Convictions or Plausibility Judgements? The Ambiguity of Self-Reported Agreement with Conspiracy Theories

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Abstract

In three studies (ns = 582, 790, 495), we examined whether self-reported agreement with conspiracy theories primarily captures convictions (i.e., firmly held beliefs) or plausibility judgments. Such disambiguation efforts are necessary because interpreting findings in terms of conviction versus plausibility judgements can lead to divergent conclusions (e.g., about the rationality of conspiracy believers). In Study 1, most (76.9%) participants who reported complete (dis)agreement with specific conspiracy theories considered that the available evidence definitively proved their position. They also reported being relatively knowledgeable about conspiracy theories—more so than undecided participants—a pattern replicated in Study 2. In Study 3, agreement was more strongly associated with veracity (r = .92) than plausibility (r = .82) assessments. These findings suggest that extreme scores on agreement scales primarily capture convictions but that such scales capture both constructs. Finally, the absence of moderation by subjective knowledge for robust correlates of conspiracy beliefs in Study 2, together with the strong intercorrelations in Study 3, suggests that these conceptual distinctions might have limited empirical implications, and do not fundamentally question the validity of past research. That said, future research should acknowledge the heterogeneity of self-reported conspiracy beliefs when interpreting findings and designing measures.

Keywords: conspiracy theories, self-reported beliefs, perceived knowledge, veracity, plausibility

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In recent years, psychological research on conspiracy theories has grown exponentially (Biddlestone et al., 2025; Bowes et al., 2023; Hornsey et al., 2022; van Mulukom et al., 2022). The vast majority of this research employs quantitative methods, measuring conspiracy beliefs by asking participants to indicate the extent to which they agree or disagree with conspiracy theories, typically on a scale from 1 (*completely disagree*) to 5 (*completely agree*).

Despite its widespread use, what this tool actually measures remains ambiguous. This ambiguity is well-known with regard to the scale's midpoint (e.g., Baka et al., 2012; Lam, 2019): a "neither agree nor disagree" may capture an absence of opinion (i.e., a non-substantive answer), or an intermediate position between two extreme options. However, extreme response options—which are crucial to properly define a continuous construct—are themselves ambiguous. The goal of this research is to resolve this ambiguity and gauge its potential impact on empirical research.

Consider a participant who reports that they "completely agree" with a conspiracy theory. This response may indicate that the participant firmly believes the conspiracy is *true*—that is, that it occurred (or is occurring) in the real world. Such *conviction* ("I know for a fact that it is true") may arise among people who consider themselves well-informed on the topic (e.g., those who have watched videos claiming to expose evidence of the conspiracy) and believe that the conspiracy is definitely proven by the available evidence based on their "own research" (see Levy, 2022). Such a position would arguably reflect a "misplaced certainty" about the truthfulness of a claim that is poorly substantiated (Oettingen et al., 2022).

Alternatively, a participant might "completely agree" not because they firmly believe it to be true, but because they find the conspiracy theory highly *plausible*. This type of agreement might be observed among participants who are not specifically informed about the conspiracy theory, but whose pre-existing attitudes and beliefs align with the conspiracy theory (e.g., the general belief that official narratives hide important truths, Lantian et al., 2016; Wood et al., 2012). In this case, their complete agreement reflects a *plausibility judgement* ("I ultimately do not know, but it definitely could be true") rather than a conviction. Such a response does not imply that the participant firmly believes that the conspiracy occurred, but rather that they view the conspiracy theory as capturing some general truth—without taking position on whether it is factually accurate (see Reyna, 2021).

Similarly, a participant who "completely disagrees" with a conspiracy theory may do so for two possible reasons. They may have never heard of the conspiracy theory but find it highly implausible for various reasons (e.g., because they trust authorities). Alternatively, they may report the conviction that it is false. Such a conviction may be the consequence of having engaged with the conspiracy theory and developed the sense of being knowledgeable about its falsity, or may stem from the fact that the conspiracy theory contradicts some scientific knowledge.

In summary, self-reported complete (dis)agreement with conspiracy theories may capture the firm belief that the conspiracy theory is true or false—namely, a *conviction*—or the sense that the conspiracy theory is highly (im)plausible under the participants' prior beliefs and attitudes—namely, a *plausibility judgement*. At the individual level, the nature of self-reported (dis)agreement may vary based on whether participants consider to be well-informed about the surveyed conspiracy theories. Self-reported conspiracy beliefs may capture conviction among participants who consider themselves knowledgeable about the

topic, but among participants who do not, these responses may capture plausibility judgements based on prior beliefs (e.g., stereotypes, Biddlestone et al., 2020).

These varying interpretations of what it means to (dis)agree with a conspiracy theory raise significant theoretical questions. A first question concerns what agreement scales primarily capture. If self-reported agreement primarily reflects plausibility judgments, then interpreting research results in terms of conviction is misleading, especially given that these two interpretations have different theoretical implications. For example, consider belief in fabricated conspiracy theories (Swami et al., 2011) and belief in mutually contradictory conspiracy theories (Wood & Douglas, 2012; van Prooijen et al., 2023). If self-reported agreement with conspiracy theories primarily reflects plausibility judgments, it would not be irrational to "completely agree" with made-up conspiracy theories (e.g., Hagen, 2018). Similarly, while it is clearly irrational to firmly believe that two mutually contradictory statements are both true, there is no inherent problem in finding two contradictory statements highly plausible (Lukić et al., 2019, see however Petrović & Iris Žeželj, 2023, for evidence that conspiracy believers are more likely to believe in mutually contradictory statements). In these two examples, an interpretation in terms of conviction would constitute evidence that conspiracy believers are irrational, while one in terms of plausibility does not.

The risks of conflating these two interpretations have been pointed out in philosophical contributions (e.g., Basham, 2017; Hagen, 2018). For instance, Basham (2017) argued that psychologists studying belief in mutually contradictory conspiracy theories mistakenly conflate "strong suspicions" with "settled beliefs," leading them to draw inaccurate conclusions. Yet there has been no empirical research specifically aimed at tackling this alleged conflation among psychologists (see however van Prooijen et al., 2023, on the topic of contradictory conspiracy theories, and Wood, 2017, on the distinction between

conspiracy beliefs and conspiracy suspicions). The main goal of this article is therefore to resolve this methodological ambiguity by determining whether agreement scales used to measure belief in conspiracy theories primarily captures convictions, plausibility judgements, or both indistinctly.

A second question pertains to the implications of this distinction for empirical research on conspiracy theories.[1] Criticisms highlighting the conflation of plausibility judgements and conviction in psychological research are philosophical, and therefore speculative in nature. While such criticisms should encourage caution in data interpretation, the question of whether the distinction questions the scope or validity of research on conspiracy theories remains to be empirically investigated. It is possible that agreement scales primarily capture – for instance – plausibility judgements, and that shifting to a measure of conviction would significantly alter findings. In that case, past research would need to be reinterpreted in terms of plausibility judgements, thereby narrowing its scope. Conversely, it is also possible that such a shift would have little to no impact, thus largely preserving past research. Such an investigation is the second goal of this article.

Research overview

[1] it is worth noting that past research has examined perceptions of plausibility and veracity as empirically distinct subcomponents of perceived realism, in the context of narrative perception (Cho et al., 2014; Hall, 2003). However, when discussing fictional narratives, the distinction is more clear-cut: a fiction can be perceived as plausible (e.g., if participants consider that the depicted events could happen in the real world), while not being perceived as factual (as fictions, by definition, do not depict real events). While conspiracy theories can be analysed as narratives, they all claim that some events happened in the real world—making the distinction blurrier and potentially inoperative.

In three cross sectional studies, we examined if (1) self-reported agreement with conspiracy theories primarily captures convictions (i.e., firmly held beliefs) or (im)plausibility judgements, and if (2) this distinction is susceptible to questioning past research. In Studies 1-2, we examined the relationship between self-reported agreement with conspiracy theories and participants' perceived knowledge about these conspiracy theories. In Study 3, we examined how self-reported agreement with conspiracy theories and conspiracy mentality relate to plausibility and veracity judgements.

To address the question of the preferred default interpretation of self-reported conspiracy beliefs, we first examined the average level of perceived knowledge about conspiracy theories. This descriptive analysis provides an initial indication of whether participants are simply guessing based on prior beliefs and attitudes (i.e., reporting plausibility judgements) or offering responses they consider well-informed (i.e., reporting conviction). We also examined both linear and "U"-shaped relationships between self-reported conspiracy beliefs and perceptions of knowledge. This approach helps determine if the feeling of being (un)informed about conspiracy theories varies according to individuals' levels of self-reported agreement with conspiracy theories, and if extreme endorsement or rejection is associated with heightened subjective knowledge. Moreover, in Study 1, we investigated whether participants who reported an extreme score ("completely agree" or "completely disagree") believed that their position was definitively supported by available evidence. This analysis provides insights into the meaning of complete (dis)agreement with conspiracy theories, as the belief that one's position is definitively proven by evidence likely reflects conviction rather than (im)plausibility judgement. Finally, in Study 3, we directly tested whether self-reported agreement with conspiracy theories relates differently to veracity and plausibility perceptions.

We examined the question of the implications of the investigated distinction for empirical research in Studies 2-3. In Study 2, we examined whether perceived knowledge moderates the relationship between self-reported conspiracy beliefs and three well-established correlates of conspiracy beliefs (see Bowes et al., 2023): level of education (Ballová Mikušková, 2022; van Prooijen, 2017), intuitive thinking (Pytlik et al., 2020; Binnendyk & Pennycook, 2022), and individual narcissism (Cichocka et al., 2022). In Study 3, we directly examining the strength of the relationships between self-reported agreement, plausibility and veracity judgements. This enabled us to gauge the extent to which these different measurements can be expected to relate similarly to the correlates of conspiracy beliefs, and if empirically, they differ from each other.

All studies were preregistered. Analyses scripts, data files, as well as materials can be found on the Open Science Framework (https://osf.io/dazqb/?view_only=9c1d65e5a0af4854ae539edf4666a6f8).

Study 1

We preregistered testing for the linear and "U" shaped relationships between conspiracy theory beliefs and perceived knowledge about them.[2] In addition, we wished to gauge the extent to which extreme endorsement scores (i.e., "completely disagree" or "completely agree" responses) reflected the perception that the conspiracy was either

[2] In the preregistered model, the first author inadvertently permuted the dependent (perceived knowledge) and independent variables (the linear and quadratic terms of agreement with the conspiracy theory). The analyses present the corrected model, as the preregistered model (with the linear and quadratic terms of perceived knowledge as independent variables) was not adequate to test our hypotheses.

definitively disproven (for "completely disagree" respondents) or proven (for "completely agree" respondents).

Method

Participants

We recruited 603 US participants from Prolific (planned $n = 600$). To increase the average level of conspiracy theory endorsement (as conspiracy believers are difficult to recruit for research, see Franks et al., 2017), half of the sample ($n = 300$) was recruited among Prolific users who rejected the COVID-19 vaccine, and the other half was recruited with no specific prescreening criterion. Five hundred and eighty-two remained after excluding participants who failed to answer correctly to the attention check ($M_{Age} = 42$, $SD = 13.16$; 353 self-identified women, 7 identifying with another gender).

Given the correlational design, a power of 90% and two-tailed tests, the achieved sample size enabled us to detect a minimum effect size of $r = .13$.

Procedure and materials

At the beginning of the survey, participants were told that the topic of the study was the meaning of self-reported beliefs. They first reported their sociodemographic information (age, gender, political orientation, nationality, occupation). Participants then completed the following scales:

Agreement with specific conspiracy theories ($\alpha = .92$). We measured participants' agreement with five US relevant conspiracy theories (Moon landing, 9/11, JFK, AIDS being created by US agencies, New World Order), and five conspiracy theories pertaining to scientific issues (the dangers of vaccines, the origin of COVID-19, the dangers of GMOs, climate change, scientific breakthroughs being covered up by corporations). The five US

conspiracy theories were taken from the Belief in Conspiracy Theory Inventory (BCTI, Swami et al., 2011). The science conspiracies were generated with ChatGPT and modified to meet the needs of the study (see Table 2 for the complete scale). Participants answered on a 5-point agreement scale ranging from *completely disagree* to *completely agree*.

Perceived knowledge about the topic of conspiracy theories (α = .90). Participants rated how informed they considered to be on the same ten conspiracy theories on a scale ranging from 1 (Not at all informed) to 5 (Extremely informed). To help participants, we provided them with an interpretation of each possible answer:

> "*Not at all informed* means that you have never engaged with any content discussing this topic. You have no knowledge or understanding of it.
>
> *Minimally informed* means that you have engaged with content discussing this topic once or twice. Your knowledge is very limited, and you only have a basic or superficial understanding.
>
> *Somewhat informed* means that you have occasionally engaged with content discussing this topic. You have a moderate understanding, but your knowledge is still incomplete.
>
> *Well informed* means that you have regularly engaged with content discussing this topic. You consider yourself knowledgeable, with a solid understanding, but you do not consider yourself an expert.
>
> *Extremely informed* means that you have spent significant time engaging with content on this topic. You have a deep understanding and feel confident that you know most of what there is to know about it."

Perception that conspiracy theories are (dis)proven. For each of the ten conspiracy theories, participants were asked to tick one of three possible answers: "The available

evidence definitely proves that it is false"; "The available evidence definitely proves that it is true"; "I do not know".

Participants completed the agree-disagree conspiracy beliefs scale first. The order of the scales measuring perceived knowledge and perception that the conspiracy theories were (dis)proven was randomized. In total, the ten conspiracy theories were presented thrice to participants. At the end of the survey, participants answered to the attention check and could leave an open comment before submitting their response.

Results

Descriptive findings

The internal reliability of the perceived knowledge scale was excellent (α = .90), suggesting that participants who believed that they were well informed and knowledgeable about one conspiracy theory believed to be well informed about the others. This warrant running analyses on aggregated scores instead of individual conspiracy theories.

On a scale ranging from 1 (not at all informed) to 5 (extremely informed), the average level of perceived knowledge about surveyed conspiracy theories was 2.91 (*SD* = 0.80), which is slightly below the "somewhat informed" point. Average level of perceived knowledge ranged from 2.39 (for the AIDS conspiracy theory) to 3.34 (for the vaccine conspiracy theory).

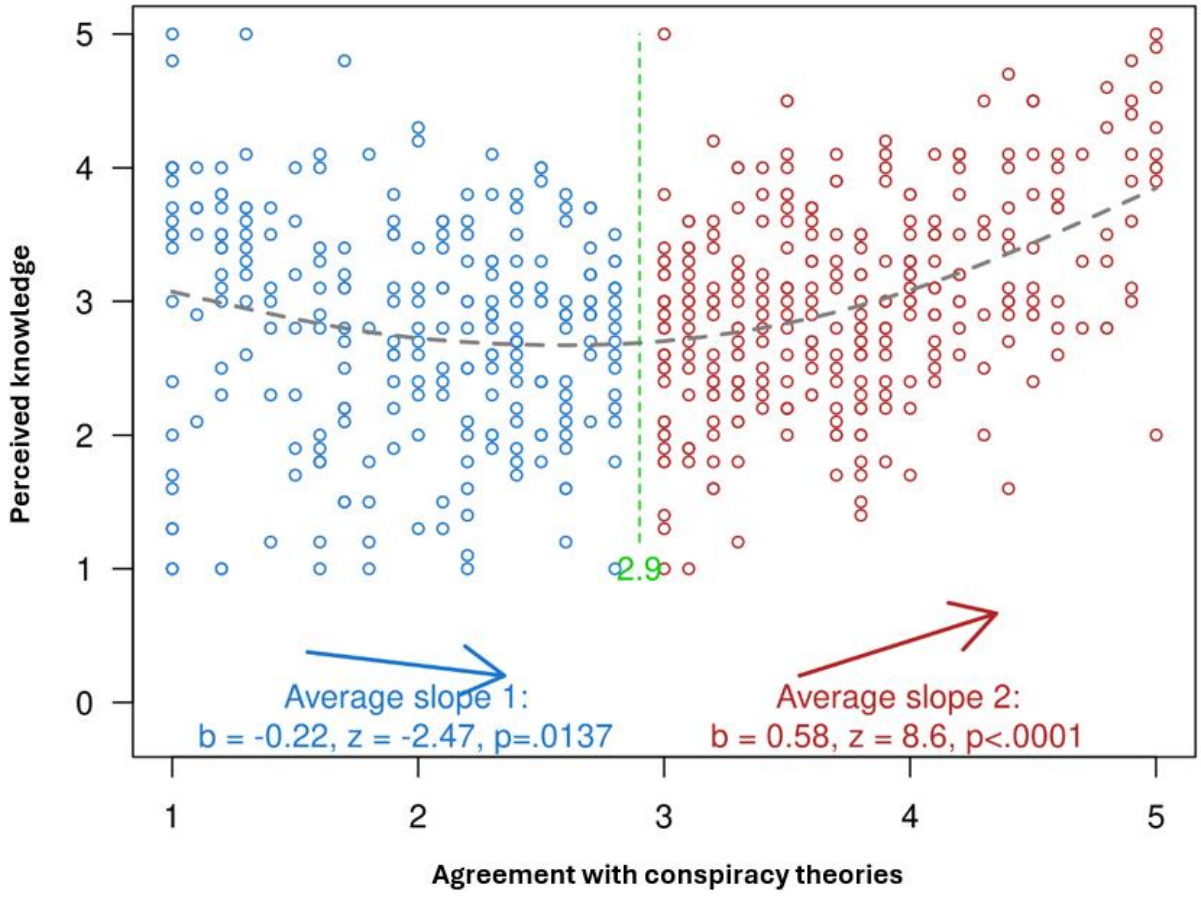
Confirmatory analyses

To examine the linear and "U" shaped relationships, we first ran a linear regression including, as predictors, the linear and quadratic terms of belief in conspiracy theories, and perceived knowledge about conspiracy theories as the criterion. We observed both a linear, b = 0.17 (SE = 0.03), t = 5.68, $p < .001$, and a quadratic relationship, b = 0.21 (SE = 0.03), t =

7.94, $p < .001$. A two-lines test (Simonsohn, 2018) corroborated the "U" shaped relationship, as we observed a modest negative relationship between conspiracy beliefs and perceived knowledge on the left side of the breakpoint (set at 2.9), $p = .014$, and a stronger positive relationship on the right side of the breakpoint, $p < .001$ (see Figure 1).

Figure 1

Two lines test for the relationship between conspiracy theory endorsement (X axis) and perceived knowledge about conspiracy theories (Y axis) in Study 1



Exploratory Analyses

Analyses for each conspiracy theory. In addition, we examined the linear and "U" shaped relationships between endorsement and perceived knowledge for each conspiracy theory individually. The quadratic term of conspiracy theory endorsement was significant and

positive for all ten conspiracy theories (see Table 1). Two-lines tests corroborated the "U" shaped relationship for nine out of ten conspiracy theories, the only exception being the New World Order conspiracy theory, for which the left side of the breakpoint did not exhibit the expected negative slope, $p = .36$ (see online supplements for details and figures).

Table 1

Examination of the linear and quadratic relationships between conspiracy theory endorsement and perceived knowledge about the conspiracy (Study 1)

	US conspiracy theories					Science conspiracy theories			
Predictors	*b*	95% CI	*t*-value	R^2		*b*	95% CI	*t*-value	R^2
Moon landing					***Origin of COVID-19***				
(Intercept)	2.40**	[2.27, 2.54]	35.58		(Intercept)	2.90**	[2.78, 3.03]	45.73	
Linear term	-0.28**	[-0.36, -0.20]	-6.75		Linear term	0.29**	[0.22, 0.36]	8.29	
Quadratic term	0.25**	[0.19, 0.30]	8.73	.12**	Quadratic term	0.17**	[0.12, 0.22]	6.95	.12**
9/11 attacks					***Vaccine safety***				
(Intercept)	2.63**	[2.50, 2.76]	39.28		(Intercept)	2.83**	[2.70, 2.96]	42.29	
Linear term	-0.05	[-0.12, 0.01]	-1.68		Linear term	0.17**	[0.11, 0.23]	5.73	
Quadratic term	0.19**	[0.14, 0.24]	7.53	.09**	Quadratic term	0.25**	[0.20, 0.29]	9.73	.15**
New World Order					***Global warming***				
(Intercept)	2.13**	[2.00, 2.26]	32.39		(Intercept)	2.75**	[2.61, 2.89]	37.85	
Linear term	0.30**	[0.24, 0.36]	9.39		Linear term	0.03	[-0.03, 0.09]	0.96	
Quadratic term	0.21**	[0.16, 0.26]	8.20	.22**	Quadratic term	0.22**	[0.17, 0.27]	8.18	.11**
JFK					***Dangers of GMOs***				
(Intercept)	2.49**	[2.36, 2.61]	38.46		(Intercept)	2.46**	[2.33, 2.59]	36.72	
Linear term	0.23**	[0.16, 0.29]	6.97		Linear term	0.29**	[0.22, 0.36]	7.84	
Quadratic term	0.18**	[0.13, 0.23]	7.17	.12**	Quadratic term	0.21**	[0.16, 0.27]	7.57	.13**
AIDS					***Corporations censoring scientific breakthroughs***				
(Intercept)	2.00**	[1.86, 2.13]	29.70		(Intercept)	2.48**	[2.35, 2.60]	39.51	
Linear term	0.05	[-0.03, 0.12]	1.21		Linear term	0.45**	[0.36, 0.53]	10.48	
Quadratic term	0.22**	[0.17, 0.28]	7.855	.14**	Quadratic term	0.19**	[0.14, 0.25]	7.018	.16**

Note. * $p < .05$ ** $p < .01$

Complete (dis)agreement and the perception that one's position is definitely proven. For each conspiracy theory, we examined if participants who reported that they completely disagreed or completely agreed considered that the conspiracy theory was definitely (dis)proven by available evidence (see Table 2). For each conspiracy theory, we excluded participants that did not report an extreme score ("completely agree" or "completely disagree"). For participants who completely disagreed, having ticked "The available evidence definitely proves that it is false" was coded as 1, and the other options were coded as 0. For participants who "completely agreed" with the conspiracy theory, having ticked "The available evidence definitely proves that it is true" was coded as 1, and the other two options were coded as 0. Finally, we ran chi squared tests to see if the two groups of participants differed in their tendency to consider that their position was proven by available evidence.

Table 2

Proportion of conspiracy believers and rejecters who consider their position to be proven by available evidence

	"Completely disagree"				"Completely agree"					
	Proven	Unproven	Total	% proven	Proven	Unproven	Total	% proven	χ^2	*p*-value
US1: The Apollo moon landings never happened and were staged.	230	48	278	82.7%	34	13	47	72.3%	2.21	.14
US2: The US government allowed the 9/11 attacks to take place so that it would have an excuse to achieve foreign (e.g., wars in Afghanistan and Iraq) and domestic (e.g., attacks on civil liberties) goals that had been determined prior to the attacks.	148	43	191	77.5%	57	21	78	73.1%	0.38	.54
US3: A powerful and secretive group, known as the New World Order, are planning to eventually rule the world through an autonomous world government, which would replace sovereign government.	94	60	154	61%	65	15	80	81.3%	8.97	**.003**
US4: The assassination of John F. Kennedy was not committed by the lone gunman, Lee Harvey Oswald, but was rather a detailed, organised conspiracy to kill the President.	75	26	101	74.3%	91	31	122	74.6%	0.00	1
US5: US agencies intentionally created the AIDS epidemic and administered it to Black and gay men in the 1970s.	153	60	213	71.8%	35	17	52	67.3%	0.22	.64
S1: The true origin of the COVID-19 virus is being covered up by governments to protect powerful interests.	76	16	92	82.6%	121	30	151	80.1%	0.10	.76
S2: The safety and effectiveness of vaccines are exaggerated, and negative side effects are being deliberately covered up.	97	15	112	86.6%	117	16	133	88%	0.02	.90
S3: Climate change is a natural cycle, but governments and scientists are misleading the public to introduce unnecessary and restrictive policies.	122	26	148	82.4%	84	22	106	79.2%	0.23	.63
S4: The dangers of genetically modified organisms (GMOs) are being suppressed by scientists and corporations to prevent the public from rejecting these products.	62	18	80	77.5%	95	28	123	77.2%	0.00	1
S5: Major scientific breakthroughs are being withheld from the public by powerful corporations to maintain their control over the economy.	47	15	62	75.8%	102	52	154	66.2%	1.47	.23
Total	1075	282	1357	79.2%	830	290	1120	74.1%	8.74	**.003**

A large majority of participants who completely disagreed (79.2%) or completely agreed (74.1%) considered that their position was definitely proven by available evidence, with "completely disagreeing" participants being significantly more likely to do so, $p = .003$. This significant difference was not observed when considering each conspiracy theory separately—except for the New World Order conspiracy theory, for which participants who completely disagreed were less likely to consider their position to be definitely proven (61%) than participants who completely agreed (81.3%), $p = .003$.

Discussion

In this first study, participants on average considered themselves to be "somewhat informed" about the surveyed conspiracy theories. Those who reported extreme scores (i.e., "completely agree" or "completely disagree") perceived themselves as more knowledgeable than undecided participants. Moreover, participants who expressed complete agreement or disagreement tended to feel that the available evidence definitively supported their position.

Overall, these findings suggest that self-reported agreement with conspiracy theories does reflect conviction, not mere plausibility judgements based on prior beliefs and attitudes. This was especially true for participants reporting extreme positions, who perceived themselves as more informed than undecided participants. Together, these initial findings suggest that when extreme scores are present in research samples, scales measuring agreement with conspiracy theories effectively capture the subjectively well-informed conviction that a conspiracy theory is true or false.

Interestingly, perceived knowledge about conspiracy theories was relatively independent of self-reported belief in conspiracy theories, with only a modest linear association between the two variables. Although the quadratic term of conspiracy agreement explained more variance than the linear term, the overall model accounted for only 13% of

the variance in perceived knowledge about conspiracy theories. Figure 1 illustrates that, at each level of agreement on the conspiracy beliefs scale, participants reported a range of perceived knowledge scores. While some participants felt uninformed about the surveyed conspiracy theories, others reported feeling well-informed.

Study 2

In Study 2, in addition to replicating the findings of Study 1, we examined whether the relationships between conspiracy theory beliefs and robust correlates (specifically, education level, individual narcissism, and reliance on intuition) were moderated by perceived knowledge about conspiracy theories. Given our limited recruitment resources, we selected three correlates based on two considerations: robustness of association with conspiracy beliefs (see Bowes et al., 2023), and plausible associations with subjective knowledge. We focused on two variables with a strong epistemic component (i.e., education level and intuitive thinking) and one personality trait linked to overconfidence (i.e., narcissism, see Macenczak et al., 2016).

Additionally, to ensure the quality of the perceived knowledge measure, we introduced fictitious conspiracy theories within the scales measuring perceived knowledge and agreement. Doing so allows us to determine if participants accurately report not knowing anything about non-existent conspiracy theories or if, due to factors such as acquiescence bias, they mistakenly report being knowledgeable about them.

Since we conducted Study 2 with a U.S. sample and surveyed the same specific conspiracy theories as in Study 1, we did not measure the perception that one's position is supported by available evidence.

Method

Participants

We recruited 802 participants on Prolific (planned n = 800). The recruitment was representative in terms of gender, age, and political partisanship, with a quota-based sampling. Seven hundred and ninety remained after excluding participants who failed to answer correctly to the attention check (M_{Age} = 46.17, SD = 16.28; 394 self-identified women, 10 identifying with another gender).

Given the correlational design, a power of 90% and two-tailed tests, the achieved sample size enabled me to detect a minimum effect size of r = .11.

Materials and Procedure

The procedure was identical to Study 1. In addition to the variables already measured in Study 1, the following variables were included in the survey:

Made up conspiracy theories. We measured agreement with, and perceived knowledge about, three fictitious conspiracy theories (e.g., "Red Bull contains hidden ingredients designed to suppress energy levels over time, creating a dependency on the drink for a quick fix.", $\alpha_{Endorsement}$ = .80; $\alpha_{Knowledge}$= .84).

Narcissism. Participants completed the nine items of the superiority subscale (e.g., "People see me as a natural leader", α = .78) of the simplified narcissism scale created by Ang and Yusof (2006).

Intuitive thinking. It was measured with the 15-item faith in intuition scale ("When I need to form an opinion about an issue, I completely rely on my intuition", α = .90) created in German by Keller et al. (2000) and translated in English by Alós-Ferrer and Hügelschäfer (2012).

Education level. We asked participants "What is the highest degree you have obtained?". They answered on a scale ranging from 1 (no formal education) to 5 (college education, graduate degree).

Results

Descriptives

Correlations and descriptives for Study 2 are displayed in Table 3. Just like in Study 1, the internal reliability of the perceived knowledge scale was excellent (α = .90). This warrants running analyses on aggregated scores instead of individual conspiracy theories. The average level of perceived knowledge about conspiracy theories was 2.87 (*SD* = 0.84), which is again slightly below the "somewhat informed" point. Average level of perceived knowledge ranged from 2.31 (for the New World Order conspiracy theory) to 3.29 (for the climate change conspiracy theory).

Table 3

Correlations and descriptives (Study 2)

Variable	*M*	*SD*	1	2	3	4	5	6
1. CT endorsement	2.36	1.03						
2. Perceived knowledge about CTs	2.87	0.84	.07* [.00, .14]					
3. Made-up CT endorsement	2.10	0.95	.73** [.70, .76]	.02 [-.05, .09]				
4. Perceived knowledge (made-up CTs)	1.53	0.79	.10** [.03, .17]	.46** [.41, .52]	.22** [.16, .29]			
5. Narcissism	2.48	0.72	.18** [.11, .24]	.03 [-.04, .10]	.25** [.18, .31]	.23** [.16, .30]		
6. Faith in intuition	3.26	0.68	.31** [.25, .37]	-.00 [-.07, .07]	.30** [.24, .36]	.20** [.13, .27]	.30** [.24, .36]	
7. Education level	3.75	0.78	-.16** [-.23, -.09]	.05 [-.02, .12]	-.08* [-.15, -.01]	.06 [-.00, .13]	.18** [.12, .25]	-.03 [-.10, .03]

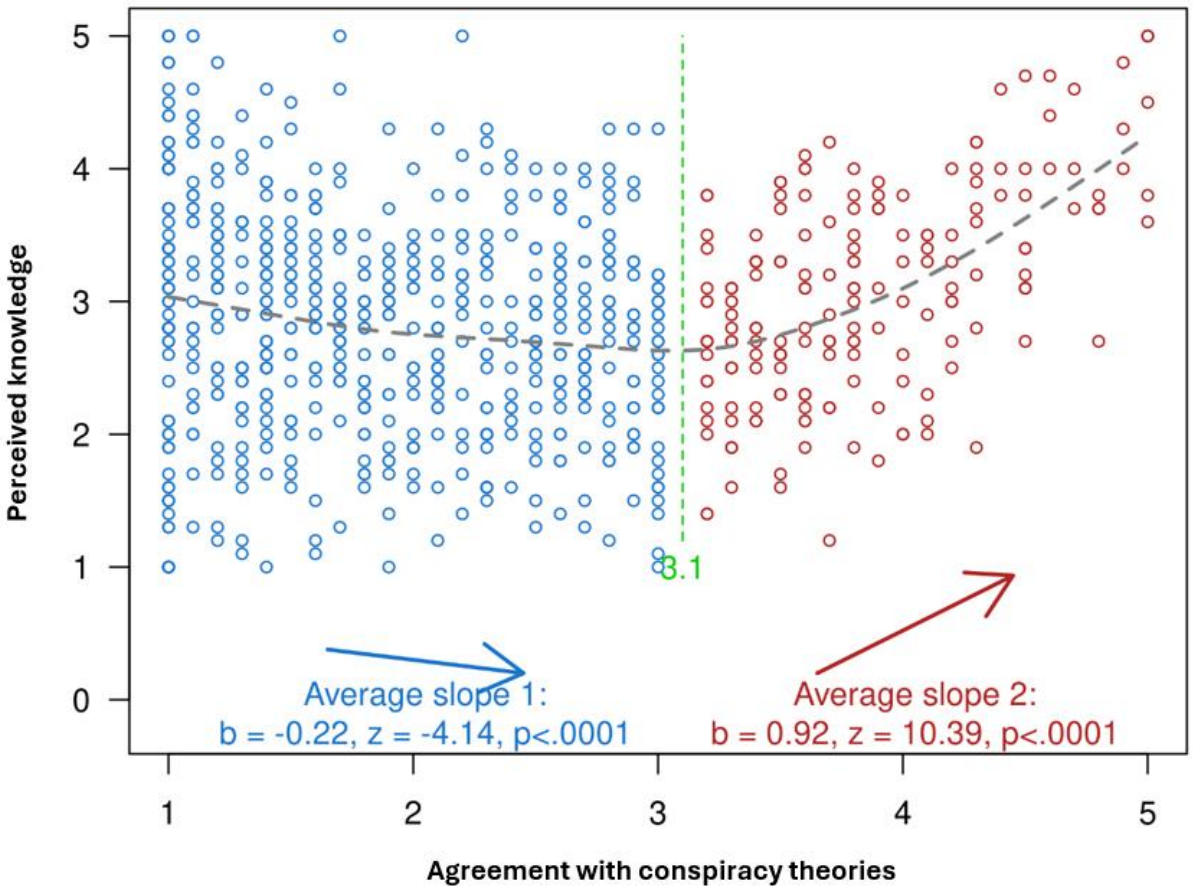
Note. * $p < .05$. ** $p < .01$. CTs stands for Conspiracy Theories. Between square brackets are 95% confidence intervals. All variables were measured on a 5-point scale.

Confirmatory Analyses

To examine the linear and "U" shaped relationships, we ran a linear regression including, as predictors, the linear and quadratic terms of conspiracy theory endorsement, and perceived knowledge about conspiracy theories as criterion. Contrary to Study 1, the linear effect was non-significant, b = -0.06 (SE = 0.03), t = -1.83, p = .068. By contrast, the quadratic term of conspiracy theory endorsement was significant, b = 0.23 (SE = 0.03), t = 8.91, p < .001. A two-lines test (Simonsohn, 2018) corroborated the "U" shaped relationship, with the expected negative relationship between conspiracy beliefs and perceived knowledge on the left side of the breakpoint (set at 3.1), p < .001, and a stronger positive relationship on the right side of the breakpoint, p < .001 (see Figure 2).

Figure 2

Two lines test for the relationship between conspiracy theory endorsement (X axis) and perceived knowledge about conspiracy theories (Y axis) in Study 2



To test the moderating role of perceived knowledge, we preregistered running regression models with belief in conspiracy theories, perceived knowledge about conspiracy theories, and their interaction term as independent variables. However, curvilinear relationships between two independent variables can obscure their linear interaction. Indeed, the interaction term being a product of the two linear components, the two sides of the "U" shaped distribution can cancel one another, hence reducing the relationship between the linear interaction term and the dependent variable. To better control for the "U" shaped relationship between the two variables, we additionally included the quadratic term of conspiracy beliefs in the model. This did not change any of the results.

We ran separate regressions for the three dependent variables – narcissism, faith in intuition, and education level.[3] Replicating past research, conspiracy theory beliefs predicted increased narcissism, $b = 0.14$ ($SE = 0.03$), $t(786) = 4.95$, $p < .001$, increased faith in intuition, $b = 0.22$ ($SE = 0.03$), $t(786) = 8.55$, $p < .001$, and decreased education level, $b = -0.13$ ($SE = 0.03$), $t(786) = -4.17$, $p < .001$. Against our hypotheses, perceived knowledge about conspiracy theories did not moderate any of these relationships, $b_{Narcissism} = 0.00$ ($SE = 0.03$), $t(786) = 0.98$, $p = .33$, $b_{Faith\ in\ intuition} = -0.02$ (SE = 0.03), t(786) = -0.88, $p = .38$, $b_{Education\ level} = 0.05$ ($SE = 0.03$), $t(786) = 1.40$, $p = .16$.

Finally, we expected that conspiracy theory believers would be more likely to report being knowledgeable about made up conspiracy theories. Against this hypothesis, conspiracy theory endorsement (excluding made-up conspiracy theories) did not significantly predict the difference between perceived knowledge about the three made up conspiracy theories, and perceived knowledge about the ten existing conspiracy theories, $b = 0.02$ ($SE = 0.03$), $t(786) = 0.51$, $p = .61$. Hence, the relationship between conspiracy theory beliefs and perceived knowledge about conspiracy theories does not significantly differ for made up and existing conspiracy theories.

Exploratory Analyses

Made up conspiracy theories. As expected, participants reported significantly less perceived knowledge for made up conspiracy theories than for existing conspiracy theories, $t(789) = 44.41$, $p < .001$ ($M_{Made\ up\ conspiracies} = 1.53$, SD = 0.79; $M_{Existing\ conspiracies} = 2.87$, SD =

[3]Causally speaking, it would have been reasonable to use narcissism, education level and intuitive thinking as predictors of conspiracy beliefs and to include subjective knowledge as a moderator of these relationships. However, it felt more intuitive to examine the combined effects of conspiracy beliefs and subjective knowledge on these different variables. Permuting the dependent and independent variables did not change our conclusions.

0.84, Cohen's d = 1.58). Hence, most participants rightfully reported that they had never heard of the made-up conspiracy theories.

Analyses for each conspiracy theory. Finally, just like in Study 1, we tested the linear and "U" shaped relationships on each conspiracy theory individually (see Table 4). While the significance and sign of the linear effect varied considerably across conspiracy theories, the quadratic term was consistently significant and positive. A series of two-lines test corroborated the "U" shape of eight relationships out of ten (see online supplements), the exceptions being the "science censored by corporations" and the "New World Order" conspiracy theories, for which the left side of the breakpoint did not exhibit the expected negative slope, $b_{New\ World\ Order} = -0.04$, $z = -0.36$, $p = .72$, $b_{Censored\ science} = -0.11$, $z = -1.6$, $p = .11$.

Table 4

Examination of the linear and quadratic relationships between conspiracy theory endorsement and perceived knowledge about the conspiracy (Study 2)

	US conspiracy theories				Science conspiracy theories				Made up conspiracy theories			
Predictors	*b*	95% CI	*t*-value	R^2		*b*	95% CI	*t*-value	R^2		*b*	95% CI	*t*-value	R^2
Moon landing					***Origin of COVID-19***					***Red Bull***				
(Intercept)	2.89**	[2.78, 3.00]	50.20		(Intercept)	2.66**	[2.54, 2.78]	42.63		(Intercept)	1.47**	[1.37, 1.58]	27.55	
Linear term	-0.65**	[-0.80, -0.51]	-8.86		Linear term	0.00	[-0.05, 0.05]	0.01		Linear term	0.11**	[0.05, 0.17]	3.40	
Quadratic term	0.27**	[0.20, 0.33]	7.83	.09**	Quadratic term	0.18**	[0.14, 0.23]	7.92	.08**	Quadratic term	0.16**	[0.11, 0.21]	6.17	.10**
9/11 attacks					***Vaccine safety***					***Dyson vacuums***				
(Intercept)	2.60**	[2.48, 2.73]	40.12		(Intercept)	2.70**	[2.58, 2.83]	43.91		(Intercept)	1.24**	[1.16, 1.32]	30.65	
Linear term	-0.13**	[-0.22, -0.03]	-2.67		Linear term	-0.21**	[-0.27, -0.14]	-6.09		Linear term	0.01	[-0.06, 0.07]	0.17	
Quadratic term	0.22**	[0.16, 0.28]	7.41	.09**	Quadratic term	0.26**	[0.21, 0.31]	10.57	.12**	Quadratic term	0.16**	[0.12, 0.21]	6.84	.09**
New World Order					***Global warming***					***Mist project***				
(Intercept)	1.95**	[1.83, 2.07]	32.47		(Intercept)	2.87**	[2.74, 2.99]	44.97		(Intercept)	1.18**	[1.09, 1.26]	27.55	
Linear term	0.12**	[0.05, 0.19]	3.44		Linear term	-0.22**	[-0.29, -0.15]	-6.33		Linear term	0.00	[-0.06, 0.06]	0.05	
Quadratic term	0.19**	[0.14, 0.24]	7.72	.18**	Quadratic term	0.20**	[0.16, 0.25]	8.24	.08**	Quadratic term	0.24**	[0.19, 0.30]	8.09	.09**
JFK					***Dangers of GMOs***									
(Intercept)	2.48**	[2.37, 2.60]	41.87		(Intercept)	2.27**	[2.16, 2.39]	37.96						
Linear term	0.07*	[0.01, 0.12]	2.46		Linear term	-0.01	[-0.07, 0.05]	-0.39						
Quadratic term	0.22**	[0.17, 0.26]	9.22	.11**	Quadratic term	0.22**	[0.17, 0.27]	8.60	.09**					
AIDS					***Corporations censoring scientific breakthroughs***									
(Intercept)	2.08**	[1.96, 2.20]	34.11		(Intercept)	2.27**	[2.15, 2.40]	36.82						
Linear term	-0.19**	[-0.29, -0.09]	-3.81		Linear term	0.21**	[0.16, 0.27]	7.64						
Quadratic term	0.25**	[0.19, 0.31]	8.31	.09**	Quadratic term	0.15**	[0.10, 0.19]	5.95	.09**					

Note. * $p < .05$ ** $p < .01$.

The quadratic term was also significant for made up conspiracy theories (see Table 4). However, two-lines test revealed that for two out of three made up conspiracy theories, the left side of the breakpoint did not exhibit the expected negative slope, $b_{Red\ Bull}$ = -0.06, z = -1.4, p = .16, $b_{Dyson\ vacuums}$ = 0.10, z = 1.26, p = .21. A small and barely significant negative slope was observed for the conspiracy theory about the "Mist" project, b = -0.13, z = -1.96, p = .05. By contrast, the right side of the breakpoint consistently exhibited the expected positive slope, $b_{Red\ Bull}$ = 0.71, z = 8.21, p < .001, b_{Dyson} = 0.38, z = 5.15, p < .001, $b_{Mist\ project}$ = 0.39, z = 5.49, p < .001. Hence, participants who agreed with the made-up conspiracy theory items tended to mistakenly report being informed about them, while participants who disagreed with them did not, resulting in "hockey-stick" shaped curves.

Discussion

In Studies 1-2, we have shown that participants reporting extreme conspiracy beliefs scores on average considered to be well informed on the surveyed conspiracy theories. Moreover, in Study 1, a large majority of participants reporting extreme (dis)agreements considered that their position was definitely proven by the available evidence. These results suggest that agreement scales used to measure conspiracy beliefs primarily capture conviction, rather than plausibility judgements. That said, belief in conspiracy beliefs and subjective knowledge about conspiracy theories were largely independent—despite their robust "U" shaped relationship. The heterogeneity of subjective knowledge scores across the agreement scale, combined with the fact that a minority of "completely (dis)agree" respondents did *not* believe that their position was definitively supported by the available evidence, suggests that convictions and plausibility judgements are to some extent conflated in agreement scales.

Regarding the second research question, we found that in Study 2, subjective knowledge did not act as a moderator for the relationship between conspiracy beliefs, narcissism, faith in intuition, and education level. These non-significant results suggest that even though participants may vary in their subjective knowledge on conspiracy theories, these variations do not seem to substantially impact (some) past findings.

Study 3

We ran a final study adopting a different approach to further disambiguate self-reported agreement with conspiracy theories. We did not examine the relationship between conspiracy beliefs and subjective knowledge; instead, we directly tested whether agreement with conspiracy theories relates differently to perceptions that conspiracy theories are true (vs. false) and perceptions that they are plausible (vs. implausible). We hypothesized that these relationships would significantly differ from each other. In addition, we hypothesized a similar discrepancy when using as the independent variable the general propensity to believe in conspiracy theories (i.e., conspiracy mentality; Bruder et al., 2013; Imhoff & Bruder, 2014; Moscovici, 1987).

Directly examining the relationship between self-reported agreement, plausibility, and veracity judgments enables us to directly test if self-reported agreement is more strongly associated with veracity judgments—in line with the results of Studies 1–2—or plausibility judgments. As for the empirical relevance of the distinction between conviction and plausibility judgments, we may draw conclusions based on the extent to which these three measures of conspiracy beliefs can be assumed to be statistically redundant despite their conceptual differences. If they are highly redundant, they are unlikely to relate substantially differently to the correlates of conspiracy beliefs. This approach enables us to circumvent the issue of the arbitrary selection of conspiracy belief correlates.

Methods

Participants

We recruited 504 French speaking Prolific users (planned n = 500), out of which 495 remained after excluding participants who failed the attention check (252 women, 235 men, 8 "other", M_{Age} = 36.61, SD = 12.2, $M_{Political\ orientation}$ = 3.33, SD = 1.49).

Given the correlational design, a power of 90% and two-tailed tests, the achieved sample size enabled me to detect a minimum effect size of r = .14.

Materials and procedure

Participants were told that the study was about the meaning of self-reported beliefs. They were told that they would have to position themselves toward the same set of statements three times, each time with different instructions. Participants first positioned themselves toward 16 conspiracy theories (10 base conspiracy theories, 3 made-up conspiracy theories, and 3 conspiracy theories that were incompatible with three of the base conspiracy theories) on an agree–disagree scale. The ten base conspiracy theories were the same as in Studies 1–2 (α = .89), translated into French. The made-up conspiracy theories and contradictory conspiracy theories were included as part of a different project and will not be discussed further.

After reporting their conspiracy beliefs on the agree–disagree scale, participants were asked to rate the truthfulness and plausibility of the same conspiracy theories, in a randomized order that we controlled for in the analyses. Perceived veracity of conspiracy theories (α = .92) was introduced by the following instruction:

> *Assess to what extent each statement is true or false, i.e. whether it describes real events, past or present.*

Certainly false: You're sure that the statement is false, either because it's contradicted by solid evidence or your own knowledge, or because of simple personal conviction (you firmly believe it's false, without any particular evidence or knowledge).

Certainly true: You are sure that the statement is true, for the same reasons (evidence, knowledge or personal conviction).

Participants answered on a 7-point scale ranging from *certainly false* to *certainly true*, with the midpoint labelled as "undecided".

The scale measuring perceived plausibility of conspiracy theories (α = .90) was introduced as follows:

Assess how plausible each assertion seems to you, that is, the extent to which it could be true.

Ask yourself this question: "How surprised would I be if this statement turned out to be true (for example, if declassified documents provided irrefutable proof)?"

Extremely implausible: You'd be very surprised to learn it was true.

Extremely plausible: You wouldn't be surprised at all if it were true.

The 7-point scale ranged from *extremely implausible* to *extremely plausible*, with the midpoint labelled *moderately plausible*.

Finally, participants reported their sociodemographic information, and their generic propensity to believe in conspiracies on the Conspiracy Mentality Questionnaire (e.g., "events which superficially seem to lack a connection are often the result of secret activities," α = .82, Bruder et al., 2013).

Results and Discussion

Descriptives and correlations are displayed in Table 5. As can be seen in the table, agreement with conspiracy theories, plausibility and veracity judgements were tightly interrelated.

Table 5

Descriptives and correlations (Study 3).

Variable	*M*	*SD*	1	2	3
1. Agreement (1-5)	1.98	0.82			
2. Veracity judgement (1-7)	2.59	1.26	.93** [.91, .94]		
3. Plausibility judgement (1-7)	2.91	1.33	.82** [.79, .85]	.87** [.85, .89]	
4. CMQ	3.44	0.84	.67** [.62, .72]	.69** [.64, .74]	.64** [.59, .69]

Note. * $p < .05$ ** $p < .01$. CMQ stands for Conspiracy Mentality Questionnaire. Between square brackets are 95% confidence intervals.

As preregistered, to test our interaction hypotheses, we computed a new variable by subtracting the plausibility judgement score from the veracity judgement score. This difference score was used as a dependent variable for both hypotheses. As independent variable, we included agreement with conspiracy beliefs, order of presentation of the perceived plausibility and veracity scales, and their interaction term.

Detailed results are displayed in Table 6. Self-reported agreement with conspiracy significantly predicted the difference between veracity and plausibility judgement, $p = .006$. This suggests that self-reported agreement relates significantly differently to plausibility and veracity judgements. Agreement with conspiracy theories was slightly more related to veracity judgements, $b = 1.43$ (SE = 0.03), $t = 54.62$, $p < .001$, than to plausibility

judgements, b = 1.33 (SE = 0.04), t = 31.68, p < .001 (see also Table 5). By contrast, conspiracy mentality was not a significant predictor of the difference between veracity and plausibility judgement, p = .44 (see Table 6). Thus, it did not relate significantly to perceptions of plausibility and veracity (see also Table 5).

Table 6

Regressing the difference between veracity and plausibility judgements on self-reported agreement with conspiracy theories (upper part) and conspiracy mentality (lower part).

Predictor	*b*	95% CI	*t-value*	*P value*	R^2
Self-reported agreement with conspiracy theories					
(Intercept)	-0.32**	[-0.38, -0.26]	-10.76	< .001	
Agreement	0.10**	[0.03, 0.17]	2.76	.006	
Order	0.04	[-0.08, 0.15]	0.62	.54	
Agreement × order	0.02	[-0.12, 0.16]	0.31	.76	
					.016*
Conspiracy mentality					
(Intercept)	-0.32**	[-0.38, -0.26]	-10.71	< .001	
CMQ	0.03	[-0.04, 0.10]	0.77	.44	
Order	0.04	[-0.08, 0.16]	0.71	.48	
CMQ × order	-0.05	[-0.19, 0.09]	-0.69	.49	
					.003

Note. * p < .05 ** p < .01. CMQ stands for Conspiracy Mentality Questionnaire. Between square brackets are 95% confidence intervals.

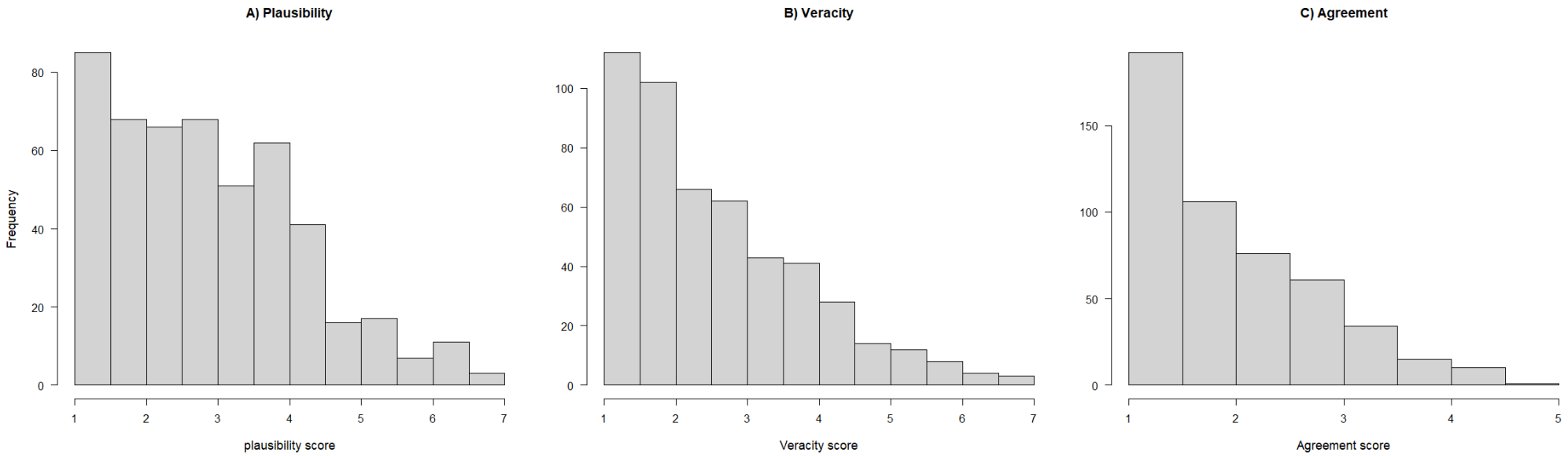
Exploratory Analyses

Cronbach's alphas for agreement (.89), plausibility (.90) and veracity (.92) judgements were all excellent and of similar value. Plausibility judgement scores were on average higher than veracity judgements, $t(494) = -10.73$, p < .001 ($M_{veracity}$ = 2.59, SE = 0.06, $M_{plausibility}$ = 2.91, SE = .06). An examination of the shape of the distributions of agreement (measured on a 5-point scale), plausibility and veracity judgements (measured on 7-point scales) yield valuable insights (see Figure 3). The plausibility distribution (A) appears

less skewed (*skewness coefficient* = .62) than the veracity (B) one (*skewness coefficient* = .91)—the latter being closer to the agreement (C) distribution (*skewness coefficient* = .95). Thus, despite the very strong correlations between agreement, veracity and plausibility scores, some discrepancies can be observed in the mean scores and shapes of the distributions.

Figure 3

Distribution histograms for plausibility, veracity, and agreement scores.



In sum, these results further corroborate the notion that agree-disagree conspiracy beliefs scale primarily capture conviction, rather than plausibility judgements. That said, the three measurements were very strongly intercorrelated, suggesting that these constructs, while they can be distinguished conceptually, are largely conflated empirically. As such, the investigated distinctions are unlikely to substantially question the validity of past research. However, we found some statistical discrepancies between plausibility and veracity judgements, such as higher average scores and lower skewness coefficient for plausibility judgements compared to agreement and veracity ratings.

General Discussion

The overwhelming majority of psychological research on this topic assesses conspiracy theory beliefs using multi-item rating scales (Biddlestone et al., 2025; Bowes et al., 2023). These scales are ambiguous because their extreme responses – which are crucial to properly define the underlying construct – potentially conflate subjectively informed convictions (i.e., the firm belief that the conspiracy theory is true or false based on the knowledge one has specifically gathered on the topic) with uninformed plausibility judgements (i.e., the sense that the conspiracy theory seems highly plausible or implausible, in the absence of specific knowledge on the topic). This ambiguity raises two questions that we investigated in three studies:

1) Do agreement scales used to measure conspiracy beliefs primarily capture plausibility judgments, convictions—or conflate both?

2) Does this distinction question the validity and scope of past research?

What Conspiracy Theory Agreement Scales Capture

On average, participants in Studies 1-2 reported being "somewhat informed" about the surveyed conspiracy theories, with some variation across specific conspiracy theories. Participants reporting extreme agreement scored higher in subjective knowledge than those with moderate or undecided stances. This is understandable, as the midpoint of the agreement scale tends to be used as a "no opinion" option by participants (Clifford et al., 2019). Nonetheless, most undecided participants also reported having some knowledge of conspiracy theories.

Moreover, in Study 1, a large majority of participants reporting complete agreement or disagreement with conspiracy theories considered that the available evidence definitively proved their self-reported position. Finally, in Study 3, while agreement with conspiracy theories was strongly associated with both veracity and plausibility judgements, it was more strongly associated with the former. Altogether, these findings suggest that it is that at least for conspiracy theories well known by the general public, it is appropriate to consider that agree-disagree scales as primarily measuring belief in the strong sense of the term—that is, convictions that conspiracy theories are true (or false).

That said, our results also suggest that agreement scales largely conflate plausibility and veracity judgements—as suggested by the considerable variance in subjective knowledge across scores of conspiracy beliefs in Studies 1-2, and the very strong intercorrelations between agreement, plausibility and veracity judgements in Study 3. Moreover, in Study 1, a minority of participants with extreme scores did not consider their position to be definitively proven by the available evidence. A possible interpretation for the latter finding is that these participants' self-reported beliefs reflect a perception of (im)plausibility rather than firm belief. While these participants may be a minority, their presence further highlights the

coexistence of different forms of self-reported beliefs, even among extreme scores (see Lukić et al., 2019; Hall et al., 2025).

In summary, our results suggest that while the agreement scales used to measure belief in conspiracy theories primarily capture convictions, they also capture plausibility judgements. This finding is valuable for two reasons. First, it suggests that agreement scales, while ambiguous to some extent, primarily capture what they are intended to: belief in conspiracy theories in the strong sense of the term, and not "mere" plausibility judgements or suspicions. As such, it grounds the validity of prior literature by testing an assumption that is foundational to quantitative research on conspiracy theories. Second, it calls for caution in data interpretation that echoes past criticisms of psychological research on conspiracy theories (see Basham, 2016; Hagen, 2018): since agreement scales largely conflate convictions and plausibility judgements, interpretations of findings should not be narrowly framed in terms of convictions. Researchers should acknowledge that "belief in conspiracy theories" is to be understood broadly as convictions as well as less settled beliefs. This nuance is important, since interpretations in terms of plausibility judgements can deflate the sensationalism of some research findings (e.g., findings about belief in mutually contradictory conspiracy theories, or belief in made-up conspiracy theories).

The Empirical Relevance of The Distinction Between (Subjectively Well-Informed) Conviction and (Subjectively Uninformed) Plausibility Judgements

In Study 2, we did not find evidence that perceived knowledge about conspiracy theories moderates the well-documented relationships between conspiracy theory beliefs and variables such as narcissism, faith in intuition, and education level. Although this absence of evidence should not be interpreted as evidence of absence, these non-significant findings support the robustness of past research. They suggest that if such moderation exists, its effect

size is likely modest—or restricted to a subset of correlates of conspiracy beliefs (e.g., behavioural outcomes, see Oettingen et al., 2022).[4] It is noteworthy that these relationships were observed even among participants who report being relatively uninformed about conspiracy theories. This observation hints at the idea that conspiracy beliefs may be rooted in relatively vague conspiracist suspicions (Wood, 2017), intuitions (Roberts & Risen, 2022), or judgements of "gist plausibility" that are independent of specific evidence evaluation (see also Reyna, 2021). In addition, the very tight relationships observed in Study 3 between agreement, plausibility and veracity judgements further suggests that the ambiguity of agree-disagree scale is unlikely to drastically question past research findings.

Even though measurements of plausibility and veracity assessments largely overlap, the distinction might open some methodological avenues. Both measurements were tightly correlated and had similarly high internal reliability, yet we observed some statistical discrepancies. A notable difference was that participants gave on average higher plausibility ratings. Moreover, descriptively, the plausibility ratings distribution was less skewed than veracity ratings—whose strong positive skewness resembled that of the agreement scale distribution. Since strong positive skews and low mean endorsement are recurring problems in conspiracy research (Imhoff et al., 2022), future research might consider plausibility ratings as an alternative measure of belief in specific conspiracy theories. Such a measurement would have the benefits of being less ambiguous as to what it captures, and of providing valuable psychometric properties (i.e., yielding belief distributions that are less prone to floor effects).

[4] A potential exception worthy of future investigation might be receptivity to interventions aimed at reducing conspiracy beliefs. It is likely more difficult to change the minds of conspiracy believers who perceive themselves as highly knowledgeable.

Limitations and Future Directions

A first limitation of Studies 1-2 lies in the fact that the measurement of perceived knowledge about conspiracy theories may conflate engagement with conspiracy theories and the sense of being knowledgeable about them—because the instructions grounded the response anchors in engagement with conspiracist content. While the goal of this grounding was to help participants better interpret what it means to be "extremely" or "somewhat" informed (which would have been otherwise rather abstract self-perceptions), it adds engagement as a potential confound in the measurement. This might be problematic for people who reject conspiracy theories, especially those related to scientific issues. For instance, if a conspiracy theory violates fundamental and widely known science, an individual does not need to be specifically informed about it to have the conviction that it is false. Future research may attempt to measure subjective knowledge without contamination by engagement.

A second limitation of Studies 1-2 is that while we created an internally consistent measurement of perceived knowledge about conspiracy theories, this measurement was mostly unrelated to other variables (e.g., narcissism, faith in intuition). The empirical usefulness of this construct remains to be determined. Future research may examine the factors associated with individuals' self-reported knowledge of conspiracy theories. Note that given the "U" shaped relationship between conspiracy beliefs and subjective knowledge, we can predict that subjective knowledge, if linearly associated with a correlate of conspiracy beliefs, might act as a statistical suppressor—that is, it might strengthen the initial relationship with conspiracy beliefs.

Third, in Study 3, the strength of the relationships between the three measurements of conspiracy endorsement (agreement, plausibility and veracity judgements) may have been

inflated by the fact that participants completed them sequentially. A longitudinal design, with agreement with conspiracy theories measured some time before plausibility and veracity judgements, may have given a less inflated estimates of these relationships. Alternatively, an experimental manipulation of the type of conspiracy endorsement, combined with the measurement of some conspiracy beliefs correlates, may provide additional insights in the empirical relevance of the investigated distinctions.

A fourth limitation pertains to the sampling of both participants and conspiracy theories. Regarding the former, we relied on convenience, Prolific samples. Thus, our conclusions regarding the fact that participants report some knowledge about the surveyed conspiracy theories should not be extrapolated to the general population; these conclusions might be restricted to such samples. Similarly, we used a subset of ten relatively well-known conspiracy theories—which might explain why participants returned relatively high levels of subjective knowledge. Other, less known conspiracy theories might return a different picture.

Conclusion

Most social psychological research on conspiracy theories relies on the validity of conspiracy belief measurements, and in particular, self-reported agreement with conspiracy theories. Building on criticisms of psychological research on conspiracy theories (Basham, 2017; Hagen, 2018; Lukić, 2019), we proposed that agreement scales may capture conviction (i.e., firm belief), but also plausibility judgements. We ran three studies to (1) disambiguate what agreement scales used in conspiracy research capture, and (2) examine the extent to which the distinction between conviction and plausibility judgement is susceptible to questioning the validity of past research.

Regarding the first question, our results suggest that agreement scales primarily capture subjectively well-informed convictions. Indeed, participants reporting complete

(dis)agreement with conspiracy theories reported relatively high levels of subjective knowledge (Studies 1-2), and a large majority of them considered their position to be definitely proven by the available evidence (Study 1). In addition, agreement scores were more strongly related to veracity than plausibility judgements (Study 3). In summary, our results indicate that, reassuringly for the field, measures of belief in conspiracy theories (mostly) measure belief in conspiracy theories.

That said, we observed considerable heterogeneity in subjective knowledge scores, and the very strong intercorrelations between agreement, plausibility and veracity assessments suggest that agreement scales largely conflate convictions and plausibility judgements. This heterogeneity calls for caution in the interpretations of research findings – particularly when a narrow interpretation in terms of conviction is much more sensationalist than one in terms of plausibility judgements. Such narrow interpretations should be avoided in future research using agreement scales to measure conspiracy beliefs.

As for the second question, our results also appear reassuring for the field. The fact that subjective knowledge did not alter the relationships between conspiracy beliefs and some well-established correlates in Study 2, combined with the tight relationships between agreement, plausibility and veracity judgements in Study 3, suggest that the empirical implications of the investigated distinction might be limited. As such, it is unlikely to fundamentally question the validity of past research.

This conclusion may seem trivial, but had we observed the opposite results, it would have been dire news for much of the social psychology of conspiracy theories. In this regard, our results are informative about the adequacy of the methods used in research and address criticisms against how researchers interpret conspiracy theory beliefs measurement in psychological research (e.g., Basham, 2017; Hagen, 2018).

Conflict of Interest and Funding Statements

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AI Use Statement

The authors used ChatGPT only for grammar checks, and to assist with item generation in Studies 1-2.

References

Alós-Ferrer, C., & Hügelschäfer, S. (2012). Faith in intuition and behavioral biases. *Journal of Economic Behavior & Organization*, *84*(1), 182-192. https://doi.org/10.1016/j.jebo.2012.08.004

Ang, R. P., & Yusof, N. (2006). Development and initial validation of the narcissistic personality questionnaire for children: A preliminary investigation using school-based Asian samples. *Educational Psychology*, *26*(1), 1-18. https://doi.org/10.1080/01443410500340942

Baka, A., Figgou, L., & Triga, V. (2012). 'Neither agree, nor disagree': A critical analysis of the middle answer category in Voting Advice Applications. International Journal of Electronic Governance, 5(3/4), 244. https://doi.org/10.1504/IJEG.2012.051306

Ballová Mikušková, E. (2022). Education and conspiracy beliefs: A replication of van Prooijen (2017). *Applied Cognitive Psychology*, *37*(1), 174-188. https://doi.org/10.1002/acp.4037

Basham, L. (2017). Pathologizing Open Societies: A Reply to the Le Monde Social Scientists, *Social Epistemology Review and Reply Collective, 6*(2), 59-68.

Biddlestone, M., Cichocka, A., Žeželj, I., & Bilewicz, M. (2020). Conspiracy theories and intergroup relations. In M. Butter & P. Knight (Eds.). *Routledge handbook of conspiracy theories* (pp. 219-230). Routledge.

Biddlestone, M., Green, R., Douglas, K. M., Azevedo, F., Sutton, R. M., & Cichocka, A. (2025). Reasons to believe: A systematic review and meta-analytic synthesis of the motives associated with conspiracy beliefs. *Psychological Bulletin, 151*(1), 48–87. https://doi.org/10.1037/bul0000463

Binnendyk, J., & Pennycook, G. (2022). Intuition, reason, and conspiracy beliefs. *Current Opinion in Psychology*, *47*, 101387. https://doi.org/10.1016/j.copsyc.2022.101387

Bowes, S. M., Costello, T. H., & Tasimi, A. (2023). The conspiratorial mind: A meta-analytic review of motivational and personological correlates. *Psychological Bulletin, 149*(5-6), 259–293. https://doi.org/10.1037/bul0000392

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

Cho, H., Shen, L., & Wilson, K. (2014). Perceived realism: Dimensions and roles in narrative persuasion. *Communication Research, 41*(6), 828–851. https://doi.org/10.1177/0093650212450585

Cichocka, A., Marchlewska, M., & Biddlestone, M. (2022). Why do narcissists find conspiracy theories so appealing? *Current Opinion in Psychology*, *47*, 101386. https://doi.org/10.1016/j.copsyc.2022.101386

Clifford, S., Kim, Y., & Sullivan, B. W. (2019). An improved question format for measuring conspiracy beliefs. *Public Opinion Quarterly*, *83*(4), 690-722. https://doi.org/10.1093/poq/nfz049

Costello, T. H., Pennycook, G., & Rand, D. G. (2024). Durably reducing conspiracy beliefs through dialogues with AI. *Science*, *385*(6714), eadq1814. https://doi.org/10.1126/science.adq1814

Edelson, S. M., Reyna, V. F., Singh, A., & Roue, J. E. (2024). The Psychology of Misinformation Across the Lifespan. *Annual Review of Developmental Psychology*, *6*. https://doi.org/10.1146/annurev-devpsych-010923-093547

Hagen, K. (2018). Conspiracy theorists and monological belief systems. *Argumentation*, *3*(2), 303-326. https://doi.org/10.23811/57.arg2017.hag

Hall, A. (2003). Reading Realism: Audiences' Evaluations of the Reality of Media Texts. *Journal of Communication, 53*(4), 624–641. https://doi.org/10.1111/j.1460-2466.2003.tb02914.x

Hall, M. S., Franks, B., & Bauer, M. W. (2025). Dialogicality and Conspiracy Theory: The Coexistence of Conspiracist and Non-Conspiracist Beliefs. European Journal of Social Psychology, 55(2), 311-326. https://doi.org/10.1002/ejsp.3120

Hornsey, M. J., Bierwiaczonek, K., Sassenberg, K., & Douglas, K. M. (2022). Individual, intergroup and nation-level influences on belief in conspiracy theories. *Nature Reviews Psychology*, *2*(2), 85-97. https://doi.org/10.1038/s44159-022-00133-0

Imhoff, R., & Bruder, M. (2014). Speaking (Un-) Truth to Power: Conspiracy Mentality as a Generalised Political Attitude. *European Journal of Personality*, *28*(1), 25–43. https://doi.org/0.1002/per.1930

Imhoff, R., Bertlich, T., & Frenken, M. (2022). Tearing apart the “evil” twins: A general conspiracy mentality is not the same as specific conspiracy beliefs. *Current Opinion in Psychology*, *46*, 101349. https://doi.org/10.1016/j.copsyc.2022.101349

Keller, J., Bohner, G., & Erb, H. P. (2000). Intuitive und heuristische Urteilsbildung–verschiedene Prozesse? Präsentation einer deutschen Fassung des „Rational-Experiential Inventory“ sowie neuer Selbstberichtskalen zur Heuristiknutzung. *Zeitschrift für Sozialpsychologie*, *31*(2), 87-101. https://doi.org/10.1024//0044-3514.31.2.87

Lam, T. (2019). Likert Scale: Misuse of Mid-Point Anchor. https://doi.org/10.31124/advance.7765463.v1

Lantian, A., Muller, D., Nurra, C., & Douglas, K. M. (2016). Measuring belief in conspiracy theories: Validation of a French and English single-item scale. *International Review of Social Psychology*, *29*(1), 1-14. https://doi.org/10.5334/irsp.8

Levy, N. (2022). Do your own research! *Synthese*, *200*(5), 1-19. https://doi.org/10.1007/s11229-022-03793-w

Lukić, P., Žeželj, I., & Stanković, B. (2019). How (ir) rational is it to believe in contradictory conspiracy theories?. *Europe's journal of psychology*, *15*(1), 94. https://doi.org/10.5964/ejop.v15i1.1690

Macenczak, L. A., Campbell, S., Henley, A. B., & Campbell, W. K. (2016). Direct and interactive effects of narcissism and power on overconfidence. *Personality and Individual Differences*, *91*, 113-122. https://doi.org/10.1016/j.paid.2015.11.053

Moscovici, S. (1987). The conspiracy mentality. In C.F. Graumann & S. Moscovici (Eds.). *Changing conceptions of conspiracy* (pp. 151-169). Springer.

Oettingen, G., Gollwitzer, A., Jung, J., & Okten, I. O. (2022). Misplaced certainty in the context of conspiracy theories. *Current Opinion in Psychology, 46*, 101393. https://doi.org/10.1016/j.copsyc.2022.101393

Petrović, M., & Žeželj, I. (2023). Both a bioweapon and a hoax: The curious case of contradictory conspiracy theories about COVID-19. *Thinking & Reasoning, 29*(4), 456–487. https://doi.org/10.1080/13546783.2022.2088618

Pytlik, N., Soll, D., & Mehl, S. (2020). Thinking preferences and conspiracy belief: Intuitive thinking and the jumping to conclusions-bias as a basis for the belief in conspiracy theories. *Frontiers in psychiatry*, *11*, 568942. https://doi.org/10.3389/fpsyt.2020.568942

Reyna, V. F. (2021). A scientific theory of gist communication and misinformation resistance, with implications for health, education, and policy. *Proceedings of the National Academy of Sciences*, *118*(15), e1912441117. https://doi.org/10.1073/pnas.1912441117

Roberts, R., & Risen, J. L. (2022). Introducing conspiracy intuitions to better understand conspiracy beliefs. *Current Opinion in Psychology*, *47*, 101395. https://doi.org/10.1016/j.copsyc.2022.101395

Simonsohn, U. (2018). Two lines: A valid alternative to the invalid testing of U-shaped relationships with quadratic regressions. *Advances in Methods and Practices in Psychological Science, 1*(4), 538-555. https://doi.org/10.1177/2515245918805755

Swami, V., Coles, R., Stieger, S., Pietschnig, J., Furnham, A., Rehim, S., & Voracek, M. (2011). Conspiracist ideation in Britain and Austria: Evidence of a monological belief system and associations between individual psychological differences and real-world and fictitious conspiracy theories. *British Journal of Psychology*, *102*(3), 443-463. https://doi.org/10.1111/j.2044-8295.2010.02004.x

Van Mulukom, V., Pummerer, L. J., Alper, S., Bai, H., Čavojová, V., Farias, J., ... & Žeželj, I. (2022). Antecedents and consequences of COVID-19 conspiracy beliefs: A systematic review. *Social Science & Medicine*, *301*, 114912. https://doi.org/10.1016/j.socscimed.2022.114912

van Prooijen, J. W. (2017). Why education predicts decreased belief in conspiracy theories. *Applied cognitive psychology*, *31*(1), 50-58. https://doi.org/10.1002/acp.3301

van Prooijen, J. W., Wahring, I., Mausolf, L., Mulas, N., & Shwan, S. (2023). Just dead, not alive: Reconsidering belief in contradictory conspiracy theories. *Psychological science*, *34*(6), 670-682. https://doi.org/10.1177/09567976231158570

Wood, M. J. (2017). Conspiracy suspicions as a proxy for beliefs in conspiracy theories: Implications for theory and measurement. *British Journal of Psychology*, *108*(3), 507-527. https://doi.org/10.1111/bjop.12231

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