Master's Thesis
International Business Communication

Trust and credibility of digital news
An analysis of clickbait headlines' impact on curiosity and credibility of news

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August 2022

Acknowledgements

This master thesis is the completion of the master of International Business Communication at the Radboud University in Nijmegen. I have learned a lot during both the premaster and the master programme. With the thought, of who doesn't dare, who doesn't win and a good dose of perseverance, I started this study in September 2020.

Writing the master's thesis was a fun and educational period. It was a challenging study because many variables were being tested against each other. This necessitated recoding after the results came out of Qualtrics. The topic captivated me from the beginning of the thesis process.

My thanks go to my supervisor Anneke de Graaf, for the good and instructive guidance during this period. She was always available to me and helped me make the right choices. I would also like to thank prof. Dr. J. Hornikx for laying the foundation for this thesis together with me and for assessing this thesis. Of course, I am also grateful to the individuals who wanted to participate in the research.

Furthermore, I would also like to thank my fellow students for the great cooperation during the period in which there were sometimes no physical lectures during the past two years. It was very nice that we dragged each other through.

Last but not least, I would like to thank my dearest boyfriend Diederik and my parents. Diederik, your faith was greater than my own, thank you so much for always being there for me. You supported me in every way possible to achieve my goal, to get my master's degree.

Dear mom and dad, you have always supported me. Your motivation and support pulled me through at the right moments, I am extremely grateful for that.

Abstract

An experiment was conducted to assess the effect of headline formulation and figuration on curiosity and credibility. Clickbaits were formulated in four different conditions; formulated as a statement or as a question, and with or without exaggeration. Participants ($N = 140$) were randomly assigned to three topics (sport, entertainment or politics). The experiment was divided into two parts, part A was about the curiosity of the headline and part B was about the credibility of the headline and the corresponding article. The findings of this research contribute to our understanding and perception of clickbaits and provide us with nuance on previous research that highlighted the arousal of curiosity by clickbaits and the negative sentiment on credibility. However, this study does share similar findings concerning headlines without exaggeration, in the sense that these are viewed as more credible than headlines with exaggeration.

Keywords: clickbait, experiment, credibility, curiosity

Introduction

Online news consumption

The way people consume newspaper articles has changed in recent years. More newspaper articles are consumed on the internet than from physical newspapers. The availability and consumption of online news emerged in the early 1990s (Chan-Olmsted & Park, 2000). At the beginning of online news, newspapers offered online news primarily as a tool for online subscription services to provide additional benefits to their subscribers or readers. Today, the online landscape has changed. With the rise of (social) media platforms, the internet has become a platform that enables the creation and exchange of user-generated content. User-generated content means that users are capable to give, seek and share information, independent of institutions or news companies, compiling facts from various sources (Chu & Choi, 2011; Dutton, 2009). This means that consumers can find news through online news aggregators, social media and blogs (Fletcher & Park, 2017). This, together with a lack of professional gatekeepers compared to traditional media, has made news organisations appear less distinct, with a wider range of actors now able to contribute to the news production process (Metzger et al., 2003).

Another aspect that changed was the experience of reading news media online versus reading the same content in print. The non-linear structure of the web browser grants the reader increased autonomy in browsing through stories (Boczkowski, 2004). For example, a study by Tewksbury (2003) showed substantial differences between online and offline consumption of the New York Times, with online-only readers spending much less time on national than international news than readers of the print editions. According to Tewksbury (2003), online readers tend to rely on their interests rather than the cues of editors when navigating online news sites. Tewksbury (2003) argues that new media shifts the power to prioritise particular stories from institutions to individual readers. This means for news companies to attract readers, they need to cater to the interests and curiosity of the readers.

The role of headlines

Headlines play a substantial role in attracting readers and maximising interest in news items. A headline summarises the main idea of an article, and it permits consumers to scan news items to get an abbreviated news update or choose which articles to read (Dor, 2003; Geer & Kahn, 1993; Ifantidou, 2009; van Dijk, 1988). It has been argued that many readers spend more time

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scanning headlines than reading articles, as this strategy will maximize readers' informational gain relative to invested cognitive effort (Dor, 2003).

There is another important reason for a good headline. The shift towards online news consumption has impacted the economic model of news media. Online media are dependent on clicks on their headlines. When readers click on a headline, they are redirected to a news article on the publisher's website, monetizing it by showing advertisements on the publisher's website alongside the news article. This has changed the function of the headline. Previously, before the shift to online news, the primary function of a headline was to give the reader, who was scanning the newspaper, a clear understanding of what the article was about (Van Dijk, 1988). But since many headlines are not read within the context of a newspaper anymore, the function of the headline has shifted.

Nowadays, the headline being one of the primary ways to attract the readers' attention, should above all make the reader curious as to what the article is about so that it lures the reader into opening the article (Chen, Conroy & Rubin, 2015). As more and more readers of news articles come from social media networks such as Facebook and Twitter (Mitchell & Page, 2015), the need grows for a good headline that results in the most clicks. This often leads to an enticing headline that induces curiosity, which is then used to lure readers into clicking on the headline. This phenomenon is known as *clickbait*. A clickbait is a catchy headline that is typically hyperlinked to the respective article and shared on news websites and social media platforms to reach readers (Lindemann, 1990). Clickbaits have the reputation that they do not contain credible and verifiable information and lead to unreliable news sources that publish nonmainstream news articles (Kaushal, 2021). This study extends studies on clickbaits by examining the role of clickbait on curiosity and credibility.

Theoretical framework

In this chapter it is examined what clickbaits are and what their effect is on curiosity and credibility. Furthermore, the present study explains the gap in knowledge, research questions and hypotheses concerning clickbaits, curiosity and credibility.

Clickbaits

Journalists use clickbaits to entice readers to read their articles (Lindemann, 1990). These are catchy headlines, typically hyperlinked to the respective articles and shared on news websites and social media platforms to reach readers. Chen, Conroy and Rubin (2015) have defined clickbait as content whose primary goal is to evoke curiosity, attract attention and encourage

consumers to click on a link to a particular web page. Examples of clickbait headlines are: "15 Things That Happen When Your Best Friend is Obsessed With FIFA", "What Happens to this Man INSIDE a Water Balloon Will Blow Your Mind" or "8-Year-Old Starts Singing with Her Eyes Closed but When She Opens Her Eyes… My Jaw Dropped! OMG!" (Chen, Conroy & Rubin, 2015).

Clickbaits exploit the cognitive phenomenon known as the curiosity gap. This is done using a stylistic technique and narrative strategy called forward-reference (Yang, 2011). Forward-reference relies on purposefully concealing key pieces of information from headlines, which creates an "information gap" and arouses curiosity and suspense in the reader to click on the headline to read further to satisfy their curiosity (Blom & Hansen, 2015).

Clickbait headlines are written in a provocative writing style. For example, buzzwords are used, such as "unbelievable", "amusing" or "shocking", to get the interest of the reader. Clickbaits are written so that important information is excluded or tease the reader that in order to obtain specific information, you need to click on the headline. Common examples are: "How to X", "X reasons why Y" and "Top X things for Y". A distinction can be made between clickbaits that intentionally leave information absent or clickbaits that tease information. The following examples show the difference between the first and the latter, "Yes! […] has signed on for four more years at Real Madrid" and "You won't believe who signed on for four more years at Real Madrid". In the previous examples, clickbaits are written as statements. They can also be written in a question, for example: "Formula 1 is back! What time will they drive and when?" (Chakraborty et al., 2016).

Clickbaits and curiosity

Curiosity plays a central role in the attraction and working of clickbait. Curiosity is broadly defined as a desire for acquiring new knowledge and new sensory experience that motivates exploratory behaviour (Litman & Spielberger, 2003). Berlyne (1954) differentiated between two types of curiosity, namely perceptual and epistemic. Perceptual curiosity (PC) is the curiosity that leads to increased perception of stimuli. It is evoked by visual, auditory or tactile stimulation. Epistemic curiosity (EC) is defined as the drive to know. It is aroused by conceptual puzzles and gaps in knowledge (Litman & Spielberger, 2003). This information gap is often exploited in clickbait to attract readers' attention, arouse their curiosity, and generate clicks. For example, the headline: "THIS Is What Apple Is Planning for India" raises an information gap that rouses curiosity (Kaushal, 2021). This aroused curiosity is epistemic and used to generate more clicks. In contrast, a headline like "Apple Plans to Make iPhones in India" does

not evoke a similar curiosity. It presents information in a clear, summarized manner with minimal information holes. There have been attempts in the existing body of research on clickbait detection to recognize clickbait based on the identification and prediction of curiosity (Kaushal, 2021). However, in this study, it is turned the other way around, the effect is examined of the formulation of a headline on the curiosity of readers.

Clickbaits and credibility

The growth of online news consumption and the variety of news sources has given news consumers more choice in supply and created a need to filter credible information (Newman, Levy & Nielsen, 2015). In the online world, news consumers can go directly to the sources they trust. However, they also have the option of turning to intermediaries that offer news aggregation to make source selection quicker and more accessible, as well as seeking the opinions of fellow news consumers on social media and other platforms (Fletcher & Park, 2017; Lee & Ma, 2012). Traditional news organisations have long been associated with high news credibility. Intermediaries or social media have often been viewed as less credible and unreliable because of their greater distance from the evidence (Molyneux & Coddington, 2019).

Clickbaits have the reputation of not containing credible and verifiable information. This means that readers do not believe the information, the information is not objective and has no attributed sources (Sundar, 1998). Clickbait content on social media platforms is seen as if it is posted by unreliable news sources that publish non-mainstream news articles (Kaushal, 2021). The following two studies can exemplify this. The first study by Scacco and Muddiman (2016) investigated the influence of clickbait headlines on the readers' sentiment. They tested readers' reactions to headlines that contained varying levels of uncertainty. Specifically, traditional headlines, forward-reference and question-based headlines. They conducted a test with 2000 U.S. adults and discovered that clickbait headlines led to a more negative attitude about the headline and heightened negative expectations from the news story than traditional headlines. The second study was performed by Molyneux and Coddington (2019). In an experiment, they asked 500 readers to choose articles based on a headline and rate articles on credibility and quality. Their findings showed that stories with clickbait headlines were consistently judged to be of lower quality and credibility. These studies exemplify the negative sentiment surrounding the credibility of clickbait headlines, resulting in lowered expectations regarding the content of the news story.

However, is the sentiment valid? With increasing competition, mainstream news publishers have started using clickbait frequently in their publications (Rony, Hassan & Yousuf,

2017). According to Rony, Hassan and Yousuf (2017), the presence of clickbait in mainstream media has increased. They analysed around 1.5 million Facebook posts created by 153 media organisations to understand the extent of clickbait practice, its impact and user engagement. Their analysis showed that 33.54% of social media posts by mainstream media contained clickbait headlines, whilst unreliable news sources contained 39.26% clickbait headlines. Furthermore, 24.12% of posts by print media were clickbaits, and for mainstream broadcast media. the headlines contained 47.56%. The findings of this study acknowledge a shift from the use of clickbait from unreliable news sources to mainstream media. So what happens to the negative sentiment around the credibility of clickbait articles when the publisher changes from unreliable sources to mainstream sources and the content appears credible and verifiable? This is something where further studies are necessary to understand credibility better when controlled for the article's content.

Present study

The present study aims to contribute to the understanding of clickbaits and their effect on curiosity and credibility. The existing research has focused on recognizing clickbait based on the identification and prediction of curiosity (Kaushal, 2021). This study will examine if the formulation of a headline might influence the readers' curiosity.

Furthermore, previous research has established that readers think that articles with a clickbait headline do not contain credible or verifiable information. Nevertheless, content studies have shown that mainstream media equally use clickbait headlines compared to unreliable news sources (Rony, Hassan & Yousuf, 2017). This study will examine credibility sentiment when controlled for the article's content.

In order to investigate the relationship between clickbait and curiosity and credibility of a headline, differentiation in stylistic techniques, writing style and formulation is exploited. This study will examine different responses to headlines formulated either as a question or statement or written with exaggeration or neutral, where the main notion is that clickbait is more frequently written with an exaggeration and formulated as a question rather than without exaggeration and formulated as a statement (Chen, Conroy & Rubin, 2015; Chakraborty et al., 2016).

In conclusion, this study investigates the effect of the stylistic figure and formulation of clickbaits on curiosity and credibility.

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The following hypotheses are proposed and investigated by using experiments:

Hypothesis 1a: *People are more likely to click on a headline with exaggeration rather than without exaggeration.*

Hypothesis 1b: *Headlines with exaggeration evoke more curiosity in readers than without exaggeration.*

Hypothesis 1c: *Headlines with exaggeration are viewed as less credible than without exaggeration.*

Hypothesis 1d: *Articles with an exaggeration in the headline are viewed as less credible than articles without exaggeration.*

Hypothesis 2a: *People are more likely to click on a clickbait formulated as a question rather than clickbait that is formulated as a statement.*

Hypothesis 2b: *Headlines formulated as a question evoke more curiosity than clickbait formulated as a statement.*

Hypothesis 2c: *Headlines formulated as a question are viewed as less credible than clickbait formulated as a statement.*

Hypothesis 2d: *Articles that have a headline that is formulated as a question, are viewed as less credible compared to articles where the headline is formulated as a statement.*

Because there is not yet enough evidence to formulate a hypothesis about the interaction between formulation and style figure, a research question is formulated.

RQ: *To what extent is there an interaction between formulation and style figure such that a question and an exaggeration strengthen each other?*

Method

Materials

In this research, an experiment was conducted to investigate the effect of the formulation of a headline (two levels: statement or question) and style figure (two levels: exaggeration or neutral) on curiosity and credibility, see Figure 1. The stimulus materials consisted of different versions of headlines and corresponding articles on three news topics (sport, entertainment and politics). The experiment consists of two parts, part A and part B. In part A participants were exposed to four different headlines on one topic, see Table 1. These headlines were all in different conditions and about different subjects within the topic. In the case of sports, the different subjects were: cycling, football, tennis, and F1. This means that for every different subject within one topic a headline in the four different conditions was created, this makes a total of 48 different headlines across the three topics. In part B, four different headlines for each topic were created, but participants saw only one headline. In total four headlines were created for each topic; this means that for the three topics in total 12 headlines were created. See Appendix 2 for all the different versions of the headlines.
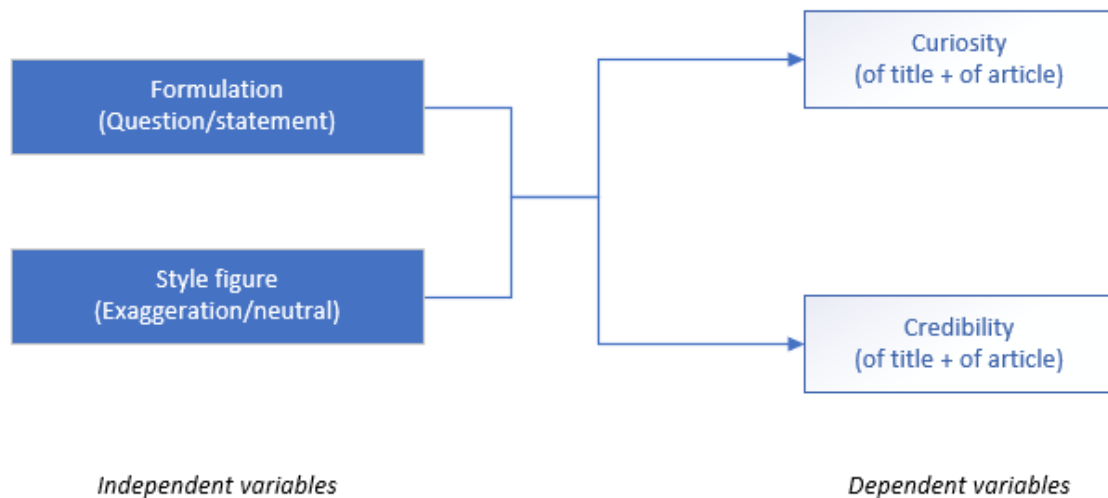

Figure 1. Independent and dependent variables

Table 1.   Conditions and examples of headlines

Conditions	Examples
Headline with exaggeration, formulated as statement;	Max Verstappen's chances at title are gone after two retirements in the first three races!
Headline with exaggeration, formulated as a question;	Are Max Verstappen's chances at title gone After two retirements in the first three races?
Headline without exaggeration, formulated as statement;	Max Verstappen's chances at title are reduced after two retirements in the first three races
Headline without exaggeration, formulated as a question.	Are Max Verstappen's chances at title reduced after two retirements in the first three races?

Subjects

For the experiment, 171 participants were recruited. A total of 140 participants fully completed the experiment: 32% were male, 66.4% were female and 1.4% chose not to identify their gender. The participant's age ranged between 20-74 years old ($M = 29.94$, $SD = 10.07$). 61.4% Of the participants responded that they were Dutch. 38.6% of the participants were from different nationalities, namely German (8), Norwegian (1), Croatian (1), Dutch/Italian (2), Indonesian (1), Malagasy (1), Bosnia-Herzegovina (1), British (8), Slovak (1), American (3), Turkish (1), Nigerian (1), Luxembourgish (3), Romanian/American (1), Greek (1), Mongolian (1), Belgian (1), Taiwanese (1), Italian (2), Italian/Ecuadorian (1), Finnish (1), Icelandic (1), Canadian (1), Polish (1), Chinese (3), Vietnamese (1), Colombian/Norwegian (1), Portuguese (1), Filipino (1), Spanish (1) and Egyptian (2).

Participants needed to have a sufficient level of English that would make it possible to understand the news articles and questions. This means that the minimum requirement to participate in the study was at least A2/B1 level of English, which is the equivalent to high school English/VWO. This made it possible for participants from different countries to translate their level to the minimum requirements for the test. The (highest) educational level of the participants was divided into VMBO (0.7%), HAVO (2.9%), VWO (3.6%), gymnasium (2.9%), MBO (0.7%), HBO (8.6%) and university (80.7%) level.

As mentioned before, the first part of the study consists of a within-subjects design. The second part of the study is a between-subjects design. For this reason, a chi-square analysis was conducted for part B to measure if gender, nationality and educational level were equally distributed across the different conditions. A two-way ANOVA was conducted to see if age was matched across both groups.

Gender did not differ across form (χ^2 (2) = .097, *p* = .953) or figure (χ^2 (2) = 2.005, *p* = .367). Nationality did not differ across form (χ^2 (6) = 5.699, *p* = .458) or figure (χ^2 (6) = 5.727, *p* = .454).

Educational level did not differ across form (χ^2 (6) = 5.699, *p* = .458) or figure (χ^2 (6) = 5.727, *p* = .454). This means that gender, nationality and educational level were distributed equally across the different conditions.

A two-way analysis of variance with as between-subject factors figuration (exaggeration/no exaggeration) and formulation (statement/question) for age showed no significant main effect of figuration (*F* (1, 136) < 1, *p* = .910). There was also no significant main effect of formulation (*F* (1, 136) < 1, *p* = .378). The interaction effect between figuration and formulation was not statistically significant (*F* (1, 136) < 1, *p* = .312). Age was matched across both groups.

Design

In the experiment, the dependent variables were used to measure participants' level of curiosity and credibility. The experiment consisted of two parts: part A is used to measure participants' level of curiosity. Part B was used to measure participants' level of credibility.

The first part of the experiment (part A) is a within-subjects design because the subjects were exposed to all four conditions. The factors are formulation (two levels: statement or question) and style figure (two levels: exaggeration or neutral), as can be seen in Figure 1. For example, participants who were subdivided into the topic of the sport were shown four headlines about different subjects. The subjects were different for the four conditions to reduce the confounding effect. For the conditions of the headlines, the different subjects for each topic were rotated. In the results section, this is called versions. See Appendix 2 for all the different versions of the headlines. Four examples of sports can be found below.

- Statement with exaggeration
  - Heavily frustrated van der Poel reacts with a smiley on Biniam Girmay's interview after the 8th Giro stage;
- Statement without exaggeration

- Rafael Nadal is a good tennis player on clay;
- Question with exaggeration
  - Are Max Verstappen's chances at title gone after two retirements in the first three races?
- Question without exaggeration
  - Why is France happy about the arrival of Messi?

The second part of the experiment (part B) is a between-subjects design because subjects were exposed to only one condition. For example, participants who were subdivided into the topic of sports only saw one of the following headlines:

- Statement with exaggeration
  - Erik ten Hag calls Cristiano Ronaldo a key figure for Manchester United next season;
- Statement without exaggeration
  - Erik ten Hag wants Cristiano Ronaldo for Manchester United next season;
- Question with exaggeration
  - Did Erik ten Hag call Cristiano Ronaldo a key figure for Manchester United next season?
- Question without exaggeration
  - Does Erik ten Hag want Cristiano Ronaldo for Manchester United next season?

Furthermore, the experiment was a 2x2 factorial design, since the effects of the two independent variables (each with two levels) were measured on two dependent variables. In part B, participants were equally distributed across the four conditions. Participants were subsequently subcategorized into smaller groups to be equally distributed across the three news topics.

Instruments

In Qualtrics, an online environment was created and hosted to run the experiment. Participants started by filling in their age, gender, education level and nationality.

The first part of the experiment (part A) contained curiosity questions. Part A was subdivided into two parts (part A1 and part A2). Part A1 started with an overview of four headlines, each in a different condition. Participants were asked to choose "Of which of the following headlines would you want to read the corresponding article?" Part A2 required participants to answer two questions about every headline in part A1. The questions were asked on a 7-point Likert scale. The first question was: "To what extent does this headline attract your

curiosity?'' (1 = very much, 7 = not at all). The second question was: "To what extent do you want to read the article that belongs to this headline?'' (1= very much, 7= not at all). The second question, earlier mentioned, is also asked in the first part of the experiment. But the results of this question are not analyzed since the focus in this part of the study is on the curiosity of the headline, which means that only the first question got the highest face validity. The curiosity of headlines is the central topic in this part (A).

The second part of the experiment (Part B) was about the credibility of the headline and the corresponding article. Participants saw a randomly selected headline with a corresponding article and needed to rate their agreement with the following statements about the headline and the article separately on a 7-point Likert scale: "can be trusted", "is informative", "is accurate" and "tells the whole story" (1 = absolutely disagree, 7 = absolutely agree). The statement "is biased'' is reverse coded because the opposite of the scale was used (1 = absolutely agree, 7 = absolutely disagree). And to what extent do you find this headline "credible'' and to what extent do you find the corresponding article credible (1 = absolutely not credible, 7 = absolutely credible). This last question deviates from the statements because the term "credibility" is a multidimensional concept, which is frequently operationalized by the measurements given in the previous five statements (Molyneux and Coddington, 2019). These statements are modified from the Gaziano and McGrath (1986) scale.

A reliability analysis was conducted to compute the Cronbach's Alpha, to find out if the reliability of credibility of the headline and the article could be measured with the six items together, as earlier mentioned. The reliability of 'credibility of the headline' comprising six items was satisfactory: α = .575 The reliability of 'credibility of the corresponding article' comprising six items was satisfactory: α = .543.

The statement "is biased'' was deleted because Cronbach's Alpha level was satisfactory (headline: α = -.344 and article: α = -.313). A possible explanation can be that because the question was reverse coded, participants did not fully understand the question. The reliability of 'credibility of the headline' comprising five items was acceptable: α = .773. The reliability of 'credibility of the corresponding article' comprising five items was acceptable: α = .740.

The curiosity questions: ''To what extent does this headline attract your curiosity?'' and ''To what extent does this article attract your curiosity?'' are not analyzed since the focus of this study is in the first part on curiosity and in the second part on credibility.

Procedure

The respondents were recruited via the researcher on social media (public message) and/or asked personally. The researcher sent the potential participants a message to motivate them to participate in the experiment. The e-mail explained the length of the experiment, the sufficient command of the English language, the minimum age of 18 years or older and the voluntary participation in the study.

The experiment started with a general introduction. Participants were informed about about the procedure of the experiment, confidentiality and the responsible researcher's contact information. The researcher maintained complete anonymity and privacy for each participant; no one was identified on any of the forms used for data collection. The procedure was the same for every participant. Due to the different conditions, the content (depending on the different topics) was different. In the study, participants were exposed to the same topic in both part A and part B, this could be either a sports topic, entertainment or politics. The articles in part B contained similar word counts of <450 words. Participants were not debriefed at the end of the experiment.

The length of the experiment was $M = 6.46$ minutes; $SD = 3.21$ minutes. The data gathering took place in the period between 28.05.2022 and 07.06.2022.

Statistical treatment

In order to do the statistical tests, all analyses were conducted with SPSS (Version 27.0).

A binomial test was used to test if each condition of part A was chosen lower or greater than chance. Repeated measures ANOVA was used to test the curiosity of the participants in relation to the headlines in the first part of the experiment. To test the credibility of the headlines and corresponding articles, a two-way ANOVA was used.

Results

The first part of this chapter will cover hypotheses and test results about curiosity. This corresponds with part A of the experiment. The second subchapter will cover hypotheses and test results about credibility. This corresponds with part B of the experiment. Additional tests that have been performed that are not based on hypotheses are reported in the last subchapter.

Curiosity

The first set of hypotheses was to determine whether people are more likely to click on a headline with exaggeration rather than without exaggeration (hypothesis 1a) and whether people are more likely to click on a clickbait formulated as a question rather than a clickbait that is formulated as a statement (hypothesis 2a). In order to analyse H1a and H2a, the selected headlines (1) and the non-selected headlines (0) were coded. Four binominal tests were performed to test if each condition was chosen at a rate lower or greater than chance (.25). A binomial test indicated that the proportion of headlines formulated as a statement with exaggeration of .21 does not differ from chance, $p = .191$ (1-sided). Another binomial test indicated that the proportion of headlines formulated as a statement without exaggeration of .21 does not differ from chance, $p = .191$ (1-sided). Another binomial test indicated that the proportion of headlines formulated as a question with an exaggeration of .24 does not differ from chance, $p = .468$ (1-sided). The last binomial test indicated that the proportion of headlines formulated as a question without exaggeration of .33 was higher than the expected .25, $p = .022$ (1-sided). The last test indicated that headlines formulated as a question, without exaggeration, were chosen at a rate greater than chance. H1a and H2a cannot be supported by the results of the binomial tests.

The second set of hypotheses was to determine whether a headline with exaggeration evokes more curiosity in readers than a headline without exaggeration (1b) and whether a headline formulated as a question evokes more curiosity than a headline formulated as a statement (2b). The topic was added as a factor to check it didn't affect the results, but it did not interact with any of the main independent variables. A repeated measures analysis for headlines with formulation as within-subjects factor and figuration showed no significant main effect of formulation ($F (1, 137) < 1$, $p = .692$) and no significant main effect of figuration ($F (1, 137) < 1$, $p = .932$). The interaction effect between figuration and formulation was not statistically significant ($F (1, 137) < 1$, $p = .515$). These results indicate that H1b and H2b cannot be supported. The absence of a significant interaction between figuration and formulation is also relevant for answering the research question. See Table 1 for *M, SD* and *N*.

Table 1. Means, standard deviations and group size for topics (sport, entertainment and politics) and conditions (statement with exaggeration, statement neutral, question exaggeration and question neutral) for the headlines of part A

	Statement Exaggeration			Statement Neutral			Question Exaggeration			Question Neutral		
	M	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*
Sport	4.79	2.28	42	5.07	1.99	42	4.24	2.16	42	4.76	2.00	42
Entertainment	4.06	1.90	50	4.26	1.78	50	4.62	1.75	50	3.76	2.25	50
Politics	4.17	2.05	48	3.94	1.84	48	4.29	1.77	48	4.29	1.79	48
Total	4.31	2.08	140	4.39	1.91	140	4.39	1.88	140	4.24	2.05	140

Credibility

The third set of hypotheses was to determine whether headlines with exaggeration are viewed as less credible than headlines without exaggeration (hypothesis 1c) and whether headlines formulated as a question are viewed as less credible than headlines formulated as a statement (hypothesis 2c). A two-way analysis of variance with as between-subject factors figuration (exaggeration/no exaggeration) and formulation (statement/question) for the credibility of the headline showed no significant main effect of figuration (F (1, 136) = 1.28, p = .260). There was also no significant main effect of formulation (F (1, 136) < 1, p = .579). The interaction effect between figuration and formulation was not statistically significant (F (1, 136) < 1, p = .437). The results of the two-way ANOVA do not support H1c and H2c.

The fourth set of hypotheses was to determine whether articles with an exaggeration in the headline are viewed as less credible than articles without exaggeration (hypothesis 1d) and whether articles that have a headline that is formulated as a question, are viewed as less credible compared to articles where the headline is formulated as a statement (hypothesis 2d). A two-way analysis of variance with as between-subject factors figuration (exaggeration/no exaggeration) and formulation (statement/question) for the credibility of the article showed a significant main effect of figuration (F (1, 136) = 4.61, p = .034). Irrespective of the formulation, participants found articles formulated without exaggeration more credible (M = 4.52, SD = 1.02) than headlines with exaggeration (M = 4.16, SD = 1.00). There was no significant main effect of formulation (F (1, 136) < 1, p = .768). The interaction effect between figuration and formulation was not statistically significant (F (1, 136) = 1.17, p = .281). The significant result disproves hypothesis 1c. Hypothesis 2c cannot be supported, based on the results. See Table 2 for means and standard deviations and number of subjects for the credibility of the headline and article and conditions of part B. The absence of a significant interaction between figuration and formulation is also relevant for answering the research question.

Table 2. Means, standard deviations and group size for the credibility of the headline, article and conditions (statement with exaggeration, statement neutral, question exaggeration and question neutral) of part B

	Statement Exaggeration			Statement Neutral			Question Exaggeration			Question Neutral			Total		
	M	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*
Credibility of the headline	3.80	.925	34	4.14	.952	34	3.84	.923	35	3.90	1.33	37	3.92	1.05	140
Credibility of the article	4.09	.97	34	4.64	.84	34	4.22	1.03	35	4.41	1.16	37	4.34	1.02	140

Additional tests

An additional test was performed to see if participants' choice in figuration or formulation was different between topics (sport, entertainment and politics). A repeated measures analysis for headlines with figuration and formulation as within-subjects factor and topic as between-subject factor showed no significant main effect of figuration and formulation of sports (F (1, 37) < 1, p = .880), a significant main effect of figuration and entertainment (F (3, 47) = 4.87, p = .005) was found and a significant main effect of figuration and politics (F (3, 44) = 4.02, p = .013) was found.

Another additional test was performed to see if participants' choice in figuration within topics was different between the versions of the headlines which were shown in part A. The difference in curiosity was found among subjects within entertainment (F (3, 47) = 4.87, p = .005). When the headline about Johnny Depp was formulated as a question with an exaggeration (M = 5.20, SD = 1.93), it was clicked on more frequently than the headline about Ukraine, which was formulated as a question without exaggeration (M = 2.50, SD = 1.44). Furthermore, when the headline about Ukraine was formulated as a question with an exaggeration (M = 4.93, SD = 1.54), it was clicked on more frequently than the headline about Johnny Depp, which was formulated as a question without exaggeration (M = 3.43, SD = 2.37).

The difference in curiosity was found among subjects within politics (F (3, 44) = 4.02, p = .013). When the headline about Putin was formulated as a statement with an exaggeration (M = 5, SD = 1.71), it was clicked on more frequently than the headline about Rutte, which was formulated as a statement without exaggeration (M = 3.5, SD = 1.73). See Appendix 2 for an overview of headline formulations.

Conclusion and discussion

Conclusion

The findings of this study did not show significant results on whether people are more likely to click on a headline with exaggeration rather than without exaggeration. There were also no significant results on whether people are more likely to click on a clickbait formulated as a question rather than a clickbait that is formulated as a statement. This means that hypotheses 1a and 2a are not confirmed.

This study showed no significant results on whether a headline with exaggeration evokes more curiosity in readers than a headline without exaggeration and whether a headline formulated as a question evokes more curiosity than a headline formulated as a statement. This means that hypotheses 1b and 2b are also not confirmed.

Furthermore, in this study hypotheses 1c and 2c were disproven since no significant interaction was found on whether headlines with an exaggeration are viewed as less credible than headlines without exaggeration or whether headlines formulated as a question are viewed as less credible compared to headlines formulated as a statement.

The results showed that articles that have a headline with an exaggeration were not viewed as significantly less credible compared to articles that have a headline without exaggeration. However, when controlled for the content of the article, participants did find articles without an exaggeration more credible, irrespective of the formulation. This partially approves hypothesis 1c. However, the findings of the study did not give significant results as to whether articles that have a headline which is formulated as a question, are viewed as less credible compared to articles where the headline is formulated as a statement. This means that hypothesis 2d is disproven.

Concerning the research question '*To what extent is there an interaction between formulation and style figure such that a question and an exaggeration strengthen each other?*', this study found no interaction between formulation and figuration. This means that the results of this study do not support the assumption that a question and an exaggeration strengthen each other in such a way that this combination arouses curiosity in readers or that it increases a negative sentiment on credibility.

Discussion

The findings from this study contradict findings and results from previous studies on clickbait headlines and their effect on curiosity and credibility. After examination, a distinction between

this study and previous studies can be made which could explain the different results. This distinction can be found in the experimental design, materials and the participant group.

The present study has a different experimental design compared to, for example, the study by Scacco and Muddiman (2016). The findings in their research on the influence of clickbait headlines on readers' sentiment concluded that question-based headlines, compared to traditional statement headlines, lead to negative attitudes about the headline and negative expectations for the associated news story. This negative sentiment increased when the headline was matched with a topic that participants found particularly unappealing. These findings are inconsistent with the findings from this study, where headlines with an exaggeration were not viewed as significantly less credible compared to headlines without exaggeration. Controlled for the article's content, however, participants did find articles without an exaggeration more credible than with an exaggeration. Looking at the experimental design of their study, Scacco and Muddiman (2016) accompanied the headlines with images and logos from news sources (e.g.: USA Today, BuzzFeed, Fox News or MSNBC) to assess whether the source played a role in participant's curiosity and/ or view on credibility. They found that this does play a significant role in influencing the credibility of the headline/content. Therefore, their study concluded that an image/logo can evoke a certain prejudice. Regarding this thesis, no images were used to accompany the headlines in order to exclude such external factors. Solely formulation and figuration were under investigation. Comparing the results, it could be that external factors, such as images, play a more important role than previously assumed, which is perhaps why the results from this study showed little to no significant results and the study from Scacco and Muddiman (2016) do.

Furthermore, this study used different materials compared to other studies, such as Scacco and Muddiman (2016) and Kaushal (2021). As mentioned in Scacco and Muddiman (2016), their findings concluded that negative attitudes about the headline and negative expectations for the associated news story increased when the headline was matched with a topic that participants found particularly unappealing. The absence of significant results in this study might mean that the topics were not found unappealing by the participants. The topics in this study were fairly general (sport, entertainment and politics). The study by Scacco and Muddiman (2016) on the other hand used economy, immigration and dissatisfaction with the government as topics. These were chosen from responses from the *November 2015 Gallup poll* that asked respondents what they thought was the most important problem facing the U.S. (Scacco & Muddiman, 2016). These topics were in their case already hot issues, raising a lot of negativity. This could have led to their findings about negative feelings and expectations. Since

the issues in this thesis were rather neutral and did not evoke emotions, it could explain the absence of significant results on credibility.

On curiosity, however, the findings from this study confirm the result from Kaushal (2021) that when participants are interested in a certain topic, they are more inclined to click on a headline formulated as a clickbait headline. The additional test in this study confirmed that, for instance, within entertainment, headlines with an exaggeration were clicked on more frequently than headlines without exaggeration, despite the subject within that topic.

Another difference in the materials is the structural design of the headlines. Chakraborty et al. (2016) explains that clickbaits often contain hyperbolic words, internet slang, punctuation patterns and common bait phrases. These elements of clickbait headlines evoke curiosity and reduce the credibility sentiment. Scacco and Muddiman (2016) and Kaushal (2021) use these stylistic elements in the design of their headlines. Their findings presented significant results in both participants' curiosity and their view on credibility. These elements were not used in this study as this study was designed to assess solely formulation and style figures. The difference in materials used by Scacco and Muddiman (2016) and Kaushal (2021) compared to the materials in this study on the other could mean that the use of hyperbolic words, internet slang, punctuation patterns and common bait phrases might play an important role in clickbait headlines and their effect on curiosity and credibility.

The last difference between this and other studies is the participants. Scacco and Muddiman (2016) used 2000 participants in their study. These were mostly US-based citizens. 25% of the participants were between 18-29, 40% were between 30-49 and 37% were fifty years or older. Molyneux and Coddington (2020) recruited participants through Amazon's Mechanical Turk (MTurk). In their study, they recruited 488 participants with an average age of 39. These were all from the U.S. Kaushal (2021) recruited 200 participants (100 English-speaking Americans and 100 English-speaking Indians). In their findings, they found a statistically significant correlation between age and propensity to click on clickbait headlines. After dividing the participants by age into two categories (lower and above 30 years old), they saw that participants above 30 had a significantly higher propensity for clickbait. This means that their findings confirmed their hypothesis. These findings build upon existing research on the impact of age on interactions with spam and online content. Their results suggest that older people might be at a higher risk of facing heightened stress and attentional issues associated with frequent clickbait interactions. In this study, the average age of participants was 29, with over 50% of the participants being younger than 33. According to the results from Kaushal

(2021), this could mean that the participants in this study were less likely to click on clickbaits, which could explain the difference in results compared to other studies.

Implications

The results of this study have theoretical implications on clickbaits and their effect on curiosity and credibility. The findings of this research contribute to our understanding and perception of clickbaits and provide us with nuance on previous research that highlighted the arousal of curiosity by clickbaits and the negativity sentiment on credibility. However, this study does share similar findings concerning headlines without exaggeration, in the sense that these are viewed as more credible than headlines with exaggeration.

Furthermore, this study provides practical implications for journalists, web editors and other creators of online content. Formulation of the headline or the use of exaggerations in headlines does not necessarily evoke curiosity or compromise the credibility of the article. This means that journalists need to adjust other elements in order to attract readers. Furthermore, the question of 'who are the readers' becomes equally important, as we can see that readers from different age groups require different tactics to attract them.

Limitations

The present study is not without limitations, which can be taken into account for future research.

The first limitation is the design of the study. As mentioned earlier, the research method was chosen to assess the relationship between clickbait headlines and curiosity and credibility without the interference of other external factors, such as the option to filter between topics or scan previews. In a realistic setting, however, people have to some extent autonomy over what they consume. This is different from the chosen design in part B where participants were only exposed to one headline and had to read the following article. Moreover, participants might not devote the same cognitive effort in a natural setting as in an experimental environment. Furthermore, a lot of participants responded after the experiment that they found it difficult that they were not allowed to see the article again when answering the credibility questions in part B. This may have influenced the answers given by participants because they forgot the details of the article which they needed in order to answer the question.

The second limitation regards the recruitment of participants. Participants were either acquaintance of the researcher or recruited by a so-called snowball method. This means that the sample group has similar demographic characteristics. For example, half of the participants were young adults (22-33 years old). This means that results from this study cannot simply be

applied to other specific age groups or groups with different demographic characteristics or from different cultures. This is also due to the limited number of participants in this study.

The third limitation concerns the topics the participants were exposed to. Some participants responded after the survey that the topic did not appeal to them. In a realistic setting, curiosity can be influenced by the interest and fascination of the subject by the reader or audience. Credibility, on the other hand, can for example be influenced by the knowledge of the audience (Kaushal, 2021). This means that if participants were allowed to choose a topic which they prefer, they would have engaged the survey differently compared to how they have engaged the survey with its current topics. This could have led to different results regarding curiosity when participants had more interest in the topic, or credibility when participants had more knowledge on the subject.

Future research

This study gives direction to future research on the effects of clickbait headlines on curiosity and credibility. The following improvements for this type of research are suggested.

The first suggestion has to do with the participants in this study. Future research could benefit from a larger and more representative sample with a more evenly distributed age range, in order to make the results more generalizable to a broader population. In this study, a huge variation in age was found, despite half of the participants being in a similar age group (22-33 years old). With a larger group, it can also be possible to perform a between-subjects study to study the effects of clickbaits on curiosity and credibility between groups (gender, age, educational level).

Furthermore, it might be interesting to let participants choose which topic they want to read in future surveys. As mentioned in the limitations, some participants responded that the topic did not appeal to them. If participants are allowed to choose a topic, they will engage the survey differently than when they are given a topic that they dislike. Participants in general will feel more curious when confronted with topics they like, so it will be beneficial for the study to get the participants in the right state of mind by choosing topics that they like.

The third suggestion concerns headline manipulation. In this study, it is not confirmed whether a question or an exaggeration evokes more curiosity. In order to further investigate this, future research could benefit from a stronger manipulation of headlines. Chakraborty et al. (2016) mention that clickbaits often contain hyperbolic words, internet slang, punctuation patterns and common bait phrases. These elements evoke curiosity and increase the negative

sentiment regarding credibility. These stylistic elements have not been used in the headlines of this study but can be added to further investigate their effect on curiosity and credibility.

The fourth suggestion is to use a different tool instead of Qualtrics to conduct a similar experiment. The literature review suggests that clickbaits on the internet and social media platforms are known to be very effective in attracting attention from readers because of the way these are used. The survey format may therefore not be a sufficiently natural or realistic representation of clickbait headlines. In a survey where clickbait headlines are directly placed against traditional news headlines, as is done in this study, participants may choose differently when traditional alternatives (non-clickbaits) are available. In representative online situations, clickbait appears alone, not contrasted with other, more traditional headlines (Chakraborty et al., 2016). This could mean that clickbait headlines can be more appealing as a stand-alone choice. It may appear less appealing when paired with "serious" headlines. To test this, a survey can be constructed where participants are allowed to choose versus not allowed to choose.

The fifth suggestion is the survey design. This could represent an actual web page which includes images and thumbnails in order to replicate clickbait headlines in an online setting. In this study, the use of web pages, images or thumbnails to accompany the headlines was not used, although these are very common online. Thumbnails are images that accompany a link to an article or video. Thumbnails are often the first thing people see when they encounter an article or video, and can often be a decisive factor in clicking on the headline (North, 2017). The use of thumbnails allows participants to interact more naturally with a greater variety of internet headlines. Therefore, future research should therefore allow a more realistic setting by, for example, including thumbnails, videos or messages on social media platforms. This could enhance the curiosity-stimulating potential of clickbait headlines.

The last suggestion is that future research should include options for selecting multiple headlines. This survey was designed to allow participants to choose one headline over another, and it did not allow them to click on more than one headline on the same topic. Often, when people are looking for information on the internet, they have the freedom to navigate through an enormous offer of articles looking for an article that suits their interest best. Getting the first click might be important for content developers, but news consumers always have the option to decide not to read the article and look for an alternative source of information. When the decision is less definitive for participants, in the sense that they can pursue online news more casually, this could ultimately lead to more consumption of news. In order to analyse this, an experiment design could be made where participants first have to choose between headlines, and after reading the corresponding article, they are asked if they want to return to make another

choice or stay with that article. Afterwards, the participant needs to answer questions about why they returned to make a different decision.

Contributions

This study proposes a contribution to the publishing and distribution of online content by journalists, web editors, platforms and other creators of digital news content. The analysis brought forward in this study is a nuance on previous research that highlighted the arousal of curiosity by clickbaits and the negativity sentiment on credibility. It reveals a need for journalists, editors and platforms to review their use of clickbait headlines and corresponding content. Previous research led to recommendations for publishers not to use clickbait headlines due to the lower credibility of news items. This research shows that clickbaits do not immediately lead to less curiosity or credibility, given the right audience and moderate use of stylistic elements.

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Appendix

Appendix 1 - Experiment Qualtrics

General introduction text

Dear participant,

You have been invited to participate in a scientific research project. This research is carried out by a Master's student at the Radboud University in the Faculty of Arts as part of the Master's Thesis.

Description of the study

The procedure of the study involves participating in an experiment. Participation in the study is voluntary. To participate, your written consent is required. Before you decide whether you want to participate in this study, you will receive an explanation of what the study entails. Please read this information carefully, and if you have any questions, contact the researcher.

What is expected of you?

This study will show you firstly several headlines and secondly a corresponding article that you will have to answer questions about afterwards. The questionnaire takes between 10-15 minutes. The questions are in English. A requirement to participate in the survey is that you have sufficient command of the English language (at least A2/B1 level of English, this is equivalent to high school English/VWO).

Voluntariness and data processing

Participation in this study is entirely voluntary, which means that you have the right to either not participate in the study or leave the survey. Your responses will be processed anonymously and will not be shared with anyone outside of the study. By participating in the study, you accept the voluntary nature of the research and understand your rights as a participant.

Questions about the study

If you have questions or want more information about the study, you can contact the researcher, Chantal Schoenmakers, at chantal.schoenmakers@ru.nl. For ethical questions,

don't hesitate to contact the Ethics Committee of the Faculty of Arts at Radboud University at etc-gw@ru.nl.

Statement of consent

If you would like to participate in this study, we ask that you sign the consent form on the next page. By giving your consent, you indicate that you have understood the information and agree to participate in the study.

Thank you for your participation!

Kind regards, Chantal Schoenmakers

Permission

By clicking ''I agree,'' you indicate that you:

- Have read the above information;

- Are 18 years or older;

- Voluntarily participate in the study;

- Sufficient command of the English language (at least A2/B1 level/High School level VWO).

- o   Yes, I agree
- o   No, I don't agree

Demographic questions

Age
- What is your age? (Fill in only the number)

Gender

How do you identify yourself?
- Male
- Female
- I don't want to answer this question
- Else, namely ..

Nationality

What is your nationality? (In case you have two nationalities, you can use a /, for example: Dutch/Chinese)
- Dutch
- Else, namely ..

Educational level

What is your highest level of education that you have completed or are currently working on?
- Lower general secondary education (VMBO)
- Senior general secondary education (HAVO)
- Pre-university education (VWO)
- Intermediate vocational education (MBO)
- University of applied sciences (HBO)
- University
- Else, namely..

On the following page a couple of headlines will be shown and a couple of questions will be asked afterwards.

Of which of the following headlines would you want to read the corresponding article?
- o Heavily frustrated van der Poel reacts with a smiley on Biniam Girmay's interview after the 8th Giro stage
- o Are Max Verstappen's chances at title gone after two retirements in the first three races?
- o Rafael Nadal is a good tennis player on clay!
- o Why is France happy about the arrival of Messi?

Heavily frustrated van der Poel reacts with a smiley on Biniam Girmay's interview after the 8th Giro stage

To what extent does this headline attract your curiosity?
(1 = very much, 7 = not at all)

Heavily frustrated van der Poel reacts with a smiley on Biniam Girmay's interview after the 8th Giro stage

To what extent do you want to read the article that belongs to this headline?
(1 = very much, 7 = not at all)

Are Max Verstappen's chances at title gone after two retirements in the first three races?

To what extent does this headline attract your curiosity?
(1 = very much, 7 = not at all)

Are Max Verstappen's chances at title gone after two retirements in the first three races?

To what extent do you want to read the article that belongs to this headline?
(1 = very much, 7 = not at all)

Rafael Nadal is a good tennis player on clay!

To what extent does this headline attract your curiosity?
(1 = very much, 7 = not at all)

Rafael Nadal is a good tennis player on clay!

To what extent do you want to read the article that belongs to this headline?
(1 = very much, 7 = not at all)

Why is France happy about the arrival of Messi?

To what extent does this headline attract your curiosity?
(1 = very much, 7 = not at all)

Why is France happy about the arrival of Messi?

To what extent do you want to read the article that belongs to this headline?
(1 = very much, 7 = not at all)

On the following page a headline with corresponding article will be shown. Afterwards a couple of questions will be asked. It is not possible to go back to the article, so make sure you read the article carefully.

Erik ten Hag calls Cristiano Ronaldo a key figure for Manchester United next season

Erik ten Hag has begun life as Manchester United manager giving the clearest indication yet that Cristiano Ronaldo will remain a key part of his plans next season.

Ronaldo has yet to declare publicly that he wants to remain at Old Trafford for a second season of his second spell at the club but that is partially because he was waiting to see what his new boss thought of him.

And the Portugal international, who is United's top goalscorer this season, even though he will be 38 next year, appears to be assured of a prominent place in Ten Hag's team, as long as he does not want to leave to play for a Champions League club next term.

Speaking in the Netherlands, Ten Hag said: "From Monday, my focus will be on United, and I will, of course, get deep into things there. What I have to say about it is, the detailed analysis still has to begin, I still have to work with the team, but let me be clear that at United there are a lot of good players around. We have to make them function as a team but definitely Ronaldo, he is a giant."

Ten Hag has revealed for the first time that he chose to leave Ajax for Manchester United because he likes the size of the challenge he will face to rebuild the club into a major European power. Given Ten Hag arrived at Ajax at arguably the lowest point in their modern history five years ago, he inevitably sees parallels between the two jobs, but admitted the task at Old Trafford was on a far larger scale, with even more pressure on him to succeed.

The 52-year-old, who has dropped a strong hint that he will look to bring defender Jurrien Timber and Brazil international winger Antony with him from Amsterdam, has begun to look at what needs to be done this summer. It means the 'Ten Hag era' is already underway, even though interim manager Ralf Rangnick still has two games of this season to go in the dugout.

"In the preparation for the season there are still a few things to be done. We have to talk carefully about where we all want to go and how we are going to achieve that. There were possibilities to work at clubs where it is easier, because there is a better foundation. But I chose United because there's something to be gained there. A lot of things need to be addressed and that's a challenge."

Source: The Telegraph, 16 May 2022

Do you agree with the following statement about the headline: "is biased"

(1 = absolutely agree, 7 = absolutely disagree)

Do you agree with the following statement about the corresponding article: "is biased"

(1 = absolutely agree, 7 = absolutely disagree)

Do you agree with the following statement about the headline: "can be trusted"

(1 = absolutely disagree, 7 = absolutely agree)

Do you agree with the following statement about the corresponding article: "can be trusted"

(1 = absolutely disagree, 7 = absolutely agree)

Do you agree with the following statement about the headline: "is informative"

(1 = absolutely disagree, 7 = absolutely agree)

Do you agree with the following statement about the corresponding article: "is informative"

(1 = absolutely disagree, 7 = absolutely agree)

Do you agree with the following statement about the headline: "is accurate"

(1 = absolutely disagree, 7 = absolutely agree)

Do you agree with the following statement about the corresponding article: "is accurate"

(1 = absolutely disagree, 7 = absolutely agree)

Do you agree with the following statement about the headline: "tells the whole story"

(1 = absolutely disagree, 7 = absolutely agree)

Do you agree with the following statement about the corresponding article: "tells the whole story"

(1 = absolutely disagree, 7 = absolutely agree)

To what extent do you find this headline credible?

(1 = absolutely not credible, 7 = absolutely credible)

To what extent do you find the corresponding article credible?

(1 = absolutely not credible, 7 = absolutely credible)

To what extent does this article attract your curiosity?

(1 = very much, 7 = not at all)

To what extent does this article attract your curiosity?

(1 = very much, 7 = not at all)

Thank you for taking the time to participate in this survey. Your response has been recorded.

Appendix 2

Part A
Headlines by topic

Table 1.   Headlines of sports with corresponding conditions

Topic	Condition	Headline
Cycling	Headline with exaggeration, formulated as statement	Heavily frustrated van der Poel reacts with a smiley on Biniam Girmay's interview after the 8th Giro stage
	Headline without exaggeration, formulated as statement	Annoyed van der Poel reacts with a smiley on Biniam Girmay's interview after the 8th Giro stage
	Headline with exaggeration, formulated as question	Why did a heavily frustrated van der Poel react with a smiley on Biniam Girmay's interview after the 8th Giro stage?
	Headline without exaggeration, formulated as question	Why did an annoyed van der Poel react with a smiley on Biniam Girmay's interview after the 8th Giro stage?
F1	Headline with exaggeration, formulated as question	Are Max Verstappen's chances at title gone after two retirements in the first three races?
	Headline without exaggeration, formulated as question	Are Max Verstappen's chances at title reduced after two retirements in the first three races?
	Headline without exaggeration,	Max Verstappen's chances at title are reduced after two retirements in the first three races

	formulated as statement	
	Headline with exaggeration, formulated as statement	Max Verstappen's chances at title are gone after two retirements in the first three races!
Tennis	Headline without exaggeration, formulated as statement	Rafael Nadal is a good tennis player on clay!
	Headline with exaggeration, formulated as statement	Rafael Nadal is the best tennis player in the world on clay!
	Headline without exaggeration, formulated as question	Is Rafael Nadal a good tennis player on clay?
	Headline with exaggeration, formulated as question	Is Rafael Nadal the best tennis player in the world on clay?
Football	Headline without exaggeration, formulated as question	Why is France happy about the arrival of Messi?
	Headline with exaggeration, formulated as question	Why is France extremely excited about the arrival of Messi?
	Headline with exaggeration,	France extremely excited after the arrival of Messi

| | | formulated as statement |
| | Headline without exaggeration, formulated as statement | France happy with arrival Messi |

Table 2.   Headlines of entertainment with corresponding conditions

Topic	Condition	Headline
Showbizz	Headline with exaggeration, formulated as question	Why does everyone on the internet massively support team Johnny Depp?
	Headline with exaggeration, formulated as statement	Everyone on the internet massively supports team Johnny Depp!
	Headline without exaggeration, formulated as statement	Everyone on the internet supports team Johnny Depp!
	Headline without exaggeration, formulated as question	Why does everyone on the internet support team Johnny Depp?
Radio	Headline without exaggeration, formulated as statement	Marieke Elsinga explains why she's quitting Q-Music's morning show
	Headline with exaggeration, formulated as question	Why is Marieke Elsinga abruptly quitting Q-Music's morning show?

	Headline without exaggeration, formulated as question	Why is Marieke Elsinga quitting Q-Music's morning show?
	Headline with exaggeration, formulated as statement	Marieke Elsinga explains why she is abruptly quitting Q-Music's morning show
Eurovision Song Contest	Headline without exaggeration, formulated as question	Is Ukraine a contender to win the Eurovision Song Contest 2022?
	Headline without exaggeration, formulated as statement	Ukraine is a contender to win the Eurovision Song Contest 2022
	Headline with exaggeration, formulated as statement	Ukraine is number one to win the Eurovision Song Contest 2022
	Headline with exaggeration, formulated as question	Is Ukraine the number one to win the Eurovision Song Contest 2022?
Tech	Headline with exaggeration, formulated as statement	Musk extremely mad about Tesla being removed from S&P 500 sustainability index
	Headline without exaggeration, formulated as question	Why is Musk frustrated that Tesla is being removed from S&P 500 sustainability index?

	Headline with exaggeration, formulated as question	Why is Musk extremely mad about Tesla being removed from S&P 500 sustainability index?
	Headline without exaggeration, formulated as statement	Musk frustrated that Tesla is being removed from S&P 500 sustainability index

Table 3.   Headlines of politics with corresponding conditions

Topic	Condition	Headline
Dutch politics	Headline without exaggeration, formulated as statement	Rutte and Kaag talk with opposition about their wishes before spring break
	Headline with exaggeration, formulated as statement	Rutte and Kaag flirt with opposition about their wishes before spring break
	Headline without exaggeration, formulated as question	Will Rutte and Kaag talk with opposition about their wishes before spring break?
	Headline with exaggeration, formulated as question	Will Rutte and Kaag flirt with opposition about their wishes before spring break?
Boris Johnson	Headline without exaggeration, formulated as question	Will Boris Johnson continue as PM after partygate?
	Headline with exaggeration,	Will Boris Johnson continue as PM after scandalous partygate?

	formulated as question	
	Headline without exaggeration, formulated as statement	Boris Johnson continues as PM after partygate
	Headline with exaggeration, formulated as statement	Boris Johnson continues as PM after scandalous partygate
Putin	Headline with exaggeration, formulated as statement	Officials expect Putin to make a big announcement on May 9
	Headline without exaggeration, formulated as statement	Officials expect Putin to announce something on May 9
	Headline without exaggeration, formulated as question	Will Putin make an announcement on May 9?
	Headline with exaggeration, formulated as question	Will Putin make a big announcement on May 9?
Dutch Minister of health	Headline with exaggeration, formulated as question	Did Hugo de Jonge play a major role in Sywert van Lienden's 100 million face mask deal?
	Headline without exaggeration,	Did Hugo de Jonge play a role in Sywert van Lienden's 100 million face mask deal?

formulated as question	
Headline with exaggeration, formulated as statement	Hugo de Jonge played a major role in Sywert van Lienden's 100 million face mask deal!
Headline without exaggeration, formulated as statement	Hugo de Jonge played a role in Sywert van Lienden's 100 million face mask deal

Part B

Corresponding articles per topic and headlines

<u>**Sport**</u>

Does Erik ten Hag want Cristiano Ronaldo for Manchester United next season?

Did Erik ten Hag call Cristiano Ronaldo a key figure for Manchester United next season?

Erik ten Hag wants Cristiano Ronaldo for Manchester United next season

Erik ten Hag calls Cristiano Ronaldo a key figure for Manchester United next season

See text in Appendix 1.

<u>**Entertainment**</u>

Did Covid leave Queen Elizabeth tired?

Did Covid leave Queen Elizabeth very tired and exhausted?

Queen Elizabeth reveals Covid left her tired

Queen Elizabeth reveals Covid left her 'very tired and exhausted'

Britain's Queen Elizabeth spoke for the first time publicly about her own battle with COVID-19, saying the virus leaves ''one feeling very tired and exhausted.''

Queen Elizabeth, 95, first tested positive for the coronavirus on Feb. 20, with the palace describing her symptoms as mild. It was unclear where or from whom the queen had contracted the infection, but several others in her residence at Windsor Castle, west of

London, also tested positive, suggesting an outbreak there. The queen had also recently met her eldest son and heir, Prince Charles, who was later reported to be isolating after becoming reinfected with the coronavirus.

In the days after she first tested positive, Elizabeth canceled some virtual engagements at least twice after showing mild symptoms but continued with ''light duties,'' the palace said.

She received a first coronavirus vaccination in January 2021, but the palace has not confirmed whether she received subsequent doses. Charles has said that he is fully vaccinated and also received a booster.

Last week, the queen virtually attended the official opening of the Queen Elizabeth Critical Care Unit at Royal London Hospital, of which she is patron. The 155-bed unit was built in five weeks to help care for the surge of patients during the pandemic. Queen Elizabeth spoke on a video call with health care workers who treated patients during the pandemic as well as a man named Asef, who recovered from COVID-19 in the unit.

"I'm glad that you're getting better," the queen told Covid patient Asef Hussain. "It does leave one feeling very tired and exhausted doesn't it, this horrible pandemic." The Queen heard how hospital staff coped with the huge influx of Covid patients. Mireia Lopez Rey Ferrer, a senior sister who has worked at the hospital in Whitechapel, east London, since 2008, told the Queen: "As nurses, we made sure that they were not alone. "We held their hands, we wiped their tears and we provided comfort. It felt at times that we were running a marathon with no finish line."

She added: "I look back to the last 18 months with great pride, pride not only in the care we provided to each and every single patient that was in one of our hospital beds, but pride in each member of staff that every day left their families at home despite their fears and worries and they came to work."

Source: BBC, 10 April 2022

<u>Politics</u>

Why does President Biden reject white supremacy?

Why does President Biden denounce white supremacy as an awful poison?

President Biden rejects white supremacy

President Biden denounces white supremacy as an awful poison

President Biden traveled to Buffalo, N.Y., to visit the scene of Saturday's racist massacre at a grocery store, calling on Americans to reject white supremacy and criticizing the racist conspiracy theory that inspired the shooter.

"White supremacy is a poison. It's a poison running through our body politic, and it's been allowed to fester and grow right in front of our eyes. No more," Biden said in remarks Tuesday at a community center alongside local leaders. "We need to say as clearly and forcefully as we can that the ideology of white supremacy has no place in America."

The president's trip comes three days after a gunman opened fire in a Tops Friendly Market store in a predominantly Black neighborhood of Buffalo, leaving 10 people dead. Following his arrest, the 18-year-old alleged suspect told officials he was targeting the Black community.

"What happened here is simple and straightforward: Terrorism. Terrorism. Domestic terrorism," Biden said, calling the shooting a "murderous, racist rampage" carried out in the name of a "hateful and perverse ideology."

Biden listed the names and ages each of the 13 victims — the 10 who were killed, and the three who were injured — along with details about their lives — "individual lives with love, service and community that speaks to the bigger story of who we are as Americans. A great nation, because we are a good people," he said.

"In America, evil will not win, I promise you. Hate will not prevail. White supremacy will not have the last word," Biden said.

After the shooting, a document allegedly tied to the gunman emerged online. It includes racist, anti-immigrant views and cites the Replacement theory — a far-right, white nationalist

conspiracy theory that baselessly claims that white people in America are being systematically replaced by people of color.

"We've now seen too many times the deadly and destructive violence this ideology unleashes," he said. "I call on all Americans to reject the lie. I condemn those who spread the lie for power, political gain and for profit."

Over the weekend, Biden said any "racially motivated hate crime is abhorrent to the fabric of this nation."

"Any act of domestic terrorism, including an act perpetrated in the name of a repugnant white nationalist ideology, is antithetical to everything we stand for in America. Hate must have no safe harbor. We must do everything in our power to end hate-fueled domestic terrorism," Biden said in a statement Sunday.

During their trip on Tuesday, the president and first lady Jill Biden visited the Tops store, which has become a memorial to the 10 who were killed there.
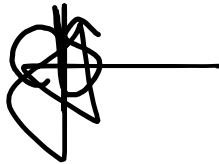
Source: NPR, 17 May 2022

Appendix 3
Declaration plagiarism and fraud

The undersigned
Chantal Schoenmakers, s1047884

Master's student at the Radboud University Faculty of Arts,
declares that the assessed thesis is entirely original and was written exclusively by
himself/herself. The undersigned has indicated explicitly and in detail where all the
information
and ideas derived from other sources can be found. The research data presented in this thesis
were collected by the undersigned himself/herself using the methods described in this thesis.

Utrecht, 15 August 2022