

**Changing audiences, changing realities:
Identifying disinformation via new teaching curricula**

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Abstract

This article examines the ways in which modern students of Social Sciences (including Journalism) identify the, so called, 'fake news'. The aims of this work are to identify the factors that enable students to distinguish between fake and real news, as well as any differences between students of Journalism compared to those of other Social Sciences, in order to be able to formulate adequate teaching curricula that can enhance students' ability to distinguish disinformation and fake news. Focus group interviews were used in order to investigate how students conceive of fake and real news. The sample consisted of forty undergraduate students, ten of whom from the field of Journalism, separated into groups of ten students for the interviews. All groups were given items of fake and real news published in new media and were then questioned on distinguishing them and their characteristics. The results show that the majority of journalism students and a significant number of students in other Social Sciences were able to discern fake from real news items supplied, although a small proportion were confused in identifying them. Students who were successful, pointed out that they perceived the combination of titles, photographs and content in fake stories as inconsistent, factors which may enable academics to design curricula in all Social Sciences.

Key Words: Fake news, disinformation, education, teaching curricula, journalism.

1 Introduction

Disinformation, currently popularized in the media as a unitary political phenomenon under the label of fake news, comes with a significant number of changes mainly targeting the current reality and, consequently, audiences. A narrow definition of ‘fake news’ is news articles that are intentionally and variably false and could mislead readers (Allcott & Gentzkow, 2017); this definition has been widely adopted in recent studies (e.g., O’Klein & Wueller, 2017; Shu, Sliva, Wang, Tang & Liou, 2017). There are two key features in this definition: authenticity and intent. First, fake news includes false information that can be verified as such. Second, fake news are created with dishonest intention to mislead the audience.

The overarching aim of this research is to be able to isolate the specific factors that can formulate curricula for training students in enhancing this skill and this paper marks the start of this effort. This article examines the ways in which modern students of Social Sciences (including Journalism) are able to discern the so-called fake news. The aims of this work are: a) to identify the factors that enable students to distinguish between fake and real news, and b) to identify differences (if any) between students of Journalism as a group compared to those of other Social Sciences. To this end, we will investigate the following research questions:

- a. Is it possible for students of Social Sciences (i.e., members of the millennial generation) to discern fake from real news in a new media environment?
- b. If so, which factors, if any, enable students to distinguish between fake and real news?
- c. Are there any differences in the ability to spot fake news between students of Journalism as a group compared to those of other Social Sciences?

The article is organised as follows. Part 2 presents the theoretical framework used for this study, mainly focussing in two areas: factors that can help us identify disinformation and the characteristics of new audiences that have led to new media consumption models. Part 3 presents the methodology used in this study as well as the specific characteristics of the sample. Part 4 focusses on findings and discussion, while Part 5 presents the general conclusions as well as the limitations of this research.

2 Theoretical Framework

2.1 Identifying disinformation

A number of research studies have investigated the role of influential experts in spotting and verifying news in social media posts (e.g., Castillo, Mendoza & Poblete, 2013; Kim, Tabibian, Oh, Scholkopf & Gomez-Rodriguez, 2018). Most of them tend to develop representations of the relevant procedures and new models for fact-checking in order to efficiently reduce the spread of disinformation with provable guarantees.

In order to fully understand the meaning of disinformation, we first need to describe what constitutes real news. In this work, ‘news’ means verifiable information of public interest. Information that does not meet these standards does not deserve the label of news (Photiou, Maniou, Eteokleous & Ketteni, 2017); in this sense then, fake news is an oxymoron which lends itself to undermining the credibility of information that does indeed meet the threshold of verifiability and public interest, i.e. real news (Ireton & Posetti, 2018). According to Fallis (2009), the standard dictionary definition of disinformation is ‘deliberately misleading information

announced publicly or leaked by an organization’ (p.3)³. Following Ireton & Posetti’s (2018) analysis, disinformation is generally used to refer to deliberate (often orchestrated) attempts to confuse or manipulate people through delivering false information to them; this is often combined with parallel and intersecting communications strategies and a suite of other tactics, like hacking or compromising of persons. Misinformation, on the other hand, is generally used to refer to misleading information created or disseminated without manipulative or malicious intent; both are problems for society, but disinformation is particularly dangerous because it is frequently organised, well resourced, and reinforced by automated technology (p.7). Based on Fetzer’s analysis (2004), the distinction between misinformation and disinformation becomes especially important in political, editorial, and advertising contexts, where sources may make deliberate efforts to mislead, deceive, or confuse an audience in order to promote their personal, religious or ideological objectives. The difference consists in having an agenda. It thus bears comparison with lying, because lies are assertions that are false, that are known to be false, and that are asserted with the intention to mislead, deceive, or confuse (p.231)⁴.

In this research, the key issue is to develop suggestions for teaching the new and radically different audience of digital immigrants how to spot the different species of disinformation posted in the new media. Therefore, the basic question is how to approach effective teaching curricula for students of journalism and other social sciences so as to enable them to identify disinformation.

To this end, this study explores the key factors that can enable younger consumers of new media how to detect disinformation. Developing teaching curricula for fact-checking never was nor is – even with the use of digital tools – an easy procedure. It requires deep knowledge of audience reception mechanisms as well as the development of methods to trace the production, circulation and reception of fake news online (Bounegru, Gray, Venturini & Mauri, 2017). In 2018, UNESCO issued a new model curriculum for combatting disinformation, with practical lessons and exemplary assignments to show how disinformation can become part of course syllabi in journalism education (Ireton & Posetti, 2018). However, although this handbook provides a crucial guide for fact-checking and data verification, there still seems to exist a gap in the relevant academic field specifically centred in the factors that can mislead young audiences when consuming new media information.

2.2 New audiences, new media consumptions

What is ‘new’ for one generation may not be new for another. For example, ‘new media’ can be perceived as a relative term; television, radio, magazines and newspapers were considered to be old (traditional) media in comparison to the world wide web at the start of the new millennium (Jenkins, Purushotma, Weigel, Clinton & Robison, 2009). Nevertheless, today online media may also be considered ‘old’ in comparison to social media.

The use of smart devices in everyday life has led to the emergence of the ‘smart audience’: a new generation of media recipients eager to use smart technology through digital portable devices in order to fulfil their everyday needs, from entertainment to information (Maniou & Veglis, 2016). In fact, current generations of media audiences are young adults, who have been born within a digital

³ According to Fallis (2009), this definition comes from the *American Heritage Dictionary of the English Language* (2006, 4th edition). The *Oxford English Dictionary* provides almost exactly the same definition.

⁴ It is not in the immediate goals of this article to analyse the differences between Disinformation and Misinformation; the distinction here was made so as to facilitate the analysis below.

world and their media consumption patterns are completely different compared to those of their parents. People who have been born after the mid-1990s grew up in an already established digital environment. For them, the Web is a medium that always existed while buying a newspaper or watching the news on television may be the unprecedented (Podara, Maniou & Kalliris, 2018). They are the so-called 'digital natives' (Prenski, 2001), 'post-millennials', 'generation Z', 'net generation' and 'iGeneration' (Edmunds & Turner, 2005; Combi, 2015; Dimock, 2018; Tapscott, 2009).

Overall, age is an indicator of a certain life course in different historical phases and holds a clear impact on media consumption (Weibull & Westlund, 2013). Obviously, various other social parameters and demographic variables of each generation, such as education, family income, origins, etc., also can influence media consumption, sometimes significantly. However, age is a personal characteristic of unquestionable effect (MacManus, 2018). According to Tapscott (2009), it is not the age per se, but the generation that affects motivation and use of media. The decade when a person was born defines its life phases and societal needs. It also leads to different trends in media use, because of the developments in technology that change the media landscape and transform the experience of the users (see also, Maniou, 2013).

In this perspective, in order to develop new teaching curricula for identifying disinformation we do not only have to take into consideration the specific characteristics of fake news, but we also need to keep into account the idiomatic synthesis of this new generation of audiences in order to understand the way(s) they perceive information and consume new media products.

3 Methodology and research sample

Focus group interviews were used in order to investigate how students conceive of fake and real news, as well as in spotting possible differences in the ability to discern fake news between students of Journalism versus those of other Social Sciences. A focus group comprises a number of individuals who interact with each other on specific topic(s), having mutual interests and frequently common characteristics. The interaction is regulated by a moderator, a researcher who utilizes the team and its interactions in order to exact conclusions regarding the topic(s) under discussion (Krueger, 1998, p. 18). The prerogatives of the moderator include the capacity to lead the discussion towards essential or fundamental elements of particular interest in their research, to confine it to specific issue(s) and to activate all the members of the group (Barbour, 2008). Liamputtong (2011) emphasises the importance of universal participation in focus groups pertaining to the Social Sciences, by stressing that they do not constitute mere group interviews, but that their value derives from the interaction. Therefore, focus group interviews are akin to the communal daily routines of the public sphere of most societies, in which people discuss the issue(s) at hand, and formulate and/or change their opinions (Rabiee, 2004). Since this work focuses on (younger-generation but public) opinion as formulated by consuming and discussing (fake and real) news, we find that focus group interviews currently constitute the most effective manner in investigating our research questions.

The sample of this research constitutes of 40 undergraduate students, 10 of whom focus their studies on the field of Journalism and the remaining 30 on other Social Sciences. The students were separated into four groups of 10 persons each and given items of fake and real news published in new media. After allowing them to consume the news, the groups were convened and questioned on distinguishing the authenticity of each news item. They were allowed/directed to discuss each in

detail, and their interaction enabled the extraction of the specific characteristics that the interviewees attributed to fake and real news.

4 Findings and discussion

Although most students commented that most fake news had a ‘dose of truth’, they exhibited incredible propensity in discerning fake news. In fact, 33 out of 40 interviewees from all disciplines were successful in doing so. This indicates that the younger generation have established or are developing an affinity for discerning the authenticity of the content of new media. Although merely a hypothesis at this stage, this skill may potentially arise from the fact that they have grown up in the environment of the internet and social media rather than being introduced to these later in their lives like older generations (e.g., see Edmunds & Turner, 2005; Combi, 2015; Dimock, 2018; Tapscott, 2009).

Given their ability, it is more interesting to investigate which factors they have attributed to fake news and whether there are any differences in such details between students of Journalism and those of other Social Sciences. The interviews have enabled the identification of four potential factors for distinguishing fake from real news, namely the sources of articles, their content, and the titles and photographs accompanying the text.

The first factor was one specifically identified by most students of Journalism. Specifically, they pointed out that fake news were easy to discern if they did not reference their sources, or if they gave very general information regarding their sources. The existence of a source did make fake news seem more plausible, but they were critical enough to evaluate the credibility of different sources so as not to be fooled by the mere existence of a source. For example, one student commented on a piece of fake news that the article cites ‘for example, the newspaper *Espresso*⁵. The existence of a source indicates a measure of truth, but on the other hand, I’m not convinced by the source itself.’ Conversely, few students of other fields who were successful in identifying fake news commented on the citations of fake articles.

The content of the news items constituted one of the more important factors by which fake news were distinguished, by both Journalism students as well as those of other fields. In fact, all students pointed out that the fake news they were able to identify exhibited inconsistencies in the facts, timelines, etc. of the story. On a particular fake article, one student commented that ‘true news have more detail,’ and this prompted another to indicate that ‘yes, and the characteristics described in the piece are hard to find in normal political and financial news,’ which a third student qualified by stating, ‘Yes, the content seems inconsistent, exaggerated.’ In fact, one of the successful interviewees commented on the presence of excessive details that ‘it seemed like someone [was] trying too hard to sell them on the story.’ Nevertheless, some fake news did deceive a small number of interviewees; these were detailed (but not excessively) and usually contained additional (manufactured) evidence such as (a) quote(s). As an example, one student stated that he believed a specific piece of (fake) news because ‘there was that quote from the specialist, what’s his name, that financial analyst,’ which prompted another student to ascertain, ‘Just because someone tells you that a specialist made a statement, doesn’t make it true!’ In fact, none of the Journalism students were deceived, even when articles contained such detail.

⁵ *Espresso* is a light, pop-culture newspaper, which is considered far from a mainstream, hard-hitting newspaper. The (fake) news item the sample were given was taken from a website that referenced this newspaper as its source.

That most interviewees were able to spot inconsistencies in the content – sometimes even if those existed in a few or even one sentence – evinces their critical and observational skills. Since the number of (successful) individuals in the sample is too large for these skills to be intuitive in all of them, and their current curriculum does not consist of courses that enable them to enhance them, it is likely that they were established through their own experience with the new media environment. The titles accompanying fake news constituted the most effective factor in discerning lack of authenticity. All students were able to point out that some fake articles exhibited a lack of continuity between the intensity of the title, which was used to provoke the audience, and the typically mild and inconsequential description/content of the news story. Students of Journalism seemed to explain their intuition of this phenomenon further. They commented that they could discern fake news when ‘loud word’ in the title (e.g., in titles displaying the words ‘shock’, ‘extraordinary’, ‘incredible’, ‘devastating’) were accompanied by inconsistently ‘calm’ content in the story. For example, one student justified his disbelief in a particular (fake) story by saying that ‘The title does not suit the story, it is too intense. It makes you believe that you’re going to read something different, far more exciting.’

Finally, fake news were also easy to distinguish by the photographs accompanying them. Specifically, most students of all fields were able to pinpoint that fake stories usually displayed generic photographs that were not explicitly connected to the story, but could have been generically shot anywhere and by anyone. For example, a Journalism student and one in another field both commented similarly on the photograph accompanying a specific (fake) story. The former stated that ‘This picture is generic and not directly related to the content, if at all. It could have belonged or been taken from any current or past story on the subject,’ while the latter said, ‘the photo is in fact too generic and does not display anything of substance with regards to the content of the news.’ Nevertheless, this problematic depiction of the news in the media seemed to concern most students of Journalism and other Social Sciences. Their trepidation, and that of many academics, was crystallised in the following statement by a Social-Science student: ‘We are reaching a situation where we won’t believe the real news, like the death of Pantelides⁶, because they have killed off so many people!’

5 Conclusions and future work

Although our research has the overarching aims of trying to identify specific factors featured in fake news and to establish curricula that can train students in enhancing the skill of distinguishing these from real news, we focus our current work to the following research questions:

RQ1: Is it possible for students of the Social Sciences (i.e., members of the millennial generation) to discern fake from real news in a new media environment?

RQ2: If so, which factors, if any, enable students to distinguish between fake and real news?

RQ3: Are there any differences in the ability to spot fake news between students of Journalism as a group compared to those of other Social Sciences?

As this preliminary research has indicated, there exist factors that can be used by specialized as well as unspecialized audiences to discern fake news in the new media. Therefore, for RQ1, we find that all Journalism students and the overwhelming majority of students in other Social Sciences have been quite successful in identifying the fake news stories we gave them during their focus groups.

⁶ The popular Greek singer Pantelis Pantelides was killed in a car accident on 18 February 2016.

Given that the numbers of successful interviewees are so high, we find that this propensity cannot be intuitive. Furthermore, it cannot be due to education, as currently their academic training does not address this skill, let alone enhance it. Therefore, by the process of rejecting these alternatives, we conclude that the ‘post-millennials’ we have selected for our sample must have developed the skill from their own experience with the new media.

In addressing RQ2, our sample was able to distil four factors in discerning fake news. Specifically, the use of generic sources or the inability to cite (a) specific source(s) raised red flags, albeit mostly for Journalism students rather than those in other fields. Inconsistencies and excessive detail in the content of stories were the most telling for the interviewees in distinguishing fake news. In addition, some articles gave themselves away by featuring ‘loud’ titles followed by a ‘mild’ content, as well as disconnected or generic photographic material.

For RQ3, no significant differences in the ability to spot fake news were detected among Journalism students and students of the other Social Sciences. This observation contradicts the expectation that Journalism students would find it easier to identify specific characteristics of fake news than the others, due to their area of study. However, it may confirm that the generation of ‘digital natives’ (Prenski, 2001) may have experientially been able to train themselves (at least in part) in discerning non-authentic stories.

The verification of the factors identified here, as well as the identification of others in fake news, constitutes an important part of media research. It can be used to design academic curricula that enable at least Journalism, Media and Social-Science students to spot them, which can begin to address the concerns that the affinity in the new media for publishing fake news may result in real stories being disbelieved.

To this end, in the next step of this study, it has been deemed appropriate to expand the sample considerably, so as to further the investigation into the ability of young audiences to determine fake news. To do so, focus-group interviews are going to be conducted with students of Journalism and other Social Sciences in various universities in Cyprus and Greece, so as to specify whether these findings can be attributed to factors relating to social characteristics and/or educational factors.

6 References

- Allcott, H. & Gentzkow, M. (2017), ‘Social Media and Fake News in the 2016 Elections’. Working Paper 23089, Cambridge, MA: National Bureau of Economic Research. Accessed at: <http://www.nber.org/papers/w23089>
- Barbour, R. (2008), *Doing focus groups*. LA: Sage
- Bounegru, L., Gray, J., Venturini, T., & Mauri, M. (2017), *A Field Guide to Fake News: A Collection of Recipes for Those Who Love to Cook with Digital Methods*. Amsterdam: Public Data Lab.
- Castillo, C., Mendoza, M. & Poblete, B. (2013), ‘Predicting Information Credibility in Time-Sensitive Social Media’, *Internet Research* 23(5): 560-588. Doi:10.1108/IntR-05-2012-0095.
- Combi, C. (2015), *Generation Z: Their Voices, Their Lives*. NY: Random House.
- Dimock, M. (2018), ‘Defining generations: Where Millennials end and post-Millennials begin’, Pew Research Center. Accessed at: <http://www.pewresearch.org/fact-tank/2018/03/01/defining-generations-where-millennials-end-and-post-millennials-begin/>
- Edmunds, J. & Turner, B.S. (2005), ‘Global generations: social change in the twentieth century’,

The British journal of sociology 56(4): 559-577.

- Fallis, D. (2009), 'A Conceptual Analysis of Disinformation'. Paper presented at the iConference 2009, February 9-11, University of North Carolina at Chapel Hill.
- Fetzer, J. (2004), 'Disinformation: The use of False Information', *Minds and Machines* 14(2): 231-240. Doi:10.1023/B:MIND.0000021683.28604.5b
- Ireton, Ch. & Posetti, J. (2018), *Journalism, Fake News and Disinformation: Handbook for Journalism Education and Training*. Paris: UNESCO Publications.
- Jenkins, H., Purushotma, R., Weigel, M., Clinton, K. & Robison, A.J. (2009), *Confronting the challenges of participatory culture: Media education for the 21st century*. Massachusetts: MIT Press.
- Kim, J., Tabibian, B., Oh, A., Scholkopf, B., & Gomez-Rodriguez, M. (2018), 'Leveraging the Crowd to Detect and Reduce the Spread of Fake News and Misinformation', *WSDM '18: Proceedings of the Eleventh ACM International Conference on Web Search and Data Mining* 324-332. Doi: 10.1145/3159652.3159734.
- Krueger, R. A. (1988), *Focus groups: A practical guide for applied research*. California: Sage
- Liamputtong, P. (2011), *Focus group methodology: Principles and practice*. Thousand Oaks, CA: Sage.
- MacManus, S. (2018), *Young v. old: Generational combat in the 21st century*. London: Routledge.
- Maniou, Th. & Veglis, A. (2016), 'Selfie Journalism': Current Practices in Digital Media, *Studies in Media and Communication* 4(1): 111-118. Doi: 10.11114/smc.v4i1.1637.
- Maniou, Th. (2013), *Television, Society and Political News: A Theoretical and Empirical Analysis in the Cypriot Public Sphere*. Thessaloniki: Epikentro (in Greek).
- O' Klein, D. & Wueller, J. (2017), 'Fake News: A Legal Perspective', *Journal of Internet Law* 20(10): 6-13.
- Photiou, I., Maniou, Th., Eteokleous, N. & Ketteni, E. (2017), 'Infotainment Journalism in times of crisis: A case-study in the Greek-Cypriot Press', *Journal of Media Critiques* 3 (12):155-165. Doi: 10.17349/jmc117409.
- Prensky, M. (2001), 'Digital natives, digital immigrants part 1', *On the horizon* 9(5): 1-6. Accessed at: <https://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>.
- Podara, A., Maniou, Th. & Kalliris, G. (2018), 'New forms of television consumption practices: Web documentary as a tool for interactivity'. In Vamvakas, V. & Paschalidis, Gr. (Eds), *50 years of Greek Television*. Thessaloniki: Epikentro, pp.531-550 (in Greek).
- Rabiee, F. (2004), *The emerging online life of the digital native: What they do differently because of technology and how they do it*. Accessed at: www.marcprensky.com.
- Shu, K., Sliva, A., Wang, S., Tang, J. & Liou, H. (2017), 'Fake news detection on social media: A data mining perspective', *ACM SIGKDD Explorations Newsletter* 19(1): 22-36. Doi: 10.1145/3137597.3137600.
- Tapscott, D. (2009), *Grown up digital: How the net generation is changing your world*. New York: McGraw-Hill.
- Westlund, O. & Lennart Weibull, L. (2013), 'Generation, life course and news media use in Sweden 1986–2011', *Northern Lights: Film & Media Studies Yearbook* 11(1): 147-173. Doi: 10.1386/nl.11.1.147_1.