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THE CONSPIRACY MENTALITY: ITS RELATIONSHIP WITH ABSURDITY AND OSTRACISM

Abstract

Conspiracy theories are generally perceived as irrational, absurd and as having a negative effect on our reputation. Yet some people do not see them as such. This may lead us to wonder why and how an individual would come to believe or support such statements. In this work, the primary goal is to obtain the level of absurdity of various conspiracy theories so that they can be used in experiments designed to test Williams' "Strategic Absurdity Hypothesis". In addition, this study attempts to demonstrate the link between conspiracy mentality and feelings of ostracism.

In this research, I analyzed a group of 47 participants recruited via social networks in May 2023. The survey collected their demographic information, their conspiracy mentality, their feeling of ostracism, their knowledge of conspiracy theories and their perception of absurdity toward them. The results were analyzed using correlations and linear regressions.

The results show a negative correlation between conspiracy mentality and the perception of absurdity for most theories. In other words, the higher a participant's conspiracy mentality, the less absurd the theory is perceived to be. Therefore, hypothesis (I) is partially supported. On the other hand, hypothesis (II), which says that ostracism predicts conspiracy mentality, is not supported by the results.

These results are in line with Williams' "Strategic Absurdity Hypothesis" and Sterelny's signaling theory, explaining that an individual, by expressing agreement with a conspiracy theory typically perceived as absurd, damages their reputation in the eyes of others to show that they belong to the group. However, for the theories relating to COVID-19 and climate change, the conspiracy mentality does not predict the vision of absurdity, suggesting that their currentness and media coverage influence whether they are used as signals.

The literature does not fully agree with our results and still presents very divergent opinions regarding the links between feelings of ostracism and conspiracy mentality. Indeed, it remains difficult to determine whether conspiracy mentality influences ostracism or vice versa. In conclusion, this study provides new ideas for future research on the origins and impact of the conspiracy theories.

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1. Introduction

1.1. The definition of conspiracy theories

During the COVID-19 pandemic that unfolded in recent years, a multitude of false information and conspiracy theories spread globally. These can be defined as attempts to explain the causes of significant events involving secret plots by powerful and malevolent groups (Goertzel, 1994). Although conspiracy theories are very popular and widespread today, this has also been the case in the past. Indeed, humans have always sought to satisfy various psychological motives. These can be categorized as epistemic, existential, and social motives (Douglas et al., 2017).

1.2. Psychological motives

An epistemic motive explains the reasons for significant events to gain a precise and coherent understanding of the world (Heider, 1958). Moreover, conspiracy theories protect certain beliefs that may be dear to an individual, such as the harmfulness of vaccination, by relying on strongly debunked evidence produced by a conspiracy (Lewandowsky et al., 2013). Indeed, conspiracy theories provide explanations that seem consistent and help preserve these beliefs from uncertainty and contradiction. As a result, these conspiracy theories may be more significant when an individual is motivated to make sense of their environment (Whitson & Galinsky, 2008). They also seem to be more pronounced when an individual is dissatisfied with overly mundane or uninteresting explanations (Leman & Cinnirella, 2013), or when the official information provided is unclear (Marchlewska et al., 2017). Such motives may correlate with the distress and uncertainty felt by individuals, as well as with other factors, such as lower levels of education (Douglas & Leite, 2016).

An existential motive allows an individual to feel secure and in control of their environment (Tetlock, 2002). Conspiracy theories propose to reject official narratives (Goertzel, 1994) and recognize a group or authority as dangerous and untrustworthy individuals, thereby reducing the perceived threat they represent (Bost & Prunier, 2013). Studies have shown that when an individual feels anxious (Grzesiak-Feldman, 2013), experiences a sense of helplessness (Abalakina-Paap et al., 1999) or a lack of sociopolitical control (Bruder et al., 2013), they are more likely to endorse conspiracy theories. Nonetheless, these theories tend, like the

epistemic motive, not to satisfy the primary motivation of the existential motive. In fact, exposure to conspiracy theories seems to eliminate the feeling of autonomy and control (Douglas & Leite, 2016), in addition to decreasing participation in measures that could strengthen these two factors (Jolley & Douglas, 2014a, 2014b).

A social motive is characterized by the desire to belong and maintain a positive self-image or group image (Douglas et al., 2017). Studies suggest that conspiracy theories enhance our own representation by attributing the negative consequences of certain events to others to preserve a valid self-image (Cichocka et al., 2015). Therefore, conspiracy theories can be very attractive to individuals whose image is threatened, such as those with objectively low status due to their ethnic backgrounds (Crocker et al., 1999) or income levels (Uscinski & Parent, 2014). Additionally, individuals on the losing side of political processes, such as during a presidential election (Uscinski & Parent, 2014) or those experiencing ostracism, tend to be more sensitive to conspiracy theories (Graeupner & Coman, 2017). However, it is uncertain whether conspiracy theories are an advantageous way to fulfill these social motivations. Indeed, one characteristic of conspiracy theories is the stigmatized and mistrustful view of others (Green et al., 2023; Kurzban & Leary, 2001). Furthermore, exposure to conspiracy theories decreases trust in government institutions (Einstein & Glick, 2014), politicians, and scientists (Jolley & Douglas, 2014a).

1.3. Negative consequences

As mentioned earlier, conspiracy theories are more attractive to individuals with specific psychological needs. However, studies have shown that they do not satisfy these needs; rather they increase negative feelings and reinforce conspiratorial thinking (Liekefett et al., 2021). According to Imhoff et al., "conspiracy mentality represents the various predispositions individuals may have to explain certain events through conspiracies" (2022, p. 392). When this mentality is reinforced, the consequences of conspiracy theories pose a greater danger to society. One negative consequence of conspiracy theories is that they affect personal health and public health. For instance, there is causal evidence that belief in COVID-19-related conspiracy theories reduces compliance with social distancing guidelines over a one-month period (Bierwiaczonek et al., 2020). Additionally, exposure to conspiracy theories can

decrease the intention to participate in medical procedures as well as trust in scientists and medicine. In fact, experimental research shows that exposure to anti-vaccine theories can decrease both the intention to vaccinate children (Jolley & Douglas, 2017) and the intention to personally receive the HPV vaccine (Chen et al., 2020). Other studies have also shown that exposure to conspiracy theories about antidepressants reduced participants' willingness to seek help due to doubts about the pharmaceutical industry (Natoli & Marques, 2022).

From a political point of view, conspiracy theories have contradictory consequences regarding democratic actions. Indeed, they decrease participation in normative measures, such as voting or legal demonstrations, while increasing non-normative behaviors, such as tax evasion (Imhoff et al., 2019). This phenomenon may stem from political helplessness, even though conspiracy theories do not satisfy the need that individuals sought when engaging with them in the first place. On the other hand, one study showed that when a conspiracy theory directly targets a specific group, such as an opposing political party, believers in that theory tend to engage more politically, believing they can play an important role (Kim, 2019).

Conspiracy theories can also influence intergroup relations. Indeed, supporting conspiracy theories may lead an individual to distance themselves from the rest of the community. For example, those who support a theory tend to withdraw from those who do not believe in it, and vice versa (Bilewicz et al., 2019). In this case, an indirect consequence of conspiracy theories would be that they increase the likelihood of exclusion for those who support them (Lantian et al., 2018), pushing them further to isolate from society and draw closer to the conspiracy community (Tang et al., 2021).

Conspiracy theories also play an important role in the functioning of extremist groups, which use them as a "radicalizing multiplier" (Bartlett & Miller, 2010). In other words, an individual is more likely to favor extremist violence if they believe that a powerful group controls society (Imhoff et al., 2019). For example, the Federal Bureau of Investigation reported in 2019 that 46% of a sample of terrorists had been exposed to conspiracy theories (Richards et al., 2019). Another study showed that theorizing conspiracies was positively linked to violent extremist relationships (Rottweiler & Gill, 2020). However, this correlation also depends on various

individual variables, such as low self-esteem, weaker morality regarding the law, or anger towards the state, associated with a willingness for violence (Jolley & Paterson, 2020).

In summary, the numerous negative effects of conspiracy theories lead us to assert that they endanger our society. As previously noted, believing in such facts is likely to mobilize individuals to disrupt the proper functioning of the community and threaten their personal and public safety. This is why further research on conspiracy theories is essential, and it is crucial to understand their effects within our society.

1.4. Absurdity

Some conspiracy theories may appear absurd and irrational to those who do not have a conspiracy mentality. Therefore, one might wonder why a portion of the population believes and endorses such claims. One explanation comes from signaling theory, which is used to clarify cooperation within a group and individuals' commitment to that group. Indeed, humans, being social beings, have developed a complex psychology of coalition (Tooby & Cosmides, 2010; Pietraszewski, 2016). For instance, when forming an alliance with an individual, we automatically assess the potential benefits and drawbacks of that interaction. Moreover, humans have developed numerous cognitive biases regarding the treatment of their ingroup, such as favoritism, as well as greater empathy and trust towards group members (Boyer, 2018).

There are several reasons why humans form groups. Nevertheless, the primary reason for group formation is to achieve goals that would be inaccessible without cooperation (Boyer, 2018; Tooby & Cosmides, 2010). Some of these goals can be explicitly beneficial, such as improving living conditions or ensuring social security in times of threat or stress (Oberlé, 2021). Others aim to strengthen the coalition and, consequently, the individual interests of each group member by enhancing their trust in this alliance (Tooby & Cosmides, 2010).

This reliance on cooperation makes groups highly vulnerable to "free-riders" individuals who benefit from the group's advantages without bearing the costs necessary for other members of the coalition to enjoy those benefits. This lack of cooperation could gradually proliferate within the group and lead to its dissolution (Olson, 1965). To address this issue, some groups have employed a "choice strategy". This strategy aims to select group members based on their cooperation and commitment to the group (Sterelny, 2012; Noe & Voelkl, 2013). To demonstrate this commitment, group members unconsciously produce signals (signaling theory) by amplifying the costs of defection (Sterelny, 2020). More specifically, they show their commitment to the group by increasing the negative costs to their reputation and personal image to eliminate the possibility of abandoning the group for another (Sterelny, 2012). Therefore, group members are more trustworthy when it is more difficult to leave the group. For instance, declaring belief in conspiracy theories carries a significant cost to one's personal reputation and serves as a strong signal of group membership, primarily because individuals outside the group will find these beliefs irrational, absurd, or strange. In this case, this behavior is referred to as the "strategic absurdity hypothesis" (Williams, 2021). In other words, it is precisely because the beliefs of these groups are considered absurd by outsiders that their adherence demonstrates commitment within the group. As a result, in general, the higher the cost of the signal, the greater the degree of commitment to the group (Fessler & Quintelier, 2013).

1.5. Ostracism

As mentioned in the previous chapter, one of humanity's primary needs is to belong to a group, as it provides numerous benefits for well-being (Baumeister & Leary, 1995). Ostracism, defined as the rejection of a group member by their community, obstructs this need and deprives the individual of the positive resources that social relationships can provide (Williams, 2007). Ostracism has many negative effects, such as difficulties in self-regulation (Baumeister et al., 2005) and in meeting basic personal needs (Williams et al., 2000). Moreover, it is positively associated with addictive behaviors, depression, and social anxiety (Poon, 2018; Nui et al., 2016; Fung & Alden, 2017). These various factors can produce mixed feelings in the rejected member, such as feeling endangered, uncertain, and anxious. This

unpleasant state, termed vulnerability, is experienced when one anticipates that a threat may occur and puts them in danger (Klein et al., 2011; Satici, 2016). As stated earlier, anxious, powerless, minority individuals with specific psychological needs are more likely to endorse conspiracy theories. In other words, it can be suggested that ostracism creates vulnerability, and this vulnerability influences the tendency to believe more in conspiracy theories (Poon et al., 2020).

Moreover, humans have a biased tendency to make decisions that are the least dangerous for their survival, therefore avoiding situations that could make them vulnerable (Haselton & Buss, 2000). They detect potential conspiracies to identify and protect themselves from coalitions that could be hostile to their survival (van Prooijen & van Vugt, 2018). As a result, in the face of an existential threat, they are more motivated to engage in epistemic processes, such as the search for meaning, which increases their desire to support conspiracy theories (van Prooijen, 2019). On the other hand, adherence to conspiracy theories is stronger when there is a heightened desire to conspire, particularly when individuals are confronted with emotionally distressing situations. They then project their own negative feelings onto an antagonistic group and blame it for their unfavorable condition (Douglas & Sutton, 2011). These two evolutionary and socio-psychological biases explain how vulnerability can lead to belief in conspiracy theories.

Furthermore, ostracized individuals are motivated to make sense of their environment to detect and avoid potential threats (Haselton & Buss, 2000). Consequently, they are also much more sensitive to physical and social danger cues, such as signals emitted by others (vocal expressions, emotions, deceptive smiles, etc.; Pickett et al., 2004; Cheung & Gardner, 2015; Bernstein et al., 2008) and those coming from the environment in which they are ostracized (Lansu et al., 2017). This heightened sensitivity and vulnerability drive many of them to believe in conspiracy theories (Poon et al., 2020).

1.6. Goals and hypotheses

In this experiment, I examined the individual conspiracy mentality of a group of participants and analyzed whether this influenced their perception of absurdity for each conspiracy theory studied. This data was collected to assist my mentor in the context of their doctoral research. Therefore, the primary aim of this experiment was to assess the level of absurdity of various conspiracy theories, which would then be used in experiments aimed at testing the "strategic absurdity hypothesis". Additionally, I studied the relationship between this conspiracy mentality and the feeling of ostracism experienced by the participants.

Referring to the theory, I hypothesize that the higher the level of conspiracy mentality among participants, the less absurd the conspiracy theories will be perceived, as they will not view them as absurd, but rather as relevant, because these theories meet their epistemic, existential, or social needs and motives (H1a-H1j). Furthermore, I presume that the more ostracized a participant feels, the higher their conspiracy mentality will be, as they will be more vulnerable and therefore more motivated to conspire to make sense of their environment and emotionally challenging situation (H2).

2. Method

2.1. Participants

A total of 137 people started to fill out the questionnaire, of which 59 completed it. Among these 59 participants, 49 passed the attention check. These participants, aged 16 to 63 years (M = 35 years, SD = 17 years), included 19 women and 30 men. They were recruited via social media (WhatsApp, Instagram, and Facebook) in May 2023 to complete an online "Qualtrics" survey. Participation was voluntary, and no compensation was provided.

2.2. Measures

2.2.1. Demographic questions

Participants were asked about their age, gender, and the highest level of education they had completed. They were also asked to indicate their political orientation on a scale from 1 = Extreme Left to 7 = Extreme Right.

2.2.2. Knowledge, agreement, absurdity

Participants were asked to provide their level of knowledge for 10 conspiracy statements (from 1 = not at all familiar to 5 = very familiar) and how much they agreed with these statements (from 1 = not at all to 5 = completely). The statements can be found in Appendix A. Additionally, they had to evaluate these statements across various dimensions (from 1 = not at all to 7 = completely):

- Plausible
- Convincing
- Worth considering
- Interesting
- Entertaining
- Fascinating
- Absurd
- Ridiculous
- Irrational

2.2.3. Ostracism

Participants were asked to answer 8 questions to measure how frequently each experienced situations of ostracism. The questions can be found in Appendix B. For this experiment, the ostracism scale from Poon and al. (2020; α = 0.90) was used, ranging from 1 = almost never to 7 = almost always.

2.2.4. GCB

Their level of conspiracy mentality was measured by asking them about the likelihood that 15 statements were true. For this study, the GCB scale by Brotherton et al. (2013; α = 0.93) was employed, ranging from 1 = certainly not true to 5 = certainly true. An attention check was added to ensure that participants were paying attention to each statement. The statements can be found in Appendix C.

2.3. Procedure

The online survey was created using the Qualtrics XM platform. Participants first received a brief explanation of the context of my thesis, followed by a consent form informing them that all data would be anonymized and that they could leave the survey at any time without their data being analyzed. Once the demographic section was completed, participants received a description of the task to be performed. After answering the main research questions (from section 2.2.2 above), they completed the ostracism questions and the GCB scale. At the end of the survey, participants were thanked for their participation and informed about the purpose of the research. My contact information was provided in case they had any questions regarding the study.

2.4. Statistical Tests

For the descriptive statistics, means and standard deviations were calculated, as well as correlations to describe the relationships between the variables. A t-test was used to determine if there was a gender difference in conspiracy mentality. Linear regressions were employed to test the hypotheses.

3. Results

3.1. Descriptive statistics

No correlation was observed between the participant's conspiracy mentality and ostracism score (r = .11, p > .05), their political orientation (r = .09, p > .05), their age (r = .26, p > .05), and their level of education (r = .12, p > .05), indicating that there is no relationship between these variables. All correlations are presented in Table 1 below. No difference in conspiracy mentality was observed by gender (Mwomen = 2.75, Mmen = 2.33, t = 1.94, p = .06).

Table 1

Means, standard deviations, and correlations with confidence intervals

Variable	M	SD	1	2	3	4
1. Ostracisme_mea n	1.81	0.93				
2. conspiracy.mean	2.49	0.77	.11 [17, .38]			
3. age	35.27	16.48	12 [39, .17]	.26 [02, .50]		
4. politique_1	3.10	1.03	15 [41, .14]	.09 [19, .37]	.43** [.16, .63]	
5. education	2.18	1.03	33* [56,06]	.12 [17, .39]	.61** [.40, .76]	.32* [.04, .55]

Note. M and SD are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates p < .05. ** indicates p < .01.

A negative correlation was found between conspiracy mentality score and the absurdity of theories regarding flat Earth (r = -.28, p < .05), broadcast signals (r = -.41, p < .05), the September 11 attacks (r = -.41, p < .01), 5G (r = -.38, p < .01), the moon landing (r = -.29, p < .05), GMOs (r = -.57, p < .001), UFOs (r = -.43, p < .01), and the assassination of John F. Kennedy (r = -.49, p < .001).

However, the results for the absurdity of theories about climate change (r = -.02, p > .05) and COVID-19 (r = -.15, p > .05) are not significant, and their correlation with conspiracy mentality is weak. These correlations are all represented in Table 2 and Graph A in the appendix.

Furthermore, the correlations between the participants' conspiracy mentality and their agreement with conspiracy theories are all positive and highly significant, except for those related to flat Earth (r = .04, p > .05), climate change (r = .10, p > .05), and COVID-19 (r = .17, p > .05). These results are to be expected, as the current relevance of these conspiracy theories likely influences their perception, and they are so stigmatized that even participants with a strong conspiracy mentality do not endorse them. These correlations are more specifically represented in Table 3 and Graph B in the appendix.

The correlation between ostracism and conspiracy mentality score is weak and not significant (r = .11, p > .05). This correlation is represented in Table H2 (in section 3.2).

3.2. Hypothesis testing

To test our hypotheses, linear regressions were used. It was found that conspiracy mentality score predicts the absurdity assessment for the flat Earth theory (F(1, 47) = 4.11, p < .05, R² = .08), for the broadcast signals theory (F(1, 47) = 9.53, p < .01, R² = .17), for the September 11 attacks theory (F(1, 47) = 9.46, p < .01, R² = .17), for the 5G theory (F(1, 47) = 7.95, p < .01, R² = .14), for the moon landing theory (F(1, 47) = 4.25, p < .05, R² = .08), for the GMO theory (F(1, 47) = 22.23, p < .01, R² = .32), for the UFO theory (F(1, 47) = 10.82, p < .01, R² = .19), and for the assassination of President John F. Kennedy (F(1, 47) = 14.5, p < .01, R² = .24). These results therefore support hypotheses H1a-H1h.

However, the results demonstrated that conspiracy mentality score does not predict the absurdity assessment for the climate change theory (F(1, 47) = 1.77, p = .19, $R^2 = .04$) and for the COVID-19 theory (F(1, 47) = 1.15, p = .29, $R^2 = .02$). Consequently, hypotheses H1i-H1j are not supported. The regression tables can be found in Appendix D.

For the second hypothesis, it was observed that ostracism does not predict conspiracy mentality score (F(1, 47) = 14.5, p = .43, $R^2 = .24$). Therefore, hypothesis H2 is not supported by these results. This regression is represented in Table H2 below.

Table H2

Regression results using conspiracy.mean as the criterion

Predictor	Ь	<i>b</i> 95% CI [LL, UL]	beta	<i>beta</i> 95% CI [LL, UL]	sr^2	sr ² 95% CI [LL, UL]	r	Fit
(Intercept) Ostracisme _mean	2.32** 0.09	[1.83, 2.81] [-0.15, 0.33]	0.11	[-0.18, 0.41]	.01	[.00, .13]	.11	$R^2 = .013$ 95% CI[.00,.13]

Note. A significant b-weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates p < .05. ** indicates p < .01.

4. Discussion

In this study, we were able to show that, in general, the higher an individual's conspiracy mentality, the less likely they are to perceive conspiracy theories as absurd. Consequently, these results are consistent with Williams' (2021) "Strategic Absurdity Hypothesis" and Sterelny's (2020) signaling theory, which explain that by expressing agreement with a conspiracy theory typically viewed as absurd, an individual harms their reputation among others to explicitly demonstrate their belonging to a group.

However, in the case of theories related to COVID-19 and climate change, the degree of conspiracy mentality does not predict the absurdity of these two theories. It is possible that the current relevance of these theories, along with their extensive dissemination through the media, influences how they are perceived, and therefore, whether they are used as a signal.

Indeed, according to Williams (2021), the "Strategic Absurdity Hypothesis" does not explain how or why a group adopts a specific conspiracy theory over another. Therefore, it is possible that this phenomenon is accompanied by other motivations and cognitive biases, such as different types of signals. Furthermore, as the "Strategic Absurdity Hypothesis" is incomplete and does not explain the choice of absurd content supported by the group, it may also depend on various context-specific factors, such as during the COVID-19 pandemic. The "Strategic Absurdity Hypothesis" is likely also linked to emotions. Indeed, this strategy is not motivated by epistemic reasons but by the behaviors of external groups and those of the group to which

the individual belongs (Williams, 2021). These factors could be manipulated in future research to analyze in more detail how the "*Strategic Absurdity Hypothesis*" operates, and the specific behaviors and mechanisms associated with it.

It is also important to consider individual variations, as each person will have different stakes for their reputation when sharing a conspiracy theory with others. For example, a person with a significant reputation within a large part of the community is likely to adopt the "*Strategic Absurdity Hypothesis*" with more caution than someone who is heavily ostracized or has a low social status, as the latter may be more tempted by costly signals to demonstrate their dedication to the group (Williams, 2021). Indeed, as previously noted in the introduction, conspiracy mentality is correlated with ostracism (Graeupner & Coman, 2017) and low social status (Abalakina-Paap et al., 1999; Crocker et al., 1999; Goertzel, 1994; Uscinski & Parent, 2014). Unfortunately, our results do not align with these studies.

Despite this, it is difficult to determine whether conspiracy mentality influences ostracism, or if it is because an individual feels ostracized that they become more susceptible to endorse conspiracy theories. In this study, our results do not support our second hypothesis (H2), which assumed that ostracism would influence the conspiracy mentality of participants. It is possible that the sample size is not sufficiently large, which would explain the low mean of ostracism (M = 1.81; SD = 0.93) and the absence of correlation with conspiracy mentality. Indeed, our restricted sample may not be representative of the overall population, and as a result, of ostracized or conspiratorial individuals.

Moreover, this study does not account for the different experiences of ostracism that participants may have encountered, such as whether the long-term feeling of ostracism has more impact on our results than a brief experience of social exclusion, which is often represented in research (Graeupner & Coman, 2017; Latian et al., 2018; Poon et al., 2020; Green et al., 2023). It is also important to note that this study is correlational. Therefore, even with regression analyses, we cannot establish causal links, meaning that even with significant results, it is not possible to claim that ostracism causes support for or belief in conspiracy theories.

However, according to Garrett et al. (2019), in a political context, ostracism tends to further push individuals to systematically process information in ways that favor their predispositions

or political parties. This bias, known as "partisan motivated reasoning", leads ostracized individuals to support falsehoods related to politics to signal their group membership. Nevertheless, this phenomenon has only been observed in a political context and depends on other individual factors. For example, individuals who think analytically are less likely to be influenced by ostracism than those who tend to operate intuitively (Garrett & Weeks, 2017; Pennycook & Rand, 2018). Ostracism also affects individuals with weak political ideologies more than those with strong ones, as extreme ideologues are often already ostracized and therefore employ this bias, making them less sensitive to the effects of this phenomenon (Garrett et al., 2019). Such knowledge could be politically exploited in real elections, allowing a candidate to use ostracism to spread conspiracy theories and false rumors to gain supporters. Raising awareness of these facts could therefore help prevent such situations from occurring.

Another hypothesis would be that an epistemic motive links social exclusion to support for conspiracy theories. Indeed, Graeupner and Coman (2017) suggest that support for conspiracy theories could be triggered by an exaggerated epistemic process. This adaptive (Foster & Kokko, 2009; Shermer, 2004), developmental (Tronick & Beeghy, 2011), and automatic (Kahneman, 2013) dynamic of the cognitive system, known as "*meaning making*", generally allows individuals to understand their environment by attributing meaning to certain events (Graupner & Coman, 2017). However, during feelings of vulnerability, this process could be excessively employed, providing specific reasons for events that lack them (Clancy, 2005; Schacter, 2001), as is the case with conspiracy theories. This hypothesis is supported by Poon et al. (2020), who explain that ostracism makes individuals vulnerable, therefore making them more susceptible to conspiracy theories. Therefore, an individual's ostracism could engage this dynamic to regain control over their situation (Whitson & Galinsky, 2008), leading them to support conspiracy theories. Nonetheless, further research would be necessary to explore the mediation between social exclusion, meaning making, and conspiracy mentality.

On the other hand, research on stigmatized beliefs by Lantian et al. (2018) explains that individuals defending a conspiracy theory generally expressed a greater fear of exclusion than those who criticized it. This effect was driven by the anticipation of a negative self-image, mainly linked to the fact that conspiracy theories carry stigmas (Harambam & Aupers, 2015; Husting & Orr, 2007). A stigma is, according to Goffman (1963, p. 3), "an attribute that

discredits an individual to a significant level". In other words, a stigma is a characteristic, such as skin color (Pinel et al., 2005), sexual orientation (Lewis et al., 2003), religion (Gervais & Najle, 2017), or mental and physical disabilities (Rüsch et al., 2005; Crandall & Moriarty, 1995), that devalues social identity and is viewed by others as a logical reason for excluding the individual concerned (Kurzban & Leary, 2001; Major & Eccleston, 2004; Miller & Kaiser, 2001; Dodor & Kelly, 2009). In addition, conspiracy theories could be considered doubly stigmatized, as they are perceived as invalid knowledge and, in some cases, as originating from individuals in a certain social group that already carries stigmas (Barkun, 2016). Consequently, non-believers in conspiracy theories generally have a negative image of conspiracy theorists and would be more likely to anticipate the fear of being excluded if they were to defend conspiracy theories.

Following this line of thought, if ostracism can influence an individual's conspiracy mentality, either through an epistemic motive or the need to signal group membership, then their social identity will be devalued by the stigmas associated with conspiracy theories, leading the individual to be even more socially isolated and pushed to support conspiracy theories. Further research into this vicious cycle could explain how an average individual might gradually be marginalized in society and pushed, by simple psychological needs and cognitive mechanisms, into increasingly absurd and irrational thinking.

5. Conclusion

My results demonstrate that our conspiracy mentality influences our perception of the absurdity of certain conspiracy theories. This work supports this point of view, although it does not establish a link with feelings of ostracism. Nevertheless, it is important to recognize that there are many factors underlying beliefs in these theories, whether they are individual or stem from the social environment. Furthermore, it is only when an individual supports these stigmatized theories that their image will be viewed negatively, and they will then realize that it is more likely they will be socially excluded, thereby entering the vicious cycle of conspiracy theories. In conclusion, this study provides new ideas for future research on the origins and impact of the conspiracy theories.

6. Appendices

Appendix A:

Below are the 10 statements presented to each participant in random order:

- 1. The Earth is flat and not spherical as we were taught at school.
- The media or the government add secret mind-controlling technology to TV broadcast signals.
- 3. Climate change is a hoax perpetrated by corrupt scientists and politicians.
- 4. The dangers of 5G phone technology are being covered up.
- 5. Americans have never been to the moon and NASA has fabricated false evidence and images of the Apollo moon landing.
- 6. The dangers of genetically modified food are hidden from the public.
- 7. Former Microsoft CEO Bill Gates created a tracking device to be injected with the coronavirus vaccine.
- 8. The government is withholding information from the public showing that UFOs (unidentified flying objects) are real or that aliens have visited Earth.
- 9. The CIA was involved in the assassination of President John F. Kennedy in Dallas.
- 10. US government officials planned the attacks of 11 September 2001 because they wanted the United States to go to war with the Middle East

Appendix B:

- 1. In general, others leave me out of their groups
- 2. In general, others keep me out-of-the-loop on information that is important to my close relationships.
- 3. In general, others treat me as if I was invisible.
- 4. In general, others give me the cold shoulder treatment.
- 5. In general, others physically turn their backs to me when in my presence.
- 6. In general, others treat me as if I am in solitary confinement.
- 7. In general, others do not look at me when I am in their presence.
- 8. In general, others ignore me during conversation.

Appendix C:

- The government is involved in the murder of innocent citizens and well-known public figures, and keeps this a secret
- 2. The power held by heads of state is second to that of small unknown groups who really control world politics.
- 3. Secret organizations communicate with extraterrestrials but keep this fact from the public.
- 4. The spread of certain viruses and diseases is the result of the deliberate, concealed efforts of some organizations.
- 5. Groups of scientists manipulate, fabricate, or suppress evidence in order to deceive the public.
- 6. The government permits or perpetrates acts of terrorism on its own soil, disguising its involvement.
- 7. A small, secret group of people responsible for making all major world decisions, such as going to war.
- 8. Evidence of alien contact is being concealed from the public.
- 9. Technology with mind-control capacities is used on people without their knowledge.
- New and advanced technology which would harm current industry is being suppressed.
- 11. The government uses people as patsies to hide its involvement in criminal activity.
- 12. Certain significant events have been the result of the activity of a small group who secretly manipulate world events.
- 13. Some UFO sightings and rumors are planned or staged in order to distract the public from real alien contact.
- 14. Experiments involving new drugs or technologies are routinely carried out on the public without their knowledge or consent.
- 15. A lot of important information is deliberately concealed from the public out of selfinterest.

Appendix D:

Tableau H1a

Regression results using d\$plat mesures 7 as the criterion

Predictor	Ь	<i>b</i> 95% CI [LL, UL]	beta	beta 95% CI [LL, UL]	sr ²	sr ² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	7.72** -0.57*	[6.25, 9.19] [-1.13, -0.00]	-0.28	[-0.56, -0.00]	.08	[.00, .25]	28*	$R^2 = .080^*$ 95% CI[.00,.25]

Note. A significant b-weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates p < .05. ** indicates p < .01.

Tableau H1b

Regression results using d\$télé_mesures_7 as the criterion

Predictor	Ь	<i>b</i> 95% CI [LL, UL]	beta	<i>beta</i> 95% CI [LL, UL]	sr^2	<i>sr</i> ² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	7.66** -1.07**	[5.85, 9.47] [-1.76, -0.37]	-0.41	[-0.68, -0.14]	.17	[.02, .35]	41**	$R^2 = .169**$ 95% CI[.02,.35]

Note. A significant b-weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively.

Tableau H1c

Regression results using d\$X11sep_mesures_7 as the criterion

Predictor	Ь	<i>b</i> 95% CI [LL, UL]	beta	<i>beta</i> 95% CI [LL, UL]	sr ²	sr ² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	8.02** -1.07**	[6.19, 9.85] [-1.77, -0.37]	-0.41	[-0.68, -0.14]	.17	[.02, .35]	41**	$R^2 = .168**$ 95% CI[.02,.35]

Note. A significant b-weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates p < .05. ** indicates p < .05.

Tableau H1d

Regression results using d\$X5G_mesures_7 as the criterion

Predictor	b	<i>b</i> 95% CI [LL, UL]	beta	<i>beta</i> 95% CI [LL, UL]	sr ²	sr ² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	4.99** -0.87**	[3.37, 6.61] [-1.49, -0.25]	-0.38	[-0.65, -0.11]	.14	[.01, .32]	38**	$R^2 = .145**$ 95% CI[.01,.32]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates p < .05. ** indicates p < .01.

Tableau H1e

Regression results using d\$JFK_mesures_7 as the criterion

Predictor	ь	<i>b</i> 95% CI [LL, UL]	beta	<i>beta</i> 95% CI [LL, UL]	sr^2	sr ² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	6.60**	[4.96, 8.24] [-1.82, -0.56]	-0.49	[-0.74, -0.23]	.24	[.05, .41]	49**	$R^2 = .236**$ 95% CI[.05,.41]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. brack to the standardized regression weights. <math>the standardized to the standardized to the standardized regression weights. <math>the standardized to the standardized to the standardized regression weights. <math>the standardized to the standardized to the

Tableau H1f

Regression results using d\$lune_mesures_7 as the criterion

Predictor	Ь	<i>b</i> 95% CI [LL, UL]	beta	<i>beta</i> 95% CI [LL, UL]	sr^2	sr ² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	7.25** -0.82*	[5.16, 9.34] [-1.63, -0.02]	-0.29	[-0.57, -0.01]	.08	[.00, .25]	29*	$R^2 = .083*$
								95% CI[.00,.25]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. brack to the beta-the beta-the standardized regression weights. <math>the beta-the beta-the

Tableau H1g

Regression results using d\$OGM mesures 7 as the criterion

Predictor	ь	<i>b</i> 95% CI [LL, UL]	beta	beta 95% CI [LL, UL]	sr^2	sr ² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	6.13** -1.37**	[4.60, 7.65] [-1.95, -0.79]	-0.57	[-0.81, -0.32]	.32	[.11, .49]	57**	$R^2 = .321**$ 95% CI[.11,.49]

Note. A significant b-weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates p < .05. ** indicates p < .01.

Tableau H1h

Regression results using d\$ovnis mesures 7 as the criterion

Predictor	ь	<i>b</i> 95% CI [LL, UL]	beta	<i>beta</i> 95% CI [LL, UL]	sr^2	sr² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	7.19** -1.13**	[5.39, 9.00] [-1.83, -0.44]	-0.43	[-0.70, -0.17]	.19	[.03, .37]	43**	$R^2 = .187**$ 95% CI[.03,.37]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates p < .05. ** indicates p < .01.

Tableau H1i

Regression results using d\$climat_mesures_7 as the criterion

Predictor	b	<i>b</i> 95% CI [LL, UL]	beta	beta 95% CI [LL, UL]	sr ²	sr ² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac y.mean	6.94**	[5.29, 8.60] [-1.06, 0.22]	-0.19	[-0.48, 0.10]	.04	[.00, .18]	19	$R^2 = .036$ 95% CI[.00,.18]

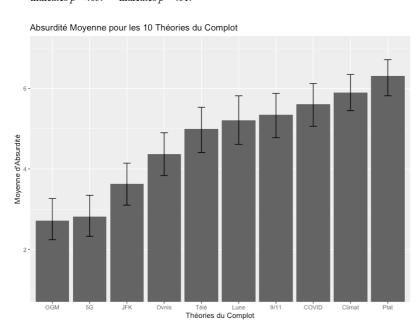
Note. A significant b-weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates p < .05. ** indicates p < .01.

Tableau H1j

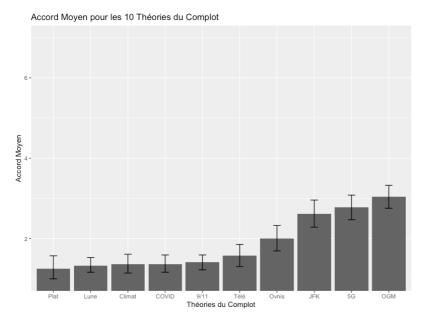
Regression results using d\$covid_mesures_7 as the criterion

Predictor	Ь	<i>b</i> 95% CI [LL, UL]	beta	<i>beta</i> 95% CI [LL, UL]	sr ²	sr² 95% CI [LL, UL]	r	Fit
(Intercept) d\$conspirac	6.58** -0.39	[4.69, 8.46] [-1.11, 0.34]	-0.15	[-0.44,	.02	[.00, .16]	15	
y.mean				0.14]				$R^2 = .024$ 95% CI[.00,.16]

Note. A significant b-weight indicates the beta-weight and semi-partial correlation are also significant. b represents unstandardized regression weights. beta indicates the standardized regression weights. sr^2 represents the semi-partial correlation squared. r represents the zero-order correlation. LL and UL indicate the lower and upper limits of a confidence interval, respectively. * indicates p < .05. ** indicates p < .01.



Graph 1



Graph 2

Table 2

15. ovnis absurdité	14. JFK_absurdité	covid_absurdité	12. OGM_absurdité	11. lune_absurdité	10. 5G_absurdité	9. climat_absurdité	8. 11sep_absurdité	7. télé_absurdité	6. plat_absurdité	5. education	4. orient politique	3. age	2. GCB_moxenne	1. Ostrac_movenne	Variable
4.37	3.63	5.61	2.71	5.20	2.82	5.90	5.35	5.00	6.31	2.18	3.10	35.27	2.49	1.81	M Negative
2.02	1.89	1.92	1.86	2.20	1.76	1.70	2.02	2.00	1.54	1.03	1.03	16.48	0.77	0.93	SD
13 [40,.15]	15 [42,.13]	26 [51, .02]	27 [52, .01]	16 [42,.12]	19 [45,.10]	13 [39,.16]	12 [39,.16]	32* [55,04]	18 [44,.11]	33* [56,06]	15 [41, .14]	12 [39, .17]	.11		1
43** [64,17]	49** [67,24]	15 [42,.13]	57** [73,34]	29* [53,01]	38** [60,11]	19 [45, .10]	41** [62,14]	41** [62,15]	28* [52,00]	.12 [17, .39]	.09	.26 [02,.50]			2
02 [30, .26]	42** [63,16]	.23	12 [-39,.17]	.29* [.01, .53]	08 [35,.21]	01 [29, 27]	04 [32, .24]	12 [39,.17]	.25 [03,.50]	.61** [.40, .76]	.43**				M SD 1 2 3
.13	06 [33, <i>2</i> 3]	06 [34, .22]	.04	.05 [-24, .32]	.08	10 [37, .18]	05 [32, .24]	.01 [-27, .29]	.02 [-26, .30]	.32* [.04, .55]					4
.15	06 [34, .22]	.39**	.21	.16 [13,.42]	07 [35, .21]	.18	.01 [27, .29]	.08	.07						5
.35*	.11	.25	.18	.26 [03, .50]	.23	.11	.40** [.13,.61]	.33* [.05, .56]							6
.49**	.40** [.13,.61]	.24	.29*	.13	.30* [.02, .53]	.28 [01, .52]	.49**								7
.42**	.46** [.21, .66]	.16	.39**	.43** [.17, .63]	.46** [21,.66]	.34* [.06, <i>5</i> 7]									∞
.39**	.33* [.05,.56]	.49**	.08	.22 [07, .47]	.01 [-27, .29]										9
.25	.24 [04, .49]	.11	.51**	. 47 ** [.22, .66]											10
.15	.02 [-26, 30]	.16	.34*												11
.45** [.19,.65]	.44** [.19,.64]	.27													12
.32*	.21 [08, .46]														13
.41**															14

Note. M and SD are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates p < .05. ** indicates p < .01.

Table 3

											Table XX
.24 [05, .49]	.54** [.30, .71]	.31* [.03, .54]	.25 [03, .50]	.42** [.16, .63]	.21 [-08, 46]	.00 [-28,.28]	.60** [.38, .75]	.10 [-18,.37]	1.12	2.00	12. ovnis_accord_1
.20 [09, .45]	.29* [.01, .53]	.09 [20, .36]	.15 [13, .42]	.36* [.08, .58]	.19 [10, .45]	.01 [27, .29]	.45** [.19, 65]	.02 [26, .30]	1.22	2.61	11. JFK_accord_1
.22 [-07, 47]	.44** [.18, .64]	.48** [.22, .67]	.19 [10, .44]	.24 [04, .49]	.49** [.25, .68]	.10 [19, .37]	.17 [-11, .43]	.33* [.06, .56]	0.81	1.37	10. covid_accord_1
	.27 [01, .51]	.39** [.12, .61]	.07 [22, .34]	.25 [04, .49]	.27 [01, .51]	.15 [-14, 41]	.55** [.32,.72]	.15 [-14, 41]	1.10	3.04	9. OGM_accord_1
		.28 [00, .52]	.29* [.01, .53]	.47** [.22, .66]	.45** [.19, .65]	13 [40,.16]	.40** [.13, .61]	.31* [.04, .55]	0.66	1.33	8. lune_accord_1
			.11 [18, .38]	.39** [.13, .61]	.48** [.23, .67]	.21 [07, .47]	.54** [31, .72]	.24 [05, .48]	1.09	2.78	7. X5G_accord_1
				.12 [16, .39]	.28* [.00, .52]	.28* [.00, .52]	.24 [05, .48]	.21 [07, .47]	0.88	1.37	6. climat_accord_1
					.35* [.08, .57]	03 [31, .26]	.52** [.28, .70]	.17 [-12, 43]	0.70	1.41	5. X11sep_accord_1
						.03 [26, .30]	.40** [.13,.61]	.33* [.06, .56]	0.98	1.57	4. télé_accord_1
							.04 [24, .32]	06 [34, .22]	0.97	1.24	3. plat_accord_1
								.11 [-17, .38]	0.77	2.49	2. conspiracy.mean
									0.93	1.81	1. Ostracisme_mean
9	8	7	6	5	4	3	2	_	SD	M	Variable

Means, standard deviations, and correlations with confidence intervals

Note. M and SD are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumning, 2014). * indicates p < .05. ** indicates p < .01.

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This project investigated the relationship between conspiracy mentality, absurdity, and ostracism. 47 participants were recruited via social networks. Three questionnaires were provided to collect their conspiracy mentality, feelings of ostracism, knowledge of ten conspiracy theories, and perception of absurdity. There are two hypotheses. Firstly, to meet the psychological motives and social needs, the individuals with a higher conspiracy mentality tend to perceive the less absurd conspiracy theories. Secondly, individuals with a higher conspiracy mentality would be more vulnerable and thus tend to perceive stronger ostracism.

Both hypotheses were examined by correlational analysis and linear regressions. The results showed a negative correlation between conspiracy mentality and eight conspiracy theories, except for climate change and COVID-19 statements. The results based on linear regressions also found that the conspiracy mentality scores predict the absurdity assessment for eight theories but not for climate change and COVID-19. The first hypothesis was partially supported. As for the second hypothesis, no significant relationship between conspiracy mentality and feelings of ostracism was found.

This study used correlation and regression analysis to explore the relationship between several variables, presenting an interesting and complete scientific exploration process. However, correlation and regression analysis with a single predictor virtually present the same hypothesis— testing purpose. I encourage researchers to use multiple regression analysis to include the demographic characteristics and the three targeting variables for further analyses. Meanwhile, the questionnaire for the absurdity assessment on ten statements(theories) presents the GCB measure on specific issues. Therefore, hypothesis—one might be taken for granted. Yet the statements for climate change and COVID—19 showed unexpected findings. Exploring what characteristics make issues more susceptible to conspiracy theories would be interesting.