Written evidence submitted by the Open University

DCMS Select Committee Inquiry on the Impact of COVID-19 on DCMS sectors

June 2020

Executive Summary

1. The Open University (OU) welcomes the Committee's call for evidence on the impact of COVID-19 on DCMS sectors. This written submission constitutes focuses on the impact of COVID-19 on the spread of misinformation, which has been a key focus of DCMS work in recent years, and negatively impacts on media industries. .
2. Thousands of fabricated, misleading, and manipulated news about COVID-19 continue to spread online at unprecedented scale and diversity, thus increasing risk and harm to the public, and reducing their trust and compliance with official pandemic response policies. Yet there is insufficient understanding of the factors (e.g., health, economic, social, technical) that influence people's endorsement of misinformation, and a lack of methods for measuring and mitigating the impact of the infodemic more efficiently and effectively.
3. Based on the evidence from the OU's research on misinformation, the following policy recommendations are made:
    - **Investigate the impact of COVID-19 misinformation** on people's behaviour and response to the pandemic;
    - **Study vulnerability to misinformation** and the social, demographic, economic, and health factors that influence it;
    - **Invest in the development of tools and campaigns to raise people's awareness** to their consumption of, and exposure to, COVID-19 misinformation;
    - **Review the publishing of unreliable and manipulated information** by traditional media and public figures and its impact on the propagation of misinformation online and offline;
    - **Investigate the impact of fact-checking** practices and strategies on halting the spread of COVID-19 misinformation;
    - **Support the research and development of mechanisms to leverage the outcomes of legitimate fact checkers** to curb the spread of misinformation on social media platforms.
4. The author of this submission, Harith Alani,[1] is Professor of Web Science at the Knowledge Media institute, The Open University, where he leads the multidisciplinary Social Data Science group. His current research is focused on studying the socio-technical dynamics of misinformation on digital media. He is currently the OU Principal Investigator on two international projects related to misinformation, funded by the European Commission; HERoS;[2] a €2.8M project to study the social and economic impact of COVID-19 infodemic, and Co-Inform;[3] a €4M project to research and co-create tools for tackling online misinformation.

Response by Social Media Platforms

[1] Professor Harith Alani, http://stem.open.ac.uk/people/ha2294
[2] H2020 HERoS project https://www.heros-project.eu/
[3] H2020 Co-Inform project https://coinform.eu/

5. Social media has no doubt created a haven for the rapid spread of misinformation. Multiple mechanisms are required to reduce this highly damaging phenomenon, all of which require much further research and development. This includes AI tools to:

    - Detect and remove or demote misinforming content;
    - Match and promote content from fact-checkers when and where relevant;
    - Raise the awareness of individual users to their own interactions and exposure to misinformation in their own social networks;[4]
    - Provide users with embedded tools to quickly, easily, and reliably verify information, to detect, correct, and perhaps block social media group pages that spread harmful misinformation;
    - Discourage users from uploading and/or sharing misinforming content.

6. A few social media platforms recently deployed AI algorithms to label known COVID-19 misinformation to alert users to such content. However, the **coverage and accuracy of the algorithms** remain unclear. The data used to train these algorithms are not shared, thus disallowing external researchers from testing and improving on these algorithms.

7. Impact of automated misinformation labelling mechanisms on users' endorsement and sharing of misinformation is yet to be determined. There is some evidence to suggest that such an approach increases users' trust in **unlabelled content**, [5] which is an unintended consequence that needs to be investigated and mitigated, especially in light of known limitations and **potential algorithmic biases**.

Impact of Fact-Checking

8. In our study of the spread of COVID-19 misinformation and associated fact-checks, we found evidence that the **publication of fact-checks has a positive impact** in reducing the spread of misinformation on Twitter. However, its efficacy is reduced due to the general amount of online misinformation and the short-term spread of fact-checking information compared to misinformation.[6] Further studies are necessary to establish the best **mechanisms for increasing the circulation and impact of fact-checks**, and the various factors that influence their performance in halting the spread of misinformation.

9. Using registered fact checkers' expertise, opinion, and verification outcomes is certainly beneficial to acquire appropriate and trusted assessments of information. However, there are a number of related challenges that hinder the use of such output for reducing misinformation on social media, such as:

    - Lack of efficient and effective mechanisms that bridge between the verification results of fact checkers, and the spread and consumption of related misinformation on social media platforms;
    - In spite of much academic literature in the field, it remains unclear which scalable and computational intervention techniques should be used, under what conditions, and for which category and profile of users, to reduce their exposure and interaction with misinformation;
    - There is evidence that the assessments provided by multiple organisations to the same content or information source can sometimes be inconsistent;[7]

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[4] Mensio, Martino and Alani, Harith (2019). MisinfoMe: Who's Interacting with Misinformation? In: 18th International Semantic Web Conference (ISWC 2019), Auckland, New Zeeland. http://oro.open.ac.uk/66341/

[5] Pennycook, Gordon & Bear, Adam & Collins, Evan. (2019). The Implied Truth Effect: Attaching Warnings to a Subset of Fake News Headlines Increases Perceived Accuracy of Headlines Without Warnings. Management Science. 10.1287/mnsc.2019.3478

[6] Burel, G., Farrell, T., Khare, P., Mension, M., Alani, H. Co-Spread of Misinformation and Fact-Checking Content during the Covid-19 Pandemic, Submitted to Int. Social Informatics Conf. (SocInfo), Italy, 2020

- The verification labels used by fact checkers vary significantly, thus comparing or merging their assessment results is challenging.

10. Support is needed for interdisciplinary research to assess the performance of current official fact-checks in halting the spread and acceptance of COVID-19 misinformation, and to establish more efficient and effective procedures and tools to boost this performance. **Understanding the conditions under which such initiatives succeed, or fail is important for the production of more effective guidelines and practices**.

Impact of influencers and traditional media

11. Currently, the pressure to remove misinformation is unequally applied to some technology companies and not to others. Furthermore, while the pressure is increasing on social media companies, there does not seem to be any similar pressures applied to traditional media. It is well known that some traditional media regularly misrepresent information, wrap facts with many layers of subjective or unverifiable information, or use carefully structured narratives to reinforce certain biased views. It is therefore unclear how impactful the regulation of social media would be when **other media can publish misrepresented information unchallenged**. There is a need to encourage more research on understanding and measuring this impact and on tracking where misinformation originates and how it propagates across various media platforms.
12. There is evidence that some **influencers** (e.g., celebrities, politicians) in the UK participate in the spread of misinformation on social media, sometimes quoting highly unreliable and biased sources. The impact of this behaviour is expected to be very high due to the large audiences of these influencers, yet we lack the studies, tools and policies to track such high-risk actions.

Infodemic-Countering Strategies

13. For health systems and governments to more effectively and efficiently prepare for, respond to, and mitigate, COVID-19 and other future health infodemics, it is vital to understand the **transmission dynamics** of misinformation; and to measure and compare the spread and endorsement of the infodemic. It is essential to understand how **misinformation about various aspects of the pandemic** (origin, prevention, cure, response, etc.) is impacting response and resilience to the pandemic in different sectors of our society, and to assess the socio-demographic dynamics and actual **social, behavioural, and economic impacts** of the infodemic on citizens, communities, and societies, as well as on health systems and response strategies and practices. Lessons learnt, impact measurements, and influencing factors and their interconnectedness need to be captured and closely analysed to produce new evidence-based policies and guidelines for tackling infodemics at the national and global level.

About The Open University

14. The OU's mission is to be *Open to people, places, methods and ideas*. For most of our undergraduate qualifications there are no academic entry requirements. We believe students should have the opportunity to succeed irrespective of their previous experiences of education.

[7] Mensio, Martino and Alani, Harith (2019). News Source Credibility in the Eyes of Different Assessors. Conference for Truth and Trust Online (TTO), London, UK. http://oro.open.ac.uk/62771/

15. The OU operates across all four nations of the UK and has 175,000 students. We teach four in ten part-time UK undergraduates (41%).
16. The OU is a world leader in distance learning. Our undergraduates do not attend a campus; they live in their own homes throughout the UK. One in five of our first-year undergraduates study at full-time intensity, a proportion that has almost doubled since 2012/13.
17. In this year's National Student Survey, overall satisfaction with the OU remains at 87%, keeping the OU in the top 20 of UK universities. The OU continues to rank first for assessment and feedback.
18. There is no typical OU student. People of all ages and backgrounds study with us and for many reasons – to update their skills, get a qualification, boost their career, change direction, prove themselves or keep mentally active.

    - 76% of our directly-registered students work full or part-time
    - 23% of our undergraduates live in the 25% most deprived areas
    - 24,709 students with disabilities studied with us in 2017/18
    - 33% of our students begin their studies with 1 A Level or less.