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Conspiracy Theory Advocacy and Endorsement of Inaccurate Material: A Review of the Psychological Research 2010 - 2022

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HIGHLIGHTS

Despite increased research on 'conspiracy theories,' conclusions about their nature or dynamics is stymied by a lack of common definitions and approaches.

ABSTRACT

Since 2010 the number of psychological investigations examining relationships between conspiracy theory (CT) advocacy and endorsement of inaccurate material (i.e., misinformation, disinformation, and fake/false news) has increased exponentially. However, due to the breadth of topics investigated, the diversity of approaches/methods employed, and the range of data examined, the extent to which research in this domain provides a coherent body of work is unclear. Accordingly, this paper performed a review of psychological articles published in Web of Science and Scopus during the period January 2010 to May 2022. Search terms used were "conspir* AND misinformation OR disinformation OR "fake news" OR "false news". The articles selected had either collected primary data or analyzed extant secondary data and were written in English. Forty-six articles were included in the review and the majority 87% (n = 40) were published between January 2018 and May 2022. This reflected the increase in interest in the topic and the concomitant development of the COVID-19 pandemic. Across the literature, there was a lack of conceptual clarity and congruence. This arose principally from the failure to adequately operationalize key terminology (i.e., definitions of conspiracy and inaccurate information) and/or use terminology consistently. This indicated that research in the field would benefit from the development of standardized operational conceptualizations and taxonomies. Given the breadth of the research across different academic disciplines and in related areas such as pseudoscience, this article should be regarded as extensive, rather than exhaustive. In this context, this review provides only insights into the nature of psychological research within the designated parameters. Future work is required to determine if investigations in allied areas demonstrate similar reporting trends to those observed in this article.

KEYWORDS

Conspiracy theory advocacy, COVID-19 pandemic, misinformation, disinformation, fake news.

INTRODUCTION

Background

This paper reviewed Psychology indexed articles, published between January 2010 and May 2022, which examined conspiracy theory (CT) advocacy and endorsement of inaccurate material (i.e., misinformation, disinformation, and fake/false news). The decision to focus on this period was informed by the observation that it marked a progressive increase in internet use that facilitated a shift from traditional (i.e., newspapers, radio, and television) to digital media (e.g., websites, blogs, and podcasts). Concomitantly, engagement with and reliance on social networking increased significantly.

The co-evolution of digital media and social networks was important as it accentuated the blurring of distinctions between authentic content, conjecture, unintentionally specious information, and deliberate falsehood. Thus, this era evidenced an exponential growth in data accessibility and availability, without the attendant means to assess source credibility and content correctness. Moreover, throughout the period the disparity between the oldest and youngest adults in adoption of digital technologies narrowed markedly (Faverio, 2022, January 13), with the consequence that society generally became more likely to encounter and share uncertain, incorrect, and false information disseminated via the internet.

These factors, together with increased social and political awareness of issues associated with exposure to misinformation, stimulated scholarly interest in the allied area of conspiracy theory (CT). The prevailing presumption, regardless of narrative accuracy, is that CTs represent a specific form of misinformation. Consequently, the study of false news and CT became intertwined as both were commonly perceived as pervasive forms of communication that potentially adversely influenced and/or distorted mass attitudes and behaviors (Dagnall, Drinkwater, Denovan, & Walsh, 2020; Drinkwater, Dagnall, Denovan, & Walsh, 2021).

Predominant Conceptualizations of Conspiracy Theories

This section focuses on predominant conceptualizations of CTs. Consideration of CT (i.e., nature and role) is extended later to encompass alternative (critical) views and perspectives.

General inspection of published research reveals that there is no single agreed definition of CT (Dagnall, Drinkwater, Parker, Denovan, & Parton, 2015; Drinkwater, Dagnall, & Parker, 2012). Accordingly, investigators conceptualize CTs in terms of recurring, canonical features. These include, but are not restricted to, premeditation (planning), clandestineness (secrecy), deception (lies), abuse of power (authority), collusion (collective), manipulation (influence), control (dominance), and intention (purpose) (Denovan, Dagnall, Drinkwater, Parker, & Neave, 2020; Drinkwater et al., 2012). Together, these largely undesirable constituent characteristics infer that the activity of 'conspirators' is adversely consequential to the individual (personally) and society (globally). This is especially true when themes coalesce to infer that actions are orchestrated by influential individuals/groups, who are able and motivated to achieve, through exploitation and subterfuge, predetermined nefarious goals.

This classification explains why some CT believers present their narratives as authentic, just, and moral truths. Accordingly, scholars have framed CT discourse in the context of the Manichean struggle between good (reality) and evil (fabricated distortion) (Drinkwater, Dagnall, Denovan, Parker, & Clough, 2018; Oliver & Wood, 2014). Commensurate with this perspective, believers regard CTs as genuine alternatives to official flawed or distorted explanations. Indeed, perceived discrepancies in authorized accounts, provide grounds for establishing the veracity of conspiracies, regardless of their inherent credibility (Dagnall, Denovan, Drinkwater, Parker, & Clough, 2017).

The Importance of Conspiracy Theories

Perceptions of CTs within the majority of Psychological research articles are guided by the assumption (both explicit and implicit) that conspiracy narratives are typically untrue and therefore irritational. Hence, CT endorsement is viewed as psychologically and socially problematic because it is predicated on/or motivated by factors other than rational, systematic consideration of objective data. These include personal judgments and preferences (i.e., political, social, and geographical affiliations) (Douglas et al., 2019). Although these factors affect the reception and dissemination of information regardless of type, they are particularly evident in extreme views or with strong emotive issues, such as those often contained within CTs (Dagnall, Drinkwater, Denovan, & Walsh, 2020). Noting this, mainstream psychological research highlights that CT advocacy is linked with selective and/or biased consideration/interpretation. Congruent with this observation, studies robustly report relationships between CT endorsement and flawed/restricted thinking (Dagnall, Denovan, Drinkwater, Parker, & Clough, 2017; Dagnall et al., 2015).

However, from a critical viewpoint, it is important to recognize that the unconfirmed rumor that informs CTs

can prove true. This was recently the case in the United Kingdom, when accusations that Conservative Party staff breached legally enforced COVID restrictions in 2020 and 2021, despite repeated government denials, were eventually confirmed. In this instance, persistent accusations prompted investigations, which resulted in proof of guilt as evidenced by Police fines. This illustration concurs with Talbot (2015), who following examination of archival material, concluded that there are numerous instances where CTs are ultimately validated. This indicates that truthfulness is not a necessary defining feature of a CT. In fact, the labeling of alternative accounts as conspiracies is determined by a range of socio-political factors (i.e., power and control of media), which may in certain circumstances seek to obscure the truth.

Nonetheless, a further often-cited feature of CTs is that they are misinformed or unfounded. This aspect is important because it delegitimizes conspiratorial narratives (Konkes & Lester, 2017). This deprecatory perception also provides justification for classifying CTs as psychologically undesirable, or even maladaptive (Escolà-Gascón, 2022). Specifically, as results from a preference for subjective evidence and an over reliance upon self-generated data (i.e., anecdotal observations) (Denovan, Dagnall, Drinkwater, Parker, & Neave, 2020). Furthermore, the elaborate and self-validating nature of CTs is used to explain why they endure in the face of apparently conflicting evidence and persevere over time.

This unfavorable abstraction is overly simplistic for several reasons. From a rational standpoint it ignores the fact that understanding of the everyday world habitually derives from consideration of restricted information and constrained, 'bounded' rationality (Simon, 1955). Explicitly, it arises spontaneously from processing capacity limitations, which result in the use of cognitive shortcuts such as the use of heuristics (i.e., drawing on strategies derived from previous experiences with similar problems) (Dagnall, Denovan, Drinkwater, Parker, & Clough, 2016; Dagnall, Drinkwater, Denovan, Parker, & Rowley, 2016). Though truncated logic typically provides acceptable (rather than optimal) solutions, it can also produce erroneous conclusions. Thus, within general populations, endorsement of false CTs is often a simple manifestation of the restrictions of decision-making. Hence, the degree to which CT endorsement is actually maladaptive depends on the extent of belief rather than mere presence. Indeed, it has long been established that human reasoning under conditions of uncertainty is flawed and that people misperceive multiple aspects of the world (e.g., Slovic, Fischhoff, & Lichtenstein, 1977).

Moreover, within endorsers, CT ideation forms an intricate, internally coherent mental framework (i.e., worldview) that influences how information is construed and bestows meaning upon the external world (Dagnall et al., 2015; Irwin, Dagnall, & Drinkwater, 2015). Thus, whilst CT advocacy may appear externally illogical, from the perspective of the believer, ideation is cogent, coherent, and justified (Dagnall, Denovan, Drinkwater, Parker, & Clough, 2017; Irwin, Dagnall, & Drinkwater, 2015). This conceptualization is consistent with the observation that CT supporters frequently cite evidence (e.g., scientific proof) to support their claims. Negative depictions of CT emphasize that this 'evidence' is habitually spurious (Soukup, 2008) and ignores instances where counter information is ill-informed or specious. Nonetheless, the provision of evidence, regardless of correctness and/or impartial corroboration, demonstrates that validation is an integral aspect of CT advocacy.

Commensurate with the pathological view of CTs, scholars depict endorsers as short-sighted and/or blinkered. Particularly, report that believers overlook the implausibility of CT narratives (i.e., abridged reasoning and circular argument), and/or their pragmatic impossibility (Grimes, 2016). A supplementary illustration of misapplied rationality is when advocates draw on rare examples where CTs have proven to be true (i.e., Watergate, Project MK Ultra, and false flags) as justification for endorsing other theories (Drinkwater, Dagnall, Denovan, & Neave, 2020). Indeed, in rational terms there will always be more spurious CTs, however, the general tendency for narratives to be false does not necessarily invalidate the need to consider the legitimacy of each case independently.

This issue is highlighted by different approaches to evaluating conspiracy theories (Buenting & Taylor, 2010). Generalists dismiss CTs or subsets of theories based on generalities. Explicitly, they contend there is no need to examine particular theories when they share features with category members where exemplars have previously been discredited. Opposing this notion, particularists assert that each theory is independent and therefore must be appraised on its merits (Hagen, 2022). The latter position appears reasonable given the type of CTs featured within prevalently used belief measures. For instance, item 6 of the Generic Conspiracist Beliefs Scale (Brotherton, French, & Pickering, 2013) assesses belief in the possibility that authorities covertly, allow/enact violence on itself (i.e., 'The government permits or perpetrates acts of terrorism on its own soil, disguising its involvement'). Whilst false flag claims are regularly made and dismissed, it is an undeniable truth that in 1962 the United States Department of Defense proposed to orchestrate and commit acts of violent terrorism against American military and civilian targets as a means for justifying war against Cuba (i.e., devised Operation Northwoods).

Similarly, there are other historical examples of false flag operations (Wilson, 2015). Although in the case of Operation Northwoods the plans were not enacted, the example demonstrates that the American government covertly considered a false flag operation, which was intended to mislead the general populace.

Acknowledging this, it is unclear whether endorsement of a false flag explanation indicates a general belief in CTs or reflects historically informed apprehensions about power abuse and mismanagement. Hence, while statistically improbable the premise is neither implausible nor illogical (Dentith, 2019). Accordingly, given the existence of well-documented precedents, each false flag allegation should be assessed independently rather than merely dismissed because of previous correct rejections (Wilson, 2015). This applies equally to CTs located in other thematic areas where there is evidence of manipulation and malpractice (e.g., government malfeasance, mishandling of information, and profiteering) (Gellert, 2021).

While this pessimistic perspective is adopted by several academics it is not without criticism. A major contention is that researchers refer to CTs using openly evaluative terms (e.g., false beliefs, rumors, and myths), which present them in negative ways (Uscinski, 2018). This construction reflects and reinforces the supposition that CTs are by nature incorrect, unjustified, and detrimental (Coady, 2018). Coady (2018) opposes this generalization by pointing out that the veracity of CTs and their socially advantageous effects are ignored. Explicitly claiming that by questioning the actions of powerful bodies such as governments CTs provide a significant public benefit.

A reason for the negative psychological depiction of CTs is that they typically oppose orthodox wisdom (Barkun, 2015). This results in them becoming a form of stigmatized knowledge, where content is ignored or rejected by the institutions that validate meaning (e.g., government agencies, scientific communities, and mainstream media). Without 'official' verification, claims regardless of basis, lack consensual credibility, and appear disreputable (i.e., become stigmatized). Without social/political support, stigmatized knowledge survives within the sub-culture. This distances believers from the mainstream and at a macro-social level, their beliefs are disregarded and trivialized. This process illustrates how institutional perceptions of truth can prove more important than objective reality.

Hence, the negative perspective invalidates CTs as a source of critical thought and positions them as groundless (Husting & Orr, 2007). A subsequent consequence is that CT advocates are marginalized, and the term CT is often used by powerful individuals/groups to belittle concerns and diminish opposition (Uscinski, 2018). Hence, an understated key element of CT is ownership and application of power and how it is misused by those with authority and influence. In this context, CTs can be socially constructive as they challenge realities created and disseminated by ruling elites. Recognizing this, CTs are better regarded with skepticism rather than as fundamentally false. Consistent with this view, Coady (2018) compares CTs to scientific theories and argues that since it is commonly accepted that bad scientific theories do not invalidate good theories, this reasoning should also be applied to CTs.

Consistent with this notion, researchers should view CTs as accusatory perceptions that may (or not) prove true. Truth is determined at a personal level by individual factors not ineludibly related to the objective appraisal of information. Consistent with this, people are inclined to endorse CTs that malign political parties they oppose (Uscinski, 2018). This demonstrates the difficulties faced by researchers when they attempt to differentiate true from false CTs. To facilitate this process, Uscinski (2018) recommends implementation of the distinction forwarded by Levy (2007), which states that properly constituted epistemic authorities should determine the status of conspiracies. This refers to "institutions in which knowledge claims result from a socially distributed network of inquirers trained in assessing knowledge claims, with methods and results made public and available for scrutiny (i.e., courts of law, scientific institutions)" (Uscinski, 2018, p. 236).

The distinction between true and false CTs is also obfuscated by the failure to distinguish between theories and facts (Keeley, 2019). Theory implies a system of ideas that are used to explain an event or occurrence. Hence, they represent a premise that may be accurate (Bjerg & Presskorn-Thygesen, 2019). Noting this, the widespread adoption of the term CT is problematic because some instances labeled 'theories' (possibilities) have proven true and are therefore facts (e.g., Watergate, Project MK Ultra, and Operation Northwoods). Moreover, referring to these events as theories ignores the degree of complexity that was required to obscure and cover up the actual cause (e.g., Watergate was a series of intricate plots) (Coady, 2018). Such semantic confusions hinder the already complex process of distinguishing between true and false CTs (see Escolà-Gascón & Wright, 2021).

A further subtle but often overlooked distinction is between conspiracy belief and conspiratorial thinking. The former denotes endorsement of a specific CT, whereas the latter refers to an underlying worldview (Brotherton, French, & Pickering 2013), which biases the individual so that they generally regard official accounts as untrue and influential actors as conspirators (Wood, Douglas,

& Sutton, 2012). This discernment acknowledges that whilst specific theories may be widely endorsed, belief in one theory does not necessarily facilitate belief in others. This suggests that claims that CT belief is monological and generic (see Goertzel, 1994) are grossly overexaggerated.

A final point to consider when operationalizing CTs is that some theorists view them in terms of minority theory (Goertzel, 1994) and social identity (Pierre, 2020). This embraces consideration of why CTs appeal to marginal groups and the effects that group membership has on the development of a distinct and self-sustaining mindset. These concepts are important because they frame CTs regarding political, geographical, and social inequalities (Baele, 2019). This contextualization provides a collective (group and normative) rationale for believing in conspiracies. Explicitly, identifies shared perceptions and motives that are not necessarily evident within general consideration of CTs (marginalization, disenfranchisement, perceived powerlessness, etc.). From this standpoint, researchers view CTs as expressions of social and political alienation/cynicism.

Consideration of the nature of CTs is imperative since definitions within scholarly work provide only limited snapshots. An example is the delineation of a CT as the conviction that powerful groups or collectives covertly plan and implement strategies with the intention of realizing malevolent goals (Bale, 2007; Sunstein & Vermeule, 2009). This clearly represents CTs as an individual impression rather than a socio-political possibility. From the critical perspective, the incidence of CTs within the general population suggests that they are a natural feature of human cognition and serve important psychological functions (Franks, Bangerter & Bauer, 2013). Particularly, they provide explanations for major social and political events and in doing so allow individuals to resolve uncertainties and make sense of the world. The current problem with the psychological approach to CT is that it does not respect or value diversity of beliefs (Cíbik & Hardoš, 2020).

Inaccurate Information

Recently, the number of academic articles investigating belief in conspiracies and proclivity to endorse erroneous information has increased substantially (Roozenbeek et al., 2020; Ryan & Aziz, 2021). The developing body of literature is now vast, comprising contributions from myriad disciplines (e.g., psychology, political studies, communication, computing, mathematics, and philosophy). Thematically, much research combines exploration of the nature, causation, and social/individual impact of CTs with consideration of the influence of media on attitudes and behavior. This includes an increased focus on the role of digital media. Concurrently, scholars have also undertaken work around mis/disinformation, which includes consideration of the nature and consequences of fake/false news (Kemei et al., 2022).

These communication-related topics are important because acceptance of inaccurate data as valid can have significant social and political consequences, such as negatively influencing health behaviors (e.g., decreased engagement with campaigns) and reduce involvement in democratic processes. Finally, the COVID pandemic over the course of the last few years has provided an applied context for the study of conspiracies and inaccurate information (Roosenbeek et al., 2020).

The Present Study

Due to the breadth of topics investigated, diversity of approaches and methods employed, and range of data examined, the extent to which scholarly work on CT advocacy and endorsement of inaccurate information provides a coherent body of work was unclear. Acknowledging this, the present paper performed a review of studies conducted since January 2010. The authors restricted the search to this period since it captured important changes in the use and consumption of digital media. This includes the widening adoption of the internet as the primary source of information/news and the emergence of social media as a predominant communication platform.

Noting the volume of multi-disciplinary publications, analysis was further restricted to Psychology classified peer-reviewed papers that collected empirical data. The focus on Psychology reflected the author's expertise and made the process of assessing research coherence manageable. That is, reducing the number of approaches, conceptualizations, and measures. This was necessary due to the vastness of academic work on and around the topic and because academic work on CT generally lacks a cogent theoretical framework (see Goreis & Voracek, 2019). Noting this, the authors anticipated that a focus on Psychology would provide important insights into the status of research in this domain.

METHOD

Inclusion Criteria, Search Strategy, and Data Extraction

The authors performed a literature search using Web of Science and Scopus. This employed the keywords conspiracy* AND misinformation OR disinformation OR fake news OR false news. Dates were restricted to January 2010 through May 2022. Within Scopus selection criteria

were Journal, English, and Psychology. For Web of Science, the search was limited to Articles or Early Access, English, in the subject area Psychology. Review papers were removed since this article focused on research where the authors had either collected primary data or analyzed extant secondary data. Articles were also omitted if they were conceptual, review, or opinion pieces. Google Scholar alerts were enabled to ensure the inclusion of accepted articles and articles in preprint.

Once identified, the title, abstract, and main text of each paper were examined, with the exclusion of documents occurring at each stage (see Figure 1). Records were screened (title and abstract) by the authors for the following eligibility criteria: analysis of empirical data, assessment of conspiracy belief; and written in English, to ensure that all authors could accurately comprehend the article.

The initial unrestricted search identified 1098 records (Scopus = 593 and Web of Science = 505). Application of selection criteria reduced this to 109. Removal of duplicates left 67 peer-reviewed papers. Finally, 21 articles were excluded due to lacking relevance (*n* = 7), being conceptual in nature (*n* = 13), and being in a foreign language (*n* = 1). Of the 46 articles included in the review 31 appeared in both Scopus and Web of Science, 6 in Scopus alone, and 9 in Web of Science alone. Regarding the study publication date, 87% (n = 40) were published between January 2018 and May 2022.

RESULTS

Terminology

Within the reviewed literature there was a lack of conceptual clarity and congruence. This arose principally from the failure to adequately operationalization key terminology (i.e., definitions of conspiracy and inaccurate information) and/or use terminology consistently across articles.

The Conceptualization of Conspiracy Theories

Given the complexity of conspiratorial ideation (see introduction) it is imperative that studies provide informed definitions that are pertinent to aims and objects. This ensures that readers are afforded a knowledgeable, contextualized understanding of the subject matter. Operationalization is also important because it designates, which aspect or features of conspiracy are under investigation.

Several articles either failed to explicitly define CTs, assuming that meaning was inferred (Calvillo, Rutchick, & Garcia, 2021; Fuhrer & Cova, 2020), or merely delineated CTs as a form of misinformation (Lewandowsky, Ecker, & Cook, 2017**;** Quinn, Fazel, & Peters, 2021). This approach was problematic because it potentially conflated high-order abstract conspiratorial ideations with the tendency to endorse specific forms of misinformation (e.g., false

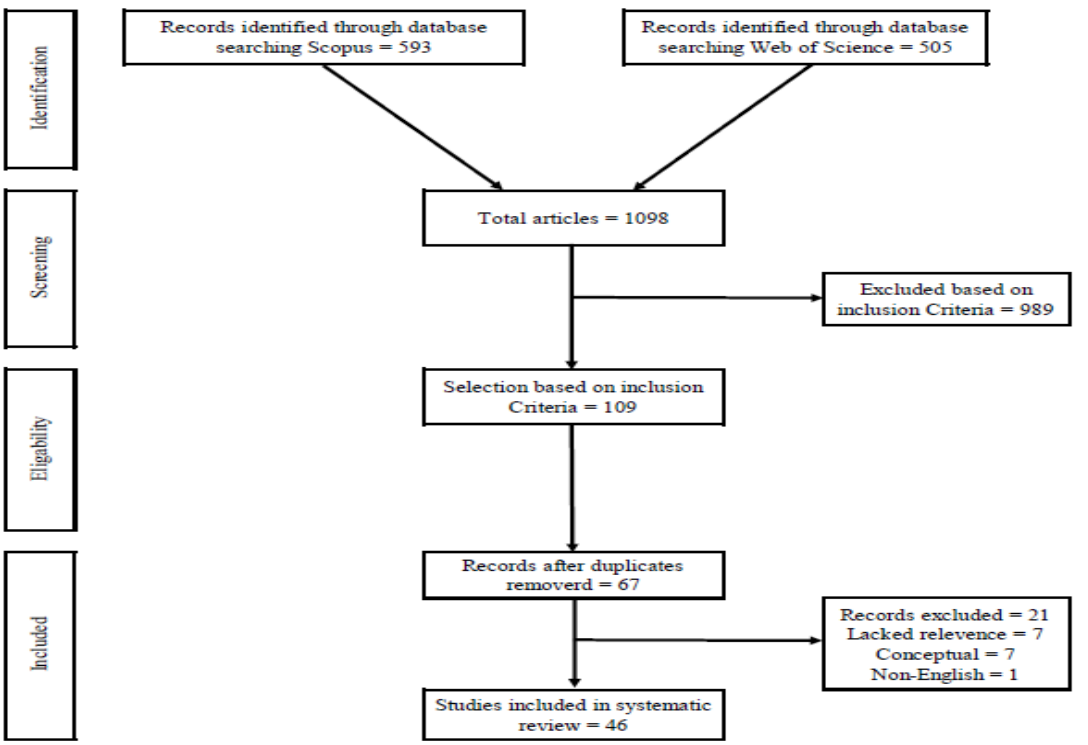

Figure 1. Prisma Chart

headlines, Calvillo et al., 2021; and implausible claim endorsement, Martire, Growns, Bali, Montgomery-Farrer, Summersby, & Younan, 2020). Although the constructs frequently overlap, they are distinct (i.e., CTs are not necessarily untrue). Furthermore, the premise that proclivity to validate misinformation in the form of CTs is likely to predict endorsement of other misinformation (e.g., false news) is tautological.

Furthermore, it is reductionist to suppose that individuals who believe in CTs (domain-specific) are likely to commonly endorse false information (domain-general). Instead, it is more productive to consider which ideational elements (e.g., thinking style) facilitate the endorsement of CTs and validation of erroneous data. Generally, these conceptual obfuscations arose from a lack of standardization and precision.

Within papers, authors typically employed narrow definitions that outlined restricted features of conspiratorial ideation. For instance, Brotherton and Son, used the Brotherton (2013) designation of CTs as "unproven claims about the existence of nefarious secret plots" (Brotherton & Son 2021, p2). Likewise, Mashuri, et al., (2021, p.4) denoted CTs as involving "allegations of secret coalitions or collaborations by certain groups with the deliberate intention to harm another group". Constrained conceptualizations such as these are problematic since they provide only restricted insights into the nature of CT.

Additionally, abridged abstractions failed to acknowledge that CT endorsement derives from multiple elements, which interact in complex ways to form discrete perceptions and cognitions. Although there exists no single agreed or prevailing delimitation of CT (Dagnall et al., 2015, Drinkwater et al., 2012), it is important that papers provide sufficient construct detail. Even within articles that outlined multiple characteristics, this was commonly not the case. For example, Sternisko, Cichocka, Cislak, and van Bavel (2021, p. 2), drawing on Douglas et al. (2019), cited that "Conspiracy theories constitute the idea that a secret group of people is conspiring towards a malevolent or unlawful goal". In a similar vein, Anthony, and Moulding (2019, p.154) classified CT as "the belief that the explanation for events (or their concealment) is that powerful forces are secretly at work to realize their sinister plans (cf. Swami, Chamorro-Premuzic, & Furnham, 2010; Zonis & Joseph, 1994)". Despite these elucidations being well-established and widely cited, they have limited utility due to their generic nature.

Indeed, using definitions that focus on specific characteristics can prove unintentionally misleading. That is, inadvertently focus attention on the attributes highlighted rather than CT ideation generally. Acknowledging this, to effectively research CTs subsequent work needs either to state that its intention is to investigate particular features or explicitly recognize the breadth of CT characteristics. This contextualization will provide greater clarity, exactness, help to disambiguate findings, and encourage meaningful comparisons between study outcomes. This is especially important as investigations typically employed global measures of conspiratorial ideations (e.g., the Generic Conspiracist Beliefs Scale; Brotherton, French, & Pickering, 2013).

Another theoretical issue was the use of interchangeable terms to describe belief in CTs. Illustratively, Imhoff et al. (2022) refer to conspiracy 'mentality' or 'mindset'. Although these terms are well located with CT literature (see Bruder, Haffke, Neave, Nouripanah, & Imhoff, 2013) and signify "general conspiracist beliefs", language was not employed consistently across the literature. Explicitly, 'mentality' or 'mindset' denotes the general tendency to suspect that conspiracies are at play, uncontaminated by concrete events, actors, or contexts (see Imhoff et al., 2022).

In addition, to using a range of operationalizations, articles assessed conspiratorial thinking using myriad measurement instruments. These included a mixture of standard and author-generated indices. The former comprised the Generic Conspiracist Beliefs Scale (GCBS; Brotherton et al., 2013), Conspiracist Mentality Questionnaire (CMQ; Bruder et al., 2013), and Belief in Conspiracy Theories Inventory (BCTI**,** Swami, Chamorro-Premuzic, & Furnham, 2010). Even though these are established scales, comparisons between measures is complicated by the differing theorizations employed (see Swami, Barron, Weis, Voracek, Stieger, & Furnham, 2017).

The GCBS and CMQ measure generic conspiracist ideation (Drinkwater, Dagnall, Denovan, & Neave, 2020). In the case of the CMQ, this is a specific form of conspiratorial thinking referred to as a conspiracy mindset (Imhoff & Bruder, 2014). This is defined as a relatively stable personality characteristic that describes individual differences in the extent to which people believe in conspiracies or conspiracy theories (e.g., Moscovici, 1987; Imhoff & Bruder, 2014). Whereas the BCTI evaluates conspiratorial ideation via endorsement of specific theories (e.g., "The assassination of John F. Kennedy"). Although independent, these measures share significant variance and appear to tap into a common construct (Swami et al., 2017).

The GCBS and CMQ appeared in a substantial proportion of the papers within the reviewed articles (e.g., Adam-Troian et al., 2021; Calvillo, Rutchick, & Garcia, 2021; Newman, Lewandowsky, & Mayo, 2022; Szebeni, Lönnqvist, & Jasinskaja-Lahti, 2021). The BCTI, however, was employed rarely (Anthony & Moulding, 2019). In the case of author-generated measures, these assessed myr-

iad events and occurrences (e.g., climate change, Brotherton & Son, 2021; Instagram post tags, Quinn, Fazel, & Peters, 2021; and comments on Facebook posts, Bessi 2016). The degree to which these were psychometrically valid and/or related to established measures was often absent. Without comparison to concurrent and discriminant measures, the validity of the outcomes is debatable. Regarding, secondary data sources it was not possible for authors to assess fit with standard scales since data was derived from pre-existing real-world sources.

Data Sources

Studies used a variety of data sources, these included online surveys (e.g., Anthony & Moulding, 2019; De Coninck et al., 2021; Lewandowsky, Oberauer, & Gignac, 2013), experiments (e.g., Banas & Miller, 2013; O'Brien, Palmer, & Albarracin, 2021), and analysis of social media (e.g., Bessi, 2016; Quinn, Fazel, & Peters, 2021). Within these, researchers employed a range of sampling techniques, which yielded differing participant numbers. For instance, Brotherton and Son (2021) drew on a traditional sample of Psychology undergraduate students (N = 211) from one college in the United States. In contrast, Adam-Trojan et al. (2021) performed a large-scale, three nation-level analyses of data from 25, 19, and 18 countries using different measures of CT beliefs (Study 1, *N* = 5323; Study 2a, *N* = 12,255; Study 2b, *N* = 30,994). While Teovanović et al. (2021), recruited participants (N = 407) via social networks (Facebook and Viber groups), and Szebeni, Lönnqvist, and Jasinskaja-Lahti (2021) used Facebook, Master's student's social contacts, and political discussion groups to recruit (*N* = 702).

A frequent recruitment strategy was to draw on commercial sources (e.g., Bowes & Tasimi, 2022). The most frequently employed were Amazon's Mechanical Turk (MTurk) (e.g., Calvillo, Ross, Garcia, Smelter, & Rutchick. 2020; Calvillo, Rutchick, & Garcia, 2021; Jolley & Douglas, 2017; Martire, Growns, Bali, Montgomery-Farrer, Summersby, & Younan, 2020) and Prolific (e.g., Juanchich, Sirota, Jolles, & Whiley, 2021; Pantazi, Papaioannou, & van Prooijen, 2021). MTurk is a crowdsourcing marketplace that enables individuals (Turkers) to complete human intelligence tasks (HITs). Since its inception, academics have increasingly utilized the platform to recruit participants and respondents for research (Palan & Schitter, 2018). The attraction of MTurk is that it is a cost-effective, expedient method for collecting large databases (Buhrmester, Talaifar, & Gosling, 2018). These properties have resulted in an exponential increase in psychological studies using MTurk. Although there is debate about the quality of data produced via the platform (see Chmielewski & Kucker, 2020) several investigators report that MTurk provides data equivalent or superior in quality to that collected via traditional methods such as laboratories, market research companies, and online professional panels (e.g., Kees, Berry, Burton, & Sheehan, 2017).

Moreover, this is true across data types and designs. Importantly, analysis indicates that MTurk samples are broader and more representative than student samples. To ensure quality, researchers should include response validity checks and screen data to identify biased responses and/or invalid data. Despite this positive body of work, concerns have recently risen about data quality. This directs that detailed reporting of data screening, which is often omitted from papers, should be a standard operating procedure (Chmielewski & Kucker, 2020).

Prolific is an online platform for participant recruitment that provides data for researchers. Investigators from several disciplines including Psychology have used Prolific as a subject pool. Noting the emergence of Prolific, Peer, Brandimarte, Samat, and Acquisti (2017) compared Prolific with MTurk, CrowdFlower (an alternative crowdsourcing platform), and traditional university subject pool data. Across experiments and a range of tasks, both Prolific and MTurk provided higher data quality than CrowdFlower and the university subject pool and replicated existing results. Regarding response rate, Prolific was superior to the university pool and slightly lower than MTurk and CrowdFlower.

In a further study, Eyal, David, Andrew, Zak, and Ekaterina (2021) examined data quality for online behavioral research across selected platforms (i.e., MTurk, Prolific, and CloudResearch) and panels (i.e., Qualtrics and Dynata). Without filters, only Prolific provided consistently high-quality data. With filters, both Prolific and CloudResearch produced high data quality. In comparison, MTurk, even with filters, supplied low-quality data. Additionally, Eyal et al. (2021) found that frequency and usage predicted data quality. Accordingly, MTurk participants who specified that the site was their primary source of income and spent the least time on it per week supplied the lowest data quality.

These findings, consistent with Chmielewski and Kucker (2020), suggest that researchers using platforms such as MTurk and Prolific should routinely employ quality checks and rigorous data screening techniques. Consideration of the papers included within the review revealed that investigators regularly reported integrity checks (e.g., honesty, implausible patterns of responding, and attention monitoring) (see Bowes & Tasimi, 2022; Calvillo, Ross, Garcia, Smelter, & Rutchick, 2020; Calvillo, Rutchick, & Garcia, 2021; Jolley & Douglas, 2017). However, information on screening was less detailed and

frequently absent. The assumption is that quality checks addressed issues arising from aberrant responses. The failure to fully report data screening concurred with Chmielewski and Kucker (2020).

Samples comprised a range of different national groups. For example, American (e.g., Calvillo, Rutchick, & Garcia, 2021; Enders & Uscinski, 2021; Jolley & Douglas, 2017), Russian (Egorova, Parshikova, Chertkova, Staroverov, & Mitina, 2020), Norwegian (Filkuková, Ayton, Rand, & Langguth, 2021), Swiss (Hartmann & Müller, 2022), Indonesian (Prawira, Pratama, Bella, & Nuraini, 2021), Spanish (Fasce, Adrián-Ventura, Lewandowsky, & van der Linden, 2021), Slovakian (Šrol, Čavojová, & Ballová Mikušková, 2022), and French. (Fuhrer & Cova, 2020).

Comparisons between national samples, providing they are large enough to be representative of/generalizable to the populations from which they were selected, offer potentially important insights into conspiratorial ideation. For instance, similarities between countries suggest possible causal influences. However, to assess these further additional methods of data collection are required. These should encompass a wide range of countries and employ methods that assess countries' relative standing on a cultural measurement of conspiracy ideation (Franke & Richey, 2010). The resulting scaled values can then be used to investigate relationships with other variables of interest (national identity, political involvement, etc.).

Inaccurate Information

Studies classified misinformation in differing ways. This was a function of study focus (e.g., COVID-19, Lobato, Powell, Padilla, & Holbrook, 2020; Theories, Sternisko et al., 2021) and the fact that there exists no agreed taxonomy of misinformation. Examples included rating the truthfulness of false headlines (Anthony & Moulding, 2019; Calvillo, Rutchick, & Garcia, 2021; Calvillo, Ross, Garcia, Smelter, & Rutchick, 2020; Faragó, Kende, & Krekó, 2020), rejection of climate science (Lewandowsky, Oberauer, & Gignac, 2013), inclination to approve rumor narratives (Kwon, Pellizzaro, Shao, & Chadha, 2022), and endorsement of statements on socially important topics (Brotherton & Son, 2021).

The multiplicity of measures made generalization across studies difficult. An underlying supposition is that endorsement of one type of misinformation predicted the global tendency to accept questionable and inaccurate material as authentic. This macro-level assumption is reductionist and disputable because there are myriad factors that influence willingness to validate misinformation. Prominent influences are source credibility, prior experience, level of knowledge, normative pressure, and social context (historical, temporal, and cultural).

Illustratively, people are more distrustful of social media and have greater faith in traditional fact-based media (Wagner & Boczkowski, 2019). Acknowledging the potential effects of such variables, researchers should be cautious when extrapolating findings or include concurrent measures. Furthermore, awareness of false information is developing rapidly. Hence awareness of false/fake news has increased, and the need to fact-check data is now more commonly practiced. This was not the case a couple of years ago. Dynamic changes such as these also potentially limit the usefulness of generalizations.

A pertinent distinction, highlighted by Campos-Castillo and Shuster (2021), was between misinformation (an unwittingly false statement) and disinformation (a deliberately false statement). However, not all demarcations were as precise and there was a tendency to merely view CTs as a specific form of misinformation. This was also true of the terms false and fake, which were regularly used interchangeably (e.g., Unkelbach & Speckmann, 2021). For example, Calvillo et al. (2021, p.1) classified fake news as "the presentation of false or misleading information as if it were legitimate journalism". This was extended by Szebeni, Lönnqvist, and Jasinskaja-Lahti, (2021, p.2), who borrowed van der Linden (2017) abstraction of fake news or disinformation as "misinformation coupled with a clear intent to cause harm or purposefully deceive others". Similarly, Faragó, Kende, and Krekó (2020) operationalized fake news as fabricated "information," which is deliberately created to misinform readers. Other studies adopted other definitions that qualified terminology. For example, De Coninck et al. (2021) used the explication of Benkler, Faris, and Roberts (2018) that states that misinformation (or fake news) is "publishing wrong information without meaning to be wrong or having a political purpose in communicating false information" (De Coninck et al., 2021, p.2).

From these illustrations disambiguation of key terms is required. This is necessary if researchers are to make meaningful comparisons between study outcomes and a coherent literature is to emerge (Molina, Sundar, Le, & Lee, 2021). Recently, the need for exactness has resulted in developing a lexicon for infodemic terms (Gradoń, Hołyst, Moy, Sienkiewicz, & Suchecki, 2021). This distinguishes between misinformation (i.e., information that is false and disseminated *unintentionally*), disinformation (false information that is *intentionally* created or disseminated), misinformation (genuine information that is shared to cause harm), and propaganda (i.e., true or false information spread to persuade an audience) (see Wardle, 2018; Wardle & Derakhshan, 2017). The difference be-

tween misinformation and disinformation can therefore be viewed as intent (Egelhofer, & Lecheler, 2019).

Similarly, there are important factors that researchers should recognize when using the terms fake and false news. Firstly, the distinction between fake and genuine news is not always clear. As Nielsen and Graves (2017) note, it is a matter of degree rather than distinction. Secondly, the label is broad and diffuse and applies to inaccuracy generally (Egelhofer, & Lecheler, 2019). Thus, fake news encompasses poor journalism, propaganda, and advertising more readily than incorrect news reports (Nielsen & Graves, 2017). The key elements of fake news are purposely fabricated (i.e., falsifies facts and details), deliberately misleading, presented as genuine in order to mislead, and inaccurate (Egelhofer, & Lecheler, 2019). Key defining features are that fake news is low in facticity, imitates media content, and intentionally seeks to deceive (Egelhofer, & Lecheler, 2019).

COVID

The outbreak and course of the COVID pandemic had a profound effect on the literature. This is evidenced by the fact that a significant proportion of post-2020 publications focused on COVID conspiracies and misinformation (e.g., Allington, Duffy, Wessely, Dhavan, & Rubin, 2021; Quinn, Fazel, & Peters, 2021; Prawira, Pratama, Bella, & Nuraini, 2021). Indeed, of the 24 studies published on CT advocacy and endorsement of inaccurate material in 2021, 37.50% focused on or around COVID. The consequence of this interest was that the number of articles in 2020, represented the majority of papers included in the review. COVID-focused articles comprised mainly large-scale international studies (e.g., De Coninck et al., 2021; Sternisko, Cichocka, Cislak, & van Bavel, 2021) and online surveys (e.g., Allington, Duffy, Wessely, Dhavan, & Rubin, 2021; Egorova et al., 2020; Prawira, Pratama, Bella, & Nuraini, 2021). However, as with the non-COVID articles, a minority of investigations used alternative methods (i.e., Instagram posts, Quinn, Fazel, & Peters, 2021; comparing vaccine supporters with vaccine rejectors; Newman, Lewandowsky, & Mayo, 2022).

Articles looked at both COVID conspiracies and COVID as a source of misinformation (Kwon, Pellizzaro, Shao, & Chadha, 2022). In some cases, as with the general research area, conceptualizations of CT and inaccurate information were used interchangeably. In this context, COVID conspiracies represented a specific embodiment of misinformation.

DISCUSSION

Despite limiting the search to Psychology publications, this review identified a breadth of approaches, which employed a variety of methods. Given this diversity and the influence of theoretical disciplines that inform work on CT advocacy and endorsement of inaccurate information, it was understandable that authors operationalized key terms in differing ways. This reflected the rapidly developing nature of the research area, the vast amount of previous investigation, and intense multi-disciplinary interest in the topic. The intention of this review, in illustrating this was not to criticize the body of work, but rather to establish the degree to which articles represented a coherent field of inquiry. It is clear from this review that this was not the case. Acknowledging this, subsequent academic work in the areas of conspiracy, false news, and mis/disinformation would benefit from considered operationalization of key terminology. Greater precision will prove beneficial by facilitating conceptual alignment and enabling meaningful comparisons between study outcomes. Currently, this is difficult because researchers use myriad definitions and central terms, such as misinformation and disinformation, which are used synonymously.

Regarding CT, this requires greater awareness of the complex nature of conspiratorial ideation and a more careful selection of delineations to ensure they align with study aims and objectives. Specifically, identification of the aspect(s) of conspiratorial ideation under investigation. For instance, researchers need to clarify whether outcomes are related to general CT beliefs (i.e., common, non-event-based ideations; Brotherton et al., 2013), specific facets (e.g., Government Malfeasance, Extra-terrestrial Cover-up, Malevolent Global Conspiracies, Personal Wellbeing, or Control of Information; Brotherton et al., 2013; Drinkwater et al., 2020), or discrete characteristics such as distrust of authority (e.g., Lobato, Powell, Padilla, & Holbrook, 2020) as assessed by measures that focus on specific government-related theories (e.g., 9/11 cover-up).

Too frequently authors used CTs as a ubiquitous, all-embracing label. This implied that findings from one context generalize to others, which is not necessarily true. For instance, believing that one celebrity faked their death or was murdered does not necessarily mean that an individual will endorse all such theories. Although these assumptions can coalesce (e.g., the 27 Club, where associations are made between famous people who died aged 27 years) they are often influenced by other factors (age, perceived health, importance, etc.).

While abridged definitions are understandable, in the context of journal word limits, the research area would undoubtedly benefit from greater conceptual exactness and the use of consensually agreed delineations of CT.

The danger with using concise definitions as illustrations is that they are reductionist to the extent that they provide only truncated snapshots of CT ideation. This is problematic as these often fail to fully represent the complex nature of CT endorsement, and consequently, prove either uninformative, or unintentionally misleading.

For instance, Egorova, Parshikova, Chertkova, Staroverov, and Mitina (2020, p. 3) define CTs as "attempts to explain various social phenomena as the result of conspiracies by certain powerful groups that are exceptionally effective and no less exceptionally malicious". This classification is vague as it refers only to collective action, power, and malevolence, and omits important elements (e.g., planning, intention, and purpose). Similarly, Lobato et al. (2020) placed an emphasis on distrust of recognized legal or scientific cultural authorities, then assessed conspiratorial ideation using the Conspiracy Mentality Questionnaire (Bruder et al., 2013), which measures the general tendency to engage in conspiracist ideation.

The limitation with measures that assess the general endorsement of CTs is the presumption that ideation is global (Pierre, 2020). That is, belief in one theory predicts faith in others (Goertzel, 1994**;** Lewandowsky, Oberauer, & Gignac, 2013). This extends to instances where narratives conflict (Wood, Douglas, & Sutton, 2012), and are fabricated (Swami et al., 2017). A commonly cited example of the former is that the more individuals believed that Princess Diana faked her own death, the more they believed that she was murdered. Similarly, the greater the conviction that Osama Bin Laden was already dead when U.S. special forces raided his compound in Pakistan, the more participants supposed he was still alive (Wood, Douglas, & Sutton, 2012). Regarding the latter, Swami et al. (2017) devised a scale around a fabricated Red Bull story (e.g., "Red Bull contains illegal substances that raise the desire for the product").

The notion that CT endorsement is a monological belief system, where belief in one theory is predicated on the advocacy of others is debatable (Franks, Bangerter, Bauer, Hall, & Noort, 2017). Critics argue that elements of CT beliefs combine to form a worldview, which is typified by CT mentality, of which monological belief is not a defining characteristic (Franks et al., 2017). Correspondingly, the commonality between theories arises from high-order factors such as distrust of government rather than conspiracies per se.

Furthermore, people do not simply share inaccurate information because they believe it is true. Analyzing data from Twitter, Vosoughi, Roy, and Aral (2018) found that falsehood (vs. truthful information) diffused significantly farther, faster, deeper, and more broadly. This was pronounced for political news. The effect was attributable to the inherent nature of false news, which was perceived as more novel and therefore worthy of sharing. True and false stories also elicited different replies. True content produced anticipation, sadness, joy, and trust, whereas false material provoked fear, disgust, and surprise. These findings indicated that conspiracies may be of inherent interest to people regardless of credibility (Vosoughi, Roy, & Aral, 2018). This observation reinforces the point that although accuracy is an important feature of CTs it is not a defining characteristic. As with gossip, people may share CTs for various social reasons.

The potential consequence of viewing CTs in overly simplistic terms is to depict endorsers as a homogeneous group. Recent work around paranormal credence indicates that believers (Dagnall, Denovan, & Drinkwater, under review) and experiencers (Drinkwater, Dagnall, Denovan, & Williams, 2021; Drinkwater, Dagnall, Denovan, Parker, & Escolà-Gascón, 2022) are best conceptualized as subgroups, who differ as a function of life history or other cognitive-perceptual factors such as level of schizotypy (Denovan, Dagnall, Drinkwater, & Parker, 2018). Applying this approach to CTs, then the tendency to validate inaccurate information within individuals scoring high on endorsement may be influenced by other variables such as delusional ideation (i.e., persecution) (see Verdoux et al., 1998). Future research would benefit from the ability to differentiate between benign CT beliefs and those that are likely to negatively influence individual well-being and/or social and political processes.

Using standardized taxonomies (e.g., lexicon for infodemic terms) would also advance work by ensuring greater conceptual consistency. A key distinction is between intentionally and unintentionally misleading sources of data. Classification of terminology is important because it enables researchers to determine whether belief in CTs is associated with a general propensity to endorse inaccurate information (Miller, Saunders, & Farhart, 2016). Tentatively, given the nature of conspiratorial ideation, it is logical to presume that higher levels of conspiratorial ideation incline individuals to place less faith in 'official' sources of information regardless of their veracity (Drinkwater et al., 2012). This should be especially true in the case of individuals scoring high on mistrust of authority. Analysis, such as latent profiling, that recognizes that CT endorsers potentially represent sub-populations based on other factors would allow investigators to test such notions.

From a critical perspective, scholars should avoid applying value judgments to CTs, as expressing concerns about the veracity of information disseminated by corrupt administrations is socially beneficial. Certainly, the notion that CTs are inherently wrong and personally and

socially harmful requires greater consideration and contextualization.

Finally, it is important to acknowledge that the selected search terms in this review highlighted only a restricted range of papers. Whilst this was necessary to ensure focus and manageability, it should be acknowledged that related, relevant articles were excluded. For example, papers investigating combinations of COVID-19, fake news, and pseudo scientific information. Hence, the review should be considered extensive, rather than exhaustive, and it only provides insights into the nature of psychological work within the designated research parameters. Consequently, future work should examine allied areas to determine if they demonstrate similar reporting trends (during the period 2010-2022) to those observed in this article.

REFERENCES

Adam-Troian, J., Wagner-Egger, P., Motyl, M., Arciszewski, T., Imhoff, R., Zimmer, F., ... & van Prooijen, J. W. (2021). Investigating the links between cultural values and belief in conspiracy theories: The key roles of collectivism and masculinity. *Political Psychology, 42*(4), 597–618. https://doi.org/10.1111/pops.12716

Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J. (2021). Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency. *Psychological Medicine, 51*(10), 1763–1769. https://doi.org/10.1017/S003329172000224X

Anthony, A., & Moulding, R. (2019). Breaking the news: Belief in fake news and conspiracist beliefs. *Australian Journal of Psychology, 71*(2), 154–162. https://doi.org/10.1111/ajpy.12233

Baele, S. J. (2019). Conspiratorial Narratives in Violent Political Actors' Language. Journal of Language and Social Psychology, *38*(5-6), 706–734. https://doi.org/10.1177/0261927X19868494

Bale, J. M. (2007). Political paranoia v. political realism: On distinguishing between bogus conspiracy theories and genuine conspiratorial politics. *Patterns of Prejudice*, *41*, 45–60. https://doi.org/10.1080/00313220601118751

Banas, J. A., & Miller, G. (2013). Inducing resistance to conspiracy theory propaganda: Testing inoculation and meta inoculation strategies. *Human Communication Research, 39*(2), 184–207. https://doi.org/10.1111/hcre.12000

Barkun, M. (2015). Conspiracy theories as stigmatized knowledge. *Diogenes*, *62*(3-4), 114–120. https://doi.org/10.1177/0392192116669288

Benkler, Y., Faris, R., & Roberts, H. (2018). *Network propaganda: Manipulation, disinformation, and radicalization in American politics*. New York, NY: Oxford University Press. https://doi.org/10.1093/oso/9780190923624.001.0001

Bessi, A. (2016). Personality traits and echo chambers on Facebook. *Computers in Human Behavior, 65*, 319–324. https://doi.org/10.1016/j.chb.2016.08.016

Bjerg, O., & Presskorn-Thygesen, T. (2017). Conspiracy theory: Truth claim or language game? *Theory, Culture & Society, 34*(1), 137-159. https://doi.org/10.1177/0263276416657880

Bonetto, E., Varet, F., & Troïan, J. (2019). To resist or not to resist? Investigating the normative features of resistance to persuasion. *Journal of Theoretical Social Psychology*, *3*(3), 167–175. https://doi.org/10.1002/jts5.44

Bowes, S. M., & Tasimi, A. (2022). Clarifying the relations between intellectual humility and pseudoscience beliefs, conspiratorial ideation, and susceptibility to fake news. *Journal of Research in Personality, 98*, 104220. https://doi.org/10.1016/j.jrp.2022.104220

Brotherton, R. (2013). Towards a definition of 'conspiracy theory. *PsyPAG Q*, 88, 9–14. https://doi.org/10.53841/bpspag.2013.1.88.9

Brotherton, R., French, C. C., & Pickering, A. D. (2013). Measuring belief in conspiracy theories: The generic conspiracist beliefs scale. *Frontiers in Psychology*, *4*, 279. https://doi.org/10.3389/fpsyg.2013.00279

Brotherton, R., & Son, L. K. (2021). Metacognitive Labeling of Contentious Claims: Facts, Opinions, and Conspiracy Theories. *Frontiers in Psychology, 12,* 924. https://doi.org/10.3389/fpsyg.2021.644657

Bruder, M., Haffke, P., Neave, N., Nouripanah, N., & Imhoff, R. (2013). Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy Mentality Questionnaire. *Frontiers in Psychology*, *4*, 225. https://doi.org/10.3389/fpsyg.2013.00225

Buenting, J., & Taylor, J. (2010). Conspiracy theories and fortuitous data. *Philosophy of the Social Sciences, 40*(4), 567–578. https://doi.org/10.1177/0048393109350750

Buhrmester, M. D., Talaifar, S., & Gosling, S. D. (2018). An evaluation of Amazon's Mechanical Turk, its rapid rise, and its effective use. *Perspectives on Psychological Science*, *13*(2), 149–154. https://doi.org/10.1177/1745691617706516

Calvillo, D. P., Ross, B. J., Garcia, R. J., Smelter, T. J., & Rutchick, A. M. (2020). Political ideology predicts perceptions of the threat of COVID-19 (and susceptibility to fake news about it). *Social Psychological and Personality Science, 11*(8), 1119–1128. https://doi.org/10.1177/1948550620940539

Calvillo, D. P., Rutchick, A. M., & Garcia, R. J. (2021). Individual Differences in Belief in Fake News about Election Fraud after the 2020 US Election. *Behavioral Sciences, 11*(12), 175. https://doi.org/10.3390/bs11120175

Campos-Castillo, C., & Shuster, S. M. (2021). So what if they're lying to us? Comparing rhetorical strategies for discrediting sources of disinformation and misinformation using an affect-based credibility rating. *American Behavioral Scientist*, 00027642211066058. https://doi.org/10.1177/00027642211066058

Chmielewski, M., & Kucker, S. C. (2020). An MTurk crisis? Shifts in data quality and the impact on study results. *Social Psychological and Personality Science*, *11*(4), 464–473. https://doi.org/10.1177/1948550619875149

Cíbik, M., & Hardoš, P. (2020). Conspiracy theories and reasonable pluralism. *European Journal of Political Theory*, *21*(3), 445–465. https://doi.org/10.1177/1474885119899232

Coady, D. (2018). Cass Sunstein and Adrian Vermeule on conspiracy theories. *Argumenta, 3*(2), 291–302.

Dagnall, N., Denovan, A., Drinkwater, K., Parker, A., & Clough, P. (2016). Toward a better understanding of the relationship between belief in the paranormal and statistical bias: the potential role of schizotypy. *Frontiers in Psychology*, 1045. https://doi.org/10.3389/fpsyg.2016.01045

Dagnall, N., Denovan, A., Drinkwater, K., Parker, A., & Clough, P. (2017). Statistical bias and endorsement of conspiracy theories. *Applied Cognitive Psychology*, *31*(4), 368–378. https://doi.org/10.1002/acp.3331

Dagnall, N., Drinkwater, K., Denovan, A., Parker, A., & Rowley, K. (2016). Misperception of chance, conjunction, framing effects and belief in the paranormal: a further evaluation. *Applied Cognitive Psychology*, *30*(3), 409-419. https://doi.org/10.1002/acp.3217

Dagnall, N., Drinkwater, K. G., Denovan, A., & Walsh, R. S. (2020). Bridging the gap between UK government strategic narratives and public Opinion/Behavior: Lessons from COVID-19. *Frontiers in Communication*, *71*. https://doi.org/10.3389/fcomm.2020.00071

Dagnall, N., Drinkwater, K., Parker, A., Denovan, A., & Parton, M. (2015). Conspiracy theory and cognitive style: A worldview. *Frontiers in Psychology*, *6*, 206. https://doi.org/10.3389/fpsyg.2015.00206

De Coninck, D., Frissen, T., Matthijs, K., d'Haenens, L., Lits, G., Champagne-Poirier, O., ... & Généreux, M. (2021). Beliefs in conspiracy theories and misinformation about COVID-19: Comparative perspectives on the role of anxiety, depression and exposure to and trust in information sources. *Frontiers in Psychology, 12*. https://doi.org/10.3389/fpsyg.2021.646394

Denovan, A., Dagnall, N., Drinkwater, K., Parker, A., & Neave, N. (2020). Conspiracist beliefs, intuitive thinking, and schizotypal facets: A further evaluation. *Applied Cognitive Psychology*, *34*(6), 1394–1405. https://doi.org/10.1002/acp.3716

Denovan, A., Dagnall, N., Drinkwater, K., & Parker, A. (2018). Latent profile analysis of schizotypy and paranormal belief: Associations with probabilistic reasoning performance. *Frontiers in Psychology*, *9*, 35. https://doi.org/10.3389/fpsyg.2018.00035

Dentith, M. R. X. (2019). *The Christchurch terrorism conspiracy theories are not just false. They're dangerous*. The Spinoff.

Douglas, K. M., Uscinski, J. E., Sutton, R. M., Cichocka, A., Nefes, T., Ang, C. S., & Deravi, F. (2019). Understanding conspiracy theories. *Political Psychology*, *40*, 3–35. https://doi.org/10.1111/pops.12568

Drinkwater, K., Dagnall, N., Denovan, A., Parker, A., & Clough, P. (2018). Predictors and associates of problem–reaction–solution: statistical bias, emotion-based reasoning, and belief in the paranormal. *SAGE Open*, *8*(1), 2158244018762999. https://doi.org/10.1177/2158244018762999

Drinkwater, K. G., Dagnall, N., Denovan, A., Parker, A., & Escolà-Gascón, Á. (2022). Paranormal experience profiles and their association with variations in executive functions: A latent profile analysis. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.778312

Drinkwater, K. G., Dagnall, N., Denovan, A., & Neave, N. (2020). Psychometric assessment of the Generic Conspiracist Beliefs Scale. *Plos One*, *15*(3), e0230365. https://doi.org/10.1371/journal.pone.0230365

Drinkwater, K. G., Dagnall, N., Denovan, A., & Walsh, R. S. (2021). To what extent have conspiracy theories undermined COVID-19: Strategic narratives? *Frontiers in Communication*, *6*, 47. https://doi.org/10.3389/fcomm.2021.576198

Drinkwater, K. G., Dagnall, N., Denovan, A., & Williams, C. (2021). Paranormal belief, thinking style and delusion formation: a latent profile analysis of within-individual variations in experience-based paranormal facets. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.670959

Drinkwater, K., Dagnall, N., & Parker, A. (2012). Reality testing, conspiracy theories, and paranormal beliefs. *Journal of Parapsychology*, *76*(1), 57–77.

Drinkwater, K. G., Denovan, A., & Dagnall, N. (2020). Lucid dreaming, nightmares, and sleep paralysis: associations with reality testing deficits and paranormal experience/belief. *Frontiers in Psychology*, *11*, 471. https://doi.org/10.3389/fpsyg.2020.00471

Egelhofer, J. L., & Lecheler, S. (2019). Fake news as a two-dimensional phenomenon: A framework and research agenda. *Annals of the International Communication Association*, *43*(2), 97–116. https://doi.org/10.1080/23808985.2019.1602782

Egorova, M. S., Parshikova, O. V., Chertkova, Y. D., Staroverov, V. M., & Mitina, O. V. (2020). COVID-19: Belief in conspiracy theories and the need for quarantine. *Psychology in Russia: State of the Art, 13*(4), 2–25. https://doi.org/10.11621/pir.2020.0401

Elley, B. (2021). "The rebirth of the West begins with you!"—Self-improvement as radicalisation on 4chan. *Humanities and Social Sciences Communications, 8*(1),

1–10. https://doi.org/10.1057/s41599-021-00732-x
Enders, A. M., & Uscinski, J. E. (2021). Are misinformation, antiscientific claims, and conspiracy theories for political extremists? *Group Processes & Intergroup Relations, 24*(4), 583–605. https://doi.org/10.1177/1368430220960805
Escolà-Gascón, Á. (2022). Impact of conspiracist ideation and psychotic-like experiences in patients with schizophrenia during the COVID-19 crisis. *Journal of Psychiatric Research*, *146*, 135–148. https://doi.org/10.1016/j.jpsychires.2021.12.022
Escolà-Gascón, Á., & Wright, A. (2021). Psychotic behaviors during COVID-19: Should conspiracist ideation be included within the continuum model of psychosis? *Schizophrenia Research,* 237, 190–191. https://doi.org/10.1016/j.schres.2021.09.007
Eyal, P., David, R., Andrew, G., Zak, E., & Ekaterina, D. (2021). Data quality of platforms and panels for online behavioral research. *Behavior Research Methods,* 1–20. https://doi.org/10.3758/s13428-021-01694-3
Faragó, L., Kende, A., & Krekó, P. (2020). We Only Believe in News That We Doctored Ourselves. *Social Psychology, 51*(2), 77–90. https://doi.org/10.1027/1864-9335/a000391
Fasce, A., Adrián-Ventura, J., Lewandowsky, S., & van der Linden, S. (2021). Science through a tribal lens: A group-based account of polarization over scientific facts. *Group Processes & Intergroup Relations*, 13684302211050323. https://doi.org/10.1177/13684302211050323
Faverio, M. (2022, January 13). Share of those 65 and older who are tech users has grown in the past decade. Pew Research Center. https://www.pewresearch.org/fact-tank/2022/01/13/share-of-those-65-and-older-who-are-tech-users-has-grown-in-the-past-decade/
Filkuková, P., Ayton, P., Rand, K., & Langguth, J. (2021). What should I trust? Individual differences in attitudes to conflicting information and misinformation on COVID-19. *Frontiers in Psychology, 1392*. https://doi.org/10.3389/fpsyg.2021.588478
Franke, G. R., & Richey, R. G. (2010). Improving generalizations from multi-country comparisons in international business research. *Journal of International Business Studies, 41*(8), 1275–1293. http://www.jstor.org/stable/40863978
Franks, B., Bangerter, A., & Bauer, M. W. (2013). Conspiracy theories as quasi-religious mentality: an integrated account from cognitive science, social representations theory, and frame theory. *Frontiers in Psychology, 4*, 424. https://doi.org/10.3389/fpsyg.2013.00424
Franks, B., Bangerter, A., Bauer, M. W., Hall, M., & Noort, M. C. (2017). Beyond "monologicality"? Exploring conspiracist worldviews. *Frontiers in Psychology*, *8*, 861. https://doi.org/10.3389/fpsyg.2017.00861
Frischlich, L., Hellmann, J. H., Brinkschulte, F., Becker, M., & Back, M. D. (2021). Right-wing authoritarianism, conspiracy mentality, and susceptibility to distorted alternative news. *Social Influence, 16*(1), 24–64. https://doi.org/10.1080/15534510.2021.1966499
Fuhrer, J., & Cova, F. (2020). "Quick and dirty": Intuitive cognitive style predicts trust in Didier Raoult and his hydroxychloroquine-based treatment against COVID-19. *Judgment & Decision Making, 15*(6), 889–908. https://doi.org/10.31234/osf.io/ju62p
Gellert, G. A. (2021). Public health nonfeasance, misfeasance and malfeasance in the US government response to COVID-19. *Ethics, Medicine and Public Health, 16,* 100611. https://doi.org/10.1016/j.jemep.2020.100611
Georgiou, N., Delfabbro, P., & Balzan, R. (2021). Conspiracy theory beliefs, scientific reasoning and the analytical thinking paradox. *Applied Cognitive Psychology, 35*(6), 1523–1534. https://doi.org/10.1002/acp.3885
Goreis, A., & Voracek, M. (2019). A systematic review and meta-analysis of psychological research on conspiracy beliefs: Field characteristics, measurement instruments, and associations with personality traits. *Frontiers in Psychology*, *10*, 205. https://doi.org/10.3389/fpsyg.2019.00205
Goertzel, T. (1994). Belief in conspiracy theories. *Political Psychology*, *15*(4), 731–742. https://doi.org/10.2307/3791630
Gradoń, K. T., Hołyst, J. A., Moy, W. R., Sienkiewicz, J., & Suchecki, K. (2021). Countering misinformation: A multidisciplinary approach. *Big Data & Society*, *8*(1), 20539517211013848. https://doi.org/10.1177/20539517211013848
Grimes, D. R. (2016). On the viability of conspiratorial beliefs. *PloS one*, *11*(1), e0147905. https://doi.org/10.1371/journal.pone.0147905
Gualda, E., Krouwel, A., Palacios-Gálvez, M., Morales-Marente, E., Rodríguez-Pascual, I., & García-Navarro, E. B. (2021). Social distancing and COVID-19: Factors associated with compliance with social distancing norms in Spain. *Frontiers in Psychology, 12.* https://doi.org/10.3389/fpsyg.2021.727225
Hagen, K. (2022). Are 'Conspiracy Theories' So Unlikely to Be True? A Critique of Quassim Cassam's Concept of 'Conspiracy Theories'. *Social Epistemology*, *36*(3), 329–343. https://doi.org/10.1080/02691728.2021.2009930
Hartmann, M., & Müller, P. (2022). Acceptance and Adherence to COVID-19 Preventive Measures are Shaped Predominantly by Conspiracy Beliefs, Mistrust in Science and Fear–A Comparison of More than 20 Psychological Variables. *Psychological Reports*, 00332941211073656. https://doi.org/10.1177/00332941211073656
Husting, G., & Orr, M. (2007). Dangerous machinery: "Conspiracy theorist" as a transpersonal strategy of exclusion. *Symbolic Interaction*, *30*(2), 127–150.

https://doi.org/10.1525/si.2007.30.2.127
Imhoff, R., & Bruder, M. (2014). Speaking (un-) truth to power: Conspiracy mentality as a generalised political attitude. *European Journal of Personality*, *28*(1), 25–43. https://doi.org/10.1002/per.1930
Imhoff, R., Zimmer, F., Klein, O., António, J. H., Babinska, M., Bangerter, A., ... & van Prooijen, J. W. (2022). Conspiracy mentality and political orientation across 26 countries. *Nature Human Behaviour,* 1–12. https://doi.org/10.1038/s41562-021-01258-7
Irwin, H. J., Dagnall, N., & Drinkwater, K. (2015). Belief inconsistency in conspiracy theorists. *Comprehensive Psychology*, *4*, 17–CP. https://doi.org/10.2466/17.CP.4.19
Jolley, D., & Douglas, K. M. (2017). Prevention is better than cure: Addressing anti-vaccine conspiracy theories. *Journal of Applied Social Psychology, 47*(8), 459–469. https://doi.org/10.1111/jasp.12453
Juanchich, M., Sirota, M., Jolles, D., & Whiley, L. A. (2021). Are COVID-19 conspiracies a threat to public health? Psychological characteristics and health protective behaviours of believers. *European Journal of Social Psychology*, *51*(6), *969-989.* https://doi.org/10.1002/ejsp.2796
Kantorowicz-Reznichenko, E., Folmer, C. R., & Kantorowicz, J. (2022). Don't believe it! A global perspective on cognitive reflection and conspiracy theories about COVID-19 pandemic. *Personality and Individual Differences, 194*, 111666. https://doi.org/10.1016/j.paid.2022.111666
Keeley, B. L. (2019). *Of conspiracy theories.* In Conspiracy Theories (pp. 45-60). Routledge. https://doi.org/10.4324/9781315259574-4
Kees, J., Berry, C., Burton, S., & Sheehan, K. (2017). An analysis of data quality: Professional panels, student subject pools, and Amazon's Mechanical Turk. *Journal of Advertising, 46*(1), 141–155. https://doi.org/10.1080/00913367.2016.1269304
Kemei, J., Alaazi, D. A., Tulli, M., Kennedy, M., Tunde-Byass, M., Bailey, P., ... & Salami, B. (2022). A scoping review of COVID-19 online mis/disinformation in Black communities. *Journal of Global Health, 12*. https://doi.org/10.7189/jogh.12.05026
Konkes, C., & Lester, L. (2017). Incomplete knowledge, rumour and truth seeking: When conspiracy theories become news. *Journalism Studies*, *18*(7), 826–844. https://doi.org/10.1080/1461670X.2015.1089182
Kwon, K. H., Pellizzaro, K., Shao, C., & Chadha, M. (2022). "I Heard That COVID-19 Was…": Rumors, Pandemic, and Psychological Distance. *American Behavioral Scientist,* 00027642211066026. https://doi.org/10.1177/00027642211066026
Levy, N. (2007). Radically socialized knowledge and conspiracy theories. *Episteme*, *4*(2), 181–192. https://doi.org/10.3366/epi.2007.4.2.181
Lewandowsky, S., Oberauer, K., & Gignac, G. E. (2013). NASA faked the moon landing—therefore, (climate) science is a hoax: An anatomy of the motivated rejection of science. *Psychological Science, 24*(5), 622–633. https://doi.org/10.1177/0956797612457686
Lewandowsky, S., Ecker, U. K., & Cook, J. (2017). Beyond misinformation: Understanding and coping with the "post-truth" era. Journal of applied research in memory and cognition, 6(4), 353-369. https://doi.org/10.1016/j.jarmac.2017.07.008
Lobato, E. J., Powell, M., Padilla, L. M., & Holbrook, C. (2020). Factors predicting willingness to share COVID-19 misinformation. *Frontiers in Psychology, 11*, 2413. https://doi.org/10.3389/fpsyg.2020.566108
Martire, K. A., Growns, B., Bali, A. S., Montgomery-Farrer, B., Summersby, S., & Younan, M. (2020). Limited not Lazy: A quasi-experimental secondary analysis of evidence quality evaluations by those who hold implausible beliefs. *Cognitive Research: Principles and Implications*, *5*(1), 1–15. https://doi.org/10.1186/s41235-020-00264-z
Mashuri, A., Putra, I. E., Kavanagh, C., Zaduqisti, E., Sukmawati, F., Sakdiah, H., & Selviana, S. (2021). The socio-psychological predictors of support for post-truth collective action. *The Journal of Social Psychology,* 1–19. https://doi.org/10.1080/00224545.2021.1935678
Miller, J. M., Saunders, K. L., & Farhart, C. E. (2016). Conspiracy endorsement as motivated reasoning: The moderating roles of political knowledge and trust. *American Journal of Political Science, 60*(4), 824-844. https://doi.org/10.1111/ajps.12234
Mocanu, D., Rossi, L., Zhang, Q., Karsai, M., & Quattrociocchi, W. (2015). Collective attention in the age of (mis) information. *Computers in Human Behavior*, *51*, 1198–1204. https://doi.org/10.1016/j.chb.2015.01.024
Molina, M. D., Sundar, S. S., Le, T., & Lee, D. (2021). "Fake news" is not simply false information: A concept explication and taxonomy of online content. *American Behavioral Scientist*, *65*(2), 180–212. https://doi.org/10.1177/0002764219878224
Moscovici, S. (1987). "The conspiracy mentality," in Changing Conceptions of Conspiracy, eds C. F. Graumann and S. Moscovici (Heidelberg: Springer-Verlag), 151–169. https://doi.org/10.1007/978-1-4612-4618-3_9
Newman, D., Lewandowsky, S., & Mayo, R. (2022). Believing in nothing and believing in everything: The underlying cognitive paradox of anti-COVID-19 vaccine attitudes. *Personality and Individual Differences,* 111522. https://doi.org/10.1016/j.paid.2022.111522
Nielsen, R. K., & Graves, L. (2017). "News you don't believe": Audience perspectives on fake news. Retrieved from https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2017-10/Nielsen%26Graves_factsheet_1710v3_FINAL_download.pdf
Nyhan, B., & Zeitzoff, T. (2018). Fighting the past: Per-

ceptions of control, historical misperceptions, and corrective information in the Israeli-Palestinian conflict. *Political Psychology, 39*(3), 611–631. https://doi.org/10.1111/pops.12449

Oliver, J. E., & Wood, T. J. (2014). Conspiracy theories and the paranoid style (s) of mass opinion. *American Journal of Political Science*, *58*(4), 952–966. https://doi.org/10.1111/ajps.12084

O'Brien, T. C., Palmer, R., & Albarracin, D. (2021). Misplaced trust: When trust in science fosters belief in pseudoscience and the benefits of critical evaluation. Journal of *Experimental Social Psychology, 96*, 104184. https://doi.org/10.1016/j.jesp.2021.104184

Palan, S., & Schitter, C. (2018). Prolific. ac—A subject pool for online experiments. *Journal of Behavioral and Experimental Finance, 17*, 22–27. https://doi.org/10.1016/j.jbef.2017.12.004

Pantazi, M., Papaioannou, K., & van Prooijen, J. W. (2021). Power to the people: The hidden link between support for direct democracy and belief in conspiracy theories. *Political Psychology, 42*(1), 267–304. https://doi.org/10.1111/pops.12797

Peer, E., Brandimarte, L., Samat, S., & Acquisti, A. (2017). Beyond the Turk: Alternative platforms for crowdsourcing behavioral research. *Journal of Experimental Social Psychology, 70*, 153–163. https://doi.org/10.1016/j.jesp.2017.01.006

Pierre, J. M. (2020). Mistrust and misinformation: A two-component, socio-epistemic model of belief in conspiracy theories. *Journal of Social and Political Psychology*, *8*(2), 617–641. https://doi.org/10.5964/jspp.v8i2.1362

Prawira, B., Pratama, A. J., Bella, A., & Nuraini, S. (2021). The role of behavioural immune system and belief in COVID-19 misinformation on COVID-19 protective behaviours in Indonesia. *Journal of Health Psychology,* 13591053211037730. https://doi.org/10.1177/13591053211037730

Quinn, E. K., Fazel, S. S., & Peters, C. E. (2021). The Instagram infodemic: cobranding of conspiracy theories, coronavirus disease 2019 and authority-questioning beliefs. *Cyberpsychology, Behavior, and Social Networking, 24*(8), 573–577. https://doi.org/10.1089/cyber.2020.0663

Roozenbeek, J., & van der Linden, S. (2019). Fake news game confers psychological resistance against online misinformation. *Palgrave Communications, 5*(1), 1–10. https://doi.org/10.1057/s41599-019-0279-9

Roozenbeek, J., Schneider, C. R., Dryhurst, S., Kerr, J., Freeman, A. L., Recchia, G., ... & Van Der Linden, S. (2020). Susceptibility to misinformation about COVID-19 around the world. *Royal Society open science, 7*(10), 201199. https://doi.org/10.1098/rsos.201199

Ryan, T. J., & Aziz, A. R. (2021). Is the political right more credulous? Experimental evidence against asymmetric motivations to believe false political information. *The Journal of Politics, 83*(3), 1168-1172. https://doi.org/10.1086/711133

Simon, H. A. (1955). A behavioral model of rational choice. *The Quarterly Journal of Economics, 69*(1), 99–118. https://doi.org/10.2307/1884852

Slovic, P., Fischhoff, B., & Lichtenstein, S. (1977). Behavioral decision theory. *Annual Review of Psychology*, *28*(1), 1–39. https://doi.org/10.1146/annurev.ps.28.020177.000245

Soukup, C. (2008). 9/11 conspiracy theories on the World Wide Web: Digital rhetoric and alternative epistemology. *Journal of Literacy and Technology*, *9*(3), 2–25.

Šrol, J., Čavojová, V., & Ballová Mikušková, E. (2022). Finding someone to blame: The link between COVID-19 conspiracy beliefs, prejudice, support for violence, and other negative social outcomes. *Frontiers in Psychology*, *6390*. https://doi.org/10.3389/fpsyg.2021.726076

Sternisko, A., Cichocka, A., Cislak, A., & van Bavel, J. J. (2021). National Narcissism predicts the Belief in and the Dissemination of Conspiracy Theories During the COVID-19 Pandemic: Evidence From 56 Countries. *Personality and Social Psychology Bulletin*, 01461672211054947. https://doi.org/10.1177/01461672211054947

Sunstein, C. R., & Vermeule, A. (2009). Symposium on conspiracy theories: Causes and cures. *The Journal of Political Philosophy*, *17*(2), 202–227. https://doi.org/10.1111/j.1467-9760.2008.00325.x

Swami, V., Barron, D., Weis, L., Voracek, M., Stieger, S., & Furnham, A. (2017). An examination of the factorial and convergent validity of four measures of conspiracist ideation, with recommendations for researchers. *PLoS One*, *12*(2), 1–27. https://doi.org/10.1371/journal.pone.0172617

Swami, V., Chamorro-Premuzic, T., & Furnham, A. (2010). Unanswered questions: A preliminary investigation of personality and individual difference predictors of 9/11 conspiracist beliefs. *Applied Cognitive Psychology, 24*(6), 749–761. https://doi.org/10.1002/acp.1583

Szebeni, Z., Lönnqvist, J. E., & Jasinskaja-Lahti, I. (2021). Social Psychological Predictors of Belief in Fake News in the Run-Up to the 2019 Hungarian Elections: The Importance of Conspiracy Mentality Supports the Notion of Ideological Symmetry in Fake News Belief. *Frontiers in Psychology, 12*, 790848. https://doi.org/10.3389/fpsyg.2021.790848

Talbot, D. (2015). *The Devil's Chessboard: Allen Dulles, the CIA, and the Rise of America's Secret Government*. London: Collins.

Teovanović, P., Lukić, P., Zupan, Z., Lazić, A., Ninković, M., & Žeželj, I. (2021). Irrational beliefs differentially predict adherence to guidelines and pseudoscientific practices during the COVID-19 pandemic. *Applied Cognitive Psychology, 35*(2), 486–496. https://doi.org/10.1002/acp.3770

Unkelbach, C., & Speckmann, F. (2021). Mere repetition increases belief in factually true COVID-19-related information. *Journal of Applied Research in Memory and Cognition*, *10,* 241-247. https://doi.org/10.1016/j.jarmac.2021.02.001

Uscinski, J. E. (2018). The study of conspiracy theories. *Argumenta*, 3(2), 233–245.

van der Linden, S. (2017). Beating the Hell Out of Fake News. *Ethical Record*, *122*, 4–7.

Verdoux, H., van Os, J., Maurice-Tison, S., Gay, B., Salamon, R., & Bourgeois, M. (1998). Is early adulthood a critical developmental stage for psychosis proneness? A survey of delusional ideation in normal subjects. *Schizophrenia Research*, *29*(3), 247–254. https://doi.org/10.1016/S0920-9964(97)00095-9

Vosoughi, S., Roy, D., & Aral, S. (2018). The spread of true and false news online. Science, 359(6380), 1146-1151. https://doi.org/10.1126/science.aap9559

Wagner, M. C., & Boczkowski, P. J. (2019). The reception of fake news: The interpretations and practices that shape the consumption of perceived misinformation. *Digital Journalism*, *7*(7), 870–885. https://doi.org/10.1080/21670811.2019.1653208

Wardle, C. (2018). *Information Disorder: The Essential Glossary*. Harvard, MA: Harvard Kennedy School.

Wardle, C., & Derakhshan, H. (2017). Information disorder: Toward an interdisciplinary framework for research and policymaking. Council of Europe Report DGI (2017)09, 27 September. Brussels: Council of Europe.

Wilson, E. (2015). *The Spectacle of the False-flag: Parapolitics from JFK to Watergate*. punctum books.

Wood, M. J., Douglas, K. M., & Sutton, R. M. (2012). Dead and alive: Beliefs in contradictory conspiracy theories. *Social Psychological and Personality Science*, *3*(6), 767–773. https://doi.org/10.1177/1948550611434786

Xiao, X., Borah, P., & Su, Y. (2021). The dangers of blind trust: Examining the interplay among social media news use, misinformation identification, and news trust on conspiracy beliefs. *Public Understanding of Science, 30*(8), 977–992. https://doi.org/10.1177/0963662521998025

Zonis, M., & Joseph, C. M. (1994). Conspiracy thinking in the Middle East. *Political Psychology*, *15*(3), 443–459. https://doi.org/10.2307/3791566

Supplemental References From Review

1. Adam-Troian, J., Wagner-Egger, P., Motyl, M., Arciszewski, T., Imhoff, R., Zimmer, F., ... & van Prooijen, J. W. (2021). Investigating the links between cultural values and belief in conspiracy theories: The key roles of collectivism and masculinity. *Political Psychology*, *42*(4), 597–618. https://doi.org/10.1111/pops.12716
2. Allington, D., Duffy, B., Wessely, S., Dhavan, N., & Rubin, J. (2021). Health-protective behaviour, social media usage and conspiracy belief during the COVID-19 public health emergency. *Psychological Medicine*, *51*(10), 1763–1769. https://doi.org/10.1017/S003329172000224X
3. Anthony, A., & Moulding, R. (2019). Breaking the news: Belief in fake news and conspiracist beliefs. *Australian Journal of Psychology*, 71(2), 154–162. https://doi.org/10.1111/ajpy.12233
4. Baele, S. J. (2019). Conspiratorial Narratives in Violent Political Actors' Language. *Journal of Language and Social Psychology*, *38*(5-6), 706–734. https://doi.org/10.1177/0261927X19868494
5. Banas, J. A., & Miller, G. (2013). Inducing resistance to conspiracy theory propaganda: Testing inoculation and metainoculation strategies. *Human Communication Research*, *39*(2), 184–207. https://doi.org/10.1111/hcre.12000
6. Bessi, A. (2016). Personality traits and echo chambers on Facebook. *Computers in Human Behavior*, *65*, 319–324. https://doi.org/10.1016/j.chb.2016.08.016
7. Bonetto, E., Varet, F., & Troïan, J. (2019). To resist or not to resist? Investigating the normative features of resistance to persuasion. *Journal of Theoretical Social Psychology*, *3*(3), 167–175. https://doi.org/10.1002/jts5.44
8. Bowes, S. M., & Tasimi, A. (2022). Clarifying the relations between intellectual humility and pseudoscience beliefs, conspiratorial ideation, and susceptibility to fake news. *Journal of Research in Personality*, *98*, 104220. https://doi.org/10.1016/j.jrp.2022.104220
9. Brotherton, R., & Son, L. K. (2021). Metacognitive Labeling of Contentious Claims: Facts, Opinions, and Conspiracy Theories. *Frontiers in Psychology*, *12*, 924. https://doi.org/10.3389/fpsyg.2021.644657
10. Calvillo, D. P., Ross, B. J., Garcia, R. J., Smelter, T. J., & Rutchick, A. M. (2020). Political ideology predicts perceptions of the threat of COVID-19 (and susceptibility to fake news about it). *Social Psychological and Personality Science, 11*(8), 1119–1128. https://doi.org/10.1177/1948550620940539
11. Calvillo, D. P., Rutchick, A. M., & Garcia, R. J. (2021). Individual Differences in Belief in Fake News about Election Fraud after the 2020 US Election. *Behavioral Sciences*, *11*(12), 175. https://doi.org/10.3390/bs11120175
12. Campos-Castillo, C., & Shuster, S. M. (2021). So what if they're lying to us? Comparing rhetorical strategies for discrediting sources of disinformation and misinformation using an affect-based credibility rating. *American Behavioral Scientist*, 00027642211066058. https://doi.org/10.1177/00027642211066058
13. De Coninck, D., Frissen, T., Matthijs, K., d'Haenens, L., Lits, G., Champagne-Poirier, O., ... & Généreux, M. (2021). Beliefs in conspiracy theories and misinformation about COVID-19: Comparative perspectives on the role of anxiety, depression and exposure to and trust in information sources. *Frontiers in Psychol-*

ogy, *12*. https://doi.org/10.3389/fpsyg.2021.646394
14. Egorova, M. S., Parshikova, O. V., Chertkova, Y. D., Staroverov, V. M., & Mitina, O. V. (2020). COVID-19: Belief in conspiracy theories and the need for quarantine. *Psychology in Russia: State of the Art*, *13*(4), 2–25. https://doi.org/10.11621/pir.2020.0401
15. Elley, B. (2021). "The rebirth of the West begins with you!"—Self-improvement as radicalisation on 4chan. *Humanities and Social Sciences Communications*, *8*(1), 1–10. https://doi.org/10.1057/s41599-021-00732-x
16. Enders, A. M., & Uscinski, J. E. (2021). Are misinformation, antiscientific claims, and conspiracy theories for political extremists? *Group Processes & Intergroup Relations*, *24*(4), 583–605. https://doi.org/10.1177/1368430220960805
17. Faragó, L., Kende, A., & Krekó, P. (2020). We Only Believe in News That We Doctored Ourselves. *Social Psychology*, *51*(2), 77–90. https://doi.org/10.1027/1864-9335/a000391
18. Fasce, A., Adrián-Ventura, J., Lewandowsky, S., & van der Linden, S. (2021). Science through a tribal lens: A group-based account of polarization over scientific facts. *Group Processes & Intergroup Relations*, 13684302211050323. https://doi.org/10.1177/13684302211050323
19. Filkuková, P., Ayton, P., Rand, K., & Langguth, J. (2021). What should I trust? Individual differences in attitudes to conflicting information and misinformation on COVID-19. *Frontiers in Psychology*, 1392. https://doi.org/10.3389/fpsyg.2021.588478
20. Frischlich, L., Hellmann, J. H., Brinkschulte, F., Becker, M., & Back, M. D. (2021). Right-wing authoritarianism, conspiracy mentality, and susceptibility to distorted alternative news. *Social Influence*, *16*(1), 24–64. https://doi.org/10.1080/15534510.2021.1966499
21. Fuhrer, J., & Cova, F. (2020). "Quick and dirty": Intuitive cognitive style predicts trust in Didier Raoult and his hydroxychloroquine-based treatment against COVID-19. *Judgment & Decision Making*, *15*(6), 889–908. https://doi.org/10.31234/osf.io/ju62p
22. Georgiou, N., Delfabbro, P., & Balzan, R. (2021). Conspiracy theory beliefs, scientific reasoning and the analytical thinking paradox. *Applied Cognitive Psychology*, *35*(6), 1523–1534. https://doi.org/10.1002/acp.3885
23. Gualda, E., Krouwel, A., Palacios-Gálvez, M., Morales-Marente, E., Rodríguez-Pascual, I., & García-Navarro, E. B. (2021). Social distancing and COVID-19: Factors associated with compliance with social distancing norms in Spain. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.727225
24. Hartmann, M., & Müller, P. (2022). Acceptance and Adherence to COVID-19 Preventive Measures are Shaped Predominantly by Conspiracy Beliefs, Mistrust in Science and Fear–A Comparison of More than 20 Psychological Variables. *Psychological Reports*, 00332941211073656. https://doi.org/10.1177/00332941211073656
25. Imhoff, R., Zimmer, F., Klein, O., António, J. H., Babinska, M., Bangerter, A., ... & van Prooijen, J. W. (2022). Conspiracy mentality and political orientation across 26 countries. *Nature Human Behaviour*, 1–12. https://doi.org/10.1038/s41562-021-01258-7
26. Jolley, D., & Douglas, K. M. (2017). Prevention is better than cure: Addressing anti-vaccine conspiracy theories. *Journal of Applied Social Psychology*, *47*(8), 459–469. https://doi.org/10.1111/jasp.12453
27. Juanchich, M., Sirota, M., Jolles, D., & Whiley, L. A. (2021). Are COVID-19 conspiracies a threat to public health? Psychological characteristics and health protective behaviours of believers. *European Journal of Social Psychology*, 10-1002. https://doi.org/10.1002/ejsp.2796
28. Kantorowicz-Reznichenko, E., Folmer, C. R., & Kantorowicz, J. (2022). Don't believe it! A global perspective on cognitive reflection and conspiracy theories about COVID-19 pandemic. *Personality and Individual Differences*, *194*, 111666. https://doi.org/10.1016/j.paid.2022.111666
29. Kwon, K. H., Pellizzaro, K., Shao, C., & Chadha, M. (2022). "I Heard That COVID-19 Was...": Rumors, Pandemic, and Psychological Distance. American Behavioral Scientist, 00027642211066026. https://doi.org/10.1177/00027642211066026
30. Lewandowsky, S., Oberauer, K., & Gignac, G. E. (2013). NASA faked the moon landing—therefore, (climate) science is a hoax: An anatomy of the motivated rejection of science. *Psychological Science*, *24*(5), 622–633. https://doi.org/10.1177/0956797612457686
31. Lobato, E. J., Powell, M., Padilla, L. M., & Holbrook, C. (2020). Factors predicting willingness to share COVID-19 misinformation. *Frontiers in Psychology*, *11*, 2413. https://doi.org/10.3389/fpsyg.2020.566108
32. Martire, K. A., Growns, B., Bali, A. S., Montgomery-Farrer, B., Summersby, S., & Younan, M. (2020). Limited not Lazy: A quasi-experimental secondary analysis of evidence quality evaluations by those who hold implausible beliefs. *Cognitive Research: Principles and Implications*, *5*(1), 1–15. https://doi.org/10.1186/s41235-020-00264-z
33. Mashuri, A., Putra, I. E., Kavanagh, C., Zaduqisti, E., Sukmawati, F., Sakdiah, H., & Selviana, S. (2021). The socio-psychological predictors of support for post-truth collective action. The *Journal of Social Psychology*, 1–19. https://doi.org/10.1080/00224545.2021.1935678
34. Mocanu, D., Rossi, L., Zhang, Q., Karsai, M., & Quattrociocchi, W. (2015). Collective attention in the age of (mis) information. *Computers in Human Behavior*, *51*, 1198–1204. https://doi.org/10.1016/j.chb.2015.01.024

35. Newman, D., Lewandowsky, S., & Mayo, R. (2022). Believing in nothing and believing in everything: The underlying cognitive paradox of anti-COVID-19 vaccine attitudes. *Personality and Individual Differences*, 111522. https://doi.org/10.1016/j.paid.2022.111522
36. Nyhan, B., & Zeitzoff, T. (2018). Fighting the past: Perceptions of control, historical misperceptions, and corrective information in the Israeli-Palestinian conflict. *Political Psychology*, *39*(3), 611–631. https://doi.org/10.1111/pops.12449
37. O'Brien, T. C., Palmer, R., & Albarracin, D. (2021). Misplaced trust: When trust in science fosters belief in pseudoscience and the benefits of critical evaluation. *Journal of Experimental Social Psychology*, *96*, 104184. https://doi.org/10.1016/j.jesp.2021.104184
38. Pantazi, M., Papaioannou, K., & van Prooijen, J. W. (2021). Power to the people: The hidden link between support for direct democracy and belief in conspiracy theories. Political Psychology, 42(1), 267–304. https://doi.org/10.1111/pops.12797
39. Prawira, B., Pratama, A. J., Bella, A., & Nuraini, S. (2021). The role of behavioural immune system and belief in COVID-19 misinformation on COVID-19 protective behaviours in Indonesia. *Journal of Health Psychology*, 13591053211037730. https://doi.org/10.1177/13591053211037730
40. Quinn, E. K., Fazel, S. S., & Peters, C. E. (2021). The Instagram infodemic: cobranding of conspiracy theories, coronavirus disease 2019 and authority-questioning beliefs. *Cyberpsychology, Behavior, and Social Networking, 24*(8), 573–577. https://doi.org/10.1089/cyber.2020.0663
41. Roozenbeek, J., & van der Linden, S. (2019). Fake news game confers psychological resistance against online misinformation. *Palgrave Communications*, *5*(1), 1–10. https://doi.org/10.1057/s41599-019-0279-9
42. Šrol, J., Čavojová, V., & Ballová Mikušková, E. (2022). Finding someone to blame: The link between COVID-19 conspiracy beliefs, prejudice, support for violence, and other negative social outcomes. *Frontiers in Psychology,* 6390. https://doi.org/10.3389/fpsyg.2021.726076
43. Sternisko, A., Cichocka, A., Cislak, A., & van Bavel, J. J. (2021). National Narcissism predicts the Belief in and the Dissemination of Conspiracy Theories During the COVID-19 Pandemic: Evidence From 56 Countries. *Personality and Social Psychology Bulletin*, 01461672211054947. https://doi.org/10.1177/01461672211054947
44. Szebeni, Z., Lönnqvist, J. E., & Jasinskaja-Lahti, I. (2021). Social Psychological Predictors of Belief in Fake News in the Run-Up to the 2019 Hungarian Elections: The Importance of Conspiracy Mentality Supports the Notion of Ideological Symmetry in Fake News Belief. *Frontiers in Psychology, 12*, 790848. https://doi.org/10.3389/fpsyg.2021.790848
45. Teovanović, P., Lukić, P., Zupan, Z., Lazić, A., Ninković, M., & Žeželj, I. (2021). Irrational beliefs differentially predict adherence to guidelines and pseudoscientific practices during the COVID-19 pandemic. *Applied Cognitive Psychology*, *35*(2), 486–496. https://doi.org/10.1002/acp.3770
46. Xiao, X., Borah, P., & Su, Y. (2021). The dangers of blind trust: Examining the interplay among social media news use, misinformation identification, and news trust on conspiracy beliefs. *Public Understanding of Science*, *30*(8), 977–992. https://doi.org/10.1177/0963662521998025