When Do Adolescents Fall For Fake News? Effect of Message Length and Emotional Content on Adolescents' Perceived Accuracy of Fake News Messages

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Abstract

Fake news has become a major phenomenon in recent times, and social media plays a vital role in the proliferation of fake news online. Adolescents prefer consuming their news on social media, which makes them vulnerable to fake news. The characteristics of fake news, such as emotional content and message length, might cause adolescents to fall for fake news. This study aimed to examine the effect of emotional content and message length on adolescents' perceived accuracy. Hence, this study conducted an experiment using a 2x2x2 factorial mixed design. A total of 107 adolescents performed a fake news recognition task by reading eight fake and real news messages and indicating their perceived accuracy for each news message. This study expected that adolescents would perceive long fake news messages as more accurate than short fake news messages, neutral content as more accurate than emotional content, and that the effect of emotional content would be stronger then message length. Results revealed significant results for the content of news messages, indicating that adolescents perceive fake neutral news messages as more accurate than fake emotional news messages. However, no significant effect on message length was found.

Keywords: fake news, perceived accuracy, adolescents, emotional content, news headlines, news articles

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Fake news is not a new trend the world is facing these days (Allcot & Gentzkow, 2017). However, the U.S. presidential election in 2016 contributed to increasing the scientific literature on fake news (Allcot & Gentzkow, 2017; Lazer et al., 2018; Pennycook & Rand, 2019; Vosoughi et al., 2018; Zhou & Zafarani, 2018). This election showed the dreadful consequences fake news could cause. For example, the *Pizzagate* (McGonagle, 2017; Shu et al., 2016; Tandoc et al., 2017), where a man had 'self-investigated' a story about the Hillary Clinton campaign operating a business in pedophilia from a pizzeria, which was an ungrounded conspiracy theory, resulting in a shooting incident.

Furthermore, fake news seemed to have a more significant impact on society today compared to before since fake news was involved in the U.S. election in 2016, the U.K.'s Brexit in 2016 —the U.K. leaving the European Union— (Bastos & Mercea, 2019), and recently in the ongoing crisis of COVID-19. Much misinformation about COVID-19 is spreading all over social media (World Health Organization, 2020), which affects people's perception of the virus and the involved risks (Krause et al., 2020). The World Health Organization even talked about an 'infodemic' because of this amount of misinformation about the coronavirus (Frenkel et al., 2020).

Moreover, fake news proliferates more pervasively online than actual news stories (Vosoughi et al., 2018). To illustrate, fake news stories about the U.S. election in 2016 outperformed real political news stories on Facebook (Silverman, 2016). In addition, more people consume their news on social media these days, which makes it easier to share these fake news stories, and therefore more fake news widely circulates on the internet (Lazer et al., 2018; Shu et al., 2016). Besides, not only adults consume their news on social media. Adolescents also prefer to consume their news on social media (Ku et al., 2019; Notley et al., 2017; Robb, 2017). However, a third of the adolescents cannot distinguish fake news stories from real ones (Nothley et al., 2017).

Another third of them are unaware of the personalized news algorithms on social media (Ku et al., 2019), meaning that the news stories they encounter on social media are adjusted to their preferences. These results are worrisome because fake and real news appears simultaneously on the internet (Burkhardt, 2017).

Since the vast proliferation of fake news on social media, adolescents consuming their news primarily on social media, and the impact of fake news, it is essential to teach adolescents how to be critical of information on social media and distinguish fake news messages from real ones. In order to teach adolescents these skills, it is essential to know which characteristics of fake news make them fall for it. Therefore, the present study will examine if adolescents' perceived accuracy of fake news messages is affected by the format (i.e., message length) and content (i.e., emotional vs. neutral) of these messages. It is expected that adolescents will perceive fake news articles as more accurate than fake news headlines and fake neutral content more accurate than fake emotional content. In the next section, a literature review on the definition of fake news will be given first, followed by an elaboration on the format and content of fake news, and finally, the research question and hypotheses of the present study will be specified.

Fake News Defined

A lot of research has already been conducted on the definition of fake news. For example, fake news is defined as "fabricated information that mimics news media content in form but not in organizational process or intent" (Lazer et al., 2018, p. 1094). Fake news is also characterized as "articles that are intentionally and verifiable false, and could mislead readers" (Allcot & Gentzkow, 2016, p. 213). Moreover, fake news is defined based on the level of facticity and the intention to mislead, including satire, parody, fabrication, manipulation, propaganda, and advertising (Tandoc et al., 2017). Similar, fake news contains messages that are low in facticity, intended to deceive, and presented in a journalistic format (Egelhofer & Lecheler, 2019). Deceptive news is also used to define fake news, including serious fabrications and hoaxes (Rubin et al., 2015). In addition, a

discursive integration of fake news is proposed aiming for a blend of genres based on misinformation, sensationalism, clickbait, and bias (Mourão & Robertson, 2019). Furthermore, fake news could be defined based on several specific characteristics. For example, fake news stories are shorter than real news stories, contain less factual information because of lexical redundancy, and include more adverbs but fewer nouns, technical words, and quotes. Fake news contains longer titles than real news stories, while these titles include simpler and more capitalized words. The body of text has the function of repeating and reinforcing the claims made in the title, and the message is more negative (Horne & Abdali, 2017).

Despite the different definitions, they all address similar elements of fake news: the goal (e.g., misleading readers), format (e.g., replicating real news), and content (e.g., misinformation, negative and emotional information). In general, the literature on fake news agrees on the goal of fake news, that is, deceiving or misleading their audience in order to manipulate people's political beliefs or to gain financial benefits through increasing the clicks on links and pages (Galeotti, 2019). On the other hand, fake news messages differ from each other regarding their format and content. It is still unclear which of these formats and content matters (i.e., characteristics) make adolescents fall for fake news, although this information is crucial in teaching them how to recognize it. Therefore, the focus of this study is the effect of characteristics of fake news messages on adolescents' perceived accuracy of these messages. The following paragraph will give an overview of previous research on format and content matters of fake news messages in the context of adolescents' falling for fake news.

Falling for Fake News

As illustrated in the previous paragraph, fake news intends to mislead its readers, but it is not clear yet which characteristics of fake news messages make adolescents fall for fake news. Instead of assessing the content and format of fake news messages, a lot of experimental studies on fake news analyzed peoples' analytic thinking skills in order to explain why people fall for fake

news, which is reduced analytic thinking (Bago et al., 2020; Bronstein et al. 2019; Clayton et al., 2019; Moravec et al., 2018; Pennycook & Rand, 2019; Pennycook & Rand, 2020). These studies used the cognitive reflection test to measure participants' propensity to think analytically since the classical reasoning account suggests that analytic thinking will predict one's ability to discern fake news from real news (Pennycook & Rand, 2019). Participants who performed better on the cognitive reflection test had improved analytic thinking skills, and therefore, were better able to differentiate between fake and real news headlines. However, two other experimental studies on adolescents' fake news recognition affected by confirmation and authority bias (Aussems, 2020; Korse, 2020) did not find the same result as previous research. In other words, they failed in finding a relationship between a participants' score on the cognitive reflection test and their perceived accuracy of fake news messages; the adolescents were not aware of the used fake articles being fake. The authors of both studies (Aussems, 2020; Korse, 2020) suggested that their results could differ from previous research (Moravec et al., 2018; Pennycook & Rand, 2019) due to the used news messages in their experiments since they used full news messages in which the fake news might be less obvious instead of only headlines. This difference, regarding whether or not studies found a relationship between the cognitive reflection test and the perceived accuracy of fake news, points to explaining when adolescents fall for fake news by assessing the content and format of fake news messages.

Given that studies using only headlines could find a relation between the cognitive reflection test and perceived accuracy, while studies using full news messages could not find this relation, the length of a news message is possibly a characteristic of fake news in explaining when adolescents fall for fake news. Nevertheless, little experimental research is conducted on fake news using full news articles; hence, little is known about the effect of message length on adolescents' perceived accuracy (Pehlivanoglu et al., 2021; Schaewitz et al., 2020). At the same time, it is relevant to examine the effect of message length on adolescents' perceived accuracy of fake news messages

since adolescents also encounter full news articles online in reality; they are not restricted to headlines only on social media.

Besides the format of fake news messages, the content of these messages also matters in the context of falling for fake news. From previous research, fake news is based on exaggerations of sentiment; they contain emotional language, judgments, and evaluations of affective state (Conroy et al., 2015) and fake news messages spread faster online than the truth (Vosoughi et al., 2018). This virality of fake news makes sense since these messages contain emotional content (Bakir & McStay, 2017; Conroy et al., 2015). In addition, characteristics such as valence, emotions, and arousal are indicators for the virality of news stories on social media (Brady et al., 2017); stories that evoke awe, anxiety, and anger are going more viral compared to other emotions because they activate arousal (Berger, 2011; Berger & Milkman, 2012). Thus, it is evident that fake news is going viral due to its emotional content, but it is wrong to assume people believe fake news based on their virality. Recent research has shown that people indicated true headlines as much more accurate than fake headlines, but this accuracy had little impact on the participants' sharing intentions because people were willing to share content they had identified as inaccurate (Martel et al., 2020; Pennycook et al. 2021; Pennycook & Rand, 2021). Therefore, sharing and believing fake news messages are two different matters.

Nevertheless, there is a lack of research examining if these emotional and highly shared fake news messages indicate a greater perceived accuracy of fake news, although it seems to play an important role (Giachanou et al., 2019). A recent study examined the effects of experiencing emotions before reading fake news headlines (Martel et al., 2020). Their results indicated an association between increased emotionality and increased belief in fake news. In addition, they tentatively suggest that emotional thinking may hinder the ability to discern fake from real news. They suggested a relationship between emotion and news accuracy judgments for specifically fake news. However, their research focused on their participants experiencing emotions by themselves

before performing a fake news recognition task, contrary to the present study's focus, namely emotional content as a characteristic of fake news messages. Because previous research revealed emotional content as an essential characteristic for the online virality of fake news messages but lacked explaining the effects of emotional content on fake news recognition, it is interesting to examine the effects of emotional content on adolescents' perceived accuracy of fake news messages.

To summarize, the focus of this study is whether or not adolescents' perceived accuracy of fake news is affected by emotional content and the length of the news message, which could serve as an explanation for when they fall for fake news. For that reason, the following paragraphs will expand more in detail on the emotional content and message length of fake news messages.

Emotional Content

To this point, it is clear that fake news messages contain emotional content (Bakir & McStay, 2018; Conroy et al., 2015). In addition, it is illustrated that false stories evoke fear, disgust, and replies (Vosoughi et al., 2018). As mentioned earlier, viral news stories on social media also evoke high-arousal emotions such as anger and anxiety, which activate a person (Berger, 2011; Berger & Milkman, 2012). Moreover, a well-known Facebook study on emotional contagion (Kramer et al., 2014) revealed experimental evidence indicating that emotions expressed by others on Facebook influenced our own emotions, which contributes to the possibility of manipulating and deceiving people by using emotions in fake news messages. However, all these studies lack an examination of the effects of emotions on the perceived accuracy of fake news messages.

A case study on fake news workshops mentioned decreased participants' perceived accuracy of news messages caused by emotional content (Hanz & Kingsland, 2020). The participants of this study thought that the used tweet of Donald Trump in his function as the U.S. President was based on opinions instead of actual facts, which made them feel like the President had another agenda and, therefore, tried to persuade his audience with emotional content. This example possibly

suggests that people tend to rate emotional news messages as less accurate. Furthermore, experimental studies investigating the role of emotion in the context of fake news detection by using algorithms revealed the importance of emotional content; in particular, these studies revealed that focusing on emotional content in fake news messages made it possible to detect fake news (Ajao et al., 2019; Ghanem et al., 2020). Accordingly, it might be possible that people can also recognize fake news better when these messages use emotional content compared to neutral fake news messages. Hence, this study expects that neutral content in fake news messages will be perceived as more accurate than fake news messages with emotional content.

Length of News Message

Most readers spend nearly always their time scanning headlines instead of reading the full news story (Dor, 2003). Therefore, headlines play an important role in news communication (Ecker et al., 2014) and determine the information the reader focuses on while reading the story (McCrudden & Schraw, 2007). Traditionally, news headlines should be concise summaries of the news message (Dor, 2003). However, these days the online news industry is very competitive, and as a consequence, the goal of headlines has changed to capturing peoples' attention and gaining clicks on their headlines, which results in more aggressive, exaggerated, and somewhat misleading headlines (Reis et al., 2015). Thus, it is no longer predetermined that reading a headline gives the reader an impression of the gist of a news article and, therefore, misleading headlines could cause misconceptions and misinformed behavioral intentions (Ecker et al., 2014).

Although there is much research on recognizing fake news, there is a lack of knowledge about the effect of message length and adolescents' perceived accuracy of fake news messages since most research used only headlines in their experiments. What is known is misleading headlines affecting peoples' inferential reasoning in case of opinions and not for factual texts (Ecker et al., 2014). This study showed that, for the opinion articles, people assumed that the misleading headlines and the gist of the article were congruent. On the other hand, this result did not account

for factual texts since the mismatches between the headlines and the articles were more obvious in facts instead of opinions and, therefore, the factual texts were seen as more inappropriate (Ecker et al., 2014). As a result, it might be that people tend to perceive news messages as less accurate if the mismatch between the headline and body of the text is more prominent. In addition, knowing that the body of the text of fake news messages contain less factual information and has the function of repeating and reinforcing the claims made in the title (Horne & Abdali, 2017), it is plausible to think that adolescents assume the body of text to be congruent to their headlines. Moreover, adolescents possibly process these fake news messages more fluently due to the repetition of claims, which might cause increased perceived accuracy of these fake news messages because research showed that people believe easily processed and repeated information more than novel information (Unkelbach et al., 2019; Unkelbach & Greifeneder, 2013). For these reasons, adolescents may find it harder to recognize fake news when reading news articles compared to reading headlines. Accordingly, it is expected that adolescents will perceive fake news articles as more accurate than fake news headlines.

Present Study

As illustrated in the previous paragraphs, the content and format of fake news messages could explain when adolescents fall for fake news. However, little research is conducted on content and format matters in order to explain fake news recognition. Therefore, the present study aimed to contribute to the educational field by examining the effect of message length (i.e., headline vs. article) and emotional content (i.e., neutral vs. emotional) on adolescents' perceived accuracy of fake news messages. In order to achieve this goal, an experimental study was conducted with students from vocational education. Based on previous research, it is expected that adolescents will perceive (1) long fake news messages (i.e., articles) as more accurate than short fake news messages (i.e., headlines); (2) fake news with neutral content as more accurate than fake news with

emotional content, and that (3) the effect of emotional content on adolescents' perceived accuracy of fake news messages is stronger than the effect of message length.

Method

Research Design

In order to test the hypotheses of this study, an experiment with a 2x2x2 mixed-design ANOVA is conducted by using the online survey platform Qualtrics. Accordingly, this research design made it possible to test three independent variables (i.e., length, content, and type of the news message). Two independent variables were measured within-subjects (i.e., content and type of message) containing two levels each (i.e., emotional vs. neutral for content; fake vs. real for the type of news message), and one independent variable was measured between-subjects (i.e., length of message) with also two levels (i.e., headlines vs. articles).

Participants

A total of 107 participants participated in this study, of which 59 males and 44 females (three participants preferred not answering this question, and one participant did not respond to the gender question). All participants were students from Deltion College, a school for vocational education, aging from 16 till 26 years (M = 18.71, SD = 1.95). The participants were randomly assigned to one of the two conditions of this study (i.e., headline vs. articles). They were not compensated financially or in grades for their participation. In addition, they participated voluntarily and could withdraw at any moment without giving a reason. In order to ensure confidentiality and anonymity, all participants were registered with a unique randomized number, and no personal data were acquired.

Instruments and Materials

All the participants have performed the survey online using the online software Qualtrics; hence, they have used a laptop. The materials used in the present study were the news messages as

part of the fake news recognitions task and the cognitive reflection test (CRT). However, the CRT is not within the scope of this study and therefore not further on elaborated.

News Messages

In order to detect fake and real news, a total of eight fake and real news messages were selected, of which four real and four fake (see Appendix A). The real news messages were selected from mainstream news sources (e.g., NOS), whereas the fake news messages were selected from a fact-checking website (e.g., N.U. checkt) because these messages were confirmed as untrue by checking the facts of these news messages by their source. The fake news messages from their original source are used in this study. In addition, the fake and real news messages were either neutral or emotional. As a result, this study used four different news messages: (a) 2 fake and emotional, (b) 2 fake and neutral, (c) 2 real and emotional, and (d) 2 real and neutral. The emotional news messages were selected according to an operationalization Kilgo et al. (2018) used in their review study on sensationalism in online news publications on social media. This operationalization applied to the present study due to the used definition of sensationalism, which was "a style (category and form) that triggers emotion for the reader and treats an issue in a predominantly tabloid-like way" (p. 1499). Therefore, the emotional news messages should "intentionally evoke emotion at the beginning of the article, use extreme circumstances to grab attention, simplify and trivialize a complex topic, promote shock value, or is presented in a tabloid-like way" (p. 1504). On the other hand, the same criteria were used to select the neutral news messages, yet in this case, these criteria were not met. Furthermore, this study used two versions of each news message: the full news story (i.e., article) and the headline (i.e., the body of the text is removed). Since social media is an important distributor of fake news, all the news items were presented in a Facebook format like Pennycook and Rand (2019) did in their study.

With these news messages, a fake news recognition test was conducted, in which the participants had to recognize fake and real news. During this test, they were asked about the

perceived accuracy of each news message they face in their assigned condition. This test contained one question (Pennycook & Rand, 2019): 'To the best of your knowledge, how accurate is the claim in the above headline/story?'. They had the following options to answer: (1) not at all accurate, (2) not very accurate, (3) somewhat accurate, and (4) very accurate.

Pilot Study

In order to test the used instruments and materials, two pilot studies were conducted. The first pilot study tested that the selected news messages were perceived as intended (i.e., emotional or neutral). For this purpose, seven participants with relatively the same age and educational level as the target group of this study had to indicate to what extent 23 news headlines provoked (a) anxiety, (b) disgust, (c) anger, and (d) worry. They answered on a 6-point Likert scale ranging from (1) not at all till (6) very much. Six news messages were selected for each type of news message, except for fake neutral ones, which contained five news messages. Since a total of 23 news messages were selected, the pilot study only used the headlines. Otherwise, the pilot would demand too much time from the participants. Based on the results of this pilot, two news messages were selected for each type of news message. In particular, if a message intended to be emotional had a score of 4 or more on one of the four questions, this message is perceived as emotional. If a message intended to be neutral had a score of 3 or less on all four questions, this message is considered neutral. Table 1 presents the means and standard deviations of the selected news messages for each question.

The second pilot was conducted to test for potential errors and weaknesses of the materials and instruments, the intended duration of the experiment, and make sure the instructions were clear to the participants. Based on this second pilot study, some minor adjustments were made. For example, correcting spelling mistakes, shortening the indicated time in the instruction, and the answers of the CRT were added in the debriefing.

Table 1

Means and Standard Deviations of the Selected News Messages

	Anxiety		Disgust		Anger		Worry	
News Message	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Fake Emotional 1	3.86	1.86	3.29	2.14	5.00	1.92	4.57	1.62
Fake Emotional 2	3.86	1.35	4.29	1.70	3,86	1.77	4,29	1.50
Fake Neutral 1	1.14	0.38	1.14	0.38	2.00	1.16	1.57	0.79
Fake Neutral 2	1.29	0.76	1.57	0.78	2.00	1.00	1.71	0.95
Real Emotional 1	3.29	1.25	4.14	1.22	4.43	1.13	4.43	1.72
Real Emotional 2	2.86	1.95	4.86	1.22	4.57	1.90	3.71	2.14
Real Neutral 1	1.00	0.00	1.29	0.49	2.00	1.41	1.00	0.00
Real Neutral 2	1.00	0.00	1.14	0.38	2.00	1.50	1.00	0.49

Procedure

Before performing the task, the participants read the information letter and gave their consent (see Appendix B). The participants needed to actively agree on the informed consent question in order to continue with the research. Since the participants of this study were adolescents starting from the age of 16, informed consent signed by themselves was enough according to the current policy of the Faculty Ethics Review Board (FERB) of the faculty of Social and Behavioural Sciences of Utrecht University (2021).

First, the participants performed the fake news recognition task. The order of the fake news items was randomized for each participant. Second, the participants had to complete the CRT. After the fake news recognition task and the CRT, all participants filled in their demographics: age, gender, and level of education. Finally, the participants were debriefed about the purpose and hypotheses of this study, an explanation of the assigned test was given, and they were informed about which news messages were fake and real and whether these messages were neutral or emotional.

Data Analysis

Data is analyzed by using the statistical program SPSS version 25.0. In order to answer the research question and test the hypotheses of this study, a mixed-design ANOVA is conducted, which made it possible to examine possible interaction effects between the three factors (i.e., message length, content, and type of message) and main effects (i.e., headline vs. article for message length; emotional vs. neutral for content; fake vs. real for the type of message). The storage of this data took place in YoDa, an encrypted storage location aimed at safely storing research data and is only accessible by the researcher and their supervisor.

A power analysis is completed using G*Power (Faul et al., 2007) to determine the required sample size for this study. The sample size for a two-way ANOVA was obtained since the program did not support the analysis of a three-way ANOVA. An ANOVA with a Test - Occasion x Condition effect was analyzed, including a fixed alpha level of .05, a power of .80, and a correlation of .50. Results indicated a required sample of $N = 52$ to be sufficient enough to reach a small to medium effect ($f = .20$). Considering this study conducted a three-way ANOVA instead of a two-way ANOVA, it is decided to double the sample size to obtain significant effects. Hence, the required sample size of this study was $N = 104$.

Results

Before conducting the data analysis, the assumptions of normality and homogeneity of variance were checked by using the Shapiro-Wilk and Levene's test statistics. The Shapiro-Wilk test was significant, indicating a not normally distributed sample. However, according to Field (2014), a test of normality is more likely to be significant in a large sample, while the assumption of normality matters less if the sample size gets larger due to the central limit theorem ($n > 30$). In addition, looking at the histograms, the variables seemed roughly normally distributed. Levene's test was not significant, indicating no violation of the assumption of homogeneity of variance.

A 2x2x2 mixed-model ANOVA was used to investigate the impact of the length and content of a message on adolescents' perceived accuracy of this message (i.e., if the message was either fake or real). In the present study, 133 participants in total completed some portion of the study. Complete data was for 107 participants since 21 participants did not finish, three participants were reported as spam, and two participants did not give their consent or were younger than 16 years old. Therefore, 107 students of vocational education have indicated their accuracy of the claim made in the headline using a 4-point Likert scale. Each participant faced fake and real news messages, as emotional and neutral news messages. However, half of the group could only see the headlines (n = 53), while the other half could see the full news stories (n = 54). The means and standard deviations for the accuracy scores of the different news messages in both conditions are reported in table 2.

Table 2

Means and Standard Deviations for Accuracy Scores of Four News Messages and Two Conditions

News Message	Condition	*M*	*SD*
Fake emotional	Headlines	1.92	0.66
	Articles	2.06	0.78
	Total	1.99	0.73
Fake neutral	Headlines	2.96	0.54
	Articles	3.16	0.61
	Total	3.06	0.59
Real emotional	Headlines	2.53	0.71
	Articles	2.36	0.72
	Total	2.44	0.72
Real neutral	Headlines	2.75	0.66
	Articles	2.86	0.66
	Total	2.81	0.66

Specifically, three hypotheses guided this research: adolescents would perceive (1) long fake news messages (i.e., articles) as more accurate than short fake news messages (i.e., headlines); (2) fake news with neutral content as more accurate than fake news with emotional content, and (3) the effect of emotional content on adolescents' perceived accuracy of fake news messages would be stronger than the effect of message length. Table 3 shows the effects of the 2x2x2 mixed-design ANOVA with the between-subjects factor message length (i.e., condition; headlines vs. articles), and the within-subjects factors news message (i.e., fake vs. real) and content of the message (i.e., emotional vs. neutral).

Table 3

The Effects of Condition, Message, and Content on Adolescents' Perceived Accuracy of Fake News Messages

Source	*SS*	*MS*	*F*(1, 105)	*p*	η^2
Between-subjects					
Condition	0.14	0.14	1.17	.283	.01
Error (Condition)	12.14	0.12			
Within-subjects					
Message	1.10	1.10	2.29	.133	.02
Message x Condition	1.10	1.10	2.29	.133	.02
Error (Message)	50.38	0.48			
Content	54.93	54.93	118.12	<.001	.53
Content x Condition	0.68	0.68	1.46	.229	.01
Error (Content)	48.83	.047			
Message x Content	13.36	13.36	33.08	<.001	.24
Message x Content x Condition	0.35	0.35	0.86	.355	.01
Error (Message x Content)	42.40	0.40			

Overall, as shown in table 3, no significant three-way interaction effect was found between news message, content, and message length. This result indicates that the perceived accuracy scores

of news messages according to their content did not differ for headlines and articles. Furthermore, the first hypothesis concerned an effect on message length. In particular, it was expected that adolescents' would perceive long fake news messages (i.e., articles) as more accurate than short fake news messages (i.e., headlines). Table 2 showed neither significant two-way interaction effects (e.g., news message x message length; content x message length) nor the main effect for message length. These results indicate no difference in the participants' accuracy scores between both conditions. Hence, message length does not affect the perceived accuracy of fake news.

Moreover, the second hypothesis expected fake neutral news messages to be more accurate than fake emotional news messages. A significant interaction effect was found between news messages and content, which indicates that the perceived accuracy of fake and real news messages differed according to their content. Post-hoc tests were used to break down this interaction. Table 3 shows the results of the Post-hoc tests, which were all significant. The results shown in table 4 indicate that participants perceived (a) fake neutral news messages as more accurate than fake emotional news messages, (b) real neutral news messages as more accurate than real emotional news messages, (c) real emotional news messages as more accurate than fake emotional news messages, and (d) fake neutral news messages as more accurate than real neutral news messages. Looking at the effect sizes, table 3 revealed a more substantial effect of emotional content for fake news messages than real news messages. Furthermore, the last result is interesting because, regarding the emotional news messages (i.e., real emotional vs. fake emotional), real news messages were more accurate than fake ones, making sense since real news is always more accurate than fake news. Therefore, one would expect the same result for the difference between real and fake news messages regarding neutral news messages. However, the results showed something different: fake news messages are perceived as more accurate than real news messages.

Table 4

Comparisons Between Group Means of Perceived Accuracy Scores on News Messages

Paired News Message	*M*	*SD*	*SE*	*t*(106)	*p*	Cohen's *d*
Fake Neutral vs. Fake Emotional	1.07	0.95	0.09	11.68	<.001	0.95
Real Neutral vs. Real Emotional	0.36	0.92	0.09	4.11	<.001	0.92
Real Emotional vs. Fake Emotional	0.45	0.99	0.10	4.75	<.001	0.99
Real Neutral vs. Fake Neutral	-0.25	0.90	0.09	-2.91	.004	0.90

Finally, the third hypothesis concerned a stronger effect for emotional content on adolescents' perceived accuracy of fake news messages than the effect of message length. The results of this study revealed no significant effects for message length, while significant results were found for the effect of emotional content on fake news messages (see table 3 and table 4).

Discussion

The primary purpose of the present research was to examine the effect of message length (i.e., headline vs. article) and content (i.e., emotional vs. neutral) on adolescents' perceived accuracy of fake news messages. Based on previous research, it was expected that adolescents would perceive (1) long fake news messages (i.e., articles) as more accurate than short fake news messages (i.e., headlines); (2) fake news with neutral content as more accurate than fake news with emotional content, and that (3) the effect of emotional content on adolescents' perceived accuracy of fake news messages would be stronger than the effect of message length. In order to examine these hypotheses, an experiment with a 2x2x2 mixed design ANOVA was conducted, in which participants had to perform a fake news recognition task. A total of 107 participants completed the task, which is a considerable number for representing the population. Nevertheless, this study found only a result for part of the hypotheses. The paragraphs below will explain the results in detail.

The first hypothesis of this study concerned the effect of the length of news messages on adolescents' perceived accuracy. The results did not support this hypothesis since no significant effects for the condition (i.e., headline vs. article) were found. Therefore, the first hypothesis of this study should be rejected. However, it is difficult to state that this result is different from what is known in the literature on recognizing fake news and the effect of message length because most of this research used headlines (Bago et al., 2020; Bronstein et al., 2019; Clayton et al., 2019; Moravec et al., 2018; Pennycook & Rand, 2019; Pennycook & Rand, 2020). Nevertheless, a very recent study investigated the role of analytic reasoning and source credibility on the evaluation of real and fake news by using full-length news articles (Pehlivanoglu et al., 2021). First of all, this study addressed the gap of knowledge of using full-length articles in research on fake news, and they argued for a more ecologically valid news evaluation methodology since people in real life are not restricted to headlines only. Furthermore, this study revealed an association between higher analytic thinking skills and more accurate detection of fake news articles and, therefore, this study extended previous research using headlines only on analytic thinking and fake news recognition. Even though this study is innovative by using full-length news articles and that their results should be replicated and confirmed by future research, this study illustrated that the length of a news message does not affect perceived accuracy explained by analytical reasoning. Their results could serve as a possible explanation for not finding significant effects for message length in the present study. However, it should be mentioned that their study focused on the relationship between analytical reasoning measured by the cognitive reflection test and the perceived accuracy of fake news. In contrast, analytic thinking and the cognitive reflection test were not part of the present study.

Another possible explanation for this result could be related to how people read news messages, which involves scanning headlines instead of reading the entire news story (Dor, 2003; Liu, 2005). Due to the digital environment we live in, where a large amount of information is accessible on the internet, peoples' reading behaviour of news messages has changed. Scanning

headlines is a very effective strategy for keeping up with all this information, and as a consequence, less time is spent on in depth-reading of news messages (Liu, 2005). Therefore, it is possible that the participants who had to read the news articles just scanned the headlines instead of reading the full news articles. At the same time, the other half of the participants fulfilled a similar task since they received only the headlines without the body of the text of the news messages. If this would be the case, both groups performed the same task, which could explain no difference between these groups. In addition, the students' teacher indicated that several students found the experiment challenging to perform and that it demanded too much of their time, which could add to the explanation of scanning headlines instead of reading the entire news message.

In addition, the question asked during the experiment could serve as a possible explanation. In both conditions, the same question was used, which was done on purpose to control for differences. As a result, in both conditions, the participants were asked to indicate their perceived accuracy of the claim made in the headlines, while one condition used news articles. Consequently, it could be that this question indirectly steered the participants' attention to the headline, causing them to pay less attention to the body of the text. It might even be that they completely neglected the body of the text due to time.

Moreover, the second hypothesis of the study concerned a higher accuracy of neutral fake news messages than fake emotional content. This study revealed a significant interaction effect between the type of news message (i.e., fake vs. real) and content (i.e., emotional vs. neutral) with higher accuracy scores for neutral news messages than emotional ones. Thus, this study confirmed the second hypothesis by illustrating that adolescents perceive fake neutral news messages as more accurate than fake emotional news messages. In other words, adolescents can recognize fake news due to emotional content. Previous research already showed algorithms detecting fake news by focusing on emotional content (Ajao et al., 2019; Ghanem et al., 2020). The present study

somewhat extended this research by showing that adolescents can also recognize fake news if these messages contain emotional content.

Although the present study did not investigate sharing intentions, it showed that adolescents could recognize fake news as less accurate than real news due to the emotional content of these fake news messages. Therefore, this result points towards research confirming that the virality of fake news messages is different from believing fake news instead of assuming that sharing fake news means that people believe it (Martel et al., 2020; Pennycook et al., 2021; Pennycook & Rand, 2021). These studies showed that the perceived accuracy of news headlines do not impact sharing intentions because people were willing to share headlines they had identified as inaccurate, which is explainable since fake news contain emotions (Bakir & McStay, 2017; Conroy et al., 2015) and that is an indicator for the virality of fake news (Berger, 2011; Berger & Milkman, 2012; Brady et al., 2017).

Furthermore, the results revealed that the adolescents perceived the fake neutral messages as more accurate than the real news messages. Since real emotional news messages were seen as more accurate than fake emotional messages, it was expected that the same result would be found for neutral messages and, therefore, this result was unexpected in the first place. Nevertheless, this result emphasized the importance of emotional content as a characteristic of fake news. When the emotions of news messages disappear, it becomes more challenging to determine whether a news message is fake or real. For that reason, this result confirmed the effect of emotional content on adolescents' perceived accuracy of fake news messages.

The third hypothesis of this study predicted a more substantial effect of emotional content on adolescents' perceived accuracy of fake news messages than the effect of message length. Since message length showed no significant results while the content of the messages did, the third hypothesis should be confirmed. However, it should be emphasized that no effect at all was found

for message length. As mentioned earlier, several explanations could be given for not finding an effect.

Implications for Theory and Practice

The key findings of the present study provide some interesting insights for theory and practice. From a theoretical perspective, this study adds to the knowledge of when adolescents fall for fake news. Much previous research revealed why people fall for fake news, such as reduced analytic thinking. However, less is known about when they fall for fake news, particularly adolescents, since they were the target group of the present study. Which characteristics contribute to adolescents falling for fake news? This study showed that the presence of emotional content in fake news messages is one of these characteristics and, therefore, this study contributes to the field of educational research and fake news. Moreover, not much research is done on fake news using full news articles since most of the research used only headlines. In addition, no study ever researched both the effect of message length and the effect of emotional content on recognizing fake news. Therefore, this study gave news insights into falling for fake news that has not been extensively studied yet.

Besides the theoretical implications of this study, this research also has some practical implications. For example, the obtained insights can be used in education. Today, adolescents learn media literacy skills in order to deal with the digital environment were living in. For example, they learn how to think critically to deal with all the information they can access on the internet, including fake news. This research has shown that emotional content is vital in explaining when adolescents fall for fake news. Considering that a characteristic of fake news is emotional content (Bakir & McStay, 2018; Conroy et al., 2015), the results from this study could serve as input for designing media literacy courses. In particular, by paying attention to the emotional content in fake news messages, adolescents are more likely to recognize these messages as fake. On the other hand, there is still a challenge here because emotions in fake news messages explain why people share

fake news messages (Berger, 2011; Berger & Milkman, 2012). Future research could provide more insights in this challenge by examining the effectiveness of interventions on reducing the willingness to share fake news.

Limitations and Future Research

Although this research contributes preliminary insights to explaining which format and content matters of fake news messages influence adolescents' perceived accuracy, it is not without limitations that should be considered when interpreting the results. First of all, the reliability was not calculated for this study's used fake news recognition task. Because each variable was measured with only two items, a low Chronbach's alpha was expected, considering that a decrease of items results in a decrease of α (Field, 2014). However, due to time restrictions and considering the required effort of the participants, the decision was made to use eight news messages in each condition resulting in two items measuring one variable. Future research should include more items measuring one variable, which creates the opportunity to calculate the reliability. Four different conditions could be used to do so while taking into account the participants' effort and required time. This suggestion is also relevant since some students indicated that the task of this study demanded too much of their time; in particular, it addressed students who had to read full news articles. It might be that they lost their concentration during the task and gave less accurate answers.

In addition, the selected emotional news messages could limit the results of this study. On second thought, the means of the emotional news messages were possibly more average scores instead of high scores since most means contained a score between three or four (see table 1). Although, it should be mentioned that the selected news messages scored the highest as emotional news messages in the pilot. However, whereas the neutral messages mainly scored one or two, which can be considered as low, the scores of the emotional new messages should have been five or six to be considered as high. Moreover, the standard deviations of the emotional news messages were also higher than the neutral news messages, indicating that the participants agreed more on the

neutral news messages compared to the emotional ones. This limitation illustrates the difficulty of operationalizing emotions and should be taken into account when interpreting the results of this study. A suggestion for future research would be to consider scores of five and six as indicators for emotional news messages and to use emotional messages with lower standard deviations; thus, news messages the participants more agreed.

Moreover, due to COVID-19 and its restrictions on society, I had to instruct the teachers beforehand, and so the teachers could instruct their students about the experiment. Ideally, I would have been there by myself to provide the necessary instructions to the students, clarify possible questions, and check if the procedure continued as planned. For example, in retrospect, I could have explicitly asked the student in the article condition to read the entire news article before answering the question. It would have possibly contributed to students not scanning the headlines, which might have caused a significant effect on message length. Perhaps future research could again examine the effect of message length by providing more explicit instructions for the participants reading full news articles. In line with this direction for future research, another recommendation could be mentioned. The present study contained two conditions, in which Qualtrics assigned participants randomly to one of these conditions. However, students participating in this experiment performed the task in their classroom. Therefore, students noticed the different conditions. In particular, one teacher mentioned after the experiment that students of the long condition were surprised that other students finished the experiment considerably faster than themselves. They also found this somewhat annoying, which may have led them to finish the task less seriously. Future research could separate the different conditions, so the participants overlook the different conditions.

Furthermore, several students found the fake news recognition task quite challenging. Consequently, they possibly did not fully understand the news messages, which may have influenced the result of this research. However, the used news messages were existing news

messages from the internet, so they have to deal with these news messages in practice, emphasizing the importance of research on fake news and adolescents interpreting these fake news messages.

In conclusion, considering the widespread proliferation of fake news on social media and that this amount still increases, it is essential to teach the society of the future how to deal with all this fake news. We do not want them to believe everything they read on the internet. Therefore, it is essential to know which characteristics of fake news messages make them fall for fake news. The present study provided evidence for one of these characteristics: the effect of emotional content on adolescents' perceived accuracy of fake news messages. Hence, if we make adolescents aware of emotional content in fake news messages, they can better recognize these messages as fake. Nevertheless, enhancing the research on fake news remains crucial to learn more about the characteristics of fake news and what makes people fall for it. In addition, if we discover more about fake news, we could strengthen the interventions that prevent people from falling for fake news.

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Appendices

Appendix A: News Messages

Fake and Emotional News Messages

Chemotherapie maakt kanker heftiger…!

Chemotherapie is niet alleen nutteloos in de strijd tegen kanker, het stimuleert zelfs de groei van kankercellen in een tumor.. Dit heftige bericht komt van het ‘Fred Hutchinson Cancer Research Centre’ in Seattle (VS).

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Chemotherapie maakt kanker heftiger…!

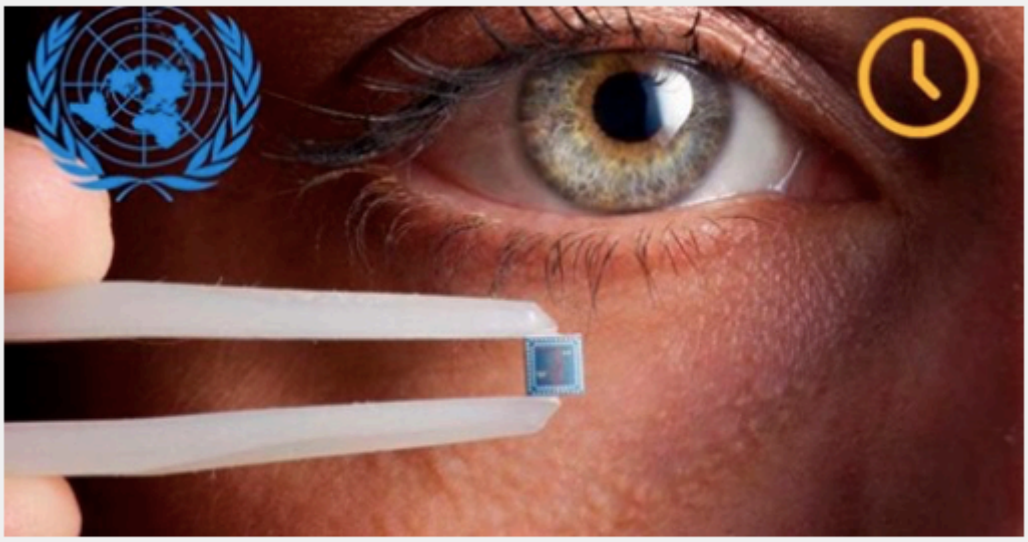
Chemotherapie is niet alleen nutteloos in de strijd tegen kanker, het stimuleert zelfs de groei van kankercellen in een tumor.. Dit heftige bericht komt van het 'Fred Hutchinson Cancer Research Centre' in Seattle (VS). Onderzoekers melden dat *'chemotherapie compleet waardeloos is' en dat mensen die kanker hebben er goed aan doen de chemische middelen helemaal te laten staan'..!*

Het blijkt uit wetenschappelijk onderzoek dat chemotherapie een tumor stimuleert om te groeien, zo ontdekten de onderzoekers; dit komt door stimulans op het eiwit WNT16B, dat kankercellen prikkelt om te overleven en te groeien. Het eiwit gaat een verbinding aan met de kankercellen, deze cellen prikkelend om te groeien en gezonde cellen binnen te dringen, waarbij ook nog eens behandeling in een later stadium wordt bemoeilijkt, zo laten de onderzoekers weten. Naar hun zeggen is 'Chemotherapie compleet waardeloos..' (Bron: Natural Medicine, 2012; 18: 1359-68).

Een team van wetenschappelijke onderzoekers, die op zoek waren naar oorzaken waarom kankercellen zo hardnekkig te bestrijden zijn, stoten bij toeval op een veel heftiger ontdekking. (…)

WANTTOKNOW.NL

De Verenigde Naties hebben besloten dat de mensheid de microchip moet plaatsen



Tegen 2030 wil de VN dat elke persoon een biometrische identificatie heeft, die wereldwijd wordt goedgekeurd. De informatie van elk mens zal worden opgeslagen in een universele database, gevestigd in Genève, Zwitserland.

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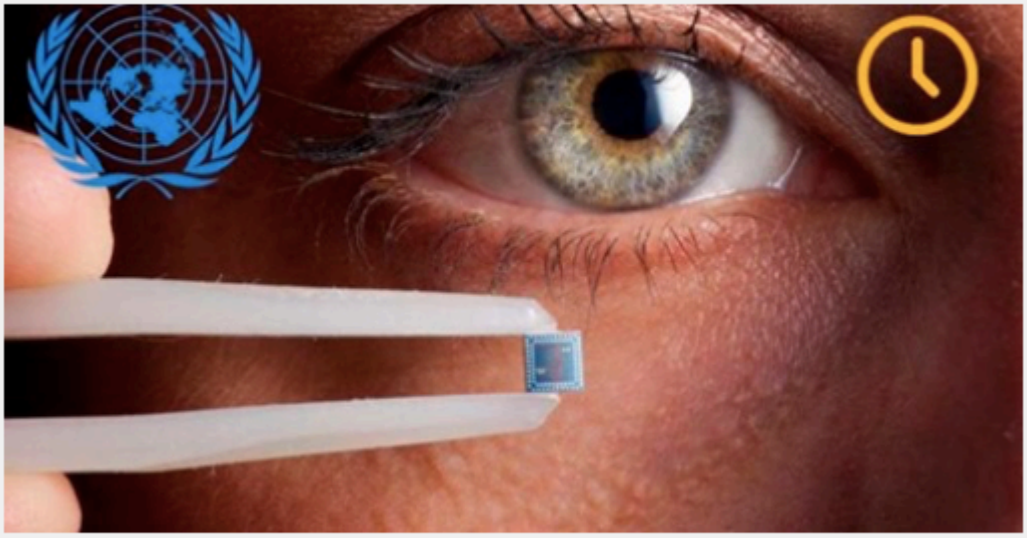

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De organisatie van de Verenigde Naties is gericht aan alle regeringen van de wereld, die de "Universal Biometric Identification" -kaart oplegt aan haar burgers. "Dit nieuwe programma is een model voor de" Nieuwe Wereld Orde", en als je de deelprojecten voor deze nieuwe wereldwijde doelen invoert, zul je de dingen erg verontrustend vinden", meldt The Economic Collapse.

De Verenigde Naties hebben dit project uitgevoerd onder vluchtelingen die zijn aangekomen in Europa. Het systeem verzamelt het gezicht, de iris en de biometrische gegevens van de vingerafdrukken en nestelt zich in de enige officiële documentatie voor vluchtelingen.

De informatie zal naar een centrale database in Genève worden gestuurd, zodat in de praktijk de follow-up mogelijk wordt.

Volgens het Find Biometrics-rapport hopen de autoriteiten dat deze technologie hen in staat zal stellen om het doel van dit soort identificatie voor mannen, vrouwen en kinderen op de planeet, binnen handbereik in 2030 te bereiken. (…)

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Fake and Neutral News Messages

Steeds meer boeren doen er iets bij: ‘Het werkt echt, kinderopvang en koeien’

Peter Gille is boer, maar ook ondernemer in de kinderopvang, uitbater van een horecagelegenheid, campingeigenaar en beheerder van een vergader- en trouwlocatie. Zijn erf in Bergschenhoek leeft allang niet meer van (…)

NOS.NL

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Gille is niet de enige boer die heeft gekozen voor 'iets erbij'. In een enquête van de Wageningen Universiteit (WUR) en uitgeverij Agrio zegt de helft van de 1200 deelnemende boeren dat ze naast veeteelt of akkerbouw andere activiteiten hebben. In de jaren 90 was dat nog minder dan een kwart. Voor de toekomst richt nog maar een op de drie boeren de pijlen alleen op landbouw. (…)

"Het is een mooie tweede poot onder je bedrijf", zegt hij. "Het biedt veel meer inkomenszekerheid." Volgens hem steekt zijn bank nauwelijks nog geld in de klassieke veehouderij, maar worden activiteiten als opvang wel volop gefinancierd. "Als je als ondernemer nog vooruit wilt, zul je verder moeten kijken. Wij halen hier nu een goed inkomen uit.” (…)

NOS.NL

Sale: Nederlanders zijn dol op korting

Zet een bordje met 'sale' neer en er komen geheid consumenten op af. Vier op de tien zeggen het een sport te vinden om zo goedkoop mogelijk boodschappen te doen. We zijn nog nooit zo kortingsbewust geweest (...)

LIMBURGER.NL

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Opvallend is dat mensen checken of er een kortingsactie is, ook als ze een product eigenlijk niet nodig hebben. Verder vindt een groeiend aantal Nederlanders het niet erg om even te wachten met de aankoop tot er een actie voorbijkomt. Zo zegt bijvoorbeeld ruim de helft van de ondervraagden te wachten op de winter- en zomersales en een kwart op speciale kortingsdagen als Black Friday en Cyber Monday.

Inmiddels weet meer dan de helft waar en wanneer er korting wordt geboden. (…)

De korting is zelfs zo in trek, dat de bezorging erdoor in gevaar komt. Webwinkels waarschuwden eerder dat pakketjes rond de feestdagen te laat kunnen komen. (…)

LIMBURGER.NL

Real and Emotional News Messages

Verkracht? Wacht even met de aangifte, zegt de politie nog steeds

Nederland is het enige land waar slachtoffers van seksueel geweld bij de politie eerst door een 'informatief gesprek' moeten, om op een later moment aangifte te kunnen doen. 'Slachtoffers gaan twijfelen.'

PAROOL.NL

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Een melding maken van seksueel geweld bij de politie is nog geen aangifte. Slachtoffers krijgen eerst een informatief gesprek. Volgens de zedenpolitie is dit nodig om een inschatting te maken of het gaat om een strafbaar feit en om het slachtoffer uit te leggen wat de consequenties van een aangifte zijn. Vaak wordt verteld dat de kans op vervolging van de dader klein is, dat een aangifte veel tijd kost of dat het bewijs gebrekkig is. Na dit gesprek volgen veelal twee weken bedenktijd waarin iemand kan besluiten een aangifte wel of niet door te zetten.

In de praktijk heeft de werkwijze van de zedenpolitie een ontmoedigend effect op zedenslachtoffers, waardoor aangiftes uitblijven. Dat bleek ook uit onderzoek waarover Het Parool afgelopen weekend publiceerde in samenwerking met NRC. (…)

PAROOL.NL

Woeste vader onthoofdt dochter (17) vanwege verboden relatie: “Hij was rustig en huilde niet”

In Noord-India is woensdag een man aangehouden op verdenking van het onthoofden van zijn eigen dochter. Dat deed hij nadat hij haar in bed zou hebben aangetroffen met een nieuwe vriend die hij niet mocht.

AD.NL

Woeste vader onthoofdt dochter (17) vanwege verboden relatie: “Hij was rustig en huilde niet”

In Noord-India is woensdag een man aangehouden op verdenking van het onthoofden van zijn eigen dochter. Dat deed hij nadat hij haar in bed zou hebben aangetroffen met een nieuwe vriend die hij niet mocht. De gruwelijke moord is in het land als een bom ingeslagen en wakkert het debat over eerwraak opnieuw aan. ,,Er moet een aparte wet komen voor het omgaan met eerwraak”, stelt een van de grootste vrouwenrechtenorganisaties in India tegen lokale media.

(…) De man bekende bij zijn arrestatie direct wat hij had gedaan en waarom hij tot de gruwelijke daad overging. (…) Toen de vader zijn dochter even later alleen aantrof, sloot hij haar op in een kamer en hakte haar hoofd eraf met een scherp voorwerp. Het moordwapen is door de politie in beslag genomen.

Het viel de politie op dat de man geen enkel verdriet of berouw toonde. ,,Ondanks de situatie was hij heel rustig. Hij huilde niet en was niet hysterisch. Toen de politieagenten met hem spraken, vroegen ze hem om het hoofd van zijn dochter op de grond te leggen en te gaan zitten, waar hij naar luisterde zonder tegen te stribbelen”, vertelt een politiewoordvoerder. (…)

AD.NL

Real and Neutral News Messages

Ex-vluchteling genomineerd voor mbo'er van het jaar

Asef Mahmoudi kwam op 18-jarige leeftijd als vluchteling naar Nederland. Vanaf het moment dat hij voet zet in Nederland, is Asef niet stil gaan zitten.

VOORBEELD-ALLOCHTOON.NL

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Toen Asef naar Nederland kwam, mocht hij niet meteen Nederlandse lessen volgen. Zijn bestaan in Nederland was nog onzeker. Asef besloot toen om zelf te investeren en Nederlands te gaan leren. (…)

Een vechter, een doorzetter, ambitieus, leergierig en het hart op de juiste plek. Een echte aanpakker. Zijn nominatie en dat hij in de top 10 zit, is dan ook geheel terecht. Wij vinden dat Asef deze prijs moet winnen. Om hem te belonen voor zijn prestaties en ook om het signaal af te geven aan Nederland dat vluchtelingen ook mensen zijn met ambitie, gedrevenheid en talenten die de samenleving en de wereld vooruit kunnen helpen. (…)

VOORBEELD-ALLOCHTOON.NL

Er zouden bijna 2,5 miljard tyrannosaurus rexen op aarde geleefd hebben

Over een tijdspanne van enkele miljoenen jaren leefden er naar schatting zo'n 2,5 miljard tyrannosaurus rexen op aarde, blijkt donderdag uit een studie in het wetenschappelijke tijdschrift Science.

NU.NL

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(…) Wetenschappers maakten niet eerder een ruwe schatting van de populatie van de tyrannosaurus rex. In die schatting kan volgens de studie nog wel een foutmarge zitten; het is bijvoorbeeld onzeker hoelang één generatie van een tyrannosaurus rex leefde en waar op aarde ze allemaal hebben gewoond.
De populatieschattingen van het onderzoeksteam lopen uiteen van 140 miljoen tot 42 miljard. Ter vergelijking: er leefden tot nu toe circa 108 miljard mensen op aarde.
Hoewel er dus mogelijk miljarden tyrannosaurus rexen hebben bestaan, zijn er relatief weinig fossielen van gevonden. Paleontologen hebben tot dusver ongeveer honderd exemplaren ontdekt: in 32 gevallen was de vondst groot genoeg om vast te stellen dat het om een volwassen dier ging. (…)

NU.NL

Appendix B: Informed Consent

Informatiebrief voor studenten

Universiteit Utrecht

Beste student,

Jij gaat zo deelnemen aan een onderzoek naar het waarderen van nieuwsberichten onder jongvolwassenen op het MBO. Vooraf wil ik jou graag wat uitleg geven over mijn onderzoek evenals het gebruiken van jouw antwoorden voor mijn afstudeeronderzoek. Dit is een onderdeel van de masteropleiding *Educational Sciences* die ik aan de Universiteit Utrecht volg. Het doel van mijn onderzoek is om beter inzicht te krijgen in hoe adolescenten nieuwsberichten lezen en beoordelen.

Wat houdt de opdracht van dit onderzoek in?
Jij gaat zo een online opdracht maken die uit twee onderdelen bestaat. Bij het eerste onderdeel vul je een paar gegevens in, namelijk jouw leeftijd, geslacht en welk niveau jij hier op het MBO volgt. Overigens worden alle gegevens helemaal anoniem verwerkt, dus niemand zal op basis van jouw antwoorden kunnen zeggen dat jij die antwoorden hebt ingevuld.

Bij het tweede deel krijg je in totaal 8 nieuwsberichten te zien en ieder nieuwsbericht moet je apart beoordelen. Afhankelijk van in welke groep jij bent geplaatst, krijg jij korte of lange nieuwsberichten te zien. Een kort nieuwsbericht bestaat uit enkel een headline (titel), afbeelding en twee á drie regels tekst. Een lang nieuwsbericht bestaat uit het volledige nieuwsbericht of het grootste gedeelte ervan, inclusief de headline (titel) en afbeelding. In het geval dat er delen van het nieuwsbericht zijn weggelaten, kun je dit zien aan de drie puntjes (…) in de tekst.

Waarom onderzoek?
In de laatste jaren wordt steeds meer nieuws via sociale media gelezen in plaats van in bijvoorbeeld de krant, wat vroeger veel gebeurde. Zeker jongeren lezen eigenlijk alleen nog maar het nieuws op Facebook, Instagram en Twitter (en alle andere sociale media). Al scrollend zie je op deze manier heel veel nieuwsberichten voorbijkomen. Met dit onderzoek hoop ik meer inzicht te krijgen in hoe nieuwsberichten op sociale media worden gelezen en beoordeeld door jongvolwassenen. Met jouw antwoorden op de nieuwsberichten in deze opdracht, kun je bijdragen aan het onderzoek naar dit onderwerp. Daarom wil ik jou vragen of je ermee instemt dat ik jouw antwoorden ga gebruiken voor wetenschappelijk onderzoek.

Vrijwillige deelname
Als je instemt met het gebruiken jouw gegevens (jouw antwoorden) voor onderzoek, is dat geheel vrijwillig. Dit betekent dat jij je op ieder moment kunt terugtrekken uit dit onderzoek, zonder dat je daarvoor een uitleg hoeft te gegeven of negatieve gevolgen aan ondervindt. Indien je hiervoor kiest, zullen jouw antwoorden niet worden opgeslagen en dus niet worden meegenomen in dit onderzoek.

Vertrouwelijkheid en gegevensverwerking
Deelname aan dit onderzoek is volledig anoniem, zoals ik hierboven al eerder even benoemde. Ik vraag namelijk niet naar jouw naam, studentnummer, of andere gegevens die herleidbaar zijn naar jouw persoon. De resultaten van dit onderzoek worden als groep gerapporteerd in mijn afstudeeronderzoek voor mijn master. Tegelijkertijd worden de resultaten van dit onderzoek in een beveiligde omgeving opgeslagen voor minimaal 10 jaar. Deze omgeving is alleen toegankelijk voor mij als onderzoeker en mijn supervisor, dit is een docent van de Universiteit Utrecht.

Contactgegevens
Heb jij vragen of opmerkingen over het onderzoek? Neem contact met mij op door mij een e-mail te sturen met jouw vraag. Ik ben bereikbaar via **h.j.agtersmit@students.uu.nl**. Indien je contact wil mijn supervisor kan dat door een mail te sturen naar **e.m.janssen@uu.nl**. Heb je een officiële klacht over dit onderzoek? In dat geval kun je een e-mail sturen naar de klachtenfunctionaris via **klachtenfunctionaris-fetcsocwet@uu.nl**. Tot slot kun je nog extra informatie vinden over het beschermen van jouw gegevens door een kijkje te nemen op de website **https://www.uu.nl/organisatie/praktische-zaken/privacy/functionaris-voor-gegevensbescherming**. Tegelijkertijd vind je op deze website de contactgegevens indien je hier nog vragen of opmerkingen over hebt.

Alvast bedankt voor jouw deelname!

Met vriendelijke groet,

Hetty Agtersmit
h.j.agtersmit@students.uu.nl

Informed consent

Toestemmingsverklaring (voorafgaand aan het onderzoek)

Ik verklaar hierbij dat ik 16 jaar of ouder ben. Daarnaast heb ik de informatiebrief over het onderzoek naar het ‘lezen en beoordelen van nieuwsberichten door jongvolwassenen’ heb gelezen. Tot slot ga ik ermee akkoord dat mijn antwoorden worden gebruikt voor dit onderzoek.

0 Ja, ik ben 16 jaar of ouder en ik ga hiermee akkoord.
0 Nee, ik ben niet 16 jaar of ouder of ik ga hier niet mee akkoord.