoretical terms, ostensive-inferential communication includes the exploitation of an ostensive stimulus to attract the attention of news seekers (Sperber & Wilson, 1985/6). Since an ostensive stimulus (vagueness) is intended to attract the newsreader’s attention, the headline designers know that the readers will only focus on a stimulus that seems relevant enough. When designers produce a headline with an ostensive stimulus, they assume that it is also relevant enough to be worth processing on side of the newspaper readers.

b. Indeterminacy of the meaning

Another type of vagueness is the indeterminacy of the meaning of an item or phrase, where the interpretation appears to be intangible (Kempson, 1977; Handke, 2013). In this case, the newspaper headline designer may create the unspecified (vague) newspaper headline. Kempson (1977) argues that indeterminacy is common in possessive constructions and journalists of the two newspapers applied vagueness in headlines to create semantic indeterminacy. This study was based on the assumption that journalists tend to use vague headlines, which is a strategy that makes online news consumers view the page and click on the link containing the information to read the full article. The data set in [9] is an illustration of indeterminacy type of vagueness that the headline designer of *Mwananchi* and *The Citizen* newspapers used to attract their online readers.

[9] a. Kanisa la Gwajima labomolewa (*Mwananchi*, July 9, 2017).
(Gwajima's church demolished)

b. Lisu's condition is deteriorating, says CHADEMA Secretary (*The Citizen*, September 12, 2017).

The headlines in the data set [9] are very vague as they refer to several undetermined stuffs and people. The headline [9a] for example, could be describing the church that Gwajima owns, the church that Gwajima built, the church that Gwajima goes to pray, the church that Gwajima leads as the Bishop, the church that Gwajima likes most, the church that Gwajima has been advocating in public. Although the newspaper headline seems to be unambiguous, it is very hard to determine the meaning of it if the context is not known. Therefore, newspaper readers can only understand the headline with the help of the background knowledge they have about the church or by going ahead and read the entire story. The journalist could have deliberately applied this kind of

vagueness to create humour and attract readers to download the article containing the information. Ifantidou (2009) asserts, "...interesting headlines may be semantically underdetermined to the extent that no information is conveyed, due to vague concepts" (p.700).

In data the set [9b], headline *Lisu's condition is deteriorating, says CHADEMA Secretary* seems to be vague. The headline could mean Lisu's health condition is deteriorating; Lisu's financial condition is deteriorating; conditions given by Lisu are deteriorating; condition given to Lisu is deteriorating and so forth. The condition being referred to is vague and readers can have a number of references in reading such kind of a headline. In light of Relevance Theory by Sperber and Wilson (1986), vagueness is a device that newspaper headline designers used to draw the attention of their readers.

c. Lack of Specification

It is a different type of vagueness that stems from a lack of specification of the meaning in the lexical item (Kempson, 1977). This study sought to presuppose that the newspaper editors or designers are aware of the fact that unspecified headlines make readers read the full story after reading a headline. The data set in [10] below is an illustration of lack of specification type of vagueness that appeared in *Mwananchi* newspaper headlines.

[10] a. Mgombea Urais 2015 ashikiliwa polisi (*Mwananchi*, September 5, 2017).
(2015 presidential candidate is held by the police)

b. Msafarawa DC washambuliwa (*Mwananchi*, August 29, 2017).
(The DC's convoy attacked).

In data set [10. a], the headline does not specify the presidential candidate and the country. The word “presidential” is also spatially underspecified. The phrase presidential candidate can be used to describe the national presidential candidate, the students’ presidential candidate at the university, the football association presidential candidate, Tanganyika Law Society (TLS) presidential candidate and so forth. Before designing such headlines, both the designer and readers knew that there were so many presidential candidates in Tanzanian 2015 general elections with Tanzania and the world at large. Furthermore, the country in which the candidate belonged to was not specified for 2015 there were so many presidential elections in different countries in the world. In Relevance Theory by Sperber and Wilson (1995), headlines are relevance optimisers. Therefore, the writer optimised relevance of the headline with ambiguity. Under the ostensive inferential communication, the writer intended to inform the readers through the headline and employed a vague headline deliberately as the strategy to entice readers to click and read the full version of the article or use the ad hoc concept in ad hoc context to interpret the vague expression.

In data set [10.b] above, there are lexical items that are underspecified. For example, the abbreviation DC is not specified and is unconventional in the word. Besides, the DC that the journalist refers to is underspecified. Of course, the acronym DC in Tanzania stands for District Commissioner and for a person who is not a Tanzanian; the headline would be difficult for him to comprehend. Even for Tanzanians, the acronym DC can be difficult for readers because there are more than 100 district commissioners in the country. The same headline in the data set [10b], the journalist did not even specify the weapons that assailants used to attack the DC’s convoy. The weapons could be nuclear, biological or chemical and so forth. Moreover, the journalist employed the passive construction and did not indicate the attacker of DC’s convoy. To make it more specific,

the headline designer would have probably specified the weapons that the invaders used to attack the District commissioner's convoy. The informative digital newspaper headline would have contained weapons such as guns, bombs, and stones and headline designer would have exposed and specified the attackers.

4.3.1.2.3 Metaphors in Online Newspaper Headlines

This study surveyed some metaphors that appeared in 259 newspaper headlines of *Mwananchi* and *The Citizen* from 2017 July to June 2018. The study found out that headline designers used different metaphors to compare objects, people and ideas with other objects according to their shapes and structural positions. The data set in [11] is an illustration of metaphor from *Mwananchi* and *The Citizen*.

[11] a. Tanzania shuts down Jamii Forum over tough new rules. (*The Citizen*, April 4, 2018).

b. Mke wa Lisu avunja ukimya (*Mwananchi*, September 24, 2017)
(Lisu's wife breaks the silence)

Metaphorically, the phrasal verb (idiom) *shut down* in data set [11.a], means that the Tanzania government has stopped the operation of the online platform, JAMII FORUM, under the new harsh online content regulations. The metaphor stems from the verb shut (to close something or to become closed). If an object, say, a door or window is shut down, it is closed. Similarly, when JAMII FORUM was shut down; the headline designer meant that its operations ceased. The designer used 'shutdown' metaphor as the source domain, which is relatively familiar and conceptually well structured, to articulate the target domain (stopping the operations). The headline designers used the conceptual structure of closing a door to explain the closing of JAMII FORUM.

In the headline of dataset [11.b], the phrase ‘Vunja ukimya’ or ‘break the silence’, is to voice an opinion or comment on something after initially avoiding doing so. In line with this definition and the text that followed the headline, Lisu’s wife had never spoken about the murder attempt of her husband. Therefore, she broke the silence by saying and expressing what happened to her husband, Lisu. The designer of this headline used ‘break the silence’ metaphor as the device of attracting readers.

According to Relevance Theory by Sperber and Wilson (1985/6), the writer of the newspaper headlines in the data set [11] intended to exploit an idiom as a metaphor to reconstruct an online headline by relevance-driven inferential communication. Thus, the role of the readers was to search for an optimally relevant interpretation of metaphor to arrive at the ad hoc concept in ad hoc context. In relevance theoretical framework, a metaphor is an informative communicative device that aims at luring the online news consumers.

The other metaphors that journalists used were based on the function of an object rather than its appearance. In this case, the metaphoric transfer does not involve any concrete appearance. It focuses on structure functionality. The data set in [12] is an illustration of the headline with metaphors from the front pages of *Mwananchi* and *The Citizen* online newspapers.

[12] a. Mkemia mkuu kitanzini. (*Mwananchi*, August 25, 2017)

(The Chief Chemist is set in Gallows)

b. Lulu slapped with two-year jail term for killing Kanumba.
(*The Citizen*, November 13, 2017)

The data set in [12.a] contains the Kiswahili metaphor *kitanzini* with the literal meaning that the chief chemist was in troubles. In spite of having literal meaning, the lexical *gallows* has the metaphoric function of similarity of executing someone by hanging. The common usage (source domain) of the term *kitanzi* (gallows) is the device that usually consists of two upright posts supporting a crossbeam from which a noose is suspended and used for execution by hanging. However, the same term has a non-literal and metaphorical meaning that is used to express the hard situation that a person faces when is waiting for his or her fate.

The headline referred to the Tanzanian Chief Government Chemist who was alleged of unregulated chemical business as he had committed a crime punishable by law (*Mwananchi*, August 25th, 2017). Headline designer imaginatively and creatively associated the charges that the chief chemist was facing and the function of gallows. This metaphor is a good example of linguistic metaphors in newspaper headlines that would make the person read the whole news article.

The word *slapped* in the headline *Lulu slapped with two-year jail term for killing Kanumba* in [12.b] has the metaphorical function of the traditional punishment of quickly hitting someone with the flat part of the hand or other flat objects. In this context, the newspaper headline designer used the term *slap* metaphorically explains a two years in jail punishment of the famous Tanzanian actress, Elizabeth Michael (Lulu) received from the court of law. In other words, the designer of the headline did not refer to the actual slapping but to the court punishment (imprisonment) given to Lulu. Metaphor under this section was the focus of Relevance Theory in communication, and consequently the pragmatics of metaphor, where cognitive linguistics centres more on the contribution of metaphors to our conceptual system.

Another metaphor was based on personification. Personification in this study was defined as metaphor where an idea, a thing, or an animal receives human qualities. Through newspaper headlines, the objects that were not humans were portrayed as having the capability of performing human actions. The data set presented in [13] is an illustration of personification based metaphors as portrayed in *Mwananchi* and *The Citizen* online newspaper headlines.

- [13] a. Viboko 12 vyamsubiri bilionea nyumba za Lugumi. (*Mwananchi*, November 16 2017)
(12 strokes await the billionaire of Lugumi's houses.)
- b. NGO opens application window for higher education loan. (*The Citizen*, November, 1 2017)

In headline [13.a] above, the strokes are given attributes of animates of waiting and practically, the strokes cannot wait for a human being, as they are inanimate creatures. Personification performed the second function of a newspaper headline. Thus, the editorial teams of the newspapers under study used personification to add interest and create vivid images.

4.3.2 Principles of Online Newspaper Headline Design

This section analyses the principles that editorial teams observe in designing appropriate headlines for digital publications. The first sections contain the analysis of interesting headlines followed by new information, presuppositions and names and concepts of news value.

4.3.2.1 Levels of Interest

In data presentation section, it was observed that a newspaper headline should be interesting enough to the readers. This study employed CTR (webmetrics of readership)

as the standard gauge for the interest of readers. The data set in [14] below is an illustration of the most interesting online headlines from *The Citizen*.

[14] a. Tanzania in trouble over North Korea sanctions (*The Citizen*, September 7, 2017)

b. The top most expensive schools in Tanzania. (*The Citizen*, June 15, 2017)

The two newspaper headlines above in data set [14] were very interesting to most readers because they received more readers than others did (See Appendix 3). The designer of the headline [14a] could have been viewed by online information seekers because of including the new information that Tanzania was in trouble for violating the UN sanctions against North Korea (*The Citizen*, September 7, 2017). The same applies to the headline “The topmost expensive schools in Tanzania” in the data set [14b] above. *Mwananchi*, the online daily newspaper received more visitors than its counterpart. The data set in [15] is an illustration of the *Mwananchi* newspaper headlines that were very interesting to read online.

[15] a. Necta yaweka hadharani matokeo darasa la saba. (*Mwananchi*, October 20, 2017)

b. Tundu Lisu apigwa risasi Dodoma. (*Mwananchi*, September 7, 2017)

The headlines in data set [15] above were respectively ranked the first and the second most read online from *Mwananchi* daily newspaper. The readership metrics show that the headlines were more interesting to the public. According to the Relevance Theory by Sperber and Wilson (1985/6), this suggests that the headline in data set [15.b], the designer of newspaper headline had to estimate the number of contextual effects and a substantive amount of news reading efforts before publishing the newspaper. In light of communicative principle of the Relevance Theory (Sperber & Wilson, 1986), the designer of the above headline intended to inform his audience through a headline and

this informative intention was portrayed through an interesting headline to draw the attention of readers. For example, in [15b] the designer foregrounded the headline with the most recent interesting event of shooting Tundu Lisu, who was a popular opposition leader in Tanzania. Similarly, the designer of the headline *Necta yaweka hadharani matokeo darasa la sabain* data set [15a] contained new information and the information of public interests (examination results release). According to Ifantidou (2009), new information, names and concepts with high 'news value' make headlines more interesting. Such headlines aroused the interests of online readers of the two selected newspapers for they conveyed 'new' information (Lisu's shooting), names, and concepts with news value such as Lisu.

Regarding the optimal relevance as suggested by Sperber and Wilson (1986) an ostensive stimulus is optimally relevant to an audience if and only if: "(a) it is relevant enough to be worth the audience's processing effort, and (b) it is the most relevant one compatible with communicator's abilities and preferences (p.256). With regard to the above quote, the headline designer of the newspapers seems to have created an optimally interesting headline as an ostensive stimulus by estimating the contextual effects that the headline would create, and the readers' processing efforts, preferences and abilities. The headline designer seems to be aware that the readers of digital headline published would need a very interesting post that would also go viral on social platforms such as Facebook, Twitter and Instagram sharing meet the context of their publications. Readers choose the headlines in the data set [15] above because of their information relevance, cognitive processing efforts, and preferences.

Dor (2003) claims that newspaper headlines writers optimise the relevance of their stories for their readers and offer “the readers the optimal ratio between contextual effect and processing effort, and direct readers to construct the optimal context for interpretation” (p.695). As a result, a news article headline becomes relevant when it offers information about the subjects that directly connect to the newsreaders’ lives and interests. Thus, newspaper headlines are relevance optimisers. Some headlines from the two newspapers were not interesting for they received few online readers (see Appendix 3). The data set in [16] is an illustration of the least interesting headlines to online news seekers.

[16] a. Wakulima ongezeni ubora mazao (*Mwananchi*, May 2, 2018)

(Farmers should raise the quality of your raw products)

b. VP visits Mloganzila (*The Citizen*, June 9, 2018).

The headlines in data set [16] failed to attract people’s interests. Probably the designers failed to select the most relevant and interesting headlines that are worthy the readers’ processing effort and preferences. Headline *Wakulima ongezeni ubora wa mazao* in data set [16a] does not convey any new information. From the web metric data, the headline seems to be irrelevant to readers. Such kind of headlines with plain and less informative language in [16.a] rarely attract readers’ attention to read the full version of the story (Nir, 1993; Dor, 2003; Saxena, 2006).

4.3.2.2 New Information

The analysis of new information principle is based on the assumption that headlines should contain new information (Dor, 2003). It is obvious that editorial teams do not know precisely what their readers know, but they estimate their readers' level of knowledge in the decision-making process. In Sperber and Wilson’s (1986) relevance-

based perspective, this makes perfect sense: A newspaper headline that lacks new assumptions can hardly have contextual impacts and so is ineffective. Headlines in the data set [17] are an illustration of headlines that seemed to convey the new information.

[17] a. Immigration to issue passport application online (*The Citizen*, August 8, 2018)

b. Kenya chief Justice Maraga main attraction at a meeting in Dar.

(*The Citizen*, September 25, 2017)

Both headlines in the data set [17] above conveyed new information. Headline [17a] above reported the news that the Tanzanian government had launched an online passport application for the first time. This proposes that in the past, people had to physically go to immigration offices to obtain passports. Likewise, headline [17b] was about the visit of the Kenyan chief justice, Maraga who attracted many people in Dar who nullified Kenyan General Elections. The news about the chief justice was reported on the following day of the event on the front page of *The Citizen* newspaper. The writers of the newspaper headlines seem to agree with the argument that a newspaper headline ought to convey the new information.

According to Dor (2003) “the major topic for negotiations between copy editors and senior editors has to do with the question of whether the readers already know what the copy editor decided to promote in the headline” (p.711). Even though newspaper designers may not be fully aware of what their readers already know, they can make estimations and predictions of their readers’ knowledge to create headlines. The headlines are designed in such a way that they connect the readers’ prior expectations and events. According to Sperber and Wilson (1995), headlines are relevance optimisers, thus, the copy editors have to maximise relevance with a piece of new information and a headline that fails to convey novel assumptions can hardly produce

contextual effects and is therefore irrelevant to news consumers. A typical newspaper headline will have more cognitive effects if it conveys new information which is in one way or another connects to the readers' current cognitive environment so that they can conclude by combining old and new information (Wilson & Sperber, 1995; Wilson & Carston, 2002).

Updated Information: Normally, newspaper editors do estimate the readers' state of knowledge by first considering what other media such as TV, Radio, and social media have already communicated. Thus, if the news of the anticipated headline for the new publication has already appeared in different media, it is likely to be rejected by the news seekers.

[18] a. Aliyamehewa na Raisi anena. (*Mwananchi*, December 12, 2017).

(The person pardoned by the president speaks out)

b. 'Bilionea' nyumba Lugumi aeleza alivyotekwa Urusi. (*Mwananchi*, November 16, 2017)

(The Lugumi houses billionaire recounts his abduction in Russia).

The headlines in the data set [18] convey the updated information. The headline *Aliyamehewa na raisi anena* in [18.a] is a piece of updated news because the audience already knew the definite noun phrase *aliyamehewa* (the person who was pardoned). Thus, the headline writer had the assumption that someone was pardoned and he/she was actually trying to report that the pardoned person had spoken out. Similarly, the headline *Bilionea nyumba Lugumi aeleza alivyotekwa Urusi* in [18b] is a piece of updated information as the readers already knew that someone had abducted the billionaire of Lugumi's houses. For that reason, the headline designer had the assumption that someone abducted the billionaire of Lugumi's house. What the headline designer was trying to update was an explanation of how the billionaire was abducted.

4.3.2.3 Presupposition in Headlines from *The Citizen* and *Mwananchi*

This section analyses the principle that a newspaper headline should not presuppose information unknown to the readers (Dor, 2003; Ifantidou, 2009). This principle, in a sense, is the mirror-image of the principle that a newspaper headline should presuppose new information. However, the information can not be overly new. Newspaper headlines should only presuppose news which is already part of the shared knowledge between the headline designer and newspaper readers. According to Sperber and Wilson (1986) relevance-based paradigm, every presumption in the newspaper headline ought to be already available within the context of interpretation of the readers. Or else, the headline's computation will not have contextual effect. The data set in [19] is an illustration of headlines presupposing the already known facts and those presupposing unknown facts.

[19] a. President Magufuli appoints Dr Slaa new Ambassador (*The Citizen*, November 2 2017)

b. Banana road almost done (*The Citizen*, May 4, 2018)

(p) >>A road called Banana does exist.

The writer of the newspaper headline *President Magufuli appoints Dr Slaa new ambassador* in the data set [19a] has the presupposition that there is a president known as Magufuli. This pragmatic inference comes from the common property of presupposition of constancy under negation (Yule, 1996). The presupposition built-in headline [19a] will always survive negation. Just like the positive form of the headline, the negative form of the headline *President Magufuli does not appoint Dr Slaa a new ambassador* presupposes that there is a president called Magufuli. According to Culpeper *et al.* (2009) and Prince (1978), the definite noun phrase such as President Magufuli is the presupposition trigger of existence. Similarly, the presupposition built in

the headline *Banana road almost done* above is the same in both positive and negative headlines. That is, both *Banana road is almost done* and *Banana road is not yet done* presuppose that there is a road called Banana. Therefore, presuppositions inferences are embedded in linguistic forms also called inferences. According to Culpeper *et al.* (2009), these triggers are not determinants of presuppositions but they are potential in triggering an inference about what the speakers or writers presuppose. In this regard, the headline designers took it for granted that their readers would understand the presupposed meaning through the aforementioned triggers.

This study adopted Yule's (1996) categories of presuppositions to analyse the presuppositions, which journalists of the two digital papers exploited in the design of newspaper headlines: existential, lexical, factive, counter-factual, structural and non-factive. All these categories aimed to capture the implicit assumptions that journalists make about the world or background belief associated with linguistic forms whose truths are taken for granted in the headlines of *Mwananchi* and *The Citizen*.

Existential presupposition refers to the assumption that someone or something that a noun phrase identifies does exist (Yule, 1996). Thus, the study sought to examine the existential presuppositions that the headline designers or copy editors make prior to publishing their headlines. According to Culpeper *et al.* (2009), the specific existential presuppositions triggers in English are definite articles, possessive pronouns, demonstratives, s-genitives followed by a proper name or a noun phrase. Therefore, to identify the existential presuppositions, the researcher surveyed 259-newspaper headlines to determine the presupposition triggers. The data set in [20] is an illustration of existential presupposition as evidenced in online newspaper headlines.

- [20] a. The ‘genius’ of Trump: What the president means when he outsmarts?
 (*The Citizen*, January 14, 2018).
 (p) >>Trump is a genius and he means something when he outsmarts.
- b. Lisu’s condition is deteriorating, says CHADEMA Secretary General.
 (*The Citizen*, September 12, 2017)
 (p) >>A person called Lisu exists.

The headline *The ‘genius’ of Trump: What the president means when he outsmarts?* In the data set [20a] the headline presupposes that there is a person known as Trump and he is a ‘genius’. The definite noun phrase structure is the trigger of existential presupposition in the headline. The structure of the newspaper headline triggers the existential presupposition. Apart from noun phrases, possessive constructions can also make an existential presupposition (Yule, 1996). The designer of the headline *Lisu’s condition is deteriorating, says CHADEMA Secretary-General* in [20b] had the prior assumption that readers of the headline via the background knowledge knew that a person called Lisu existed. What the writer was trying to update with the headline was that Lisu’s condition was deteriorating. In relevance-based theory by Sperber and Wilson (1986), new information is an ostensive inferential trigger that was used by the online journalists to draw the attention of readers so that they may click on the news article.

Some studies (Bonyadi & Samuel, 2013; Siagian, Pangaribuan & Toruan, 2009) concur with the finding under this section that journalists commonly exploit the existential and lexical presuppositions as the linguistic devices for attracting newspaper headline readers. Zare, Abbaspour and Nia (2012) have also testified that existential presupposition trigger is the most frequently exploited device in TV broadcasting.

Based on Relevance Theory terms, editorial teams of *Mwananchi* and *The Citizen* online newspaper did not just intend to inform readers of the new information through the headline, but also they expressed the assumptions they had made prior to writing their

papers through presupposition triggers. The existential presupposition triggers are ostensive inferential devices that journalists used to attract more people to click on the headline.

According to Yule (1996), the lexical presupposition is the assumption that, in using one word, the writer assumes that another meaning for a similar word is understood. Thus, in newspaper headline designs, the designer takes it for granted that the use of a certain word form in the headline (asserted conventional meaning) will be interpreted with another non-asserted meaning. Culpeper et al. (2009) argue that lexical presupposition triggers are inchoative (change of state) verbs such as manage, start, launch, stop, begin, again, enter, go, come and so forth. The data set in [21] is an illustration of the sampled lexical presuppositions from *The Citizen* and *Mwananchi* online newspaper headlines.

- [21] a. Tanzania *launches* e-Passport as Magufuli calls for tighter control of illegal immigrants (*The Citizen*, January 31, 2018).
p >> Tanzania did not have the e-passport before.
- b. Pompeo awasili *tena* Korea Kaskazini (*Mwananchi*, May 9, 2018)
(Pompeo arrives again in North Korea)
p >> Pompeo was in North Korea before.

The designer of the headline *Tanzania launches e-Passport as Magufuli calls for tighter control of illegal immigrants* in data set [21a] assumed that readers, with another meaning that is not stated, would interpret the use of the lexical verb *launch*. Despite conveying the information that Tanzania had launched e-passport and Magufuli was calling for tighter control of illegal immigrants, the newspaper designer or copy editor had the presupposition that Tanzania did not have an e-passport before. Thus, launch was used as the lexical presupposition trigger in that headline. Similarly, in data set (21b), the headline *Pompeo awasili tena Korea Kaskazini* has the presupposition trigger

tena (again). This word *tena* (again) is the lexical presupposition trigger in that headline. The designer of the headline had the presupposition that Pompeo was in North Korea before. In other words, the arrival of Pompeo in North Korea was not the first time for him and the designer assumed that people were aware of his previous trip in the country. The arrival of Pompeo in North Korea was new information and that Pompeo was in North Korea before was taken for granted by the headline designer that readers knew this fact. Based on relevance theory by Sperber and Wilson (1986/1995), the lexical presupposition triggers are ostensive inferential devices that were used to attract readers on the internet to click on news.

In this structural presupposition, the headline writer assumes that the part of the headline structure encompasses information that is familiar to readers (Yule, 1966). The presupposition triggers in English have the conventional interpretation that any news that appear after temporal clauses or subordinating clause *why, when, where, who, before, while, after* is well known (Culpeper et al., 2009; Yule, 1966). This section therefore, sought to identify the structural presupposition triggers from digital newspaper headlines. 259 newspaper headlines were examined to check whether they contained structural presuppositions or not. The data set in [22] is an illustration of the structural presupposition in newspaper headlines.

[22] a. *Why* JPM dissolved NHC board, sacked Mchechu? (*The Citizen*, March 23, 2018)

(p) >> JPM dissolved the NHC board and sacked Mchechu.

b. Here's *why* Diamondgot the World Cup hook up. (*The Citizen*, April 26, 2018)

(p) >> Diamondgot the World Cup hook up.

In data set [22] above, the writer of headline *Why JPM dissolved NHC board, sacked Mchechu?* Presupposes that the information stated after ‘Why’ construction (JPM dissolved Mchechu, sacked Mchechu?) was known. According to Yule (1996), the construction ‘*why*’ forms the part of the headline and the presupposition triggering the information that NHC board was dissolved and Mchechu sacked. The headline was just an endeavour to explain why JPM sacked Mchechu. It was taken for granted that readers knew what happened to NHC board and Mchechu.

In Relevance Theoretical terms, interrogative headlines are ostensive inferential triggers that raise the readers’ curiosity to read the news find answers. Therefore, Wh-constructions as part of structural presupposition in newspaper headlines can raise the number of the readers who view the page and read the whole article. Lai and Farbrot (2014) findings on interrogative headlines concur with the finding under this section that regardless of the topic communicated, question headlines generate higher interest in the target message compared to non-question headlines. The above-mentioned scholars have acknowledged the capability of question headlines to draw the readers’ attention.

According to Yule (1966) and Culpeper et al. (2009), factive presupposition is the assumption that the information stated after certain words such as *regret, aware, realise, odd, glad* and *know* is true. Thus, by using the above-mentioned words in newspaper headlines the headline designers presuppose that the information stated thereafter is true. Culpeper et al. (2009) classify two types of factive presupposition triggers, which are factive emotive verbs (*regret, be sorry, glad*) and factive epistemic verbs (*understand, learn, know, discover, confirm, recognise, be obvious, prove, reveal, remember*). In designing headlines, journalists or copy editors can use factive presupposition triggers to show that what they present after certain words are very true. When journalists opt for a factive verb trigger, they are committed to the truth and take

it for granted that the proposition expressed after the factive presupposition trigger is actually true. The data set in [23] below is an illustration of the factive presuppositions as observed from the online newspaper headlines.

[23] a. Traders discover three bodies floating along Coco Beach. (*The Citizen*, September 26, 2017).

(p)>> Three bodies are floating along Coco Beach.

b. Mashujaa kukumbukwa kimyakimya. (*Mwananchi*, July 21, 2017)

(Heroes to be remembered discretely)

(p)>> The heroes will indeed be remembered quietly.

In data set [23a], headline: *Traders discover three bodies floating along Coco Beach* has the expression that follows the presupposition trigger *discover* that presupposes the truth that the bodies were floating along Coco Beach. Just like the positive statement, the negative headline *Traders do not discover three bodies floating along Coco Beach* has the same presupposition that bodies were floating along Coco Beach. Since newspaper headlines are relevance optimiser, the headline designer seems to have optimised the relevance of the headlines with the presupposition trigger *discover* to convey the truth that the three dead bodies were floating along Coco Beach.

The headline *Mashujaa kukumbukwa kimyakimya* in data set [23b], the verb *kumbuka* (remember) is the presupposition trigger of truth that heroes would be remembered silently. The presence of the presupposition trigger *kumbuka* (remember) in the headline structure above generates the factive presupposition that the people will indeed remember the heroes quietly. In terms of relevance theoretical framework by Sperber and Wilson (1986/1995), every presupposition in the newspaper headline should already be available in the newspaper consumer's context of interpretation. Or else, the working out of the headline will give rise to zero contextual effects. Some scholars (Karttunen & Peters, 1979; Stalnaker, 1972) are of the opinion that presupposition relates to the

assumed common ground between the speaker and hearer. However, the reality is more complicated.

4.3.2.4 Names and Concepts of High News-Value

This section presents the analysis of data on the names and concepts of news headlines as the principle of effective headlines. The headlines in data set [24] below is an illustration of headlines with concepts and names of the high news values as observed from *Mwananchi* and *The Citizen* newspaper headlines.

- [24] a. Tundu Lissu apigwa risasi Dodoma. (*Mwananchi*, September 7, 2017)
(Tundu Lisu Shot in Dodoma).
- b. Tanzania in trouble over North Korea sanctions (*The Citizen*, September 12, 2017).

The headline *Tundu Lisu apigwa risasi Dodoma* in the data set [24a] contains the name of the very famous politician in Tanzania, Tundu Lissu, who was the opposition leader in the Tanzanian parliament, was shot by anonymous attackers. Apart from mentioning the name, the headline reported that he was shot in Dodoma. In light of Relevance Theory by Sperber and Wilson (1995), qualified and experienced digital journalists must know, or at least they believe they are conversant with names and concepts that are likely convey the maximum number of contextual effects for their readers. In the digital setting, the headline designer knows that such kind of news headline will receive more clicks. The designers of headlines in the data set [24] knew that the names of popular politicians and the country like North Korea would carry many positive cognitive and contextual effects to the readers. The finding in this section concurs with Blom and Hansen (2015) study that names of famous people in headlines represent the focus of information.

Likewise, the headline *Tanzania in trouble over North Korea sanctions* in data set [24b] has the names and concepts of high-news value. The headline reported that Tanzania was in trouble for violating arms embargo that the United Nations (UN) had imposed against North Korea. The headline contains the name of the country North Korea, and the information that Tanzania was in trouble for violating the UN sanctions. The headline designer seemed to be aware of the power of names such as North Korea in making people read the article introduced by the headline.

According to Relevance Theory of Sperber and Wilson (1986/1995), an ostensive stimulus is optimally relevant to an audience if and only if it is relevant enough to be worth the audience's processing effort and it is the most relevant one compatible with communicator's abilities and preferences. Thus, copy editors can optimize the relevance of their headlines to the readers by carrying the maximal amount of contextual effects—by including names and concepts of high news value. The relevance optimization of headlines ensures the readers create the right context for interpretation. In this regard, the headline designers have to make sure that their headline information is compatible with that context by containing names and concepts with high news value. This is because readers prefer information with terms and thoughts of high news value. Couched with Relevance Theory, Dor (2003) study concurs with the finding under this section that “experienced editors know, or at least believe they know, which names and concepts will carry a large number of contextual effects for their readers” (p.713). Blom and Hansen (2015) argue that names and concepts of high news values are good determinants of news readership. Therefore, the headline designers choose names of important people such as presidents, musicians, artists, politicians, and other concepts with high news values with the prior expectations that people prefer reading the news of high value.

Some headlines contained terms and concepts with low news-value for the news consumers. According to Dor (2003) and Ifantidou (2009), experienced editors avoid promoting the headline with low news value as they do not support the news consumers to create the optimal context for the headline interpretation. Table 4.5 above shows that 41.3 % of 259 headlines analysed failed to include the headlines with concepts and names of high news value. The data set in [25] is an illustration of headlines with names and concepts of low news value.

[25] a. VP visits Mlongazila (*The Citizen*, June 9, 2018)

b. Govt asked to supervise allocations of abandoned farms (*The Citizen*, August 29, 2017).

The headlines in the data set [25] above contain terms and concepts of low news values. The main words in the headline *VP visit Mlongazila* do not have high news value. First, VP is not well known and Mlongazila is just a referral hospital that was built in the outskirts of Dar es Salaam city in Tanzania. Similarly, the headline *Govt asked to supervise allocations of abandoned farms* does not have any valued information to readers. The number of people who opened the page containing the headlines to view the news is the confirmation that people prefer reading the news of high value. Out of 21 people who viewed the headline in the data set [25a] above, only 11 people clicked to read the entire article and out of 19 who viewed the headline, seven (7) people managed to download and read the whole article introduced by the headline. The statistical observation above suggests that there is a very close relationship between news value and its readership. Thus, headline designers should include terms or concepts of people's interest if they wish to attract readers. In relevance theoretical terms by Sperber and Wilson (1986/1995), the headlines designers have to optimise the relevance of their headlines with concepts and names of high news-value.

4.3.3 Clickbait Features that Editorial Teams Use to Attract Newspaper Readers

4.3.3.1 Readability of Online Newspaper Headlines

This section analyses the readability index of newspaper headlines. It was noted in Table 4.7 that all *The Citizen* newspaper headlines analysed had 49 readability score in Flesch-Kincaid Reading Ease, 8.4 score in the Flesch Kincaid Grade Level, 8.8 in Gunning Fog Index, 7.6 in Smog Index, 14.5 in Coleman Liau Index was and 6.8 in Automated Readability Index.

According to FRE, the readability index of 30 to 50 scores suggests that the text is difficult to read and could only be understood by the university graduates. The readability score 30-50 falls indicates that the headlines published by *The Citizen* digital paper were difficult to read on the average. In Relevance Theoretical framework (Sperber & Wilson, 1986/1995), the easy to read headline will reduce processing effort and maximise the positive cognitive effect and the relevance of the article will be optimum whereas the difficult to read headline will maximise the necessary processing effort and the story will be irrelevant to the readers. In light of the above-mentioned theory, most of the headlines would require more processing efforts. According to Dor (2003), such headlines are common in ‘quality’ newspapers and they tend to be longer, complicated and difficult to read than headlines those headlines published in ‘popular’ newspapers. However, the newspaper writers may opt for a difficult vocabulary and structure in the headline as the strategy to make readers go ahead and read the full article to understand or use context to understand what is conveyed in the headline. In relevance theoretical terms, difficult words might be an ostensive-inferential stimulus that journalists use to attract the newspaper readers’ attentions.

4.3.3.2 One Sentence Headlines

This section analyses the nature of newspaper headlines as presented in previous sections. The study was interested to know whether the headlines were comprised of a one simple sentence, compound or compound complex sentences. It was observed that all 259 newspaper headlines contained one simple sentence. The data set in [27] is an illustration of the typical sentential headlines

- [27] a. Vocational centre gets BOA support. (*The Citizen*, December 19, 2017)
- b. African leaders urge support for new security doctrine (*The Citizen*, November 14, 2017).
- c. Magufuli construction of Isaka Kigali (*The Citizen*, January 15, 2018)

Headlines *Vocational centre gets BOA support and African leaders urge support for new security doctrine* in data set [27a-b] are typical one-sentence headlines. This observation is supported with Dor (2003) and Saxena (2006) that headlines should be as short as possible because it is easy to understand for readers. In relevance theoretical framework by Sperber and Wilson (1986), readers can easily process a one-sentence headline than that, which is complex or compound. The reader requires insubstantial effort to read and interpret the headlines in data set [27] because they are single, short and simple clauses, comprising 5-8 words respectively. In addition, the readers would need the lesser efforts to construct the context for the interpretation of the headline, as they do not need to retrieve the sets of assumptions that the headlines designers have prior to publishing the headline. In this regard, headline designers seem to have created such headlines to optimise the relevance of their news with simple sentences.

4.3.3.3 Number of Words per Headline

This section presents the analysis of the assumption that there is an ideal length of a newspaper headline with reference to the number of words it contains. In this regard, this study employed readability tools to determine the number words per headline. It

was revealed that most of the headlines had few words. The data set in [28] is an illustration of headline with different number of words as observed from *The Citizen* and *Mwananchi*.

- [28] a. VIP visits Mloganzila. (*The Citizen*, June 9, 2018)
- b. Tanzania wins key DSTV award. (*The Citizen*, April 14, 2018)
- c. WINNING LEADERSHIP: How to define yourself and brighten up your prospects (*The Citizen*, July 14, 2016)
- d. Baraza la uuguzi lawapa onyo wakunga sita. (*Mwananchi*, June 29, 2018)
(The nursing council warns six midwives)

Headline [28a] represents headlines with three words (very short headline), [28b] five words (short headline), [28c] eleven words (long headline), and [28d] seven words (moderate length). In relevance-based theory, the short headlines such as in [28a-b] require a small amount of processing efforts to the readers whereas headlines in [28-d] would require the maximum amount of processing effort to the readers.

4.3.3.4 Complex Words per Headline in *The Citizen* and *Mwananchi*

The readability software such as FRE and GFI suggest that words' complexity makes it hard for readers to comprehend. This study analysed 259 headlines with The GFI that displays complex words in blue colour. This section presents the data analysis of newspaper headlines' words complexity. The data set in [29] is an illustration of complex words (in blue) from newspaper headlines.

- [29] a. **Ukongakings** labour to down heats in RBA. (*The Citizen*, August 9, 2017)
- b. **Liverpool** legend Hyypiato grace Standard Chartered trophy **tournament**.
(The Citizen, May 14, 2018)
- c. Tira **yaandaawarakakuimarishabiashara** ya bima. (*Mwananchi*, December 11 2017)

The blue words such as *Ukonga*, *Liverpool*, and *tournament* and the like in data set [29] above are complex because they consist of more than one syllable. Graves and Graves (2003) argue that vocabulary complexity is among the factors that affect the readability of newspaper discourse. According to the cognitive principle by Sperber and Wilson (1995, p.260), “human cognition tends to be geared to the maximisation of relevance”. Thus, the writer designs the relevant headlines by assuming that it will be relevant to readers too. Under the communicative principle of Relevance Theory however, headline writers always intend to inform readers of certain information through headlines. Then, the headline writer informs the readers of their communicative informative intention (by drawing the readers’ attention to the writer’s informative intention). The use of complex words becomes an overt stimulus of drawing the attention of their communicative intention to the readers.

4.3.3.5 Characters in Newspaper Headlines

Apart from the number of words, characters are used to determine the headline length. This section therefore provides the analysis of *Mwananchi* and *The Citizen* newspaper headlines as observed during the data collection and presentation. The data set in [30] presents the summary of characters per headline.

- [30] a. Japanese teachers visit Tanzania schools. [36 char.] (*The Citizen*, August 29, 2017)
- b. Government asked to supervise allocations of abandoned farms [53char.]. (*The Citizen*, August 29, 2017).
- c. Tanzania lawmakers concerned as ExxonMobil plans to sell out of gas field. [63 char.] (*The Citizen*, 19 June 2018).

In data set [30], the first headline has 36 characters length, the second one has 53 characters length and the third one has 63 characters length. Co Schedule software reports that headlines with about 55 characters long tend to earn the highest number of

click-through rates. By referring to Co Schedule principles, only 21% (46-50 characters length) of 259 headlines published by *The Citizen* and *Mwananchi* would perform well in the digital environment. In relevance theoretical terms by Sperber and Wilson (1995), newspaper headlines are relevance optimisers. Thus, the headline writers or editors should optimise relevance other their headlines by creating headlines with about 55 characters if they want their posts to go viral on the social platforms.

This section concludes that the *Mwananchi* and *The Citizen* newspaper writers were still observing the traditional print media in designing their headlines for digital publications. This is because most of the headlines published were identical to both print and online versions of the papers. We can propose that online newspaper writers should optimise online headlines to make it for readers to search for information online. By doing so, the headlines will get more engagement on the web.

4.3.3.6 Question Headline

This section analyses the data on the role of question headlines on headline performance. The data set in [31] is an illustration of headline structures that the writers of *Mwananchi* and *The Citizen* used design their online headlines.

- [31] a. Why JPM dissolved NHC board, sacked Mchechu? (*The Citizen*, March 23, 2018)
- b. Airtel kuboresha Mtandao wake. (*Mwananchi*, November 9, 2017)
(Airtel to improve its Network)
- c. Uhai Cup itoe matokeo chanya. (*Mwananchi*, June 11, 2018)
(Uhai Cup should produce positive results)

In data set [31], the headline *Why JPM dissolved NHC board; sacked Mchechu* is in question form, *Airtel kuboresha Mtandao wake* is in declarative form and *Uhai Cup itoe matokeo chanya* in statement form. In relevance theory by Sperber and Wilson

(1986/1995), headlines are relevance optimisers. Therefore, the headlines designers intended to use the headline that is the interrogative form. Regarding ostensive inferential communication as stated by Sperber and Wilson (1995), the writer's intention to publish headline [31a] can be interpreted in two layers. The informative intention is the intention to inform an audience of something (to communicate certain content) and the communicative intention is the intention to inform the audience of one's informative intention (to draw the audience's attention to one's informative intention)" (Wilson & Sperber, 2002, p. 255). In this view, the writer of the headline [31.a] had an intention to inform their readers of reasons for JPM dissolving the NHC board and sucking Mchechu. On the other hand, the use of the headline that is an interrogative form is an attempt to show their intention that the article conveys the full information about the reasons of JPM dissolving NHC board and sucking Mchechu. The interrogative "Why-question" is an overt stimulus that the writer used to draw the attention of the readers to read the full version of the article.

Although there were few question headlines in *Mwananchi* and *The Citizen*, a plethora of literature has shown that Wh-headlines such as *Why JPM dissolved NHC board; sacked Mchechu* are considerably more adequately communicative than declarative headlines for attracting click-through rates and readership. This section concludes that *Mwananchi* and *The Citizen* newspapers rarely used question headlines for their online publications.

4.3.3.7 Colons or Hyphens [: -] in Headlines from *The Citizen* and *Mwananchi*

From the data presented in previous section on colons and hyphens, very few headlines had these clickbait features. The headlines in data set [32] are an illustration of headlines with colons or hyphens observed from *The Citizen* digital newspaper.

- [32] a. CANDID TALK: When smooth talking devils rob you blind. (*The Citizen*, June 24, 2018)
- b. IMF: TZ is rapidly closing its economic gap with Kenya. (*The Citizen*, September 24, 2017).

The headlines in the data set [32] contain colons. Different search engines use their own syntax operators. Google search engines use colons and hyphens (:-) as one of the advanced search operators to specify its advanced search definition possibilities (Garbe, 2013). Usually a colon is used before a list or an explanation that is preceded by a clause that can stand by itself. In this regard, a headline with a colon will have two clauses where the second clause explains the first one. The headline *CANDID TALK: When smooth-talking devils rob you blind* has two parts where the first one (CANDID TALK) is explained by the second one (When smooth-talking devils rob you blind). According to Google Search Engine, URLs with hyphens and colons are very important in Search Engine Optimisation (SEO) for they increase click-through rates (CTR), add visual impression, and encourage online readers to click and read more.

Headline writers in [32] wrote relevant headlines with expectations that their online readers would easily search the information conveyed. Based on Relevance Theory of Sperber and Wilson (1986), the study concludes that writers intended to inform their readers of smooth-talking devils that rob people's minds and showed this informative intention with a colon. Hyphens and colons were ostensive inferential stimuli that the headlines designers used to make it easy for people searching for information online obtained what they want. Therefore, a colon becomes a device of making people access information online.

4.3.3.8 Sentimental Words in Newspaper Headlines

The clickbait of sentimental words was based on the assumption that headlines that incorporate one or more negative or positive sentimental words perform better on the

internet. Headlines in data set [33] are an illustration of types of sentimental words that writers of *Mwananchi* and *The Citizen* employed to construct their headlines for digital publications.

- [33] a. Magufuli orders **arrest** of a Don (*The Citizen*, May 2, 2018)
- b. Tanzania Law firm hit by **suspected bomb** blast. (*The Citizen*, May28, 2018)
- c. Expatriates on the Immigration radar over permits (*The Citizen*, October 5, 2017)
- d. Barrickgovt set to **reach** an **agreement**. (*The Citizen*, April 25, 2018)

According to Co Schedule analysis, the headline [33a] shows a strong negative sentiment for it conveys stronger emotion and is likely to perform better on the internet. The presence of the sentiment word *arrest* in the headline is an expression of a strong negative sentiment to the online news consumers. Equally, headline (33b) contains two negative sentimental words (*suspected, bomb*) which show strong negative sentiments. In accordance with Co Schedule online software, the aforementioned headlines are likely to perform better in the digital environment.

Headline *Expatriates on the Immigration radar over permits* in the data set [33c] shows a neutral sentiment, as it does not contain any sentimental word. In Co-Schedule analysis, the presence of neutral sentimental words confirms that the headlines cannot perform better on the internet for they miss positive or negative sentimental words. Therefore, the *Mwananchi* and *The Citizen* newspaper headlines with neutral sentimental headlines could not perform well on the internet. Unlike other headlines in data set [33], headline *Barrick Government set to reach an agreement* contains positive sentiments. The sentimental words (*reach/agreement*) in the headline provide a positive emotion to readers to click and read the full article. According to Co Schedule online software, the headlines that convey positive emotion words tend to perform better on

the internet that those which do not have. This suggests that journalists should use one or more positive sentimental words if they want to engage more people on the internet. According to Co Schedule, the online headline analyser, the best performing headlines consists of 10-15% emotional words.

4.3.3.9 Self-referencing

This section analyses data on self-reference as the clickbait that the editorial teams use to craft online newspaper headlines. The data set in [34] is an illustration of self-referencing features as observed from *The Citizen* and *Mwananchi* newspaper headlines.

- [34] a. When **your** immune system fights itself. (*The Citizen*, 14 May 2018).
- b. CANDID TALK: When smooth talking devils rob **you** blind? (*The Citizen*, 2018)
- c. CHADEMA: **We** are fielding our candidates in Kinondoni, Siha. (*The Citizen*, 2018)

Headline *When **your** immune system fights itself* in [34a] is self-referencing as it contains clues that make the news appear more personally relevant, encouraging the online news consumers to compare the message to their understanding and beliefs. The form of the headline for the newspaper article headline is a question headline with “self-referencing cue” your — is more likely to generate a click. Similarly, headline *CANDID TALK: When smooth-talking devils rob **you** blind?* In data set [34] is self-referenced as it uses the pronoun *you*. In communicative principle by Sperber and Wilson (1995), “you” and “your” are the self-referencing cues and strategies that journalists used to entice readers to read the article introduced by the headlines.

4.3.3.10 Literal and Non-Literal Constructions

This section analyses the use of non-literal constructions as opposed to literal constructions in newspaper headlines. In the data presentation, the study revealed that

the headlines with non-literal constructions were few. The headlines in data set [35] are an illustration of both literal and non-literal newspaper headlines observed from *Mwananchi* and *The Citizen*.

- [35] a. Foreign ministry in JPM crosshairs (*The Citizen*, October 28, 2017)
- b. Biashara ya samaki yaingia ruba (*Mwananchi*, April 4, 2018)
(Fish business is getting worse).

Headline *Foreign ministry in JPM crosshairs* is a non-literal headline. According to *Cambridge Advanced Learners' Online Dictionary*, an idiom *crosshair* refers to “two thin wires crossing each other in a gun or other device, which you use to help you aim at something”. If an individual is in someone's crosshairs, they intend to arrest, catch, or stop them. After reading the article, it was revealed that the foreign ministry was subject to scrutiny. Actually, JPM had put the Foreign Ministry officials on notice that he had not been impressed with happenings at the ministry of foreign affairs (*The Citizen*, October 28, 2017). Under the communicative principle of relevance theory by Sperber and Wilson (1986), first, the writer of the headline intended to inform readers via the headline that the foreign ministry was in JPM's targets. To accomplish this, the headline writer exploited a non-literal expression “crosshairs” as the strategy to attract readers. Although the headlines were not informative, the headline designer knew that the readers would understand the headlines. Therefore, the headline designer used the non-literal meaning to inform the public that the foreign ministry officials in Tanzania were subject to scrutiny. The writers knew that the readers would understand the information by its relevance through the ad hoc context of its publication. The non-literal headline is an ostensive stimulus that would entice people to click on the headline.

Headline *Biashara ya samaki yaingia ruba* in data set [35b] was used metaphorically that the fish business was getting worse. In practice, the Kiswahili noun *rub* refers to the type of Annelida family of organisms that is found in the dermis. This organism can bite

skin and absorb someone's blood. After reading the article, the story was about complaints of the tough inspection of fish products before reaching markets in Tanzania. In ostensive inferential communication by Sperber and Wilson (1986/1995), the writer intended to inform readers that fish business was getting worse in Tanzania with the headline. To accomplish this communicative goal, the writer executed the figurative language 'ingia ruba' to engage their readers with a more creative tone that would bait humour and thinking. The use of non-literal language makes newspaper headlines more interesting and dramatic than the literal language that uses words to explain a certain statement of fact.

4.3.3.11 Signal Words

This section presents an analysis of data related to signal words as they are used in online newspaper headlines. According to Kuiken et al. (2017), the headlines that incorporate signal words (*this, that, these, those, how, what*) perform better than those, which do not on the digital environment. In this regard, the headlines designers of the two papers would have constructed the online newspaper headlines with signal words if they wanted the headlines to perform well. In relevance-based theory, signal words are the overt ostensive inferential stimuli (Sperber and Wilson, 1986) that digital journalists use to attract newspaper readers to click on the headline and read the full version of the article. According to Yang (2011.), forward-referencing signal words refer to "forthcoming (parts of the) discourse relative to the current location in the discourse" (p.129). The headlines in data set [36] are an illustration of signal words observed from Mwananchi and *The Citizen* newspapers.

[36] a. How TRA dropped Makonda's tax exemption request. (*The Citizen*, May 20, 2018)

b. Watakaojitangazia matokeo Kenya kukiona. (*Mwananchi*, July 21, 2017).

(Those who will announce their own results in Kenya will be in troubles)

The headline *How TRA dropped Makonda's tax exemption request* in data set [36.a] has the signal word *how*. As stated by Kuiken et al. (2017), headlines with signal words such as *how* tend to perform better on the digital setting because when searching news on the internet, people normally start with interrogative questions (*who, how, when, what*) as their keywords. In communicative principle suggested by Sperber and Wilson (1986) relevance theory, signal words such as *how* are overt inferential communication stimuli that digital journalists execute to prompt readers to read the entire article. If the readers were seeking to know how TRA dropped Makonda's tax exemption request, they would have to read the full story that provides the relevant answer.

Headline *Watakojitangazia matokeo Kenya kukionain* [36.b] as well, incorporated the signal word *watakojitangazia* (**Those who** announce their own results will be in troubles). In light of ostensive inferential communication of relevance theory by Sperber and Wilson (1986), the writer of the above-mentioned headline had an intention to warn people not to announce their own results. To show the cautioning informative intention, the writer exploited the demonstrative pronoun *those* as the input to draw the attention of readers to click on the full version of the article introduced.

4.3.3.12 Numbers in Digital Newspaper Headlines

According to Safran (2013), numbers in headlines are clickbait features that journalists use to attract readers on the internet. This comes from the fact that humans like certainty. The editorial teams used numbers in few headlines as observed in data set 37. The data set in [37] is an illustration of headlines incorporating numbers as observed from *The Citizen*.

[37] a. Top 10 most expensive schools in Tanzania. (*The Citizen*. June 15, 2017)

b. Top 20 most viewed Tanzanian music video in YouTube. (*The Citizen*, July 1, 2017)

The headlines in the data set [37] above incorporated numbers. Thus, a headline like *Top 10 most expensive schools in Tanzania* in [37.a] makes readers get rid of any ambiguity of what entails the article they are going to read. Therefore, the headline tells readers precisely what they will get after reading the story. Whoever tries to read the story, will certainly get details about the top 10 most expensive schools in Tanzania.

Based on relevance theoretical framework as suggested by Sperber and Wilson (1986), the headline writers choose relevant headlines that incorporate numbers for their readers. Through an ostensive-inferential communication, which is “characterised by two levels of intention on part of the communicator” (Sperber & Wilson, 1994, p.255), first, the headline designers (communicators) intended to inform the readers about the top 10 most expensive schools in Tanzania. Secondly, the writer showed this communicative intention by incorporating numbers, which was an overt stimulus of drawing the reader’s attention to the top 10 expensive schools in Tanzania.

Headline *Top 20 most viewed Tanzanian music videos in YouTube* in [37b] is another example of number headlines. Regarding an ostensive inferential communication (Sperber and Wilson, 1995), the designer of the headlines had the intention to inform the readers about the top 20 most viewed music videos on YouTube. The use of number aimed at drawing the attention of the readers to click and read the article about the top 20 music videos that people frequently view on YouTube.

This section has revealed that the writers of the digital newspapers rarely incorporated numbers in their headlines designs. The previous research has revealed the significance

of incorporating numbers in headlines for they make the conveyed information clear. Therefore, readers proceed to read the article knowing exactly what is contained in the full article. In this regard, headlines designers should create content that will make people read and repeatedly share on the social platforms. This will help the newspaper owners keep out with the growing competition of news publications.

4.4. Discussion

This section discusses the communicative adequacy of headlines from *The Citizen* and *Mwananchi*. In the first part, the section discusses the communicative functions followed by the principles of designing appropriate headlines. Then, the subsequent part under this section is the discussion about clickbaits that *Mwananchi* and *The Citizen* editorial teams of used to attract online news consumers. The last part under this section discusses the impact of clickbait features on newspaper readership.

4.4.1 Communicative Functions of Online Newspaper Headlines

As noted in previous sections, the functional definition of newspaper headline relied very heavily on Sperber and Wilson's (1986) technical term of relevance. Newspaper headlines were functionally defined as relevance optimizers for they are created to optimise the relevance of their online newspaper articles for their readers. According to Cognitive principle of Relevance Theory by Sperber and Wilson (1986), the headlines which perform the function of summarising articles require readers less processing efforts to produce the positive cognitive effect or make a true conclusion. In other words, readers can easily understand such kind of headlines as they are clear and informative enough and tend to allow readers to skip reading the full articles introduced by the headline.

The Communicative Principle in Relevance Theory by Wilson and Sperber (1986) on the other hand states that an ostensive-inferential communication requires the informative intention by the writer (the intention to inform the audience of something) and the communicative intention of the writer (the intention to inform the audience of one's informative intention). In this regard, the designers of the informative online newspaper headlines intended to be informative to their readers by overtly communicating their intentions in a clear and plain language. However, "vague or not-fully-informative – creative or figurative headlines being a few of a vast array of semantically underdetermined headlines are used to prompt readers to construct ad hoc concepts in ad hoc contexts" (Ifantidou, 2009, p. 713).

In ostensive inferential communication as Sperber and Wilson (1995) claim, writers, journalists in this context, intend to convey the message to the newsreaders through clickbaits such as ambiguous, vague and metaphorical constructions in headlines deliberately with the prior knowledge that the readers will understand the meaning through pragmatic inferences. The headline designers know that the use of linguistic devices such as ambiguity, vagueness and metaphors are ostensive stimuli that make the newspaper readers read the full article. If the reader fails to read and understand the entire article, he/she will certainly choose the relevant meaning with the help of background knowledge and context.

This finding on communicative functions of online newspaper headlines agrees with the traditional assumption that a headline is a riveting shortcut to the contents of a newspaper (Van Dijk, 1988; Dor, 2003; Saxena, 2006) and according to Van Dijk (1988), Bell (1991) and Nir (1993) a news article must have a headline that recaps the story it represents. However, the study by Bucaria (2006), Alagbe (2009) on ambiguity in newspaper headlines, confirm that newspaper headline designers exploit syntactic

and lexical ambiguity to create headlines and journalists distort the meaning by manipulating the headline clarity to that of vagueness. Even though Khamahani and Tahirov (2013) claim that in linguistics, ambiguity is considered as a problem, but in newspaper headline design, ambiguity provides value as the device that draws the attention of the newsreaders. Similarly, Greene (2013) argues that the use of vague lexical items in newspaper headlines violates the journalistic principle of integrity and correctness, and that an informative newspaper headline is far better than the less informative one. According to Greene (2013), vague and ambiguous headlines are in the group of clickbaits and most of people find it insulting and annoying, sceptical, blurred and misleading.

The analysis of vagueness was based on Gilmore (2016) that journalists deliberately use headlines which are vague for the purpose of enticing readers to read the whole story in the newspaper. Vagueness under this study was considered one of the marketing strategies in online newspaper headlines. Guo, Tieying and Gimeno (2017) support the argument that vagueness is a communication device in marketing. Similarly, Blom and Hansen (2015) hold that vague or blurred newspaper headlines are technical and narrative luring devices that attempt to prompt curiosity and anticipation for the readers to click on the headline and read the article.

The designer used personification metaphor as both the cognitive and conceptual element (Lakoff & Johnson, 1980) and a literary device of attracting the attention of online newsreaders (Sperber & Wilson, 1995). This metaphor is an ostensive stimulus that is aimed at attracting the audience's attention. A metaphor, in this case, is both a conceptual aspect of news representation and a literary strategy for attracting readers to click and read the entire news article (Molek-Kozakowska, 2014). Vega-Moreno (2003) uses the Relevance Theory by Sperber and Wilson (1985/6) to conclude that idiomatic

metaphors are constrained at every single step by the search for an optimally relevant reading.

From the above explanations it is clear that a newspaper headline has the double functions- to summarise the articles and attract newspapers. It is clear that various newspaper headlines do offer what appears to be a summary (or abstract) of their articles, but the general theoretical notion which takes this to be the important function of the newspaper headline seems to be too narrow, for at least three complementary reasons. First, news headlines do not always summarize their stories. Secondly, Lindeman (1990) argues that tabloidized newspaper headlines rarely summarize their stories and in many cases such kind of headlines are not even informative. The third reason is that headlines have another, pragmatic function, beyond the semantically oriented function which is supposed to be captured by the headline-as-summary analysis. A good headline therefore should not only summarise the article but it should also attract readers. By so doing it becomes more communicative as it meets the expectations of its readers.

4.4.2 Principles of Designing Appropriate Headlines

Generally, newspaper headline designers never work with a very precise definition of what headlines are, or of their communicative functions. They work with their professional intuitions from the field of journalism on the principles of what we might call, rather informally, the appropriate newspaper headlines. This study extracted some of principles of the appropriate newspaper headlines from Dor (2003). Even though the study submits that they are accurate rendition of the set of inherent professional intuitions shared by experienced copy editors of *The Citizen* and *Mwananchi*, this section presents the discussion of principles of good headlines that designers have to observe in creating the headline such that it renders the story optimally-relevant by choosing a good number of principles suggested by Dor (2003).

It should be noted that the data presented earlier was not an endeavour to construct a theoretical framework, but to give an account of a set of professional intuitions shared by newspaper writers with reference to the principles of the good newspaper headlines. It is very clear that some of the principles seem to be related to some principles discussed in the literature under the rubric of news value (Galtung & Ruge, 1965; Bell, 1991) and Grice's (1975) conversational maxims. The data on principles of appropriate newspaper headlines by Dor (2003) intended to reduce the entire set of principles to the relevance-based meta-intuitions.

Secondly, the principles suggested by Dor (2003) should be regarded as default necessary conditions, rather than obligatory conditions. This is because headlines do not necessarily have all the principles suggested. However, a newspaper headline that meets any of these principles is better than an online newspaper headline which does not, and a headline that meets a good number of the principles is better than a newspaper headline that meets a smaller number of those principles.

There is a principle that a newspaper headline should be clear, easy to understand, and unambiguous (Dor, 2003). In relevance theory, such headlines reduce processing efforts to the necessary minimum— and optimize the relevance of the story. However, the newspaper editors sometimes propose headlines which appear unclear, hard to comprehend, or unintentionally ambiguous. In relevance theory, such headlines maximize the processing efforts and have no positive cognitive effects to the readers. In communicative principle by Sperber and Wilson (1986) however, editors always intend to communicate something through headlines with such kind of unclear headlines and they show their communicative intentions via unclear and ambiguous constructions which are the strategies to attract readers to read the full articles.

Also, the principle that a newspaper headline should be interesting is also necessary. The editorial teams of *The Citizen* and *Mwananchi* had to look for the most interesting information to foreground to the newspaper headline so that readers can click to read the article. The very interesting headlines tend to reduce the processing efforts to produce positive cognitive effects whereas the less interesting may not have positive cognitive effects to the readers.

It is obvious that newspaper headline designers never really know what their online newspaper readers know, but they calculate their readers' state of knowledge that plays a significant role in the decision-making process (Ifantidou, 2009). This makes perfect sense within Sperber and Wilson (1986) relevance-based framework: An online newspaper headline which does not convey novel assumptions fails to bring about contextual effects, and is thus irrelevant. In *The Citizen* and *Mwananchi* writers estimate their readers' state of knowledge with reference to what has already been communicated by the other news sources such TV, social media and radio. If the information of the suggested headline for the next publication has already appeared in the news before, most chances are it will not be accepted.

“Headlines should not presuppose information unknown to the readers”. This principle, in a sense, is the mirror-image of the previous one: The information in the headline should definitely be new—but it cannot be ‘overly new’.

There was a principle that headlines should only presuppose news which is already part of the mutual knowledge shared between the online newspaper and its readers. In terms of Sperber and Wilson (1986) relevance Theory, every presupposition in the headline must have already been existing within the readers' context of interpretation. Or else, the calculation of the newspaper headline will result in zero contextual effect.

Headlines should include names and concepts with high news-value for the readers. Skilled editors always develop a sense of the news-value of names and concepts before publishing headlines. In terms of the relevance-based framework by Sperber and Wilson (1986), experienced newspaper writers of *Mwananchi* and *The Citizen* know, or at least believe they know, which names and concepts will have a significant amount of contextual effects for their readers.

4.4.3 Clickbait Features that Editorial Teams Use for Online Newspaper Headlines

It was noted earlier that on the Internet, different sources of news compete for readers' attention (Chen, Conroy, & Rubin, 2015). Most readers of the newspapers are from the online social platforms such as Twitter, Instagram and Facebook (Mitchell & Page 2015) where the need for a headline that delivers the most *clicks* is growing very fast. As a result, the online journalists are creating headline that arouse interests, which is then used to attract readers into clicking on the headline. In this study, this is what we referred to as clickbaits. A clickbait was used to describe various strategies that aim at attracting attention and arousing interests of the readers to click on a newspaper headline. The clickbaits applied under this study were readability features (number of words, sentences, and complex words), signal words, sentimental words, self-referencing, forward referencing, the use of questions, numbers, colons and hyphens, and concepts and names of high news value. In relevance theoretical framework, clickbaits features are ostensive inferential communication devices that writers use to attract newspaper readers to click on the headline.

Regarding readability, it was revealed the newspaper headlines were difficult to read and college graduate were only newspapers who could read and understand. In Relevance Theoretical framework (Sperber & Wilson, 1986/1995), the easy to read headline will reduce processing effort and the relevance of the article will be optimum

whereas the difficult to read headline will maximise the necessary processing effort and the story will be irrelevant to the readers. In light of the above-mentioned theory, most of the headlines would require more processing efforts. Dor (2003) assertion that newspaper editors sometimes suggest headlines, which come out unclear, and not easy to understand unintentionally was reflected in *The Citizen* Newspaper headlines. According to Dor (2003), such headlines are common in ‘quality’ newspapers and they tend to be longer, complicated and difficult to read than headlines those headlines published in ‘popular’ newspapers.

However, the newspaper writers may opt for a difficult vocabulary and structure in the headline as the strategy to make readers go ahead and read the full article to understand or use context to understand what is conveyed in the headline. In relevance theoretical terms, difficult words might be an ostensive-inferential stimulus that journalists use to attract the newspaper readers’ attentions. The readability formulas show different difficulties and grade levels of the digital newspapers under this study. According to Click Help (2020), readability is very important for headline writers for they need to make sure that users understand the conveyed information. Moreover, Agrawal (2018) explains that readability affects SEO and it is therefore applicable in search engines like Google as one of the factors in its ranking algorithm. Therefore, newspaper writers should make use of readability scores to improve search engine optimisation.

Regarding headline length in terms of number of words it was revealed that most of the headlines were short as Dor (2003) recommends. This study on headline length for the number of words confirms Dor (2003) headline property that short headlines are easy to comprehend. Besides, the presence of a few keywords in the headline makes it easy for online news consumers to search for news on the internet. Although the finding under

this section agrees with Dor (2003) and Saxena (2006) that headlines should be short, the contemporary studies about online posts performance (Hubspot & Outbrain, 2015; Dean; 2019; Buzzsumo, 2017) have confirmed that longer headlines perform better than shorter headlines on the online social platforms. Hubspot and Outbrain (2015) for example, have revealed that headlines, which are between 8 and 12 words on average are likely to perform better on Twitter but the headlines, which are between 12 and 14 words on average are perform well on Facebook. Likewise, Dean (2019) in *Backlinko* Blog examined 912 million posts from blogs and revealed that very long headlines (14 to 17 words) outperformed short headlines by generating 76.7% more shares than short headlines on social platforms. Similarly, Buzzsumo (2017) analysis of more than 100 million online headlines found out that headlines with 12 to 18 words produced the highest level of engagement, on average. In relevance theoretical terms, headlines are relevance optimisers. Therefore, for online posts to perform well, the newspaper writers should optimise their headlines to suit the context of search engines. This will make it easy for online news consumers to search for the information they want from different search engines.

Lee (2014) argues that the ideal length of a Tweet post is 71-100 characters but a recent report by *Buddy Media* reveals that Tweets, which are shorter than 100 characters, get a 17% higher engagement rate than those with more than 100 characters. However, Bullas (2013) has found out that the ideal length of a Facebook post is less than 40 characters and concluded Facebook posts with ultra-short 40 characters receive 86% higher engagement. Farnsworth (2012) who is a blogger studied the *Google+* breaking point and found that headlines should not exceed 60 characters. In this regard, the typical size of a *Google* headline should be less than 60 characters and LinkedIn headlines that are within 80 to 120 characters perform well on the internet.

It was revealed that most of headlines incorporated complex words. Seely (2013) argues that GFI is the renowned and useful measure of readability of a text but it has some weaknesses. Its weakness is because not all complex words are difficult. Seely (ibid), a one-morpheme word as well can hard to understand if it is not regularly used. In this regard, the results obtained under this section should be taken with cautions. Despite its weaknesses, this readability Index is still very useful for comparison purposes. Gunning (1952) used GFI to study and compare popular magazines and revealed that they were consistent in their reading levels over time.

Legarraga (2018) argues that question headlines are captivating, hilarious and sometimes educative. Thus, the question headlines such as ‘how’ show that the answer is in the article introduced by the headline, infuse curiosity that is intended to capture out the attention of readers to know more. The question headlines show that readers can find answers from the article. The studies by (Howard & Barry, 1988; Maule, 2014; Lai & Farbot, 2014) admit that the prevalence of question usage is the advertisement strategy in the field of communication and marketing for they tend to grab the readers’ attention. However, designing headlines as questions is a technique employed by newspapers that do not "have the facts required to buttress the nut graph" (Berthon et al., 2019, p. 257). According to Sack (1999, pp. 2–48), the writers of newspapers opt for question headlines to avoiding defamation. Bly (2007) asserts that a question headline does not only just ask a question, but also it must be that the reader can empathise with or would like to see answered. Similarly, Lai and Farbot (2013) report that self-referencing is effective for enhancing cognitive processing, triggering arousal and interest, and further increasing the level of attention given to the message. However, Lai and Farbot’s (ibid) study warns that the success of question headlines is likely to vary

across topic or content. The limited use of self-referencing cues in question headlines might have affected the performance of the headlines under this study.

The study by Outbrain and Hubspot (2015) has shown that a headline that employs a colon or a hyphen performs better than the one without, presumably, because this punctuation mark indicates a subtitle that includes a piece of amplified information. The newspaper headlines of *Mwananchi* and *The Citizen* should have considered the use of hyphens and colons if they wanted to create viral headlines on the web.

In relevance theoretical framework by Sperber and Wilson (1995), the writers choose headlines because they are relevant to their readers. In writing headlines with positive or negative sentimental words, the writer intends to inform the readers of something. Besides, the writer shows their communicative intention with sentimental words, which are techniques of attracting people to read the entire article. The digital newspaper headline designers had the prior assumption that in using positive or negative headline would stimulate people to click on the link containing the headline.

Sentimental words are click baits that online journalists use to craft their headlines. This observation concurs with Kuiken, Schuth, Spitters and Marx (2017) assumption that newspaper headlines that contain one or more sentimental words are preferable by newsreaders over headlines that do not have sentimental words. Similarly, Dos Reis *et al.*'s (2015) study reveals that the sentiment of the headline is strongly related to news popularity. Failure to use sentimental words proposes that most of the headlines would not perform better on the internet.

Literal constructions are said to affect the headline performance. Ifantidou (2009) has revealed that headline readers prefer creative and informationally underdetermined figurative headlines and such headlines largely require an inferential process. According

to Sperber and Wilson (1995), the inferential relevance-driven interpretation process depends on the readers' familiarity with the topic and background knowledge. In this regard, the non-literal constructions prompt online news consumers "to construct ad hoc concepts in ad hoc contexts" (Ifantidou, 2009.p.713). The use of plain language and lack of creativity in *Mwananchi* and *The Citizen* should not be the indicator that the newspapers headlines under this study would not perform well on the internet. This is because news readers may use context to understand the information communicated.

Newspaper writers exploit signal words in headlines as "stylistic and narrative luring devices trying to induce anticipation and curiosity so the readers click (or tap on) the headline and read on" (Blom & Hansen, 2015, p.87). Accordingly, incorporating signal words such as *how* and *these* in online newspaper headlines makes statements that create the information gap among readers. To fill out this information gap, the readers have to click the headline otherwise; it will create discomfort if they do so (Hills, 2016). In this regard, the designers of the headlines mentioned above rarely used this technique to attract newspaper readers.

As explained by Safran (2013) earlier, numbers are very important in the human cognitive process as people dislike being uncertain. Therefore, the use of numbers reduces ambiguity in newspaper headlines. According to *Well Organised Marketing Blog* (2016), print media journalists and writers have long been incorporating numbers in headlines to attract readers even before the invention of the internet because numbers appeared to be the best way of attracting the readers' attention. Accordingly, numbers make people know what they are going to read in the article and they visually stick out and hence attract the eyes.

4.4.4 The Impact Clickbaits on Online Newspaper Headlines Readership

This section discusses the clickbait features of a headline that have a significant impact on the performance of the online newspaper headline. Using the CTR of *Mwananchi* and *The Citizen* we defined the performance of headlines and tested whether headlines with a certain feature performed significantly better than headlines without that feature. This was followed by testing seven hypotheses. In this study, we claimed that the communicative adequacy of a newspaper headline was linked to the number of individuals that clicked on a newspaper headline. Generally, and for *The Citizen* and *Mwananchi* in particular, the aim of a headline is to attract on newspaper readers to click on the headline and read the story. That is to say, the more people clicked, the more people were attracted by the online newspaper headline, and the more communicative it was. Therefore, the study based on the performance of a headline on the Click Through Rate. The CTR is the number of people that clicked on an item divided by the number of people that have seen that item. The CTR is the metric that is in most cases used to assess performance of news readership on the internet (König, Gamon, & Wu, 2009; Richardson, Dominowska & Ragno, 2007). After testing the hypotheses, it was revealed that characters, literal and non-literal headlines, headlines with signal words had no significant statistical impact on news readership (CTR). However, negative and positive sentimental words, complex words, names and concepts of high-news value had the greatest statistical significant impact on news readership (CTR).

Regarding headline length in terms of characters, the analysis accepted the null hypothesis that there was a similar preference in readership between longer headlines (>55 char.per headline) and shorter headlines (≤ 55 per headline) and rejected the alternative hypothesis that shorter headlines (≤ 55 char.) are more preferred to longer

headlines. Loranger and Nielsen (2017) and Dor (2003) have maintained that the best headlines for news sites should be very short. On one hand, Loranger and Nielsen (2017) suggest as short as 5 words or less than 40 characters in a single headline. Lee (2015), on the other hand, proposes that a blog headline should have 6 words or less than 50 characters. By contrast, Outbrain (2017) proposes 16 to 18 words or 80 to 110 characters as the ideal length for driving engagement on the digital environment. According to the *Official SpyFu Blog* (2020), search engines tend to display only the initial 50-60 characters of a page's title in their search outputs. Therefore, the length of a newspaper headline is vital in SEO. On the other hand, Lee (2014) claims that the ideal length of a Tweet post is 71-100 characters and *Buddy Media* suggests shorter headlines of less than 100 characters. However, Bullas (2013) suggests a Facebook post which is less than 40 characters whereas Farnsworth (2012) suggests that headlines for *Google* should not exceed 60 characters and LinkedIn headlines should be between 80 to 120 characters. In this study we suggest that there is no ideal length of newspaper headline.

Regarding literal and non-literal constructions, the regression analysis shows that there was no significant difference in readership between literal headlines and non-literal headlines. However, Ifantidou (2009) argues readers prefer non-literal headlines and such headlines largely require an inferential process. According to Sperber and Wilson (1995), the inferential relevance-driven interpretation process depends on the readers' familiarity with the topic and background knowledge. In this regard, the non-literal constructions prompt online news consumers "to construct ad hoc concepts in ad hoc contexts" (Ifantidou, 2009, p.713). The finding on literal and non-literal constructions is quite different from the previous studies as the both literal and non-literal headline performed equally in the digital environment.

This study rejected the null hypothesis that readership preference was similar between online newspaper headlines that contained one or more signal words over that did not, $p < \alpha$. Thus, the alternative hypothesis that there was a statistically significant difference between headlines that contained one or more signal words over that did not was accepted. The headlines without signal words outperformed the headlines with signal words. This finding is contrary to (Mitchell & Page, 2015; Hills, 2016; Kuiken et al., 2017) findings that readers prefer headlines with signal words on the internet. Also, the finding in this study is against Blom and Hansen (2015) argument that signal words such as *this* and *that* are stylistic and narrative luring devices that induce anticipation and curiosity so that the readers can click or tap on the headline and read on.

Using a One Way ANOVA analysis the alternative hypothesis that readers prefer headlines that contain one or more negative or positive sentimental words to the headlines that do not was accepted. This finding concurs with (Haskins & Miller, 1984; Co Schedule, 2015); Kuiken et al. (2017) that bad news normally gets preferred treatment and exceed both good and neutral news in the media. Therefore, newspaper writers of *The Citizen* and *Mwananchi* optimise relevance of their headlines content with negative sentimental words which the ostensive inferential stimulus in an endeavour to attract the attention of their readers (Sperber & Wilson, 1986).

Using the binary logistic regression analysis, the study rejected the null hypothesis and accepted the alternative hypothesis that there was a significant difference in readership preference between headlines that contained complex words over headlines that did not. The results showed that readers preferred headlines that did not contain complex words to headlines that had more than one complexword. According to GFI, a polysyllabic word is more difficult to understand than a monosyllabic word. However, Seely (2013) noted that even monosyllabic words might be difficult to understand if they are not

frequently used in public. Despite its weaknesses, GFI remains a very useful tool for comparison purposes (DuBay, 2004).

Regarding names and concepts of high news-value, the null hypothesis that readership preference was the same between headlines with names and concepts with high news-value and those headlines with concepts and names of low-news value was rejected ($p < \alpha$). The alternative hypothesis that the preference was not the same between headlines with names and concepts with high news values over those headlines with low news value. The cross-tabulation results showed that headlines with high news values had a very high CTR at 40.20% compared with headlines with names and concepts of low news value at 15.40% CTR. This concurs with the principle by Dor (2003) that headlines that contain names and concepts of high news value receive more readers. According to Blom and Hansen (2015) names and concepts of high news-value in headlines are good determinants of news readership. Therefore, copy editors optimise relevance of their headlines by choosing names of important people such as presidents, famous musicians, artists, politicians, and other concepts with high news values with the prior expectations that people prefer reading the news of high value.

Even though the software analysis showed that most of the headlines were difficult to read, the impact of readability analysis on readership showed $p = 0.095$ which was less than $\alpha = 0.05$ and this meant the null hypothesis was accepted ($p > \alpha$). Therefore, there was no exact readership preference between headlines, which were very easy to read (100-91) over headlines that were very difficult to read (30-00). This implies that the newspaper readers read all the headlines regardless of their reading ease levels. However, the reader responses showed that 23% of the headlines were at the graduate level (very difficult), 18% at the university level, 18% at form five to six levels, 17% at form three to four levels, 12% at form one and two levels, 6% were at standard seven

level and 6 % were below standard seven levels. Graves and Graves (2003) assert that vocabulary complexity, sentence and text structure, elaboration and coherence, and familiarity tend to affect readability of texts.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides the summary of the findings, conclusions and recommendations of the study on communicative adequacy of headlines from two online newspapers in Tanzania. The various sections of this chapter cover the four specific objectives, which were to examine the communicative functions the virtual newspaper headlines in Tanzania; to determine the communicative principles that editorial teams use to create appropriate headlines in the digital environment; to investigate the clickbait features that journalists used to construct headlines for the digital newspapers; and to determine the impact of newspaper headline features on news selection and readership. In the first section, this chapter summarises the three major findings under this study whereas the second section concludes the aforementioned results regarding the specific objectives of this study. Lastly, the chapter makes recommendations for further studies for linguists and other communication stakeholders.

5.2 Summary of the Findings

The section highlights the key study findings on the communicative adequacy of Tanzanian newspaper headlines. The first part under this section discusses the communicative functions of online newspaper headlines. The second section is the discussion of principles that newspaper writers use to design appropriate headlines for digital setting and the third part deals with clickbaits that the editorial teams use to craft online newspaper headlines. The last section covers the discussion on the impact of the clickbaits on newspaper readership.

5.2.1 Communicative Functions of Headlines in two Online Newspapers

Based on the two headline communicative functions, the study revealed that largely, *Mwananchi* and *The Citizen* online newspaper headlines performed the primary communicative functions of print newspaper headlines in the digital age. That is to say, the majority of headlines published by the two online dailies were optimised to summarise the articles they introduced and readers could easily understand the message conveyed by the headlines without reading the full articles represented or context. Despite the majority of the headlines performing the function of summarising the story, the study realised that there were few instances where *Mwananchi* and *The Citizen* headlines performed the double functions at once.

5.2.2 Communicative Principles of Designing Headlines of Online newspapers

The study found out that the majority of *Mwananchi* and *The Citizen* online newspaper headlines observed the traditional communicative principles of designing appropriate headlines in the digital setting. The editorial teams of the two online newspapers in Tanzania optimised relevance of their headlines with minimum amount of processing efforts by making them short, unambiguous, clear and easy to read so as to create positive cognitive effect to readers. The editorial teams of the *The Citizen* and *Mwananchi* also optimised relevance of their headlines by ensuring the newspaper readers are creating the correct context for understanding, the news content of the headlines are compatible with that context—by keep away from unknown presuppositions and by containing names and concepts with a high news-value.

5.2.3 Clickbait Features that Newspaper Writers Use to Design Online Headlines

The study revealed that in most cases the editorial teams exploited the standard words length per headlines but they rarely exploited the clickbaits of question, readability, negative sentimental words, and self-referencing. That is, the majority of the headlines

incorporated the optimal length with short headlines containing 4-9 words on average and 31 to 45 characters per headline. However, the headlines published by *The Citizen* and *Mwananchi* had the greater degrees of difficulty Index of (49) in FRE and the college graduates in Tanzania were the only readers who could read and understand the newspaper headlines with ease.

5.2.4 Impact of Headlines Features on Newspaper Readership

Using statistical test and models, it was revealed that headlines with negative and positive sentimental words, concepts and names of high news-value, and headlines without signal words had the significant impact on newspaper readership in the digital environment. In other words, the online headlines with the three above-mentioned features received more visitors on the newspapers' websites than those without these features. However, readability, literal and non-literal constructions, and number of characters per headline had no significant impact on newspaper readership.

5.3 Conclusions of the Study

This section presents the conclusion made per specific objectives and hypotheses.

5.3.1 The Communicative Functions of Online Headlines

Initially, it was reported that the majority of the headlines from *The Citizen* and *Mwananchi* performed the primary function of summarising the articles, rather than the second and pragmatic function. It can be concluded that a newspaper headlines have both the semantically- and pragmatically-oriented functions. We have made a claim that the generalized communicative functions which *The Citizen* and *Mwananchi* online newspaper headlines are thought to fulfil is that they are created to optimize the relevance of their news for their online readers. In this regard, the editorial teams of *Mwananchi* and *The Citizen* may opt to summarise the article represented or go for the

second and pragmatic function where readers require context for interpretation or both. From this observation, we can conclude that the communicative online newspaper headline is that which optimises its relevance of the story by informing the online newspaper readers and attract individual online news consumers to click and read the full version of articles they are interested in.

5.3.2. The Communicative Principles of Designing Headlines

From the finding that most headlines from *Mwananchi* and *The Citizen* largely observed the traditional principles of designing headline design in the digital environment, it can be concluded that the principles observed were based on the correct interpretation of the set of implicit professional intuitions which editorial teams of *The Citizen* and *Mwananchi* had in common. However, *Mwananchi* and *The Citizen* newspaper headlines should not necessarily observe all the above-mentioned principles at the same time; rather, they should observe the maximal number of principles, thus providing the newspaper consumers with the optimal ratio between contextual effects and processing efforts..

5.3.3 The Clickbaits that Editorial Teams use to Design Headlines

From the finding that the editorial teams of *Mwananchi* and *The Citizen* rarely exploited clickbaits, it can be concluded that the headlines published could not perform well in the digital environment. For newspapers that we read online, a headline seems to have acquired a new role. Nowadays, the primary focus of a headline is to get potential readers who are interested in a story. This has resulted to what is termed as clickbait. In this study, clickbait has been taken as a specific style of writing, aiming at drawing the attention of online newspaper readers and enticing them into clicking and opening the newspaper articles.

5.3.4 The Impact of Clickbaits on Newspaper Readership

From the findings of *The Citizen* and *Mwananchi* newspaper headlines, it can be concluded that some, but not all; of the clickbait features do have a significant impact on the readership of a newspaper headline. Headlines with positive and negative sentimental words, names and concepts of high news-value have the very significant impact on newspaper readership. In other words, headlines with such features tend to attract clicks on the internet. However, headlines' length in terms of characters' readability, signal words, words' complexity and non-literal constructions have no any significant impact on the newspaper readership in the digital setting.

5.4 Recommendations

This section presents recommendations for further studies and the people who are in the field of communication

5.4.1 Recommendation for Further Studies

The study recommends a comparative study between print and digital newspaper headlines communicative adequacy because the current study did not seek to compare headlines designed in both print and online versions of the newspapers. The focus of this study was on the online version of *The Citizen* and *Mwananchi* newspapers. This is because the practical functional definition of a newspaper headlines relies heavily on the version of a newspaper.

This study would also recommend other studies on the communicative adequacy of digital newspapers to focus on other non-linguistic features, which also contribute to the performance of online newspaper headlines. This is because the performance of the headlines also depends on the number of factors that are not linguistics in nature.

The other recommendation is based on fact that the current study did not consider the theme and genre of the story headline even though they might as well have a significant impact on the newspaper headline readership. This is because some clickbait features might apply for certain headlines of different genres and topics. Including genres and contents of the story in the data analysis could have given us the picture of an adequately communicative newspaper headline in the digital setting.

The headline designers should optimise relevance of their headlines with a good number of the principles of headline design to reduce process effort and maximise the positive cognitive effects.

The current study was carried out in Tanzania newspapers only; similar studies are needed in other countries to cross-validate the results obtained. Since Tanzania is a country with many media houses that provide online news services, it will be useful to examine readership in social platforms posts such as Facebook, Blogs, Twitter, and Instagram.

5.4.2 Recommendation for Online Journalists, Bloggers and Marketers

The newspaper headlines designed for print media should be different from that of digital setting. The current study observed that most of the print newspaper headlines published by *Mwananchi* and *The Citizen* were similar to their counterparts' digital newspapers. This is because both versions of the newspapers have different audiences and the modes of communication. The online headline designers should design searchable headlines that are optimised for the search engines for web ranking and visibility. Further, the online headline designers should choose a headline that will provoke readers to click on their headlines, as there are many news providers on the internet.

The digital newspaper writers should think of using the online headline analysers such as Co Schedule to test the communicative adequacy of their headlines they wish to publish. Also, the editorial teams, bloggers, online journalists should make use of clickbaits such as negative and positive sentimental words, names and concepts of high news value for they were observed to perform better on the internet.

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APPENDICES

Appendix 1: Sample of Online Newspaper Headlines with Complex Words (in blue)

1. **Tanzania** in trouble over North **Korea** sanctions.
2. Top 10 most **expensive** schools in **Tanzania**.
3. **Immigration** to issue passport **application** forms online.
4. Tundu Lissu **reportedly** shot in **Dodoma**.
5. Top 20 most viewed **Tanzanian** music **videos** in **YouTube**.
6. **Expatriates** on the **Immigration** radar over permits **Kenya**.
7. Chief Justice **Maraga** main **attraction** at a meeting in Dar.
8. **Tanzania** Law firm hit by suspected bomb blast.
9. Nape **Makamba** get **emotional** about **Kinana's** resignation.
10. **Tanzanian** seized in **Kenya** with Sh2bn gold bars.
11. From what does **Magufuli** want to what has become.
12. Now govt takes back Manji land.
13. Here's why **Diamond** got the World Cup hook up.
14. **Anyone** against **Stiegler's** Gorge project will be jailed, says **Minister**.
15. IMF [:] TZ is **rapidly** closing its **economic** gap with Kenya.
16. Experts warn of **Tanzania** risk of losing US support.
17. US envoy mulls sending Dr **Magufuli** to US.
18. Barrick: govt set to reach an **agreement**
19. Foreign **ministry** in JPM crosshairs.
20. Govt directs all **embassies** to **register Tanzanians** working abroad
21. **Tanzania** launches **e-Passport** as **Magufuli** calls for tighter control of **illegal immigrants**
22. **Magufuli** orders arrest of a Don.

23. Lissu in [critical condition](#) [:] Mbowe.
24. [DiamondPlatinum Zari](#) in Dar signs deal with [Kedz Tanzania](#)
25. How TRA dropped [Makonda's tax exemption](#) request
26. [Opposition](#) parties are not the [enemy](#), Kikwete tells [African](#) ruling parties
27. Dad [:] [Masogange's](#) last promise to me
28. Use of old passports to end [January 2020](#)
29. [Expansion of financial inclusion](#) in [Tanzania](#) wins Ndulu praises
30. Dr [Bashiru Ally](#) succeeds [AbdulrahmanKinana](#)
31. [Chadema](#) [:] Police are on the way to search Lissu's house
32. Dar [residents](#) warned of heavy rain
33. [Magufuli](#) orders arrest of a Don
34. About 4,000 head of [Tanzanian](#) cattle seized in Kenya
35. [PresidentMagufuli](#) appoints
36. Dr Slaa new [ambassador](#)
37. [Majority](#) of loan [applicants](#) fail to meet [requirements](#)
38. [Salary](#) increase will come before end of my tenure, [Magufuli](#) tells workers
39. WINNING [LEADERSHIP](#) [:] How to define [yourself](#) and brighten up your prospects
40. Govt mulls plan to retake 105 idle ranches from [investors](#)
41. Court allow police to question
42. Manji Rostam Aziz exits [Vodacom Tanzania](#)
43. Govt fails to shade light on suspected Lissu's [attackers](#)
44. [Chadema](#) [:] We're fielding our [candidates](#) in [Kinondoni](#),
45. Siha [Vodacom](#) share price now drop to Sh770m
46. Lissu given [referral](#) from [Dodoma hospital](#)

47. Lissu' [condition](#) is [deteriorating](#), says [Chadema](#)
48. [SecretaryGeneralKenya](#) is splitting and this rift at Suswa is just the beginning
49. Govt [abandons](#) JK championed plan
50. Rostam Aziz exits [Vodacom Tanzania](#)
51. PROFILE John Pombe Joseph [Magufuli](#)
52. NGO opens [application](#) window higher [education](#)
53. Plans afoot to refer Lissu to US for treatment
54. [Motorists](#) to pay traffic fines via mobile phones
55. Work permit [refusal](#) doesn't-make [Tanzanians xenophobic](#)
56. Fastjet [passengers](#) stranded at Dar airport
57. Lissu [condition](#) is [deteriorating](#) says [Chadema](#)
58. Sudan envoy shot dead by mistake
59. Lissu shooting shocks Human Rights body
60. [Diaspora](#) raises Sh22[.] 3m to [facilitate](#)
61. Lissu treatment [Nyererestrategy](#) vital for [industrialisation](#)
62. Veta Bail for woman caught with 1 million at JNIA
63. More details emerge on tragic [Zanzibar](#) plane crash
64. [Tanzania](#) shuts down [Jamii](#) Forum over tough new rules
65. [MagufuliConstruction](#) of [IsakaKigali](#)
66. Lulu slapped with two-year jail term for killing [Kanumba](#)
67. Revealed Best paying jobs
68. [Tanzania](#) Zari and [Diamond](#) breakup was a long time coming
69. TZ firm gets [Kenya evacuation](#) licence
70. It pays to be a girl of the night says [prostitute](#)
71. [Uhuru](#) basks in court ruling as Raila digs in

72. [Magufuli](#) asign [Kashillilah](#)
73. Mangu new posts Traders [discover](#) 3 bodies floating along Coco Beach
74. Here's how to [exercise](#) your [memory](#)
75. Why JPM dissolved NHC board sacked Mchechu
76. How TRA dropped [Makonda's](#) tax [exemption](#) request
77. Lissu Govt owned aircraft is held in [Canada](#)
78. Horti exports to hit \$ 1[.] 3bn in three years
79. CANDID TALK [:] When smooth talking devils rob you blind
80. [Kenya](#) marks [Tanzania](#) border afresh amid [persistent](#) row
81. TEF members warn their leaders against taking [decisions](#) without [consultations](#)
82. Franchising [:] What ails [indigenous](#) brands
83. DEDs ordered to [identify](#) idle land
84. New [regulations](#) seek to bring [sanity](#) to TZ drone [operations](#)
85. Merkel enters final stretch in [coalition-building marathon](#)
86. [Serena, Sharapova](#) ready to renew bad blood in Paris.
87. [Kabila motorcade](#) in fatal [Zambia accident](#).
88. Waking the [interest](#) of [Tanzanians](#) in [yoga](#).
89. Bonds [issuance](#) for financing [development](#) in [Tanzania](#)
90. [Tanzanian](#) wins key DStv award.
91. TZ is working on basic [education](#) for all youth
92. Lady can't [believe](#) you can't buy her [another](#)
93. Govt to launch major programme to boost [agriculture](#)
94. [Stakeholders](#) call for [establishment](#) of more schools
95. TPA asks support from govt to strengthen [security](#) against pirates
96. Govt vets [potential](#) pharma [investors](#)

97. [Madonna](#) to direct film on [Sierra](#) Leone dancer
98. Retired police [officers](#) to heighten [security](#)
99. TZ [Diaspora](#) in US award old runner [Athwart](#)
100. More locked shares become [eligible](#) for trading on two stock exchanges
101. [Magufuli](#) urges [Tanzanians](#) to emulate [Nyerere](#)'s patriotism
102. [Manyara](#) undecided on [villagers](#) 'eviction
103. Fortune smiles on gritty Ndanda, [Majimaji](#) drop
104. China to hit US soybeans, cars, planes with [retaliatory](#) tariffs
105. Shortage of pineapples hits Dar City.
106. [Mkuchika](#) outlines his [priorities](#)
107. Los Angeles tests cooling [pavement](#) paint to beat heat
108. Two lucky winners gain big from M-Bet draw
109. US [president](#) torn between his job and his [business](#)
110. [African](#) leaders urge support for new [security](#) doctrine
111. Project to use khanga to raise [environment](#) awareness
112. [Tanzanian lawmakers](#) concerned as [ExxonMobil](#) plans to sell out of gas field
113. Twiga Stars eye flying start in women's Afcon
114. [Vocational](#) centre gets BoA Support Blaze rips through Dubai [skyscraper](#)
115. The Torch EAC is ready for [business](#) with the world, says Kagame, [Museveni](#)
116. [EDITORIAL](#) [:] [National](#) bodies must focus on youth games
117. [Japanese](#) teachers visit [Tanzania](#) schools
118. [Tanesco](#) told to open offices in remote areas to improve power supply
119. Afghan [cabinet nominees](#) approved after months of [stalemate](#)

120. The way out for AU [parliament](#) In-form
121. Simba eye flying start as [Yanga](#) crash out
122. [Banana](#) road almost done
123. Govt asked to [supervise allocations](#) of [abandoned](#) farms
124. When your immune system fights itself
125. Ex-Trump aide paid [Europeans](#) to lobby for [pro-Russia](#)Ukraine [\[:\]](#) papers
126. VPN law latest step in Kremlin online crackdown [\[:\]](#) experts.
127. VP visits [Mloganzila](#).
128. The ‘[genius](#)’ of Trump [\[:\]](#) What the [president](#) means when he touts his
smarts
129. [Liverpool](#) legend [Hyypia](#) to grace Standard Chartered Trophy
[Tournament](#)
130. [Ukonga](#) Kings labour to down Heats in RBA

Mwananchi online newspaper headlines

131. Necta [yawekahadharani](#)Matokeodarasa la saba
132. Tundu Lissu [apigwarisasi](#)Dodoma
133. HESLB [yatoaorodha](#) ya wanafunziwaliopangiwa mikopo
134. Nape [aelezaalichoambiwa](#) na Lissu [wakitokabungeni](#) jana
135. Mbowe [\[:\]](#) Hali ya Lissu ni mbaya
136. Lissu [azinduka](#)Nairobi
137. Rais JPM [awatumiasalamu](#) Nape Bashe
138. [Alichosema](#) Lissu chumba cha [habari](#)
139. [Aliyesamehewa](#) na Rais [Magufulianena](#)
140. [Serikaliyatoamaelekezoujio](#) wa ndege ya [Askofu](#)Gwajima
141. [Mawaziri](#) wanne [watemwa](#)

142. Mange [Kimambiatajwamichango](#) ya Lissu
143. Baba wa [Akwilinaaelezaatakachomfanya](#)
144. Zitto [amjibu](#) Spika [ahusishamashtaka](#) yake na Lissu
145. Mjane [aliyemliliaMagufuliakamatwaakiandaa](#) banda la [chakula](#)
146. CCM [yawarudishakugombeamadiwaniwaliohamaChadema](#)
147. [Magufuliawasubiri](#) wabunge [watatu](#) CCM
148. Manji [aombamsamahamahakamani](#)
149. Mke [wa-Lissuavunja-ukimya](#)
150. [Derevakondaktawasimuliatukio](#) la mwanafunzi NIT [kupigwarisasi](#)
151. Mtoto wa Sokoine [azikwaakiachautata](#) wa kifo chake
152. Manji [atingamahakamanikivinginehakimuawaonyapolisi](#)
153. [Auawa](#) kwa [risasiKibiti](#)
154. [Mhadhiri](#) UDOM [auawa](#) kwa [kuchomwa](#) kisu na mumewe
155. [Marekaniyataja](#) nchi tisa kwa [ukandamizaji](#) wa [vyombo](#) vya [habari](#)
156. [BaruaNyalandu](#) kwa Spika hii hapa
157. [Mambosasaampongeza](#) Mange [Kimambi](#)
158. [Ajitoleakumsomesha](#) mtoto wa [Masogange](#) hadi chuo [kikuu](#)
159. [Maombi](#) kwa Lissu [yapigwa](#) stop [Sumbawanga](#)
160. [Barazajipyawizara](#) John [Magufuli](#)
161. [Katibuapinga](#) sharti la [PolepoleMangula](#)
162. Meya [ChademaakabidhibaruaIkuluMadiwaniwaliojiuzulu](#)
163. [Chademawatoswa](#) CCM
164. [Uhuruatampawakati](#) mgumu [Lowassa](#)
165. Sauti ndani ya [kontenayazuataharukibandarini](#)
166. Dk Slaa [azungumziamaandamano](#) nchini Sweden

167. Lissu [aizungumzia](#) kauli ya Rais [Magufuli](#)
168. [Polisiwatumiamabomu](#) ya [machozikumfungulia njia Lowassa](#)
169. [Spika Ndugai](#) ‘[ampokonya](#)’[mwenyekitiuongozi](#) baada ya [wapinzanikuitwa](#) mbwa
170. Siri ya [kuzikwapembezeni](#) mwa [nyumbaMasogange](#).
171. [Wabunge wa CUF wavuruganabungeni](#).
172. [AliyemuitaKafulilatumbiliafafanua](#).
173. [Mkemia mkuu kitanzini](#).
174. [Katibu Mkuu Wizara ya Afyaamtibu Lissu](#).
175. Lissu [atakuwa](#) mkubwa zaidi [akitokahospitali](#).
176. [CCM inavyoumiakwakupuzaushauri](#).
177. [Marekani : Tukiombwakuchunguzashambulio](#) la Lissu [tutasaidia](#).
178. [CCM Chademazafukuzanamatokeo](#) ya awali.
179. [Msafarawa DC washambuliwa](#).
180. [Kivuli cha NyalanduchaitesaChademaSingida](#).
181. [Maoni ya ProfesaKitilayazuamjadala](#).
182. [Bomoabomoayaikumbanyumba](#) ya Sh1bil.
183. [Askofu KKKT awaombamsamahawaumini](#).
184. [Wabunge tisa wa Ukawawatajwakuhamia CCM](#)
185. Lissu [asimulia](#) mambo [mazitodakika 60](#).
186. [AskofuNiwemugiziasema](#) yuko [tayarikuitwamchochezi](#).
187. [Familia ya Diamondyamwandikia](#) ujumbe mzito Zari.
188. [Askofuaandikawaraka](#) mzito kwa Lissu.
189. [Viboko 12 vyamsubiribilioneanyumba](#) za [Lugumi](#).
190. [Msigwa azungumziamaendeleo](#) ya [afya](#) ya Lissu.

191. TRA yatishiakuuzamali za Makonda.
192. Familia ilishamta ngabilione anyumba za Lugumi.
193. Matibabu ya Lissu Sh10 milioni kwa siku.
194. Dk Shika atikisa mji Kahama.
195. Darasa la saba 400 kuondolewa kazini Morogoro.
196. Bilione anyumba Lugumia elezea alivyotekwa Urusi.
197. Mgombea Urais 2015 ashikiliwapolisi.
198. Lema amhoji Lowassa haya baada ya kwenda Ikulu.
199. Bilione anyumba Lugumiasema mpango wake uko pale pale.
200. Kanisa la Gwajimalabomolewa.
201. Matokeo: CCM yaongoza Kinondoni.
202. Serikali yakubalimaoni ya wabunge.
203. Picha za ngono ni hatari kwa afya ya ubongo.
204. Fahamu wakati na faida ya kutumia dawa za ziada.
205. Jaji Mutungi atoa onyokwa vyama vya siasa.
206. Wenye vitwa Serikali za Mtaa wa CUF wamuunga mkono Profesa Lipumba.
207. PAET yafafanua sakata la hisa.
208. DC Mbulu awajia juu polisi.
209. Xi Jinping awa kiongozi mwenye nguvu zaidi China.
210. Elimu ya ufundi ipewe mkazo kuongeza mchango uchumi waviwanda.
211. Necy akamilisha vifaa vya kupigia kura.
212. Sido yatoamaeneoujenzi waviwanda kanda ya ziwa.
213. Airtel kuboresha mtandao wake.
214. Mtue mama ndoo yawafikia Runzewe.

215. Uso kwa uso na [Katibu Mkuu wa Cecafa](#).
216. [YWCA yawanufaishavijana](#).
217. [Serikali:Madola](#) msiende [kugeukawataliiAustralia](#).
218. [Tambua](#) namna usounavyoweza [kuainishaubora](#) wa afya yako.
219. Uhai Cup itoe [matokeochanya](#).
220. [Baraza](#) la [uuguzilawapa](#) onyo [wakunga](#) sita.
221. Spika Ndugai [amshukuru](#) Dk [Kashililah](#).
222. Benki ya [Efathayafungwa](#) baada ya [taarifa](#) ya BoT.
223. [Muktadhawamawasiliano](#) na [athari](#) zake.
224. [MkenyaamrithiFerraokuiongozaVodacom](#).
225. IEBC [yajibumalalamiko](#) ya kina Raila [Odinga](#).
226. [Uturukiyaridhishwanamazingira](#) ya [biashara](#).
227. Naibu [waziriatakamabadiliko](#) sekta za [mifugo,uvuvi](#).
228. [Tanzania](#) ya [viwanda](#) bila maji ya [uhakikahaitawezekana'](#)
229. Wanaume [wenzangu](#) mjue kuwa [tunaishinamalaika](#).
230. Putin [atakakuachananamatumizi](#) ya dola.
231. Mkazi Dar kaa chonjo.
232. Mwijage [:] CBE toeni [elimu](#) ya [ujasiriamali](#).
233. [Wamilikiwa](#) Sober houses [wawalalamikia](#) wabunge.
234. [Tetemeko](#) dogo la ardhi [latokea](#) Karagwe.
235. TTCL [kutumia](#) Sh44 [bilioni](#) kusambazaintaneti.
236. [BakhresaakaribishwakuwekezaNyanda](#) za Juu.
237. GGM [yatumia](#) Sh1[.] 6 [bilioni](#) kufanikishamatibabu ya [watoto](#).
238. [KoreaKaskazini'yamnyonga'ofisamwandamizi](#).
239. [Mashujaakukumbukwakimyakimya](#).

240. Watakojitangaziamatokeo Kenya kukiona
241. Asiliyashinda tuzo ya uwajibikaji zaidi Afrika.
242. Mtoto [:] Jaji Msuya alikata kauli tangu Oktoba mwaka jana.
243. Biashara ya samakiyaingia ruba.
244. Mambo yatakayofanyauipende zaidi kazi yako.
245. Brela Usajiliwakampuni sasa kielektroniki.
246. Tira yaandaawarakakuimarishabiashara ya bima.
247. Mke waKayihuraawakataamawakili wa mumewe.
248. Halmashauri kaeni chonjo Mwenge huo.
249. Mufurukikuinunua Zuku.
250. Kamati ya Bunge yabainidosariusambazaji wa dawa
251. Pompeoawasili tena KoreaKaskazini.
252. Wadau wahabari nchini wainyooshea kidole Serikali.
253. Tirdo sasa yatakiwakufanya kazi saa 24.
254. Uokojiwahelikopta waanza Mlima Kilimanjaro.
255. Mgombeaudiwaniaahidi neema ya soko.
256. TanzaniainawezakuzalishaakinaAmadou Gallo.
257. Wakulimaongezeniuboramazao.
258. TanzaniainawezakuzalishaakinaAmadou Gallo.

Appendix 2: Checklist

A1: The Newspaper

1 = Mwananchi

2 = The Citizen

A2: Year of Publication

1. 2018

2. 2017

A3: Month of Publication

1. January

2. February

3. March

4. April

5. May

6. June

7. July

8. August

9. September

10. October

11. November

12. December

B2: Rate the newspaper headline in terms of levels of interest on a 1-to-5 interval scale

where:

1 = very interesting

3 = somewhat interesting

4 = moderately interesting

4 = somewhat not interesting

5 = not interesting at all

B3: Rate the newspaper headline length on a 5-level scale of word-count where:

1. Very short = 1–3 words
2. Short = 4–6 words
3. Moderate = 7–9 words
4. Long = 10–12 words
5. Very long = 13+

B4: The headline contains...

1. New information
2. Updated information
3. Old information

B5: The headline Presupposes.

1. = Familiar
2. = Unfamiliar

C: Readability Index and Grade Level

C1: Flesch Kincaid Reading Ease

1. 100-91 Very easy to read
2. 90-81 Easy to read
3. 80-71 Fairly easy to read
4. 70-61 Plain English
5. 60-51 Fairly difficulty to read
6. 50-31 Difficult to read
7. 30-00 Very difficult to read

C2: Flesch Kincaid Grade Level_____

1. 100-91 5th Grader
2. 90-81 6th Grader
3. 80-71 7th Grader
4. 70-61 8th & 9th Grader
5. 60-51 10th to 12th Grader
6. 50-31 College student
7. 30-00 College Graduate

C3: Headline Features (1)

C31 No. of sentences_____

1. One sentence
2. Two sentences
3. Above two sentences

C32 No. of words per headline_____

1. 1-3 very short
2. 4-6 short
3. 7-9 moderate
4. 10-12 long
5. 13- 15 very long
6. 16+ extremely long

C33 No. of complex words per headline_____

0. None
1. 1 complex word
2. 2 complex words
3. 3 complex words

4. 4 complex words
5. 5 complex words
6. 6 complex words
7. 7 complex words
8. 8 complex words +

C34 Percent of complex words _____

1. 0-25 %
2. 26-50 %
3. 51-75%
4. 76-100 %

C35 Average words per headline _____

1. 1-5 words
2. 6-10 words
3. 11-15 words
4. 15 and above

C36 Average syllables per word _____

1= syllable

2= syllables

3=syllables

4=syllables

5= syllables

6=syllables

7=syllables+

C37: Number of Characters

1. 1-15 characters
2. 16-30 characters

3. 31-45 characters
4. 46-60 characters
5. 61+ characters

D1: Headline Form

1. Question form
2. Statement form
3. Command/Request
5. None of the above

D2: Hyphenation

1. With hyphens and colons
2. Without hyphens and colons

D3: Signal words

1. with signal words
2. without signal words

D4: Self-Referencing

1. with pronouns
2. without pronouns

D5: Literal vs non-literal headlines

1. Literal language
2. Figurative language

D6: Names and concepts of high and low news values

1. High news value
2. Low news value

D7: Headlines containing numbers

1. with number(s)
2. without number(s)

D8: Sentimental words:

1= Negative sentimental words

2= Positive sentimental words

3= Neutral sentimental words

F1 No. of views-----

F2 No. of clicks.....

F3 Click through Rate %

1- 0-20 very low

2- 21-40 low

3- 41-60 average

4- 61-80 high

5- 80-100 very high

Appendix 3: Online Newspaper Headlines Webmetrics

	Headline	views	clicks	Time
1	Tanzania in trouble over North Korea sanctions	11,600	10,738	00:04:32
2	Top 10 most expensive schools in Tanzania	11,174	10,079	00:05:42
3	Immigration to issue passport application forms online	10,343	8,109	00:04:06
4	Tundu Lissu reportedly shot in Dodoma	8,296	7,215	00:02:59
5	Top 20 most viewed Tanzanian music videos in YouTube	8,266	7,615	00:03:57
6	Expatriates on the Immigration radar over permits	7,196	6,488	00:04:13
7	Kenya Chief Justice Maraga main attraction at a meeting Dar	6,423	5,990	00:02:51
8	Tanzania Law firm hit by suspected bomb blast	6,215	5,651	00:02:53
9	Nape Makamba get emotional about Kinana's resignation	4,778	4,033	00:03:31
10	Tanzanian seized in Kenya with Sh2bn gold bars	4,366	3,595	00:02:41
11	From what does Magufuli want to what hes become	4,173	3,788	00:06:20
12	Now govt takes back Manji land	4,077	3,813	00:04:36
13	Here's why Diamond got the World Cup hook up	4,067	3,371	00:02:33
14	Anyone against Stiegler's Gorge project will be jailed, says Minister	4,012	3,474	00:02:40
15	IMF: TZ is rapidly closing its economic gap with Kenya	3,919	3,565	00:05:53
16	Experts warn of Tanzania risk of losing US support	3,826	3,526	00:04:18
17	US envoy mulls sending Dr Magufuli to US	3,825	3,525	00:02:44
18	Barrick govt set to reach an agreement	3,770	3,553	00:04:40
19	Foreign ministry in JPM crosshairs	3,648	3,319	00:04:13
20	Govt directs all embassies to register Tanzanians working abroad	3,539	2,977	00:02:30
21	Tanzania launches e-Passport as Magufuli calls for tighter control of illegal immigrants	3,522	3,174	00:03:32
22	Magufuli orders arrest of a Don	3,481	3,239	00:03:16
23	Lissu in critical condition:Mbowe	3,402	2,956	00:02:19
24	Diamond Platnumz Zari in Dar signs deal with Kedz Tanzania	3,357	2,788	00:02:42
25	How TRA dropped Makonda's tax exemption request	3,277	3,096	00:05:15
26	Opposition parties are not the enemy, Kikwete tells African ruling parties	3,191	3,001	00:04:01
27	Dad:Masogange's last promise to me	3,136	1,968	00:01:23
28	Use of old passports to end January 2020	3,015	2,650	00:03:54
29	Expansion of financial inclusion in Tanzania wins Ndulu praises	2,945	2,433	00:03:01
30	Dr Bashiru Ally succeeds Abdulrahman Kinana	2,905	2,410	00:02:53
31	Chadema: Police are on the way to search Lissu's house	2,89	2,715	00:02:54
32	Dar residents warned of heavy rain	2,845	2,356	00:02:35
33	Magufuli orders arrest of a Don	2,810	2,353	00:02:23
34	About 4,000 head of Tanzanian cattle seized in Kenya	2,767	2,512	00:03:27
35	President Magufuli appoints Dr Slaa new ambassador	2,727	2,468	00:02:49

36	Majority of loan applicants fail to meet requirements	2,622	2,358	00:02:38
37	Salary increase will come before end of my tenure, Magufuli tells workers	2,621	2,107	00:02:28
38	WINNING LEADERSHIP: How to define yourself and brighten up your prospects	2,589	2,341	00:03:34
39	Govt mulls plan to retake 105 idle ranches from investors	2,577	2,408	00:02:44
40	Court allow police to question Manji	2,537	2,404	00:01:44
41	Rostam Aziz exits Vodacom Tanzania	2,494	2,308	00:04:56
42	Govt fails to shade light on suspected Lissu's attackers	2,487	2,282	00:02:48
43	Chadema: We're fielding our candidates in Kinondoni, Siha	2,468	2,007	00:02:28
44	Vodacom share price now drop to Sh770m	2,408	2,249	00:04:46
45	Lissu given referral from Dodoma hospital	2,389	2,099	00:02:18
46	Lissu' condition is deteriorating, says Chadema Secretary General	2,3	2,179	00:02:32
47	Kenya is splitting and this rift at Suswa is just the beginning	2,360	2,166	00:04:11
48	Govt abandons JK championed plan	2,354	2,204	00:05:16
49	Rostam Aziz exits Vodacom Tanzania	2,347	2,151	00:04:40
50	ROFILE John Pombe Joseph Magufuli	2,345	2,136	00:05:35
51	NGO opens application window higher education	2,329	1,716	00:03:40
52	Plans afoot to refer Lissu to US for treatment	2,314	2,090	00:03:31
53	Motorists to pay traffic fines via mobile phones	2,289	2,099	00:05:07
54	Work permit refusal doesn't-make Tanzanians xenophobic	2,283	2,094	00:05:19
55	Fastjet passengers stranded at Dar airport	2,275	1,959	00:02:14
56	Lissu condition is deteriorating says Chadema	2,233	1,812	00:02:45
57	S Sudan envoy shot dead by mistake	2,222	2,027	00:02:26
58	Lissu shooting shocks Human Rights body	2,221	2,059	00:01:58
59	Diaspora raises Sh22.3m to facilitate Lissu treatment	2,215	2,084	00:03:51
60	Nyerere strategy vital for industrialisation Veta	2,21	2,069	00:02:05
61	Bail for woman caught with 1 million at JNIA	2,206	2,039	00:03:15
62	More details emerge on tragic Zanzibar plane crash	2,153	1,980	00:03:36
63	Tanzania shuts down Jamii Forum over tough new rules	2,132	1,978	00:03:27
64	Magufuli Construction of Isaka Kigali	2,124	1,944	00:03:12
65	Lulu slapped with two year jail term for killing Kanumba	2,102	1,771	00:01:40
66	Revealed Best paying jobs Tanzania	2,076	1,937	00:06:28
67	Zari and Diamond breakup was a long time coming	2,075	1,917	00:03:58
68	TZ firm gets Kenya evacuation licence	2,072	1,935	00:02:25
69	It pays to be a girl of the night says prostitute	2,070	1,962	00:05:38
70	Uhuru basks in court ruling as Raila digs in	2,061	1,912	00:03:04
71	Magufuli assign Kashillilah Mangu new posts	2,054	1,854	00:03:22
72	Traders discover 3 bodies floating along Coco Beach	2,032	1,858	00:03:35
73	Here's how to exercise your memory	2,018	1,839	00:05:29

74	Why JPM dissolved NHC board sacked Mchechu	2,001	1,829	00:06:34
75	How TRA dropped Makonda's tax exemption request	1,994	1,837	00:03:59
76	Lissu Govt owned aircraft is held in Canada	1,986	1,811	00:03:32
77	Horti exports to hit \$ 1.3bn in three years	2	0	00:00:50
78	CANDID TALK: When smooth talking devils rob you blind	2	0	00:00:24
79	Kenya marks Tanzania border afresh amid persistent row	3	0	00:00:32
80	TEF members warn their leaders against taking decisions without consultations	3	0	00:00:50
81	Franchising: What ails indigenous brands	3	0	00:00:24
82	DEDs ordered to identify idle land	3	1	00:00:50
83	New regulations seek to bring sanity to TZ drone operations	3	1	00:00:24
84	Merkel enters final stretch in coalition-building marathon	3	1	00:00:51
85	Serena, Sharapova ready to renew bad blood in Paris	3	1	00:01:26
86	Kabila motorcade in fatal Zambia accident	3	1	00:00:32
87	Waking the interest of Tanzanians in yoga	3	1	00:00:24
88	Bonds issuance for financing development in Tanzania	7	1	00:01:27
89	Tanzanian wins key DStv award	7	2	00:00:32
90	TZ is working on basic education for all youth	7	2	00:00:50
91	Lady can't believe you can't buy her another	7	2	00:00:24
92	Govt to launch major programme to boost agriculture	7	2	00:00:50
93	Stakeholders call for establishment of more schools	8	2	00:00:24
94	TPA asks support from govt to strengthen security against pirates	10	2	00:01:25
95	Govt vets potential pharma investors	10	2	00:00:50
96	Madonna to direct film on Sierra Leone dancer	10	2	00:00:24
97	Retired police officers to heighten security	11	2	00:00:52
98	TZ diaspora in US award old runner Akhwari	11	2	00:00:56
99	More locked shares become eligible for trading on two stock exchanges	11	2	00:00:32
100	Magufuli urges Tanzanians to emulate Nyerere's patriotism	12	2	00:00:52
101	Manyara undecided on villagers' eviction	12	2	00:01:25
102	Fortune smiles on gritty Ndanda, Majimaji drop	12	2	00:00:32
103	China to hit US soybeans, cars, planes with retaliatory tariffs	12	2	00:00:50
104	Shortage of pineapples hits Dar City	12	2	00:00:24
105	Mkuchika outlines his priorities	12	2	00:00:51
106	Los Angeles tests cooling pavement paint to beat heat	12	2	00:00:32
107	Two lucky winners gain big from M-Bet draw	12	2	00:00:32
108	US president torn between his job and his business	12	2	00:00:50
109	African leaders urge support for new security doctrine	12	2	00:00:52
110	Project to use khanga to raise environment awareness	13	2	00:00:50

111	Tanzanian lawmakers concerned as ExxonMobil plans to sell out of gas field	13	2	00:00:51
112	Twiga Stars eye flying start in women's Afcon	13	2	00:01:23
113	Vocational centre gets BoA support	14	2	00:00:50
114	Blaze rips through Dubai skyscraper The Torch	15	2	00:00:24
115	EAC is ready for business with the world, says Kagame, Museveni	16	2	00:00:50
116	EDITORIAL: National bodies must focus on youth games	16	2	00:00:24
117	Japanese teachers visit Tanzania schools	16	2	00:00:52
118	Tanesco told to open offices in remote areas to improve power supply	16	3	00:00:51
119	Afghan cabinet nominees approved after months of stalemate	16	3	00:01:22
120	The way out for AU parliament	16	3	00:00:32
121	In-form Simba eye flying start as Yanga crash out	17	4	00:00:50
122	Banana road almost done	18	7	00:00:49
123	Govt asked to supervise allocations of abandoned farms	19	7	00:01:23
124	When your immune system fights itself	19	7	00:00:32
125	Ex-Trump aide paid Europeans to lobby for pro-RussiaUkraine: papers	19	7	00:00:24
126	VPN law latest step in Kremlin online crackdown: experts	20	10	00:00:52
127	VP visits Mloganzila	21	11	00:00:51
128	The 'genius' of Trump: What the president means when he touts his smarts	23	11	00:00:32
129	Liverpool legend Hyypia to grace Standard Chartered Trophy Tournament	24	14	00:00:24
130	Ukonga Kings labour to down Heats in RBA	24	14	00:00:48

Appendix 4: Questionnaire for readers of newspapers

Dear respondent,

My name is Nasibu Musa, a PhD (Linguistics) candidate from Rongo University, Kenya. I am conducting a survey on the Communicative Adequacy of Tanzanian Online Newspaper Headlines. In this survey, I am trying to find out the readability index and levels of the newspaper headlines extracted from Mwananchi and The Citizen online newspapers published online from 2017 July to 2018 June in Tanzania. This is to assure you that the responses given under this online survey are kept confidential. Filling in this questionnaire will consume 20 to 30 minutes. Thank you for taking your time to fill out this questionnaire.

A: Read the online newspaper headlines listed (1-259) in this questionnaire and validate each headline as either.....

1. Informative but not creative, or
2. Creative but not informative, or
3. Both creative and informative, or
4. Neither creative nor informative.

NOTE:

- *Creative* is defined as ‘‘humorous, playful, witty, punning, (employing) figurative language, rhyming, (drawing on) implicatures (rather than explicit meaning), (employing literary style.
- *Informative*: allowing skipping article reading, clear, unambiguous, full information, hence easier to understand

- *Non-informative*, hence inviting article reading (ambiguous, vague, general information, hence open-to-more-than-one-interpretation, imaginative, interesting.

B: The newspaper headlines numbered (1-259) are of different reading levels of difficulty. Validate each headline as either.....

1. Very easy to read or ()
2. Easy to read or ()
3. Fairly easy to read or ()
4. Plain English/Swahili or ()
5. Fairly difficulty to read or ()
6. Difficult to read or ()
7. Very difficult to read or ()

C: The online newspaper headlines listed (1-49) are of different reading levels. How would you grade/rank each headline reading level in the Tanzanian Education System?

1. Below class seven level ()
2. Class Seven Level ()
3. Form one and two levels ()
4. Form Three and Four levels ()
5. Form Five and Six levels ()
6. University Student levels ()
7. University Graduate levels ()

Appendix 5: Work Plan

TIME FRAME	ACTIVITY	VERIFIERS	MAIN ACTOR
January-February, 2018	Proposal writing	Draft proposal	Researcher
March- April, 2018	Proposal writing	Formal proposal	Researcher
May 2018	Proposal Defence	Oral examination	Researcher
June – September 2018	Piloting	Primary Data collection	Researcher
September-January 2019	Field work	Actual Data collection	Researcher
February – July, 2019	Data compilation and analysis	Summary outputs	Researcher
August, 2019- February, 2020	Thesis writing	Chapters on data analysis	Researcher
March, 2020	First draft of thesis	1 st draft Report	Researcher
May –June 2020	Final draft of the Thesis/defence	Final draft	Researcher

Appendix 6: Research Permit

The United Republic of Tanzania
Prime Ministers' Office

REGIONAL ADMINISTRATION AND LOCAL GOVERNMENT

ILALA DISTRICT

Phone Address:

Phone No 2203185/2203182

In reply quote Ref. No: AB/69/701



DISTRICT COMMISSIONER'S OFFICE

ILALA DISTRICT

P. O. Box 15456,

DAR ES SALAAM

Date 12/12/2018

Municipal Director,

P. O. Box 20950,

Ilala.

DAR ES SALAAM. ✓

RE: RESEARCH PERMIT

Prof./Dr./Mr./Mrs./MS./Miss: NAEIRU MUSA KALICOLA
from The ST. AUGUSTINE UNIVERSITY OF TANZANIA she/he has
been permitted to undertake a field work research on
".....
THE COMMUNICATIVE ADEQUACY OF TANZANIAN
ONLINE NEWSPAPER HEADLINES....." The
case study of Ilala District from 12 DEC 2018 to MAY 3RD 2019.....

Therefore, you are asked to give the said researchers necessary assistance and Cooperation.


/ District Administrative Secretary
ILALA

Copy:
.....
.....
.....
.....

Appendix 7: Graduate Studies Letter



OFFICE OF THE DEAN

SCHOOL OF GRADUATE STUDIES

Tel. 0771349741

P.O. Box 103 - 40404
RONGO

Our Ref: **PLIN 2016/0003**

Date: Wednesday, March 20, 2019

The Chief Executive Officer,
National Commission for Science, Technology & Innovation,
off Waiyaki Way, Upper Kabete,
P.O Box 30623-00100,
Nairobi-KENYA.

Dear Sir,

**RE: RESEARCH PERMIT FOR MR.NASIBU M.K. MUSA-PLIN
2016/0003**

We wish to inform you that the above person is a bona fide graduate student of Rongo University in the School of Arts & Social Sciences pursuing a PhD degree in Linguistics. He has been authorized by the University to undertake research titled; ***"The Communicative Adequacy of Tanzania's Online Newspaper Headlines."***

This is, therefore, to request the commission to issue him with a research permit to enable him proceed for field work.

Your assistance to him shall be highly appreciated.

Thank you.

A handwritten signature in black ink, appearing to read "Anino".

Dr. Edward Anino

DEAN, SCHOOL OF GRADUATE STUDIES

Copy to: Vice Chancellor
Deputy Vice Chancellor (Academic and Student Affairs).
Dean, SASS
HoD, Languages, Linguistics & Literature

Received
@y/h
22/03/2019