

The Impact of Misinformation on Social Media: A Quantitative Analysis among Malaysian Youth

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Abstract

Abstract Social media platforms serve as hubs of communication and information, yet they also facilitate the rapid spread of misinformation. This study explores how misinformation impacts young adults aged 18 to 30, focusing on three primary variables: social media usage, trust in social media sources, and critical thinking skills. Utilizing the Uses and Gratifications Theory (UGT), the study employs a quantitative approach, surveying 400 respondents from Bandar Sri Permaisuri, Malaysia. The findings demonstrate strong correlations between the independent variables and susceptibility to misinformation, contributing significantly to the body of communication and media literacy research. This paper further discusses potential educational and technological strategies to mitigate the spread of misinformation and emphasizes the importance of digital literacy among young Malaysians.

Keywords

Misinformation, Social Media, Critical Thinking, Trust, Uses and Gratifications Theory, Youth

1. Introduction

The digital age has significantly altered the way individuals communicate and consume information. Social media, while enhancing connectivity and access to information, also facilitates the rapid dissemination of falsehoods (Tasnim & Mahbub, 2020). Misinformation—defined as false or misleading information regardless of intent—can influence public opinion, provoke fear, and even compromise health decisions. This issue is especially prevalent among young adults, who often use platforms like Facebook, Twitter, Instagram, and TikTok as their primary sources for news and current events (Sadiq & Matthew, 2022).

Young adults aged 18 to 30 are among the most frequent users of digital content. Their high levels of engagement with digital platforms make them susceptible to information that is not always critically evaluated. Many of these users may lack the necessary media literacy skills to discern fact from fiction or evaluate the reliability of online content. This lack of digital discernment can result in the amplification of false narratives that spread rapidly across social networks. Therefore, this study seeks to explore the extent to which misinformation affects young adults' trust in online content and their critical thinking abilities, particularly in an increasingly polarized and digitized society.

2. Literature Review

The proliferation of misinformation has emerged as a major concern for digital media scholars. Research by Pennycook et al. (2020) and Lewandowsky et al. (2021) highlights how emotionally charged and sensationalist content often evades users' critical scrutiny. This is especially true when content confirms existing biases, making it more likely to be believed and shared. Social media algorithms that prioritize engagement further complicate this issue by promoting content that may be popular but not necessarily accurate. These algorithms can lead to echo chambers and filter bubbles that reinforce users' preconceptions, reducing their exposure to diverse perspectives (Pariser, 2011). In such environments, the critical thinking necessary to evaluate online content becomes even more essential.

Uses and Gratifications Theory (UGT) offers a lens through which users' motivations and behaviors concerning media consumption can be analyzed (Katz, Blumler, & Gurevitch, 1973). According to UGT, people actively choose media sources to satisfy specific needs such as information seeking, entertainment, and social interaction. However, the need for immediate information can sometimes override the need for accuracy, leading users to accept and share content without verification.

Studies indicate that increased social media use correlates with a higher probability of encountering misinformation (Vosoughi et al., 2020). The rapid dissemination of false information, especially during crises such as the COVID-19 pandemic, demonstrates the urgency of improving media literacy. During such times, the demand for information is high, but the ability to critically evaluate sources may be compromised due to emotional stress and urgency.

3. Theoretical Framework

The study is grounded in Uses and Gratifications Theory, which posits that individuals actively seek media that satisfy specific needs. This theory provides a comprehensive framework for understanding how users interact with digital platforms. It posits that gratification is a driving factor in media usage, which influences the types of content users consume and share.

UGT helps explain why young people may engage with, and potentially propagate, misinformation. For instance, a user might share a post not because it is true, but because it satisfies a need for social approval or aligns with their identity. This concept is crucial in understanding how false information spreads and how user behavior is influenced by psychological and social gratifications.

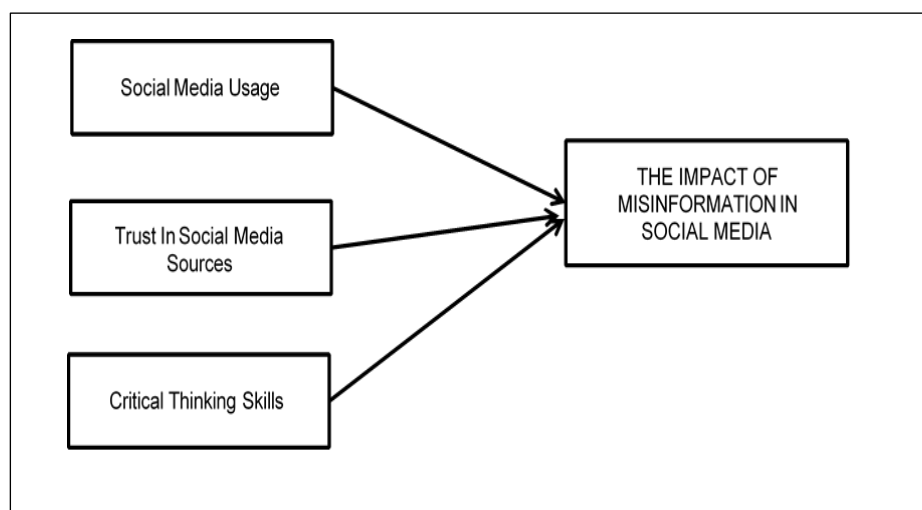


Fig. 1: Research framework

4. Methodology

A quantitative design using survey methodology was employed. A structured questionnaire was distributed to a sample of 400 respondents aged 18–30 residing in Bandar Sri Permaisuri, Kuala Lumpur, Malaysia. The sampling method used was probability sampling to ensure that the results would be representative of the general population of young adults in the area.

The questionnaire, administered via Google Forms, consisted of items designed to measure levels of social media usage, trust in social media sources, critical thinking skills, and perceived impact of misinformation. A 5-point Likert scale was used to collect data. Responses were analyzed using SPSS software, which included both descriptive and inferential statistical techniques.

The reliability of the constructs was tested using Cronbach's Alpha. Social media usage ($\alpha = .912$), trust in social media sources ($\alpha = .910$), critical thinking skills ($\alpha = .909$), and impact of misinformation ($\alpha = .903$) demonstrated strong internal consistency. Validity checks were performed through a pre-test involving 100 respondents from a demographically similar area.

Table 1: Cronbach's Alpha analysis

Variable	α
Social media usage	.912
Trust in social media source	.910
Critical thinking skills	.909
Impact of misinformation	.903

5. Result and Discussion

Findings revealed significant correlations between each of the independent variables and the dependent variable, i.e., the impact of misinformation. Increased frequency of social media use was associated with a higher susceptibility to misinformation, particularly when users relied on unverified sources. Respondents who reported greater trust in social media sources were also more likely to accept and share false information, suggesting that trust without verification can be a risk factor.

Conversely, higher critical thinking skills were associated with a reduced likelihood of believing and sharing false content. Respondents who scored higher on items assessing evidence-based reasoning, information evaluation, and source credibility tended to question the validity of content before engaging with it. These findings support the hypothesis that critical thinking acts as a buffer against misinformation.

The study supports previous research indicating that emotional appeal and cognitive bias play crucial roles in the acceptance and spread of misinformation (Guess et al., 2020; Swire-Thompson et al., 2021). Digital platforms often amplify content based on engagement rather than accuracy, increasing exposure to misleading information.

The findings underscore the urgent need for targeted media literacy programs. Educational institutions should incorporate critical thinking and digital literacy training into their curricula to equip young people with the skills needed to navigate complex online environments. Moreover, social media companies should adopt more robust fact-checking mechanisms and prompt users to verify content before sharing it.

This study also highlights the relevance of UGT in explaining user behavior. By understanding that users turn to social media to fulfill psychological and social needs, we can better design interventions that align with these motivations while promoting content accuracy.

6. Conclusion

This study underscores the importance of digital literacy in mitigating misinformation among youth. By examining the roles of social media usage, trust in sources, and critical thinking, the research offers insights into potential interventions aimed at reducing misinformation's impact. Social media platforms, educators, and policymakers must work collaboratively to foster a more informed and resilient digital citizenry. Future research should explore longitudinal effects of misinformation exposure and investigate the role of cultural factors in shaping digital behaviour.

References

- [1] Allcott, H., & Gentzkow, M. (2021). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211-236.
- [2] Guess, A., Nyhan, B., & Reifler, J. (2020). Exposure to untrustworthy websites in the 2016 US election. *Nature Human Behaviour*, 4(5), 472-480.
- [3] Katz, E., Blumler, J. G., & Gurevitch, M. (1973). Uses and Gratifications Research. *The Public Opinion Quarterly*, 37(4), 509-523.
- [4] Lewandowsky, S., Cook, J., & Ecker, U. K. H. (2021). Misinformation and its correction: Continued influence and successful debiasing. *Psychological Science in the Public Interest*, 13(3), 106-131.
- [5] Pariser, E. (2011). *The filter bubble: What the Internet is hiding from you*. Penguin Press.
- [6] Pennycook, G., & Rand, D. G. (2021). The Implied Truth Effect: Attaching Warnings to a Subset of Fake News Stories Increases Perceived Accuracy of Stories Without Warnings. *Management Science*, 66(11), 4944-4957.
- [7] Sadiq, M., & Matthew, L. (2022). Young Adults and Misinformation: The Digital Age Dilemma. *International Journal of Communication*, 16(1), 88-105.
- [8] Swire-Thompson, B., DeGutis, J., & Lazer, D. (2021). Searching for the Backfire Effect: Measurement and design considerations. *Journal of Applied Research in Memory and Cognition*, 6(3), 286-294.
- [9] Tasnim, S., & Mahbub, A. (2020). Misinformation and the COVID-19 pandemic: A review. *Journal of Preventive Medicine and Public Health*, 53(3), 171-174.
- [10] Vosoughi, S., Roy, D., & Aral, S. (2020). The spread of true and false news online. *Science*, 359(6380), 1146-1151.