

Jan 7, 2021

A new modifier increases the efficiency of perovskite solar cells

Feb 9, 2021

Scientists establish first

The team observed that news reports correcting science and health-related COVID-19 misinformation were dominant at the start of the outbreak due to the uncertainty surrounding the nature of the coronavirus, but then tapered off over the course of the pandemic's first four months.

Meanwhile, false information about government policies and measures implemented during the outbreak became increasingly reported on and subsequently corrected, found the communication researchers from NTU's Wee Kim Wee School of Communication and Information (NTU WKWSCI).

The type of misinformation that was corrected in mainstream media also evolved over the course of the four months, changing from fabricated misinformation – defined as made-up, completely false claims – to reconfigured misinformation, defined as a mix of authentic and fabricated information.

An example of fabricated content corrected by mainstream media includes false claims alleging that an MRT station was closed for disinfection due to COVID-19 when it was operational. An example of reconfigured misinformation rectified by mainstream media includes a WhatsApp post about a food delivery rider being fined \$300 for wearing a cloth mask when the rider was, in fact, approaching the police officer for assistance.

The study findings highlight how public health crises like the ongoing COVID-19 pandemic can be the perfect breeding ground for misinformation, as well as the potential for mainstream media to play an important role in debunking myths as part of the nation's wider pandemic efforts.

lethal mouse model for COVID-19

Aug 27, 2020

NEXT

Professor May Oo Lwin, Chair of the Wee Kim Wee School of Communication and Information and lead author of the study, said: "At the beginning of the pandemic we were seeing misinformation that is clearly fake based on clear visual and text cues, but as the pandemic evolved with latter phases and infodemic waves, the misinformation styles and presentation became more sophisticated and harder for the lay audience to discern."

"This is where the mainstream news media, with their social importance, wide reach, and role as a credible information source to the public during times of uncertainty, can play a crucial role in the timely dissemination of misinformation correction and prevent people from being hoodwinked and acting on potentially harmful misinformation. It is important to combat the propagation of misinformation, which can undermine key public health communication efforts and worsen the strain on public health systems."

The study was published in the scientific journal Health Communication in June.

Evolving misinformation

From more than 2,000 news articles on COVID-19 identified from a database through keywords related to the coronavirus and misinformation, the NTU team selected 164 unique Singapore-specific articles for analysis based on criteria such as articles with keywords mentioned in the headline and lead.

In these 164 articles, the team found 100 unique misinformation claims that were corrected 305 times. Of these 100 unique claims, 59% of the misinformation claims reported by the mainstream news media were based on fabricated information, while the remaining 41% were reconfigured misinformation.

To study how the mainstream newspaper's coverage and correction of COVID-19 misinformation varied across the pandemic timeline in Singapore, the researchers divided their study into different stages:

- pre-outbreak stage (1 Jan to 22 Jan);
- initial outbreak stage, between the first COVID-19 case and right before the Disease Outbreak Response System Condition (Dorscon) level was raised to orange (23 Jan to 6 Feb);
- first wave of the outbreak, (7 Feb to 4 Apr); and
- second wave of the outbreak (5 Apr to 30 Apr).

In the pre-outbreak stage, fabricated misinformation accounted for 87% of the corrections published in mainstream media. However, by the second wave of the outbreak, the proportion of rectified fabricated misinformation published in

mainstream media had dipped to 48%.

More than half (55%) of the misinformation that was corrected in the preoutbreak stage was about science and health, but this figure gradually dipped to just 8% by the second wave of the outbreak. Meanwhile, the proportion of misinformation related to government policy and measures that was corrected jumped from 11% at the start to 42% during the second wave.

The researchers also found that misinformation on government policy and measures (68%), as well as science and health (66%) found on social media was more likely to be fabricated. Misinformation related to scams was more likely to be reconfigured, that is, a mix of authentic and fabricated information (88%).

Associate Professor Edson Tandoc Jr. of the Wee Kim Wee School of Communication and Information and co-author of the paper said: "As the news media fact-checks what goes viral, the fact-checks also reflect the trend in misinformation swirling around. We see that the types of misinformation that spread are affected by the actual situation, and to some extent this is what makes them go viral, because they seem to be timely and relevant to what's going on.

"In the earlier stages of the pandemic, most misinformation centred on what's happening outside Singapore as well as on the origin of and remedies for COVID-19; when it hit Singapore and measures were being put in place, the misinformation messages switched to being about social distancing ambassadors fining violators or drivers being fined for wearing cloth masks."

Trust in Singapore media improved amid pandemic

The importance of the media in fighting misinformation during a health crisis was

reiterated in a separate survey of over 2,000 Singaporeans commissioned by the Reuters Institute for the Study of Journalism (RISJ) at Oxford University, which found that trust in media has increased amid lingering concerns over misinformation during the pandemic.

The survey, done in collaboration with researchers at the Centre for Information Integrity and the Internet (IN-cube) at NTU WKWSCI was part of the recently published global Reuters Institute Digital News Report 2021, and found that 50% said they could trust most of the news content that they consume, up from 42% during the same period last year, before the COVID-19 pandemic hit Singapore.

This increased trust in the news exists alongside lingering concern over false information online. Close to two-thirds of those polled (64.8%) remained concerned about false information online, a marginal dip from last year (65.8%).

Assoc Proc Tandoc, who is also director at NTU's IN-cube, said: "These findings in Singapore, which found that interest in news, even from traditional news outlets, increased during the COVID-19 pandemic, are consistent with those from many countries around the world. The increased interest in news during the pandemic may explain the increase in the level of trust in news media as the public relied on the news to keep track of the outbreak."

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Note to Editors:

Paper titled 'Mainstream News Media's Role in Public Health Communication During Crises: Assessment of Coverage and Correction of COVID-19 Misinformation' published online in *Health Communication* on 23 Jun

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About Nanyang Technological University, Singapore

A research-intensive public university, Nanyang Technological University,

Singapore (NTU Singapore) has 33,000 undergraduate and postgraduate students in the Engineering, Business, Science, Humanities, Arts, & Social Sciences, and Graduate colleges. It also has a medical school, the Lee Kong Chian School of Medicine, established jointly with Imperial College London.

NTU is also home to world-class autonomous institutes – the National Institute of Education, S Rajaratnam School of International Studies, Earth Observatory of Singapore, and Singapore Centre for Environmental Life Sciences Engineering – and various leading research centres such as the Nanyang Environment & Water Research Institute (NEWRI) and Energy Research Institute @ NTU (ERI@N).

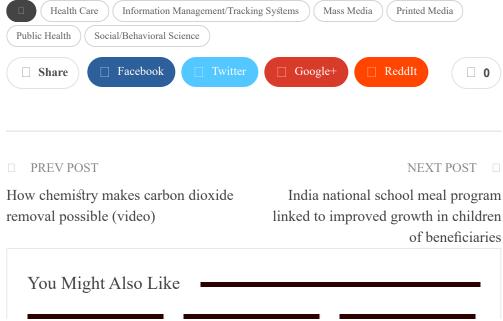
Ranked amongst the world's top universities by QS, NTU has also been named the world's top young university for the past seven years. The University's main campus is frequently listed among the Top 15 most beautiful university campuses in the world and has 57 Green Mark-certified (equivalent to LEED-certified) buildings, of which 95% are certified Green Mark Platinum. Apart from its main campus, NTU also has a campus in Novena, Singapore's healthcare district.

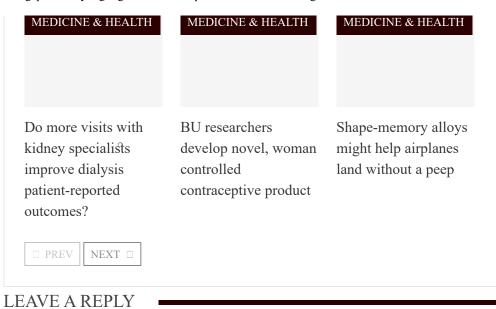
Under the NTU Smart Campus vision, the University harnesses the power of digital technology and tech-enabled solutions to support better learning and living experiences, the discovery of new knowledge, and the sustainability of resources.

For more information, visit http://www.ntu.edu.sg.

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