Papers related to misinformation from
[David Rand](#) and [Gordon Pennycook](#)'s research team

Key papers
- ➜ The Psychology of Fake News [TiCS 2021] [X thread] [15 minute video summary]
- ➜ Durably reducing conspiracy beliefs through dialogues with AI [Science 2024] [NYTimes write up] [X thread] [BlueSky thread] [9min presentation] [45min presentation] [Experimental materials] [Browse the conversations] [Try the bot yourself!]
- ➜ Shifting attention to accuracy can reduce misinformation online [Nature 2021] [X thread]
- ➜ Understanding and Combatting Online Misinformation Across 16 Countries on Six Continents [Nature Human Behaviour 2023] [X thread] [30 minute video presentation]
- ➜ Quantifying the Impact of Misinformation and Vaccine-Skeptical Content on Facebook [Science 2024] [X thread] [Scientific American op ed]
- ➜ Differences in misinformation sharing can lead to politically asymmetric sanctions [Nature 2024] [BlueSky thread] [X thread]

Hyperlinked Table of Contents:

Overview of our methodological approach
➔ A practical guide to doing behavioural research on fake news and misinformation Collabra: Psychology 2021 [X thread]
➔ *REVIEW:* Field experiments on social media Current Directions in Psychological Science 2021 [X thread]
➔ High level of concordance across different news domain quality ratings PNAS Nexus 2023 [X thread]
➔ How to think about whether misinformation interventions work Nature Human Behaviour 2023 [X thread]

Evaluating interventions to fight misinformation

Popular overview:
The Right Way to Fight Fake News NYTimes 2020 [X thread]

Human-AI dialogues
➔ Durably reducing conspiracy beliefs through dialogues with AI Science 2024 [NYTimes write up] [X thread] [BlueSky thread] [9min presentation] [45min presentation] [Experimental materials] [Browse the conversations] [Try the bot yourself!]
➔ Just the facts: How dialogues with AI reduce conspiracy beliefs Working paper [BlueSky thread] [X thread]
➔ The Levers of Political Persuasion with Conversational AI Working paper [BlueSky thread] [X threat]
➔ AI reduces conspiracy beliefs even when presented as a human expert Working paper [BlueSky thread]
➔ Reducing belief in conspiracy theories as they unfold using large language models Working paper [BlueSky thread] [X thread]
➔ Addressing climate change skepticism and inaction using human-AI dialogues Working paper [BlueSky thread] [Try the bot yourself] [Browse the conversations]
➔ Personalized Dialogues with AI Effectively Address Parents' Concerns about HPV Vaccination Working paper [BlueSky thread] [Twitter thread] [Try the bot yourself]
➔ Deep canvassing using AI Working paper [BlueSky thread] [Browse the conversations]
➔ It's the Thought that Counts: Evaluating the Attempts of Frontier LLMs to Persuade on Harmful Topics Working paper
➔ How Malicious AI Swarms Can Threaten Democracy Working paper

Accuracy prompts
- ➔ *REVIEW:* Nudging Social Media Sharing Towards Accuracy [AAAPSS 2022](#)
- ➔ Shifting attention to accuracy can reduce misinformation online [Nature 2021](#) [[X thread](#)] [[Scientific American op ed](#)]
- ➔ Reducing misinformation sharing at scale using digital accuracy prompt ads [Working paper](#) [[X thread](#)] [[45 minute lecture video](#)]
- ➔ Accuracy prompts are a replicable and generalizable approach for reducing the spread of misinformation [Nature Comm 2022](#) [[X thread](#)]
- ➔ Thinking more or thinking differently? Using drift-diffusion modeling to illuminate why accuracy prompts decrease misinformation sharing [Cognition 2023](#) [[X thread](#)]
- ➔ The social media context interferes with truth discernment [Science Advances 2023](#) [[X thread](#)]
- ➔ Inoculation and accuracy prompting increase accuracy discernment in combination but not alone [Nature Human Behavior 2024](#) [[X thread](#)]
- ➔ On the Efficacy of Accuracy Prompts Across Partisan Lines: An Adversarial Collaboration [Psychological Science 2024](#) [[X thread](#)]
- ➔ Examining partisan asymmetries in fake news sharing and the efficacy of accuracy prompt interventions [Working paper](#) [[X thread](#)]
- ➔ Fighting COVID-19 misinformation on social media: Experimental evidence for a scalable accuracy nudge intervention [Psychological Science 2020](#) [[X thread](#)]
- ➔ Developing an accuracy-prompt toolkit to reduce COVID-19 misinformation online [HKS Misinformation Review 2021](#) [[X thread](#)] [[Medium post](#)]
- ➔ Exploring Lightweight Interventions at Posting Time to Reduce the Sharing of Misinformation on Social Media [CSCW 2021](#)
- ➔ Examining accuracy-prompt efficacy in combination with using colored borders to differentiate news and social content online [HKS Misinfo Review 2023](#) [[X thread](#)]
- ➔ Accuracy prompts protect professional content moderators from the illusory truth effect [PNAS Nexus 2024](#) [[BlueSky thread](#)]

Crowdsourcing
- ➔ *REVIEW:* Crowds Can Effectively Identify Misinformation at Scale [Perspectives on Psych Science 2023](#) [[Twitter thread](#)]
- ➔ Scaling up fact-checking using the wisdom of crowds [Science Advances 2021](#) [[X thread](#)] [[Time op ed](#)]
- ➔ Political motives help rather than hinder crowdsourced fact-checking [Working paper](#)
- ➔ Birds of a feather don't fact-check each other: Partisanship and the evaluation of news in Twitter's Birdwatch crowdsourced fact-checking program [CHI'22](#) [[X thread](#)] [[Financial Times Op Ed](#)]
- ➔ Fighting misinformation on social media using crowdsourced judgments of news source quality [PNAS 2019](#) [[X thread](#)] [[The Hill op ed](#)]

- ➔ Will the crowd game the algorithm? Using layperson judgments to combat misinformation on social media by downranking distrusted sources. CHI '20 [X thread]
- ➔ Republicans are flagged more often than Democrats for sharing misinformation on X's Community Notes PNAS 2025 [BlueSky thread] [LinkedIn thread]

Warnings/Corrections
- ➔ *REVIEW*: Misinformation warning labels are widely effective: A review of warning effects and their moderating features Current Opinion in Psychology 2023 [X thread]
- ➔ The Implied Truth effect: Attaching warnings to a subset of fake news headlines increases perceived accuracy of headlines without warnings Management Science 2020 [X thread]
- ➔ Fact-checker warning labels are effective even for those who distrust fact-checkers Nature Human Behaviour 2024 [Twitter thread]
- ➔ Labeling AI-Generated Media Online PNAS Nexus 2025
- ➔ Labeling AI-Generated Content: Promises, Perils, and Future Directions MIT Policy Paper 2024
- ➔ What label should be applied to content produced by generative AI? Working paper [X thread]
- ➔ Perceived legitimacy of layperson and expert content moderators PNAS Nexus 2025
- ➔ Partisan consensus and divisions on content moderation of misinformation Working paper
- ➔ Perverse Downstream Consequences of Debunking: Being Corrected by Another User for Posting False Political News Increases Subsequent Sharing of Low Quality, Partisan, and Toxic Content in a Twitter Field Experiment CHI'21 [X thread]
- ➔ Timing matters when correcting fake news PNAS 2021 [X thread]
- ➔ Unbundling Digital Media Literacy Tips: Results from Two Experiments Working paper
- ➔ Promoting engagement with social fact-checks online PLoS ONE 2025
- ➔ Do explanations increase the effectiveness of AI-crowd generated fake news warnings? ICWSM '22 [X thread]
- ➔ You're definitely wrong, maybe: Correction style has minimal effect on corrections of misinformation online Media and Communication 2021 [X thread]
- ➔ Debunking Handbook 2020 [PDF] [X thread]
- ➔ How effective are TikTok misinformation debunking videos? HKF Misinformation Review 2023 [X thread]

Source Information
- ➔ Emphasizing publishers does not effectively reduce susceptibility to misinformation on social media HKS Misinformation Review 2020 [X thread]
- ➔ Displaying News Source Trustworthiness Ratings Reduces Sharing Intentions for False News Posts J Trust and Safety 2023 [X thread]
- ➔ Partisan Source Cues and Trust in Global News Working paper
- ➔ Depoliticizing Public Media: Polarization and the Dynamics of Media Trust in Poland Working

[paper](#)

Role of reasoning in detecting versus falling for misinformation

Popular overview: "Why do people fall for fake news?" [NYTimes op ed 2019](#)

Experimental papers
- ➔ Fake news, fast and slow: Deliberation reduces belief in false (but not true) news headlines [JEP:General 2020](#) [[X thread](#)]
- ➔ Reliance on emotion promotes belief in fake news [Cognitive Research: Principles and Implications 2020](#) [[X thread](#)] [[Blog post](#)]
- ➔ Reasoning about climate change [PNAS Nexus 2023](#) [[X thread](#)]
- ➔ Emotion may predict susceptibility to fake news but emotion regulation does not seem to help [Cognition and Emotion 2022](#) [[X thread](#)]
- ➔ Does deliberation decrease belief in conspiracies? [Journal of Experimental Social Psychology 2022](#)
- ➔ Uncommon Errors: Adaptive Intuitions in High-Quality Media Environments Increase Susceptibility to Misinformation [Working paper](#) [[X thread](#)]
- ➔ Emotional language reduces belief in false claims [Working paper](#) [[X thread](#)]

Correlational papers
- ➔ Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning [Cognition 2019](#)
- ➔ Cognitive reflection correlates with behavior on Twitter [Nature Communications 2021](#) [[X thread](#)]
- ➔ Who falls for fake news? The roles of bullshit receptivity, overclaiming, familiarity, and analytic thinking [Journal of Personality 2019](#)
- ➔ Belief in fake news is associated with delusionality, dogmatism, religious fundamentalism, and reduced analytic thinking [Journal of Applied Memory & Cognition 2019](#)
- ➔ Beyond "fake news": Analytic thinking and the detection of false and hyperpartisan news headlines [Judgment and Decision Making 2021](#)
- ➔ What Makes News Shareable on Social Media? [Journal of Quantitative Description: Digital Media 2023](#) [[X thread](#)]
- ➔ Digital literacy is associated with more discerning accuracy judgments but not sharing intentions [HKS Misinfo Review 2021](#) [[X thread](#)] [[Scientific American op ed](#)]
- ➔ Overconfidently conspiratorial: Conspiracy believers are dispositionally overconfident and massively overestimate how much others agree with them [Personality and Social Psychology Bulletin 2025](#) [[BlueSky thread](#)]

Cross-cultural papers
- ➔ Beliefs about COVID-19 in Canada, the U.K., and the U.S.A.: A novel test of political polarization

and motivated reasoning [Personality and Social Psychology Bulletin 2022](#) [X thread]
➔ Happiness and surprise are associated with worse truth discernment of COVID-19 headlines among social media users in Nigeria [HKS Misinformation Review, 2021](#) [X thread]
➔ Does Analytic Thinking Insulate Against Pro-Kremlin Disinformation? Evidence from Ukraine. [Political Psychology 2022](#) [X thread] [SPSP Blog post]

Elite Party Cues/Messaging
➔ Measuring exposure to misinformation from political elites on Twitter [Nature Communications 2022](#) [X thread] [Web app to show any Twitter user's exposure to elite misinfo]
➔ Partisans' receptivity to persuasive messaging is undiminished by countervailing party leader cues [Nature Human Behaviour 2023](#) [X thread] [The Hill op ed]
➔ Correcting Misperceptions of Out-partisans Decreases American Legislators' Support for Undemocratic Practices [PNAS 2023](#) [X thread]
➔ Elite Party Cues Increase Vaccination Intentions among Republicans [PNAS 2021](#) [X thread] [WashPo Op Ed]
➔ Pro-Climate Statements from Elon Musk can Persuade Republicans on Climate Change [Working Paper](#)
➔ Examining false beliefs about voter fraud in the wake of the 2020 Presidential Election [HKS Misinformation Review 2021](#) [X thread] [The Hill op ed]

Illusory truth and the effect of repetition on belief
➔ Prior exposure increases perceived accuracy of fake news [JEP:General 2018](#)
➔ Blatantly false news increases belief in news that is merely implausible [Working paper](#)
➔ Repetition increases perceived truth equally for plausible and implausible statements. [Psychonomic Bulletin & Review 2019](#)
➔ Replicability and generalizability of the repeated exposure effect on moral condemnation of fake news [Nature Communications 2025](#)
➔ Investigating the robustness of the illusory truth effect across individual differences in cognitive ability, need for cognitive closure, and cognitive style. [Personality and Social Psychology Bulletin 2019](#)
➔ Illusory Truth Occurs Even with Incentives for Accuracy [Working paper](#) [X thread]
➔ The Not So Illusory Truth Effect: A Rational Foundation for Repetition Effects [Working paper](#)

Politically motivated reasoning (or lack thereof)
➔ Thinking clearly about causal inferences of politically motivated reasoning: Why paradigmatic study designs often prevent causal inference [Current Opinion in Behavioral Science 2020](#) [X thread]
➔ Rethinking the link between cognitive sophistication and identity-protective bias in political belief formation [JEP:General 2021](#) [X thread]

- ➔ No association between numerical ability and politically motivated reasoning in a large US probability sample PNAS 2023
- ➔ Bayesian or biased? Analytic thinking and political belief updating Cognition 2020 [X thread]
- ➔ Increasing accuracy motivations using moral reframing does not reduce Republicans' belief in false news HKS Misinfo Review 2023
- ➔ Science beliefs, political ideology, and cognitive sophistication JEP:General 2022 [X thread]
- ➔ On the belief that beliefs should change according to evidence: Implications for conspiratorial, moral, paranormal, political, religious, and science beliefs Judgment and Decision Making 2020 [X thread]
- ➔ Sincere or Motivated? Partisan Bias in Non-political Information Processing Judgment and Decision Making 2023
- ➔ Self-persuasion does not imply self-deception Cognition 2025

Polarization, echo chambers, and moral outrage
- ➔ Megastudy testing 25 treatments to reduce antidemocratic attitudes and partisan animosity Science 2024 [X thread]
- ➔ Information Gerrymandering and Undemocratic Decisions Nature 2019 [X thread]
- ➔ Political Sectarianism in America Science 2020 [X thread]
- ➔ Divergent patterns of engagement with partisan and low-quality news across seven social media platforms Working paper [BlueSky thread] [X thread]
- ➔ Shared Partisanship Dramatically Increases Social Tie Formation in a Twitter Field Experiment PNAS 2021 [X thread]
- ➔ Partisans neither expect nor receive reputational rewards for sharing falsehoods over truth online PNAS Nexus 2024
- ➔ Psychological underpinnings of partisan bias in tie formation on social media JEP:General 2024 [X thread]
- ➔ Blocking of counter-partisan accounts drives political assortment on Twitter PNAS Nexus 2024 [X thread]
- ➔ Misinformation and harmful language are interconnected, rather than distinct, challenges PNAS Nexus 2024 [X thread] [BlueSky thread]
- ➔ Interventions Reducing Affective Polarization Do Not Necessarily Improve Anti-Democratic Attitudes Nature Human Behaviour 2022 [X thread]
- ➔ From Foe to Friend and Back Again: The Temporal Dynamics of Intra-Party Bias in the 2016 U.S. Presidential Election Judgment and Decision Making 2019
- ➔ Signaling when no one is watching: A reputation heuristics account of outrage and punishment in one-shot anonymous interactions JPSP 2020 [X thread] [NYtimes Op Ed]
- ➔ Why Do We Hate Hypocrites? Evidence for a Theory of False Signaling Psych Science 2017 [NYTimes Op Ed]

➔ Third-party punishment as a costly signal of trustworthiness [Nature 2016](#) [[NYTimes Op Ed](#)]
➔ Dynamic Remodeling of In-Group Bias During the 2008 Presidential Election [PNAS 2009](#)

Other papers related to misinformation
➔ The (Minimal) Persuasive Advantage of Political Video over Text [PNAS 2021](#) [[X thread](#)]
➔ The distorting effects of producer strategies: Why engagement does not reveal consumer preferences for misinformation [PNAS 2024](#) [[X thread](#)]
➔ Quantifying the Potential Persuasive Returns to Political Microtargeting [PNAS 2023](#) [[X thread](#)]
➔ Addressing misperceptions takes more than combating fake news [TiCS 2025](#)
➔ Character Deprecation in Fake News: Is it in Supply or Demand? [Group processes and intergroup relations 2021](#)
➔ Cognitive reflection and the 2016 U.S. Presidential Election [Personality and Social Psychology Bulletin 2019](#)
➔ Human Cooperation and the Crises of Climate Change, COVID-19, and Misinformation [Annual Review of Psychology 2022](#)