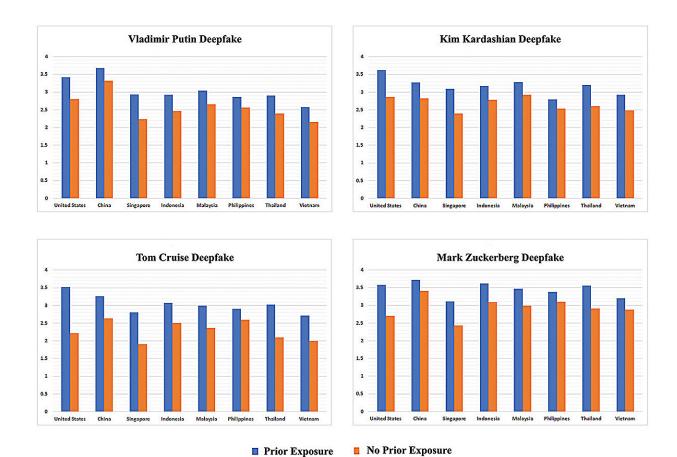


Repeated exposure to deepfakes makes you more likely to believe their claims, international study finds

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Perceived accuracy means (prior exposure vs no prior exposure) for four deepfakes across eight countries. Credit: *Journal of Broadcasting & Electronic Media* (2024). DOI: 10.1080/08838151.2024.2410783



According to a false video generated using artificial intelligence (AI) that went viral on social media, American media personality Kim Kardashian manipulates people online for money, and you are more likely to believe this if you come across the same video again online, according to a multi-country study by Nanyang Technological University, Singapore (NTU Singapore) published in the *Journal of Broadcasting & Electronic Media*.

Through an international study of 8,070 study participants, the NTU Singapore team found that those who had seen this viral deepfake of Kim Kardashian on social media prior to the study were more likely to believe the claim made in the video when exposed to it again.

The same effect was replicated when the study participants from Singapore, China, Indonesia, Malaysia, the Philippines, Thailand, the United States, and Vietnam were shown viral deepfakes of three other well-known figures as part of the study: Facebook founder Mark Zuckerberg, Russian president Vladimir Putin, and actor Tom Cruise.

The scientists suggest that this is due to the illusory truth effect, a <u>psychological phenomenon</u> in which people are more likely to believe information is true simply because they have encountered it multiple times, regardless of its accuracy. Repetition increases familiarity with the information, which in turn makes it easier for the brain to process.

This effect is amplified in study participants who rely primarily on social media platforms for news rather than direct news sources (e.g., websites, TV, newspapers) and thus are more likely to encounter deepfakes, increasing their risk of accepting the false claims as true. Contrary to existing research, the scientists found that having a higher cognitive ability did not defend these participants against the amplified illusory truth effect.



NTU Wee Kim Wee School of Communication and Information's (WKWSCI) Assistant Professor Saifuddin Ahmed, who led the study, said, "Our study shows that across participants from different sociopolitical contexts, repeated exposure to the same <u>deepfake</u> makes them more likely to believe it, suggesting that the illusory truth effect persists regardless of their cultural and political background.

"As deepfakes become increasingly common, there is a pressing need for governments, <u>tech companies</u>, and media outlets to collaborate on solutions that mitigate their impact."

He added, "Given that mere exposure to deepfakes could reinforce false beliefs, policymakers could consider psychological mechanisms (such as the illusory truth effect) when developing educational campaigns focused on debunking deepfakes. Policymakers could also make use of the same psychological mechanism to disseminate important and truthful information, such as during a health crisis, to subconsciously encourage certain behaviors in the public."

More information: Saifuddin Ahmed et al, Social Media News Use Amplifies the Illusory Truth Effects of Viral Deepfakes: A Cross-National Study of Eight Countries, *Journal of Broadcasting & Electronic Media* (2024). DOI: 10.1080/08838151.2024.2410783

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