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The Crisis of Misinformation and Dark Creativity

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Abstract

The checkered history of false knowledge, deliberate (disinformation) or otherwise (misinformation), has been long and varied, ranging from propaganda to memes. In recent times, the crisis of misinformation has been amplified owing to multiple agents on social media, usually comprising user-driven platforms where unchecked "facts" can be posted. This chapter explores the intersection of dark creativity and misinformation, particularly conspiratorial misinformation. Dark creativity refers to the use of ideational processes to meet less desirable (and even harmful) goals. Recent research has also reconceptualized conspiracies as creative narratives, and therefore, we propose features common to creative and conspiratorial thinking. We also discuss features associated with individuals who may be more susceptible to believing and spreading misinformation, as well as their creative characteristics. The chapter also proposes ways to emerge from the crisis, harnessing critical thinking skills that can assist in debunking or pre-bunking misinformation.

Keywords: crisis; conspiracy theories; creativity; malevolent creativity; misinformation

The Crisis of Misinformation and Dark Creativity

Before Kim Kardashian was breaking the internet in her *Paper Magazine* cover shoot, India was readying itself for its 2014 Lok Sabha Elections. During this election cycle, the question of who will be the next Prime Minister of India loomed large, to the extent that it essentially came down to two personalities: Narendra Modi and Rahul Gandhi. In the run-up to the elections in the world's largest democracy, the now ruling Bharatiya Janta Party's (BJP) leaders, party workers, and supporters gave Rahul Gandhi the moniker of "Pappu." Pappu is a derogatory remark to note that Rahul Gandhi lacked common sense and that he is unintelligent. If one Googled Pappu, the search returned the profile of Rahul Gandhi. It can be argued that this was the beginning of social media being weaponized in the Indian elections (e.g., Patel, 2014) and that memes—units of cultural exchange—like "Pappu" were used to derogate political opponents.

False knowledge has a long history of being used to change large-scale behaviors such as public opinions or voting patterns, either directly or indirectly. These include the use of propaganda, memes, and deliberate and indeliberate deception through omission or commission. For instance, during the 2020 elections in the US, to promote his presidential campaign, Mike Bloomberg worked with Instagram pages to create posts that make him sound self-aware (Lorenz, 2020). Memes, specifically, are now a cornerstone of popular culture; however, they are also likely to be used to spread false information. Memes, along with short video formats such as TikTok videos and/or Instagram reels are particularly potent in the current attention economy due to their virality, spreadability, and ease of consumption.

There is extensive work that outlines how misinformation should be deemed a modern-day crisis (see Van Lange & Rand, 2022). Below is a summary of the real-world harm brought about by its spread:

- Circulating misinformation regarding possession of beef on WhatsApp in India has incited mob violence and lynchings (Banaji & Bhat, 2019).
- Conspiracies related to the origin of COVID-19 contributed to vaccine hesitancy among UK and Turkish samples -- a public health risk (Salali & Uysal, 2020).
- Beliefs in COVID-19 misinformation have undermined public health messaging and engagement in preventive health behaviors at an individual level (Barua et al., 2020).
- Various misinformation harms--from physical to emotional harm--have been documented during humanitarian crises like hurricanes and anti-vaccination scenarios (Tran et al., 2021).
- The conspiracy theory that Hilary Clinton was operating a child-trafficking ring out of a Washington DC pizzeria led to *pizzagate*, where a believer fired rounds with an AR-15 assault rifle in the location (Bleakley, 2021).
- Misinformation related to climate change can contribute to climate change skepticism and denial (Gruener, 2022; Treen et al., 2020).

Through this chapter, we argue how the generation of false information in the form of conspiracy theories can bring about original harm across contexts. In other words, we argue how the spread of misinformation (unintentional) or creation of disinformation (intentional) are instances of dark creativity. Moreover, because dark creativity involves using creative ideation to come up with ways to damage or hurt others, the crisis of misinformation provides fertile ground

for causing widespread societal harm. Therefore, it is necessary to understand the motives of not only believers, but also generators of disinformation.

The remainder of this chapter is organized as follows: we start by discussing how conspiracies can be reconceptualized as creative narratives to further specific agendas. Next, we discuss similarities and differences between creative and conspiratorial thinking by relying on past scholarship in these two domains; we also propose avenues for future research here related to specific constructs and traits. We then discuss how intellect and critical thinking can serve as armor against falling prey to misinformation. Last, we present ways to emerge from this crisis.

Conspiracies as Creative Narratives

Bonetto and Arciszewsk (2021) argue that conspiracies, much like poems or stories, are creative products. To view conspiracy theories as creative narratives may seem like a leap at first; however, once their underlying structure and function are analyzed, it is evident how they are original explanations that serve a specific purpose. In other words, conspiracies help individuals make sense of seemingly random events; at the same time, conspiracies as a form of misinformation often have deleterious consequences and bring about harm. Therefore, it is further argued that conspiracies are dark creative products (Bonetto & Arciszewski, 2021) that have tremendous latitude. Once conceived of as creative narratives, misinformation in this form can be used to generate radical explanations for (a) why more people are choosing to be vegan, (b) whether alien life exists or not, (c) whether society is controlled by a small group of wealthy people, and so on. Unfortunately, misinformation related to any topic can emerge; it seems to be constrained only by the socio-cultural "Zeitgeist" and the ways in which it can spread.

Conspiracies, like other falsehoods, also need to walk the fine line between credibility and absurdity. A claim that is too novel can backfire (see also Walczyk & Cockrell, in press),

and to be valuable, conspiracies need to be believable enough to convince certain groups. Such a belief system serves as an antecedent of dark creativity in the AMORAL model (Kapoor & Kaufman, 2022). This is a framework examining the Antecedents, Mechanisms (individual), Operants (environmental), Realization, Aftereffects, and Legacy of dark creative behaviors. In a nutshell, antecedents include motivators like the need for power that interact with mechanisms (like personality) and operants (like cultural ideology) to realize a darkly creative act. This act varies in its scope depending on factors like who the actor and target are, culminating into short and long-term consequences of the harmful behavior. In this context, it can be argued that people's belief systems moderate how creativity can be deployed—for beneficial or nefarious purposes. For instance, belief in the superiority of a certain race can facilitate the generation of novel atrocities toward those belonging to the outgroup. In today's social media age, it could manifest in the creation of echo chambers through online communities by targeting "others" (de Saint Laurent et al., 2020).

Apart from analyzing the dark creative components of conspiracies and other misinformation, Kapoor (in press) also proposes a conspiracy-based divergent thinking methodology. Specifically, open-ended scenarios can be used to yield responses using conspiratorial and creative thinking, such as "Generate as many original reasons as you can to explain why some people believe the moon landing was faked." In addition to originality, these responses can be coded on the basis of believability. Moreover, such an integrative method can be used to examine patterns of relationships with traits common to those who are susceptible to being creative and conspiratorial.

Features of Conspiratorial and Creative Thinking

Theoretically, individuals who engage in creative thinking can also be prone to coming up with conspiracy theories, perhaps owing to the commonality of cognitive flexibility in both processes (see also de Dreu et al., 2011). However, research is yet to determine whether individuals who come up with conspiracies are likely to be cognitively flexible (generating multiple, novel reasons for a phenomenon), in addition to their motives for generating such explanations. Conversely, there is research suggesting that those who believe in conspiracies may be more psychologically inflexible (Constantinou et al., 2021). Usually, people who believe in one conspiracy theory are also likely to believe in others, in the sense that conspiracy beliefs might be a stable individual difference. There is also a general conspiracy mentality (a general susceptibility to believe explanations based on conspiracy theories; see Bruder et al., 2013; Imhoff & Bruder, 2014), even if some of the conspiracy theories are contradictory (e.g., Wood et al., 2012). For instance, those who believed in 9/11 conspiracy theories were also likely to believe others such as the staging of the Apollo Moon landing (Swami et al., 2010). At the same time, those who thought Princess Diana was assassinated also thought that she faked her own death (Imhoff & Bruder, 2014).

Personality Dimensions

Like those who display higher levels of openness to experience, conspiracy believers also seek out unusual and novel ideas. It is likely that this relationship is driven by interests in unusual situations and ideas. That is, it is possible that those who have high levels of openness to experience might be more exposed to conspiracy theories, possibly driven by intellectual curiosity and an active imagination (Swami et al., 2010). In a similar vein, openness to experience is a personality trait that has been consistently associated with higher creative ability

and ideation (e.g., Feist, 1998; Kaufman, 2011). It is very likely that imaginative thought processes can contribute to both conspiratorial and creative cognition.

A conspiracy mentality is negatively associated with agreeableness (e.g., Swami et al., 2011). Other research has identified how disagreeableness can help prompt others to hear and utilize original ideas, especially when the situation is unsupportive of creativity (Hunter & Cushenbery, 2015; Silvia et al., 2011). Being disagreeable seems to be a prominent personality trait associated with both creative and conspiratorial thinking, possibly connected via tendencies toward anti-establishment thought or non-normative behavior. However, this is a hypothesis that needs to be empirically investigated.

Darker aspects of personality have also been related to conspiratorial and creative thinking. Douglas and Sutton (2011) argue that those whose personal morality is not strict may endorse conspiracies because they themselves are willing to participate in them; this was consciously acknowledged by participants. Specifically, Machiavellianism positively and significantly predicted willingness to participate in a conspiracy, explained by a willingness to conspire in order to increase a sense of agency (March & Springer, 2019). Kay (2020) on the other hand found that Machiavellian views were negatively associated with conspiratorial thinking, arguing that the general distrust found in those with higher levels of Machiavellianism also translates to distrust in authority figures. Kay (2021) further found that sadism, and aspects of narcissism, psychopathy, and Machiavellianism are positively related to conspiratorial ideation.

Hughes and Machan (2021) found that primary psychopathy is positively associated with conspiracy beliefs and conspiracy dissemination (see also March & Springer, 2019). That is, exploitative individuals are more susceptible to believing in conspiracies, perhaps because of

their generally antagonistic and cynical nature, as well as their tendencies to manipulate others. In contrast, Kay (2020) found that antisocial aspects of psychopathy were positively linked to conspiracy beliefs, perhaps because they may engage in odd or unusual beliefs. Kay (2021) also found that fatalism and distrust mediate the relationships between aspects of psychopathy and conspiratorial ideation; in other words, psychopathy and conspiratorial beliefs might be linked through the mechanisms of suspicion and paranoia about others.

Narcissism was positively related to conspiracy beliefs and suppresses the negative association between self-esteem and conspiracy beliefs, regardless of which group (in-group or outgroup) is implicated in the conspiracy theory (Cichocka et al., 2016, 2022). Hart et al. (2021) also found that narcissism was linked to gullibility. Similarly, narcissism predicts conspiratorial ideation as well as believing in specific conspiracies such as faking the Moon landing. This might be because narcissism is related to an exaggerated sense of being at the center of others' thoughts. Similarly, narcissists tend to believe that others' behaviors are targeted towards them. Particularly, both grandiose and vulnerable narcissism are positively related to conspiracy beliefs. Those with higher levels of grandiose narcissism also have a need to be unique (e.g., Emmons, 1987), and a need for uniqueness is related to believing in conspiracies (Lantian et al., 2017). Further, Kay (2021) found that a desire for control also mediates the relationship between narcissism and belief in conspiracies.

The Dark Triad and Tetrad of personality have also been investigated in the context of creativity (Lebuda et al., 2021), including dark creativity. Narcissism is usually not associated with harm-based creativity, but is associated with higher self-reported general creativity (e.g., Goncalo et al., 2010); Machiavellianism has been associated with dark creativity (Jonason et al., 2017), as well as general creative potential and achievements (e.g., Guo et al., 2021); and

psychopathy has been linked to harm-based creativity (Kapoor, 2015; Kapoor & Khan, 2018) and to specific domains like mechanical/scientific creativity (Jonason, Richardson, et al., 2015). Further, personality is a prominent individual mechanism in the AMORAL model (Kapoor & Kaufman, 2022); similarly, personal values such as morality are also less important when harm-based creativity is involved (Kapoor & Kaufman, 2021). In general, individuals with higher Dark Tetrad traits display compromised morality and greater moral flexibility (Jonason, Strosser, et al., 2015; Karandikar et al., 2018). Taken together, certain dark personality traits such as psychopathy and lower concerns for morality may be common between creative and conspiratorial thought.

Behavioral and Cognitive Factors

A conspiracy mentality (CM) has been positively correlated with social dominance orientation, which refers to the endorsement of hierarchy between groups (Bruder et al., 2013; Dyrendal et al., 2021). This might stem from believing that some people are inherently powerful, and are particularly in charge of bizarre or unexpected events. In other words, if one conceives of powerful others as forming the outgroup, it can promote retaliatory creative ideation (Perchtold-Stefan et al., 2022), perhaps in the form of conspiracies. CM is also related to anthropomorphism (Bruder et al., 2013), which is the tendency to attribute human-like attributes to non-humans; it is also related to anomia, the sense that society is too complex to understand.

General conspiracy beliefs are also related to cognitive-perceptual measures such as dimensional schizotypy, delusional ideation, and inclination to experience hallucinations (Dagnall et al., 2015). That is, eccentric and paranoid ideation, and the magical thinking aspects of schizotypy (rather than a diagnosed personality disorder) are likely to be associated with

conspiratorial thinking (Dyrendal et al., 2021). Conspiratorial thinking is also associated with paranormal beliefs (Bruder et al., 2013; Rizeq et al., 2021). In a similar vein, the relationship between schizotypy, specifically positive symptoms of schizotypy, and creativity has been established and verified multiple times (e.g., Acar & Sen, 2013; Wang et al., 2018). Further, full-blown expression of schizophrenia symptoms hampers creative expression, indicating that the relationship is not linear (Acar et al., 2018). Some thought patterns such as over-inclusive thinking and magical/unusual experiences are common links between creativity and schizotypy (Acar & Sen, 2013). Research has also identified how impulsive antisocial schizotypy is associated with using creativity to meet harmful ends (Perchtold-Stefan et al., 2021).

In other work, conspiracy beliefs have been negatively related to personal and interpersonal control. This might be because pattern perception, including formulating patterns of agency in conspiracies, is perhaps a compensatory mechanism among those who experience little to no control over their everyday lives and environment (Imhoff & Lamberty, 2018). In an organizational context, Douglas and Leite (2017) showed that organizational conspiracy beliefs about autonomy and control in their organizations increase turnover intentions. In other words, conspiracies that suppress autonomy and personal control also indicate reduced satisfaction, commitment, and attachment to the group. On the other hand, research has indicated how creativity and innovation can continue to flourish under a broad framework of organizational control (e.g., Speklé et al., 2017). The role of autonomy in decision-making, sense-making, and perceived control is perhaps important to be studied in the contexts of creative as well as conspiratorial thinking.

Further, conspiracy believers attribute events to intentionality in powerful others; that is, those who believe in conspiracies tend to also perceive agency and intentionalities in

environments and people who do not have them (Douglas et al., 2017). It is possible that creative thinkers may also conceive of such explanations more easily; however, the extent to which they believe in the same may vary. Again, this needs to be verified with particular attention paid to the difference between generation and believability of such explanations.

Conspiracy beliefs have also been correlated with uncertainty and powerlessness; specifically, subjective uncertainty and perceived morality of authority figures affect one's tendency to believe or not believe conspiracies (van Prooijen & Jostmann, 2013). Further, emotions such as worry and fear, which are related to uncertainty activate the need to experience order and structure through compensatory mechanisms such as conspiracies (Whitson et al., 2015). Uncertainty and doubt are also known to encourage creative thinking and creative action (Beghetto, 2019, 2021); creativity thrives when individuals tolerate ambiguity well and are able to conceive of original solutions despite being in unstructured situations (Zenasni et al., 2008). Together, these findings indicate that individuals who may be prone to thinking in a conspiratorial manner may utilize their creative faculties to come up with explanations that meet their goals in uncertain situations, like pandemics or wars. Similarly, high anxiety situations (e.g., food shortages) also increase one's tendency to report believing in specific conspiracies (Grzesiak-Feldman, 2013); this might stem from the connection between anxiety and threat perception. On the other hand, anxiety hampers creative performance owing to demands on limited cognitive resources (Byron & Khazanchi, 2011). Baas et al. (2008) also found that negative, activating moods like fear and anxiety lowered cognitive flexibility. This is another area ripe for investigation, given the differences between the relationships of emotional states to creative and conspiratorial thinking.

Analytical and Critical Thinking

Conspiratorial thinking is also negatively correlated with analytical thinking. Specifically, evoking analytical thinking experimentally lowers conspiracist ideation in a student and general population (Swami et al., 2014). Cognitive ability is related to conspiratorial thinking; specifically, those with lower cognitive ability may easily accept simplified explanations of complex phenomena (Swami et al., 2011). In contrast, analytical and creative thinking go hand in hand, given the large overlaps from a conceptual and methodological perspective between intelligence and creativity (e.g., Kao, 2014). Further, cognitive reflection, which is the ability to be deliberate and reflective in one's thinking (rather than reacting based on gut reactions) is associated with being less likely to be receptive to conspiratorial thinking (Kantorowicz-Reznichenko et al., 2022; Stecula & Pickup, 2021; Swami et al., 2014).

Open-mindedness, which is related to critical and analytical thinking and different from openness to experience (Christensen et al., 2019), is negatively related to conspiracy beliefs. Similarly, the need for cognition (NFC), which refers to the motivation to engage in effortful cognitive activities, is also negatively related to the same. In other words, analytical thinking styles reduce conspiracist ideation, perhaps because they motivate deliberate thinking, which might also make one more discerning of any information consumed (Swami et al., 2014).

In this chapter, we look at the spread of conspiracy theories as a form of misinformation, in that both are examples of motivated reasoning through which people who engage with them are unable to discern the truth from falsehoods. Thus, in reasoning literature, previous work has indicated that people who are reflective and tend to think analytically do not believe in false news (Pennycook & Rand, 2019). Similarly, people who believe in fake news overclaim their levels of knowledge and tend not to think analytically (Pennycook & Rand, 2020).

The function of open-mindedness and the need for cognition is different in creative thought; both are positively related to creative ideation, and a higher NFC facilitates creative performance and creative problem solving (Dollinger, 2003; Watts et al., 2017). Higher NFC is also related to higher general intelligence (Hill et al., 2013). Therefore, although both conspiratorial and creative thinking are related to the disposition of being open to new experiences, only creative actors are likely to pursue critical and analytical thinking associated with a higher NFC.

Conspiracy beliefs are also associated with a rejection of scientific thinking (Lewandowsky, Gignac, et al., 2013). For instance, inconvenient scientific findings (e.g., the reality of climate change) are considered a "hoax" by conspiracy theorists. Lewandowsky, Gignac, et al. (2013) and Lewandowsky, Oberauer, et al. (2013) find that conspiratorial ideation predicts rejection of scientific findings such as climate change, vaccines, HIV and AIDS, and genetically modified foods. They argue that scientific findings do not necessarily need to be related to the conspiracy at hand; those who endorse conspiracies tend to reject completely unrelated scientific findings as well. Relatedly, conspiracy beliefs and anti-science beliefs are related in that they, along with paranormal beliefs constitute "contaminated mindware." That is, these are beliefs based on information without evidence (Rizeq et al., 2021). Further, conspiracy believers often contest whether new information they have acquired about an event is legitimate (Leman, 2007). Alternatively, they may change the narrative of the conspiracies to fit their earlier beliefs. These features may reflect qualitatively different cognitive flexibility, in that those with a conspiratorial mindset seem to want to accommodate beliefs in line with their confirmation bias. On the other hand, cognitive flexibility serves a somewhat different function when conceiving original ideas. The intent of creative ideation is usually to achieve a certain

objective, often positive, but at times negative and harmful to oneself and others. The two cognitive processes--creativity and conspiratorial thinking--therefore merge when thinking of new explanations for seemingly random events.

Cognitive Armor Against Misinformation

The focus of our chapter so far has been on individual differences that predispose one to first generate conspiracies as a form of dark creative ideation (disinformation), and then believe or spread them (misinformation). By targeting specific tendencies that result in "falling" for conspiracies, it might be possible to reduce them. Xiao et al. (2021) found that misinformation identification reduces one's beliefs in conspiracy theories. Thus, it is likely that the mechanisms to identify misinformation might be similar to those that identify conspiracies.

Here, we summarize a few such interventions, based on what has been studied in the context of misinformation:

1. Improving reasoning

Thinking styles, as we have discussed thus far, affect our predisposition to believe in conspiracy theories. One set of proposed interventions, then, is to improve thinking and reasoning skills.

a. Deliberative/Analytical Thinking

During a period of crisis, such as the COVID-19 pandemic or a terrorist attack, when there is a lot of uncertainty, people try to make sense of their worlds through conspiracy theories. One possible antidote to this is analytical thinking. Analytical thinking is characterized by reflective or deliberative thinking, that is, slow processing of information. Of course, we do not always rely on analytical thinking while making everyday decisions because they are effortful and take up our working memory resources (Evans & Stanovich, 2013). However, such

deliberation usually helps us think about the flaws in our decision-making and inconsistencies in our thinking. Previous work has shown that people who are cognitively reflective are less likely to believe in conspiracy theories in the context of COVID-19 (Kantorowicz-Reznichenko et al., 2022). Similarly, analytical thinking reduces gullibility (Krueger et al., 2019). Interventions that improve analytical thinking might thus reduce the acceptance of conspiratorial thinking.

b. Open-mindedness

Similar to analytical thinking, active open-minded thinking (AOT) includes reflective thinking that is divorced from immediate experience (see Stanovich, 2009). Similarly, it includes thinking about alternative explanations for events (Campitelli & Gerrans, 2014). It also captures flexibility and openness (Baron, 2000). In a study by Swami (2014), AOT was negatively associated with conspiracy beliefs. Thus, it is possible that priming people to think reflectively and open-mindedly about a particular event might reduce the extent to which one thinks conspiratorially about that event. Interventions that increase AOT might reduce the acceptance of conspiracy theories.

c. Curiosity

There are two forms of curiosity: interest and deprivation. Interest curiosity is motivated by the joy of exploration, whereas deprivation curiosity is motivated by the need to reduce uncertainty (e.g., Litman, 2008).

So far in this chapter, we have argued how open-mindedness itself probably increases the need to look for conspiracies to close causal loops. Zedelius et al. (2022) found that deprivation curiosity is linked to being receptive to bullshit, erroneously thinking new information is old, and not being able to discern true information from false. On the other hand, interest curiosity is linked to being more knowledgeable and discerning.

Curiosity affects our behavior in many positive and negative ways. For instance, curiosity makes us seek novel information, including questioning the roots and consequences of a varied number of behaviors. Curiosity is also how clickbait-y headlines make us open dubious articles; for instance, headlines that are extremely negative *and* extremely positive attract clicks and readers (Reis et al., 2015). As in the case of conspiracies, the integrative interpretation of curiosity proposed by Loewenstein (1994) argues that curiosity, especially epistemic and scientific curiosity, arises from a gap in one's knowledge. Thus, a potential manner to reduce conspiratorial mentality is to improve interest curiosity, or learn widely and deep-diving into a number of topics.

d. Critical thinking mindset

Critical thinking includes a number of skills, including but not limited to verbal and mathematical reasoning, scientific reasoning, and dealing with uncertainties, among others. Critical thinking and conspiracies are negatively associated (Lantian et al., 2021). Jackson (2019) argues that the unwarranted confidence we have in finding information online with relative ease, even though algorithmic search is a potent source of bias, also makes us relatively confident about the veracity of that information. This is, Jackson argues, a threat to critical thinking. Therefore, training people in terms of their critical thinking skills, along with identifying sources of bias, including algorithmic ones can be used to develop interventions for conspiracy beliefs.

2. Other techniques

However, only improving reasoning skills is not enough. There are many innovative skills that can be taught to guard against believing in conspiracy theories.

a. Narratives and storytelling

Conspiracy theories and narratives are similar in the sense that they represent ways to construct reality; storytelling might be often used in constructing conspiracy theories. Narratives in general are persuasive and might serve as a useful tactic to persuade likely conspiracy believers to both believe and not to believe in them. Previous work has shown that false information presented in narrative forms was accepted as true when the setting was not familiar to the reader, and was accepted as false when the setting was familiar (Prentice et al., 1997; but see Wheeler et al., 1999). For instance, a narrative nonfiction piece might be more effective than a strictly reported piece, often regardless of how familiar or interesting the topic is to the reader, as long as it is engaging or relatable (e.g., Green, 2004). This might be because narratives are easier to recall, to comprehend, and might have shorter reading times (Zabrucky & Moore, 1999).

Thus, a possible counteract for an engaging narrative to influence the reader to believe in conspiracies may be an engaging narrative to influence them to *not* believe in conspiracies as a public communications strategy.

b. Emotional messages

As in the case of narratives, emotional messages could be more engaging. The functional theories of emotions argue that emotions facilitate and guide behaviors. For instance, anger may guide approach or avoidance tendencies (fight or flight) and disgust may elicit avoidance behaviors (e.g., revulsion). Emotions usually also influence our public health or policy-related attitudes (e.g., Brenner & Inbar, 2015; Skitka et al., 2006; Ticku et al., 2021). In this context, it might be helpful for public communicators to use emotional messaging (e.g., through emotional appeal) to inoculate against conspiracies.

c. Humor

Relatedly, humor, which is often contingent on the elicitation of surprise (Gruner, 1997; Gulas et al., 2017), can be used to inoculate against the persuasiveness of conspiracy theories. For instance, there is some evidence of the positive results of humor-based corrections of misinformation (Vraga et al., 2019). Similarly, there is some evidence that humor draws attention to images in a correction tweet (Kim et al., 2021).

As we mentioned in the beginning of this chapter, it is possible that memes often drive conspiracy theories, and they have been weaponized in the political as well as public health spheres (e.g., during the COVID-19 pandemic). A possible intervention for conspiratorial thinking could include using humor, through memes, TikTok videos, or reels to reduce the perception of the credibility of those who spread and add to the conspiracy (Garrett & Poulsen, 2019).

d. Trust

Considering that much of the engagement with conspiracy theories comes from a distrust towards authority and an inability to deal with uncertainties, a possible mechanism for interference might be to build trust in public institutions, including public communication. Mari et al. (2022) find that in societies where the levels of uncertainty-avoidance are high, conspiracy theories negatively affect institutional trust; however, if people use social media interactively, informatively, and express themselves politically on social media, they may be able to mitigate the harmful effects of conspiracies.

Though distrust in institutions is likely related to systemic injustices including historical ones and negative personal experiences with such institutions (de Figueiredo et al., 2020), building trust in institutions (especially with respect to their good intent) is important to reduce conspiratorial thinking.

Ways to Emerge from this Crisis

We are in the midst of a misinformation and post-truth crisis. The interventions outlined in the earlier section are starting points at an individual level to identify, acknowledge, and emerge from this crisis. At the same time, coordinated efforts at the policy level may be required to help societies tackle this crisis as well. For instance, media literacy campaigns can adopt a combination of these interventions to encourage discernment of good quality news and news sources (see also Guess et al., 2020). Further, in a meta-analysis on media literacy interventions, Jeong et al. (2012) identified positive effects on media-relevant (e.g., knowledge) and behavior-relevant (e.g., attitudes) outcomes. On the other hand, media literacy is not always effective—rather, sometimes it backfires and reduces the ability to identify misinformation (Badrinathan, 2021).

One way to promote media literacy is through pre-bunking interventions that rely on psychological inoculation theory. In a nutshell, exposing individuals to microdoses of misinformation (often using humor or gross exaggeration) can make them less likely to believe fake news when encountered in the future (e.g., Roozenbeek et al., 2020). An example is "The 8th season of #GameOfThrones will be postponed due to a salary dispute."[1] Therefore, an interesting avenue for future research could be to investigate how such microdoses of misinformation are generated in the first place. Based on the arguments presented in this chapter, we contend that a certain level of dark creativity may be involved when generating such novel explanations. Might this be used as a pre-bunking strategy integrated with divergent thinking?

Consider a study where two groups of individuals are presented with a description of a fictional nation state, and their task is to generate (mis)information pertaining to policies in that

[1] You can also inoculate yourself against fake news by playing the Bad News game: https://www.getbadnews.com/books/english/

region. This part of the study assesses dark creative ideation in a conspiracy context. Their responses are then interchanged and an assessment is made of the believability of the information; this part assesses the extent to which generating misinformation served as its own pre-bunking strategy. Of course, running this by (and getting approval from) an Institute Ethics Committee may be the most challenging in such a project. However, we argue that there is merit in designing future research along similar lines, where theoretical links between creative and conspiratorial ideation can be used to measure these constructs empirically.

In sum, this chapter presents a summary of how conspiracies, misinformation, fake news, and the like are forms of creative narratives, some of which share similar underlying cognitive and behavioral features (sometimes). That said, this is a burgeoning field of interdisciplinary research, crossing boundaries of psychological and creativity science, communication, and information exchange worth further investigation.

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