

SPECIAL ISSUE ARTICLE

Editorial—The truth is out there: The psychology of conspiracy theories and how to counter them

1 | INTRODUCTION

A *conspiracy theory* can be defined as an “attempt to explain the ultimate causes of significant social and political events as secret plots by powerful and malicious individuals or groups” (Douglas & Sutton, 2018, p. 1; see also Moscovici, 1987). Once thought to be restricted to the fringes of society, belief in conspiracy theories is now widespread. For example, 50% of Americans endorse at least one conspiracy theory (Oliver & Wood, 2014) and during the COVID-19 pandemic, around 28% of Americans reported believing that powerful elites such as Bill Gates were using the vaccine to implement microchips for global surveillance (YouGov, 2020). Over a third of the population in many countries around the world now think that a secret group of people control world events (Ibbetson, 2021). Other examples abound from Satanic pedophile rings to climate denial to 9/11 being an inside job. The psychology of conspiracy theories and how to counter them has become an increasingly popular subject in psychology (Douglas & Sutton, 2023). Yet, scholars have only seriously started to focus on the psychological underpinnings of conspiratorial thinking within the last decade or two (Douglas & Sutton, 2018). Given the known negative consequences of belief in conspiracy theories, including reduced intentions to act on climate change (Jolley & Douglas, 2014; van der Linden, 2015), endorsement of political violence (Hebel-Sela et al., 2022; Jolley & Paterson, 2020; Vegetti & Littvay, 2022), a decreased likelihood of following public health guidance (Romer & Jamieson, 2021; Roozenbeek et al., 2020) and increased racism (Jolley et al., 2020; Swami, 2012), it is of critical importance to advance our understanding of both drivers and potential solutions. Interestingly, the majority of psychological research on conspiracy theories to date has remained largely self-reported, correlational, and descriptive (Douglas & Sutton, 2018; Fong et al., 2021; van Prooijen & Douglas, 2018). Moreover, conspiracy theorists are notoriously unwilling to participate in research (Franks et al., 2017) and very little causal and experimental work on cognitive processes currently exists on how to effectively counter belief in conspiracy theories (Sassenberg et al., 2023). Accordingly, in this special issue we showcase cutting-edge research that aims to move the field forward by focusing on three related yet previously neglected contributions; (1) experimental work on how to reduce belief in conspiracy theories, (2) research which highlights the unique cognitive processes involved

in conspiracy belief, and (3) novel methodological approaches to studying conspiratorial thinking. We discuss the special issue's contribution to each of these areas in turn.

2 | NEW INSIGHTS FOR COUNTERING BELIEF IN CONSPIRACY THEORIES

Several papers tested strategies to counter belief in conspiracy theories, such as conjunction fallacy training, inoculation, and scientific reasoning interventions. One of the key underlying cognitive processes that has been identified in conspiracy susceptibility is a tendency to commit conjunction errors. In other words, people who think two unrelated (independent) events are more likely to occur in conjunction than separately on their own are more likely to believe in conspiracy theories (Brotherton & French, 2014). Yet, no research to date has examined if training people to spot the conjunction fallacy could causally reduce belief in conspiracy theories. Stall and Petrocelli (2022) conducted two studies. In the first they found correlational evidence that belief in a novel conspiracy theory was associated with greater conjunction errors and a tendency to list fewer disconfirming thoughts. In Study 2, the researchers tested the impact of both a brief training intervention aimed at helping people identify conjunction errors as well as a thought-listing exercise to elicit disconfirming evidence. Although the thought-listing exercise was not effective on its own, the conjunction fallacy training did significantly reduce belief in conspiracy theories. Similarly, Biddlestone et al. (2022) used a novel narrative inoculation message to immunize people against the conjunction fallacy beforehand. Across two studies, the authors found that the process of psychological inoculation reduced people's belief in conspiracy theories indirectly through the fact that people made far fewer conjunction errors. These two studies provide some of the first causal evidence that training people to identify conjunction errors can directly and indirectly reduce belief in both existing and novel conspiracy theories. Following on from the success of previous psychological inoculation interventions, Iyengar et al. (2022) advance important insights with one of the first non-WEIRD direct replications of the *Bad News* game (Roozenbeek & van der Linden, 2019) in India using a novel set of local headlines. Within the live game environment players are inoculated against the techniques used by producers of conspiracy

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theories and subsequently tested by rating (unseen) headlines that make use of the conspiracy and other misinformation techniques. The authors found that the intervention significantly reduced ($d = 0.34$) how reliable people deemed conspiracy theories using local headlines in India. Moreover, in contrast to some prior work, the *Bad News* intervention also boosted reliability of real news headlines and thus significantly improved truth discernment. Finally, Georgiou et al. (2023) exposed participants to a conspiracy theory, after which participants were randomized to either a control condition or a scientific reasoning manipulation where participants listened to material that debunked the conspiracy theory in question and identified logical fallacies. Overall, the authors found that the participants who completed the scientific reasoning training were less likely to endorse conspiracy theories in comparison to the control group postintervention ($d = 0.15$).

3 | COGNITIVE PROCESSES UNDERLYING BELIEF IN CONSPIRACY THEORIES

With regards to underlying cognitive processes as to *why* people believe in conspiracy theories, there was focus upon trust, cognitive sophistication, and motivated cognition. Frenken and Imhoff (2022) hypothesized that interpersonal mistrust could lead to a heightened sensitivity to cues of untrustworthiness. In two experimental studies, the authors manipulated the level of facial trustworthiness of both real and computer-generated facial images. Although the experimental manipulation was successful insofar as people could discern the facial (un)trustworthiness cues, in neither experiment was this effect moderated by conspiracy mentality. Instead, conspiracy mentality correlated with a generalized tendency to view others as untrustworthy. The authors conclude that their studies provided evidence for the notion that, rather than being a response to a specific situation, conspiracy theories might fuel distrust as a situation-invariant disposition. Building on the role of trust, Fiagbenu (2022) conducted three studies with over 50,000 respondents and demonstrates that belief in conspiracy theories about the stock market consistently predicted between an 8% and 20% reduction in the odds of personally owning stocks, and that this effect is (partially) mediated by lower social trust—an important variable in economic decision-making. Fiagbenu (2022) presents some of the first evidence that belief in conspiracy theories (e.g., that the stock market is rigged) can be consequential for financial decision-making. Two studies in this special issue aimed to shed further light on the debate between the role of cognitive sophistication versus motivated cognition as competing theoretical accounts of why people believe in conspiracy theories. Vitriol et al. (2022) found some evidence for both accounts, in that political sophistication predicted reduced endorsement of COVID-19 conspiracy theories for Democrats (but not Republicans) whereas greater cognitive reflection was associated with reduced belief in COVID-19 conspiracy theories regardless of partisan identity. Similarly, Saltor et al. (2022) found that higher cognitive reflection, actively open minded thinking (AOT)

and weaker causal illusions (as measured by a computerized contingency learning task) were all associated with the tendency to better differentiate between fake and real news about COVID-19. Overall, in line with other research (e.g., Roozenbeek et al., 2022), the authors conclude that AOT was the strongest predictor of veracity discernment.

4 | NOVEL METHODOLOGIES FOR STUDYING BELIEF IN CONSPIRACY THEORIES

Most of the research on conspiracy theories has been cross-sectional with little regard to how such beliefs can change over time. Wang and van Prooijen (2022) employed latent growth curve models using a five-wave longitudinal design to study how belief in conspiracy theories changed in the context of the 2020 US presidential election. Although conspiracy mentality, as a trait, remained stable over a 2-month period, specific conspiracy theories did significantly change over time. For example, belief in outgroup conspiracy theories for winners (those who voted for Joe Biden) decreased after the election (compared with before), whereas outgroup conspiracy beliefs for losers (who voted for Trump) increased over time. In comparison to some recent research that found conspiratorial thinking to be relatively stable (Uscinski et al., 2022), these findings illustrate how endorsement of conspiracy theories can change over time during critical societal events. In a novel conversational paradigm, Vlasceanu and Coman (2022) assessed the impacts of having people discuss (in dyads) accurate versus conspiratorial claims about COVID-19 for approximately 5 minutes. Participants were assigned to either a low-epistemic condition (discussing both accurate and conspiratorial claims) or a high-epistemic (or “accuracy”) condition where they only discussed accurate information. Although people in the accuracy condition did discuss more accurate information, this in and of itself did not impact people's belief in conspiracy theories and inaccurate claims. The authors speculate that accuracy nudges (e.g., Pennycook et al., 2021) may therefore influence what people choose to discuss or share online, but not actually change their beliefs or knowledge about the subject, an important potential boundary condition highlighted by this new methodology.

Green et al. (2022) tackle another understudied area using a novel methodology: the link between depressive symptoms and belief in conspiracy theories. Using a unique three-wave dataset from the multicollaborative COVID States project, the authors investigated the link between depression and belief in conspiracy theories using a single-learner algorithm, a machine learning approach that can be used to help uncover heterogeneity in the relationship between a predictor and outcome variable. Overall, the authors find a consistent association between depressive symptoms (via the Patient Health Questionnaire) and belief in COVID-19 conspiracy theories. Furthermore, the extent of the relationship depended on individual characteristics (with a significantly stronger effect for those being white, male, educated and higher-income) and situational factors that can either alleviate (e.g., social support) or exacerbate stress (e.g., contracting COVID-19).

Overall, the contributions in this special issue highlight key advances in our understanding of the cognitive processes that lead people to espouse conspiracy theories, novel methods for studying them, and new interventions that can help counter belief in conspiracy theories.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Data sharing is not applicable to this article as no new data were created or analyzed in this study.

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