Group Processes & Intergroup Relations
G P I R

Article

COVID-19 conspiracy theories

Group Processes & Intergroup Relations
2021, Vol. 24(2) 270–275

DOI: 10.1177/1368430220982068
journals.sagepub.com/home/gpi


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Abstract

Conspiracy theories started to appear on social media immediately after the first news about COVID-19. Is the virus a hoax? Is it a bioweapon designed in a Chinese laboratory? These conspiracy theories typically have an intergroup flavour, blaming one group for having some involvement in either manufacturing the virus or controlling public opinion about it. In this article, I will discuss why people are attracted to conspiracy theories in general, and why conspiracy theories seem to have flourished during the pandemic. I will discuss what the consequences of these conspiracy theories are for individuals, groups, and societies. I will then discuss some potential strategies for addressing the negative consequences of conspiracy theories. Finally, I will consider some open questions for research regarding COVID-19 conspiracy theories, in particular focusing on the potential impact of these conspiracy theories for group processes and intergroup relations.

Keywords

conspiracy beliefs, conspiracy theories, COVID-19, disinformation, misinformation

Paper received 9 October 2020; revised version accepted 26 November 2020.

Conspiracy theories began to emerge immediately after the first news of the COVID-19 outbreak (van Bavel et al., 2020), and many of these stemmed from existing tensions within and between groups. For example, from early on during the pandemic, some people believed that COVID-19 was deliberately manufactured by the Chinese to wage war on the USA (or vice versa). As the pandemic progressed, others believed that COVID-19 was a hoax or was exaggerated by left-wingers as part of a plot to derail Donald Trump's reelection campaign. These conspiracy theories persist, and recently a vocal minority of "antimaskers" in Western countries have protested against what they view as a direct attack from powerful authorities on their civil liberties. In this article, I will explain why people believe in conspiracy theories like these, and why conspiracy theories are likely to appeal to people during the pandemic. I will also explore the potential dangers of COVID-19 conspiracy theories for individuals, groups, and societies, and explain what might be done about them.

Why People Believe in Conspiracy Theories

Conspiracy theories attempt to explain significant events and circumstances as the malevolent acts of secret and powerful groups (Douglas et al.,

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2017; Douglas et al., 2019). The psychological literature on this topic has grown rapidly in the past 15 years, and suggests that people are drawn to conspiracy theories when important psychological needs are not being met. The first set of needs are epistemic, including the desire to satisfy curiosity and avoid uncertainty. For example, research has linked conspiracy beliefs with the search for patterns and meaning even when no such patterns exist (van Prooijen et al., 2018), and with lower levels of education (Douglas et al., 2016). The second set of needs are existential, including the desire to restore a threatened sense of security and control (see also Kruglanski et al., 2021, for further discussion of threats to self). For instance, people are more likely to believe conspiracy theories when they are anxious or worried (Grzesiak-Feldman, 2013), and when they feel that they have no power (Abalakina-Paap et al., 1999). The third set of needs are social, including the desire to hold one's self and one's groups in positive regard. For instance, people are more likely to believe in conspiracy theories if they need to feel unique compared to others (Lantian et al., 2017), feel a need to belong (Graeupner & Coman, 2017), or feel that their group is underappreciated (Cichocka et al., 2016) or under threat (Jolley et al., 2018).

During a pandemic, people's psychological needs are likely to be particularly frustrated. Uncertainties are high, and people are worried and fearful for their future and the future of their loved ones. They are seeking information to answer important questions about the outlook for the coming months. Furthermore, the information landscape is complex, and people are frequently confronted with contradictory information. One week people are asked to "eat out to help out" local restaurants, and the next they are being asked to stay indoors. Also, people have endured (and in many cases are still enduring) lengthy periods of social isolation, restricting their access to social support that can help with both physical and mental health (Jetten et al., 2017). They are also worried that the actions of powerful outgroups such as governments are making things worse. In general, too, research suggests that conspiracy theories tend to prosper in times of crisis as people look for ways to cope with difficult and uncertain circumstances (van Prooijen & Douglas, 2017). The time is therefore ripe for conspiracy theories to flourish.

Consequences of Conspiracy Theories

Conspiracy theories are consequential, and in many studies have been linked to climate denial, vaccine refusal, political apathy, apathy in the workplace, prejudice, crime, and violence (see Douglas et al., 2019, for a review; see also Rutjens et al., 2021, for further discussion on science skepticism). Recent research suggests that conspiracy theories about COVID-19 are no exception, and, in particular, that they have negative consequences for people's intentions to comply with government recommendations. For example, Romer and Jamieson (2020) measured belief in COVID-19 conspiracy theories in the US and found that these beliefs were negatively associated with perceived threat of the pandemic, taking preventive actions (e.g., wearing a mask), and intentions to vaccinate against COVID-19 if a vaccine became available. Barua et al. (2020) similarly found that belief in conspiracy theories negatively predicted preventive intentions in a sample of Bangladeshi respondents. Imhoff and Lamberty (2020) found that the relationship between COVID-19 conspiracy beliefs and preventive intentions depended on the nature of the conspiracy theory. Specifically, "hoax"-related conspiracy theories predicted refusal to engage in preventive behaviours, whereas conspiracy theories about the virus being manufactured in a laboratory seemed to promote more self-centred prepping behaviour. Finally, Biddlestone, Green, and Douglas (2020) demonstrated that people with an individualist (vs. collectivist) cultural orientation displayed lower intentions to engage in COVID-19 preventive behaviours, a relationship mediated by belief in COVID-19 conspiracy theories.

Research has identified other negative consequences of COVID-19 conspiracy theories. For example, Jolley and Paterson (2020) showed that

belief in the conspiracy theory that 5G phone masts spread COVID-19 predicted greater willingness to vandalise 5G masts and to commit violence more generally as a means to get things done. Several preprints available on PsychArXiv.com have also described negative consequences of COVID-19 conspiracy theories. These include support for alternative remedies such as hydroxychloroquine (Bertin et al., 2020), consuming garlic and colloidal silver (Teovanović et al., 2020), and self-serving behaviours such as stockpiling (Bai, 2020). Like political, climate change, and antivaccine conspiracy theories, COVID-19 conspiracy theories therefore also appear to do harm. At a time when communities need to focus on efforts to halt the spread of the virus and prevent further deaths, conspiracy theories spreading within and between communities appear to be damaging those efforts.

Addressing the Impact of Conspiracy Theories

In general, it is difficult to address the consequences of conspiracy theories because such theories are often multilayered, nebulous, and therefore resistant to disconfirmation (e.g., Lewandowsky et al., 2012). Also, belief in conspiracy theories is often driven by strongly held social and political identities, and the ties of these group memberships are difficult to break (Uscinski et al., 2016). As people become more attached to a group that holds conspiracy beliefs, it is likely that they will be persuaded to act upon their beliefs and cause further harm, as has been the case with "antimaskers" protesting across the US, often joined by antivaccine activists and "QAnon" supporters who believe that the Democrats are at the centre of a paedophile ring and that Republican President Donald Trump is leading the fight against them. Such social movements, driven strongly by conspiracy theories, have the potential to lead to acts of violence and terrorism (Douglas et al., 2019). However, appealing to larger group memberships may be an effective strategy for dealing with conspiracy theories. For example, Biddlestone, Green and Douglas (2020) showed that whilst individualists were more likely to believe COVID-19 conspiracy theories, thus demonstrating reluctance to engage in preventive behaviours, this was not the case for collectivists. People with a collectivist cultural orientation were in fact more likely to show intentions to engage in preventive behaviours. Promoting collectivism, or a "we are in this together" approach, may therefore be a way to both reduce susceptibility to conspiracy theories and improve people's COVID-19 response.

Another challenge in dealing with COVID-19 conspiracy theories is that people are likely to reject direct counterarguments from governments and authorities because these groups are perceived to be part of the conspiracy, and their actions are considered as evidence of their conspiracy. As the "other" or outgroup, they are also viewed as a group that cannot be trusted to pass on helpful, honest, and reliable information because they are perceived to have self-serving motives. It also does not help that conspiracy theories are often touted by leaders and people in positions of trust and authority (see also Antonakis, 2021, for further discussion of leadership during times of crisis). When trusted sources of information argue in favour of conspiracy theories, damaging ideas can easily gain momentum. One promising line of research may therefore be to employ "trusted messengers" to reduce the impact of conspiracy theories. In other words, combating the conspiracy theory may be likely to have more success if the counterarguments come from trusted sources such as valued ingroup members, instead of outgroup members who are typically associated with mistrust (Nisbet, 2009). For example, if a long-standing member of an online conspiracy forum argues against COVID-19 conspiracy theories, other members of the forum are more likely to listen to these arguments compared to arguments coming from government representatives or scientists.

Another promising line of research suggests that "inoculating" people with factual information can stem the influence of conspiracy theories. Jolley and Douglas (2017) showed that for believers in antivaccine conspiracy theories, direct

anticonspiracy arguments increased intentions to vaccinate a fictional child when these arguments were presented prior to conspiracy theories. However, once the conspiracy theories were established, they were difficult to correct with anticonspiracy arguments. A related strategy may be preexposure warnings—that is, if people are explicitly warned up front that the information they are about to see may be inaccurate or misleading, they may be more able to resist it (Lewandowsky et al., 2012). This appears to be an effective strategy as long as the warnings explain that misinformation can have lasting effects. Similar interventions that present the facts about COVID-19 or prewarn people about misleading information and therefore enable them to spot conspiracy theories before they fall for them, may be effective strategies against COVID-19 conspiracy theories.

Future Research

COVID-19 conspiracy theories are likely to have consequences for group processes and intergroup relations that are as yet unexplored. First, as people further disidentify with society and its institutions and view themselves as outsiders, this is likely to further fuel mistrust and cynicism and increase people's feelings of isolation and marginalisation. People are also likely to feel powerless rather than powerful as a result of consuming conspiracy theories (Jolley & Douglas, 2014), and this may further limit their access to the benefits of group membership. For example, people are likely to lose touch with social connections that help them maintain their mental and physical health at difficult times (Jetten et al., 2017). Increased social isolation is also associated with increased conspiracy belief (Graeupner & Coman, 2017), and so as people endure longer periods of lockdown and restrictions on social gatherings during the pandemic, a vicious cycle may follow.

Second, belief in COVID-19 conspiracy theories largely stems from, but can also potentially fuel, intergroup tensions. For example, if people perceive that China deliberately caused the virus, this may increase feelings of negativity towards Chinese people. These feelings—further driven by fear, loss of control, and narcissistic feelings about the morality of one's own group (see Biddlestone, Cichocka, et al., 2020, for a review)—may lead to prejudice, hostility, and discrimination toward the alleged conspirators. These effects have been demonstrated consistently in the case of anti-Semitic conspiracy theories, which fuel prejudice and discrimination towards Jews. However, these negative effects can even generalise to groups who are not viewed as part of the conspiracy. Therefore, conspiracy theories about one group can generalise and cause more general discriminatory approaches toward other disliked outgroups (see Biddlestone, Cichocka et al., 2020). In a similar vein, conspiracy theories about groups can also have implications for the legitimisation of injustice. Conspiracy theories give people an "other" to blame for their predicament and may therefore perform a system-justifying function, deflecting blame from dysfunctional societal problems and instead blaming a few "bad apples"—an outgroup—for the ills of society (Jolley et al., 2018). Exploring these mechanisms in the context of COVID-19 would be a useful avenue for future research.

Another interesting question in the current context is whether people who would not normally be attracted to conspiracy theories have become receptive to them during this time, also beginning to believe conspiracy theories about unrelated events. For example, if a person believes that COVID-19 is a hoax, will they now be more likely than before to entertain the notion that climate change is a hoax? Research shows that belief in one conspiracy theory tends to coincide with belief in others (see Douglas et al., 2019). This occurs because conspiracy theories typically cohere with the general proposition that important things are covered up or hidden from the public. For people who believe in one conspiracy theory, other conspiracies therefore also seem more plausible. This raises the worrying possibility that COVID-19 conspiracy theories could lead people down the "rabbit hole" to pursue other conspiracy theories.

Conclusions

Conclusions

Conspiracy theories flourish in times of crisis when people feel threatened, uncertain, and insecure. The COVID-19 pandemic has created the perfect circumstances for conspiracy theories, and research suggests that they are having negative consequences for people's compliance with preventive behaviours. Most of these conspiracy theories stem from existing tensions between groups, and as the pandemic continues, conspiracy theories are likely to further fuel these tensions. A significant challenge for researchers is how to deal with these conspiracy theories and their associated effects.

Funding

The author received no financial support for the research, authorship, and/or publication of this article.

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