ACICE
ADMM Cybersecurity and
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UPDATE ON
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Use of "Pre-bunking" in Reducing Public's Susceptibility to Disinformation

INTRODUCTION

1.   The rise of disinformation on social media has become a monumental stress test for the online audience when distinguishing between facts, or manipulated "mis-truths". As the spread of disinformation increases, there is a growing body of research studying the effectiveness of different techniques in tackling disinformation. Among the various techniques, "pre-bunking" has shown promising results in reducing the public's susceptibilities to disinformation.

2.   Pre-bunking is defined as the process of debunking lies, tactics or sources before they emerge. Based on inoculation theory[1], pre-bunking interventions are used to inoculate netizens from the deceptive techniques used by malicious actors to mislead people. According to *Gizmodo*, pre-bunking interventions are meant to pre-emptively expose online users to manipulated content and show how the content is manipulated. This approach will help users to be self-aware and take steps to discern information received.

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[1] Inoculation theory is the notion that one can forge psychological resistance against manipulation attempts.

Implementing Pre-bunking Interventions

3.   Given the rise in disinformation around the world, researchers are conducting trials, such as educating the public on various manipulation techniques used by malicious actors. As *The Shift News* reported, a recent social media experiment by a team of psychologists from the University of Cambridge and Bristol, as well as the Jigsaw team[2] from Google, showed promising results in the fight against disinformation through pre-bunking. In Aug 2022, the researchers uploaded three 90-second cartoon advertisement clips[3] on YouTube, designed to familiarise users with manipulation techniques such as scapegoating and deliberate incoherence. The clips (see Figure 1 for the snapshots taken from the three different clips) featured characters from popular TV/movie series such as "The Simpsons", "Star Wars", "South Park" and "Family Guy".

Figure 1: Snapshots from Cartoon Advertisement Clips

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[2] Jigsaw is a unit within Google that explores threats to open societies, and builds technology that inspires scalable solution.

[3] The clip was run as a YouTube ad, which is commonly played before/during a video.

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4.   Of note, these pre-bunking clips do not target any specific claims, and neither do they make assertions about what is true or not. Instead, these videos utilise cartoons to engage and show viewers how false claims work by focusing on the characteristics of disinformation. It was later found that a single video ad had boosted the recognition of manipulation technique by 5% on average.

5.   Other social media platforms such as Twitter have also begun experimenting with the idea of pre-bunking. According to *CNA*, Twitter will double its efforts in combatting misinformation by including information prompts on user timelines to pre-bunk falsehoods before they spread further online. Twitter will also revive features on its platform to clamp down on false and misleading posts about the US elections ahead of the mid-terms in November.

6.   Other than tech companies, researchers have developed games that aim to inoculate people against fake news. *Niemanlab* reported that researchers have recently developed a game called Harmony Square, where users get to play the role of a fake-news mastermind. Through the game, users learn to recognise the different fake news techniques, and understand how one could sow discord within the fictional town of Harmony Square by spreading disinformation. 14,000 participants who had played the game were surveyed and they reportedly improved their ability to spot falsehoods and rate the reliability of fake tweets and news reports by about 20%.

7.   Pre-bunking clips and role-playing games are not designed to replace content moderation programmes that tech companies around the world have set up to detect and take down posts that violate their rules. Researchers have also acknowledged the uncertainties regarding the period of "inoculation effect" and as promising as the studies are, the pre-bunking campaigns might have limited effect in stemming the tide of disinformation from prominent sources like far-right influencers. After all, it would be challenging to go after every viral piece of disinformation.

ASSESSMENT

8.   Despite the challenges and uncertainties of the inoculation effect in combatting disinformation, interest in pre-bunking disinformation has continued to percolate in the past few years. Researchers involved in the study remain optimistic about the utility of pre-bunking efforts – even if they may not fully resolve the problem of disinformation. With more people being educated on the different types of manipulative tactics, it can reduce one's susceptibility to disinformation in the long run.

9.   According to *the Conversation,* governments that tell the public what to believe or disbelieve may trigger an adverse reaction from them. The public might feel that their autonomy has been violated and therefore reject the information provided by the authorities, especially if it contradicted their personal beliefs. Instead, it may be more effective to educate the public on different manipulative tactics so that they could better identify misinformation in the future. Such pre-bunking efforts empower people to make their own decisions on what to believe based on what they have understood on the different deceptive techniques.

10.   In conclusion, pre-bunking can complement governments' efforts to combat disinformation. According to *The Age*, countries like Poland have adopted pre-bunking campaigns in an attempt to pre-bunk misinformation or false claims on topics such as Russia-Ukraine war. Researchers have also encouraged governments around the world to utilise "pre-bunking" measures as one of the interventions to tackle the rise of misinformation.

CONTACT DETAILS

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