## Call it a Conspiracy:

## **How Conspiracy Belief Predicts Recognition of Conspiracy Theories**

### BY

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### **THESIS**

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### **SUMMARY**

While conspiracy theories are treated as irrational fringe beliefs in popular culture, over 50% of the US population believes at least one conspiracy theory (Oliver & Wood, 2014). Given the disconnect between stereotypes and prevalence, I tested whether people have difficulty recognizing the conspiracy theories that they believe as conspiracy theories.

Across two studies I demonstrate that people have considerable difficulty identifying conspiracy theories they believe as conspiracy theories, particularly when they do not take much time to consider whether their beliefs might be conspiracy theories. This is consistent with the notion that people experience "conspiracy blindness." People have trouble recognizing the conspiracy theories they believe as conspiracy theories because they do not take the time to consider whether their beliefs might be conspiracy theories. In Study 2, I demonstrate that people can overcome their conspiracy blindness and recognize the conspiracy theories they believe as conspiracy theories when they are given a definition for "conspiracy theory" and asked to consider their answer. This suggests that people are typically ignorant of their own conspiracy beliefs, but capable of recognizing them when given the tools and motivation to do so.

#### 1. INTRODUCTION

"I'm not a conspiracy theorist but there are an awful lot of very powerful people who would like to see this Epstein thing go away. Is anyone investigating the guard on duty?" — Patricia Heaton (via Twitter)

Conspiracy theorists do not have the best public image. Late night talk show hosts mock their intelligence and sanity (The Late Show with Stephen Colbert, 2017; LastWeekTonight, 2016), popular media portrays them as isolated eccentrics (Carter, 1993; Moore & Gibbons, 1986; Rowling, 2003), and stereotypical images portray them with tinfoil hats. It is little wonder that actress Patricia Heaton claimed that she did not believe conspiracy theories, even as she presented one that she did believe, nor is it surprising that many other conspiracy theorists do the same (Harambam & Aupers, 2017; Wood & Douglas, 2013).

## A. BACKGROUND

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret (Hawley, 2019; Keeley, 1999; Uscinski & Parent, 2014). These theories, like the people who believe them, are often considered irrational (McKenzie-McHarg & Fredheim, 2017; Wood & Douglas, 2013), even by the people who study them (Basham & Dentith, 2016; Bjerg & Presskorn-Thygesen, 2017). Despite their bad reputation, belief in conspiracy theories (i.e., "conspiracy belief") is widespread. Over 50% of a representative sample of U.S. citizens was willing to endorse at least one conspiracy theory out of a list of 14 (Oliver & Wood, 2014), and conspiracy belief is evident throughout history (e.g., the French and American revolutions; Tackett, 2000) and across cultures (West & Sanders, 2003).

Although popular media often treats conspiracy theories as jokes, these 'irrational' beliefs can have devastating consequences. They can facilitate the spread of various diseases. For example, people who believe conspiracy theories about vaccination and contraception are less likely to vaccinate themselves and their children or engage in safe sex behaviors (Thorburn Bird & Bogart, 2003; Bogart & Thorburn Bird, 2005; Jolley & Douglas, 2014). Conspiracy theories can also facilitate climate change by discouraging environmentally friendly behaviors for people who believe that climate change is a hoax (van der Linden, 2015). They can even discourage political participation for people who believe that the political system is rigged (Jolley & Douglas, 2014).

### **B. STATEMENT OF THE PROBLEM**

Given their wide-reaching consequences, it is important that we understand when, where, and why people believe conspiracy theories, and why they do so in the face of the stigma against them. Patricia Heaton has reason to be concerned about how sharing a conspiracy theory could damage her public image. People report negative feelings about conspiracy theorists in general, and even more negative feelings about people who believe specific conspiracy theories (Prims & Motyl, 2018). A longitudinal study of British Parliament found that labeling a claim as a conspiracy theory made politicians less likely to repeat that claim in parliament (McKenzie-McHarg & Fredheim, 2017), and ridiculing conspiracy theorists reduces self-reported conspiracy belief (Orosz et al., 2016), but labeling a belief a conspiracy theory does not necessarily reduce self-reported belief on an anonymous survey in the absence of ridicule (Wood, 2016). In other words, people may be reluctant to express their beliefs in public spaces if people label them as conspiracy theories but may continue to believe them.

There are two possible explanations for how people can maintain their conspiracy belief in the face of social stigma: First, although people may recognize that their beliefs can be perceived as conspiracy theories by others, they may be motivated to believe that their beliefs are nonetheless not conspiracy theories. I will refer to this as the "motivated reasoning hypothesis." Second, it may not occur to people to evaluate whether their beliefs are conspiracy theories in the first place, much less find a reason for why they are not conspiracy theories. I will refer to this as the "conspiracy blindness hypothesis."

## C. MOTIVATED REASONING HYPOTHESIS

Motivated reasoning is a process through which pre-existing biases affect reasoning (Kunda, 1990). When people engage in motivated reasoning, they seek out arguments and information that support their pre-existing biases and beliefs and ignore or discredit arguments and information that does not support their pre-existing biases and beliefs. Conspiracy beliefs are facilitated by motivated reasoning (Edelson, Alduncin, Krewson, Sieja, & Uscinski, 2015; Miller, Saunders, & Farhart, 2015). People tend to believe conspiracy theories about groups that they have negative preconceptions of. Liberals tend to believe conspiracy theories about conservatives, and conservatives tend to believe conspiracy theories about liberals (van Prooijen, Krouwel, & Pollet, 2015). Pre-existing biases against social groups like Jewish people (Grzesiak-Feldman & Suszek, 2008; Nyhan & Zeitzoff, 2018) and Westerners (Mashuri & Zaduqisti, 2013) are associated with more conspiracy beliefs about those groups. This tie between negative preconceptions and conspiracy belief also applies to institutions like the government. Believing that the government is untrustworthy is associated with more conspiracy beliefs about the

Motivated reasoning may influence not just conspiracy belief, but the ability to recognize conspiracy theories in the first place. Many of us are prone to overconfidence in all three of its forms. People believe that they are better than they are (overestimation), that they are better relative to others than they actually are (overplacement), and they are more confident in their beliefs than they should be (overprecision; Moore & Healy, 2008). People frequently overestimate their performance on tasks and how well they have performed on that task relative to others (e.g., the Better-Than-Average effect, Alicke & Govorun, 2005).

Self-assessments of knowledge and cognitive ability are prone to these same biases. Many people believe that they know more about a given topic than they actually do (e.g., the Dunning-Kruger Effect, Kruger & Dunning, 1999), and the majority of Americans also believe that they are more intelligent than the average American (Heck, Simons, & Chabris, 2018) and less prone to cognitive and motivational biases (i.e., that they are more rational) than others (Pronin, Gilovich, & Ross, 2004).

This is all to say that the average person has a pre-existing belief that they are relatively knowledgeable, intelligent, and rational compared to (their perception of) the average person. However, over half the U.S. population believes in at least one conspiracy theory; beliefs that are typically considered both irrational and socially undesirable. As conspiracy theories are considered irrational, and people are biased to believe that they themselves are rational, they may engage in motivated reasoning to justify that their beliefs are not conspiracy theories.

For example, consider a person that believes that global warming is a hoax. They believe that they are rational and know that conspiracy theories are generally considered irrational. If someone labels their belief a conspiracy theory, they will be motivated to find reasons that their belief is not a conspiracy theory to preserve their pre-existing belief that they are a rational

person. They may justify their belief by citing one of the few scientists that does not believe that climate change is occurring, or by citing data that, in some places, winters are becoming colder. They will then use these justifications to reinforce their belief that "global warming is a hoax" is not a conspiracy theory and protect their self-perceptions of rationality. As a consequence, they will have difficulty correctly identifying their belief as a conspiracy theory.

In short, the motivated reasoning hypothesis predicts that when people are presented with a conspiracy theory that they are predisposed to believe, they will have difficulty recognizing it as a conspiracy theory because they are motivated to justify why their belief is not irrational (i.e., not a conspiracy theory).

## D. CONSPIRACY BLINDNESS HYPOTHESIS

People rarely have the time or resources to make careful, well-researched, and informed decisions. They tend to believe the things they read at first and must take extra steps to evaluate the validity of the information, (Gilbert, Krull, & Malone, 1990). During initial information processing, people may rely on heuristics to judge the veracity of information (e.g., the availability heuristic, the familiarity heuristic, or the representativeness heuristic). Sometimes heuristics may be things like motivated reasoning (e.g., finding reasons to believe something consistent with one's pre-existing biases), but sometimes heuristics mean that one may not bother to evaluate the information in the first place. For example, people may fail to evaluate the validity of their own arguments (Trouche, Johansson, Hall,& Mercier, 2016), accept politically congenial information as the truth without evaluating it (Strickland, Taber, & Lodge, 2011), or fail to evaluate whether a news story is true or false, provided that the headline is plausible (Pennycook & Rand, 2019).

The conspiracy blindness hypothesis predicts that when people are presented with a relatively plausible conspiracy theory, people will not think to evaluate whether the statement is a conspiracy theory, and subsequently fail to recognize it as a conspiracy theory or justify their decision. For example, if someone hears that the leader of North Korea is telling his people that citizens of the United States are planning to take over North Korea to justify an attack on the United States, they probably will not wonder if it is a conspiracy theory. As a consequence, they will have trouble correctly identifying it as a conspiracy theory and will not feel the need to justify their failure to identify it as a conspiracy theory. In short, the conspiracy blindness hypothesis predicts that when people are presented with a conspiracy theory, they will have difficulty recognizing it as a conspiracy theory because they will not evaluate whether it is a conspiracy theory in the first place.

## E. PURPOSE OF THE STUDY

I test these two hypotheses in two studies. In Study 1, participants read summaries of twenty news articles: ten that did not contain conspiracy theories and ten that did contain conspiracy theories. Participants rated how true they think the information in each article is as a measure of belief. Then they decided whether each article contained conspiracy theories. Their responses were timed. If the motivated reasoning hypothesis is true, then participants will be motivated to take the time to justify their decision that the conspiracy theories they believe are not conspiracy theories, and as a result, more likely to incorrectly categorize the conspiracy articles they believe

<sup>&</sup>lt;sup>1</sup> That is, a conspiracy theory that is not immensely implausible given our current understanding of the world. For the purposes of this paper, "implausible conspiracy theories" are conspiracy theories about events or groups that have little to no precedent. These theories may involve aliens, lizard people, flat planets, or vampires. Conspiracy theories that scientists are deliberately disseminating false information or covering up unsavory experiments (e.g., conspiracy theories about Global Warming or governmental experimentation with HIV-AIDS) are not considered implausible for the purposes of this paper because there is precedent for this sort of behavior (e.g., the Tuskegee Syphilis Experiments).

as mainstream. However, if the conspiracy blindness hypothesis is true, then participants will not consider whether the conspiracy theories they believe are conspiracy theories, decide quickly without bothering to justify their decision, and as a result, will be more likely to incorrectly classify the conspiracy articles they believe as mainstream.

Although Study 1 used environmentally valid stimuli in the form of real headlines from websites devoted to conspiracy and mainstream news, it may have been be difficult to identify the discrete conspiracy theories in them. In addition, participants' ability to identify conspiracy theories may haves be limited due to individual differences in their understanding of what constitutes a "conspiracy theory." Study 2 served two purposes: First, it acted as a replication of Study 1 with cleaner stimuli in the form of statements. Second, it tested whether providing participants with a definition for "conspiracy theory" increased their accuracy when identifying conspiracy theories that they believed. Before reading and rating the statements, participants either received the definition for the term "conspiracy theory," or no definition at all. Participants read the statements, rated how true they thought the statement was, and categorized the statement as a conspiracy theory or as not a conspiracy theory.

In Study 2, I attempted to replicate the results of Study 1 using short statements intentionally written to contain or not contain conspiracy theories. As before, if the motivated reasoning hypothesis is true, then participants will be motivated to take the time to justify their decision that the conspiracy theories they believe are not conspiracy theories, and as a result, more likely to incorrectly categorize the conspiracy statements they believe as mainstream. However, if the conspiracy blindness hypothesis is true, then participants will not consider whether the conspiracy theories they believe are conspiracy theories, and decide quickly without bothering to

think about their decision, and as a result, will be more likely to incorrectly classify the conspiracy statements they believe as mainstream.

I also tested whether asking participants to apply the definition of the term "conspiracy theory" to the statements improved their accuracy in identifying conspiracy theories that they believed. If the motivated reasoning hypothesis is true, then asking participants to use the definition for "conspiracy theory" while making their judgments should improve their accuracy in correctly identifying conspiracy theories that they do not believe relative to participants that do not receive the definition, because they have more information about what constitutes a conspiracy theory. If they do not believe the conspiracy theory, they should not have reason to state that it is not a conspiracy theory. However, having used the definition for "conspiracy theory" while making their judgments should not improve their accuracy in identifying conspiracy theories that they do believe relative to participants given no definition, because they are motivated to believe that their beliefs are not conspiracy theories, even in the face of evidence.

If the conspiracy blindness hypothesis is true, giving participants the definition for "conspiracy theory" should improve their accuracy in correctly identifying all conspiracy theories regardless of their beliefs. By asking them to apply the definition for "conspiracy theory" to each statement, participants are encouraged to consider whether a statement could be a conspiracy theory when they had not considered it before.

### IX. PILOT

I conducted a pilot study to identify appropriate stimuli for Studies 1 and 2. The primary goals of this pilot study were to identify headlines and statements that did or did not contain conspiracy theories. I pre-selected 30 headlines (15 intended to be conspiracy headlines and 15 intended to be mainstream headlines) and 30 statements (15 intended to be conspiracy statements and 15 intended to be mainstream statements) for the pilot. I selected conspiracy headlines from websites that appeared on at least five lists of "top conspiracy websites" (e.g., InfoWars, Natural News), and mainstream headlines from several popular mainstream news sites (e.g., CNN, BBC). All headlines were from the past six months. The headlines addressed a variety of topics, and I attempted to match the general topics of the conspiracy and mainstream headlines. I created conspiracy statements based upon famous or contemporary conspiracy theories and created mainstream statements that addressed similar events to the conspiracy statements.

#### A. METHOD

### **B. PARTICIPANTS**

One hundred and one workers from Amazon Mechanical Turk completed the pilot survey. Ten participants who showed two or more signs of low-quality responding (Prims & Motyl, 2018), and one participant who indicated that they had misunderstood the instructions were removed, leaving a final sample size of 90 participants. The average age of the sample was 37.43 years (SD = 11.12). Twenty-nine participants identified as men, 35 identified as women, and one chose not to answer. On a scale of -3 (Very Liberal) to 3 (Very Conservative) the sample skewed slightly conservative, with an average political orientation of 0.09 (SD = 1.99).

Thirty-five participants identified as liberal, 17 identified as moderate, and 38 identified as conservative.

### C. MEASURES

The conspiracy headlines came from several news sites known for their conspiratorial content (InfoWars, ZeroHedge, Natural News, etc.). The headlines were selected because they did not contain references to partisan individuals or policies, and their articles contained elements of conspiracy theories. The mainstream headlines were selected from several of the most trafficked news websites (CNN, Fox, ABC, etc.). These headlines were selected because they did not contain references to partisan individuals or policies, and their articles were missing at least one major element of conspiracy theories (e.g., secrecy).

The statements were written with similar considerations. They did not contain mentions of partisan individuals or policies. Conspiracy statements were based on existing conspiracy theories, and mainstream statements were based on real events. Every headline and statement was accompanied by three bullet points: The first listed who was responsible for the event, the second indicated whether elements of the event were publicized or concealed, and the third indicated the consequences of the event. All headlines and statements are available in Tables 1 and 2. Their accompanying bullet points are available in Appendix A.

Both the motivated reasoning and conspiracy blindness hypotheses predict that people will have trouble recognizing conspiracy theories, so rather than ask participants whether each headline or statement contained a conspiracy theory, I created a check list containing three key features of conspiracy theories: 1) a group of powerful people is working together to accomplish a goal, 2) they are attempting to keep their activity secret, and 3) they are acting at the expense of

others (Hawley, 2019, Oliver & Wood, 2014; Uscinski & Parent, 2014). Participants read each headline and statement and indicated every feature they believed was present in that headline or statement. I then tallied the number of features each participant indicated for each headline or statement. A score of 0 indicated that a participant did not see any of the three features in the headline or statement. A score of 3 indicated that the participant saw all of the three features in the headline or statement.

To determine the political leaning of the stimuli (i.e., whether the stimuli primarily appealed to liberals or conservatives), participants reported their belief in the truth of each article and statement on a scale of 1 (Completely false) to 7 (Completely true), and their political orientation on a scale of 1 (Very liberal) to 7 (Very conservative). The belief measure was rescored to a scale of -3 (Completely false) to 3 (Completely true) and centered on 0 such that negative scores indicated disbelief and positive scores indicated belief. The political orientation measure was rescored to a scale of -3 (Very liberal) to 3 (Very conservative) and centered on 0 such that negative scores indicated a liberal political orientation, and positive scores indicated a conservative political orientation.

Though I did not tell participants that they were identifying conspiracy theories, I was concerned that they might realize the nature of the task and be reluctant to indicate that they'd noticed all three features in the stimuli they believed. As an additional precaution, two independent coders coded each stimulus for the presence or absence of the three features. Interrater reliability was good. The independent coders agreed substantially on whether each stimulus contained all three features of conspiracy theories (Cohen's  $\kappa = .87$ ), and the total number of features in each stimulus (Cohen's  $\kappa = .72$ ; Cohen's Weighted  $\kappa = .90$ ).

## D. SELECTION CRITERIA

To reduce ambiguous stimuli, I eliminated any stimulus where the independent coders disagreed on whether it contained all three features of conspiracy theories from consideration (n = 3). Then, to ensure that the conspiracy stimuli contained more features of conspiracy theories than the mainstream stimuli, I selected the 10 conspiracy stimuli with the highest percentage of participants reporting that all three features of conspiracy theories were present, and the 10 mainstream stimuli with the lowest percentage of participants reporting that all three features of conspiracy theories were present.

### E. RESULTS

Participants identified more conspiracy features in the conspiracy stimuli (headlines: M = 2.30, SD = 0.71, statements: M = 2.32, SD = 0.68) than the non-conspiracy stimuli (headlines: M = 1.46, SD = 0.84, statements: M = 1.57, SD = 0.70) for both the headlines (t(89) = 8.97, p < 0.001) and the statements t(89) = 9.65, p < 0.001. Belief in the conspiracy stimuli was lower (headlines: M = 0.21, SD = 1.10, statements: M = 0.19, SD = 1.11) than for the non-conspiracy stimuli (headlines: M = 1.02, SD = 0.85, statements: M = 1.35, SD = 0.91) for both the headlines (t(89) = 6.31, p < 0.001) and the statements, t(89) = 7.50, p < 0.001.

To ensure that all potential conspiracy stimuli were perceived as having more conspiracy features than all potential mainstream stimuli, I conducted two *t*-tests (one for the headlines, and one for the statements) comparing the "weakest" conspiracy stimuli (i.e., the conspiracy stimuli with the lowest proportion of participants identifying all three features of conspiracy theories in the stimuli) to the "weakest" mainstream stimuli (i.e., the mainstream stimuli with the highest proportion of participants identifying all three features of conspiracy theories in the stimuli). Even when comparing the weakest conspiracy headline with the weakest mainstream headline,

participants identified significantly more conspiracy features in the conspiracy headline than in the mainstream headline, t(89) = 3.64, p < 001. The same was true when comparing the weakest conspiracy and mainstream statements, t(89) = 2.50, p = .014.

*Table 1.* Means and standard deviations of belief, the proportion of participants who saw all three conspiracy features, correlations between political orientation and belief, and interrater agreement on the presence of all three conspiracy features

Statement	Belief M (SD)	Proportion	r	Agreement
Conspiracy Statements				_
COVID-19: Perfect Cover for Mandatory Biometric	0.13 (1.97)	.64	38***	Yes
ID	(-1,7,7)			
CNN heavily revises article called out for looking	0.25 (1.69)	.49	36***	Yes
suspiciously like Chinese news release	0.28 (1.0))	,		105
Coming to a wall or lamppost near you – 5G and	-0.33	.58	29**	Yes
fake diseases to cover up its effects	(2.01)		>	105
New WikiLeaks Documents Expose Doctoring of	0.03 (1.56)	.58	33**	Yes
Chemical Weapons Report to Justify 2018 US Attack	0.03 (1.50)	.50	.55	105
on Syria				
Psychologist: big tech will use "subliminal methods"	-0.25	.67	32**	Yes
to shift 15 million votes on election day	(1.90)	.07	.52	103
China launches biological warfare agenda: Covertly	-0.56	.63	43***	Yes
infiltrates plane with "Trojan Horse" coronavirus	(2.03)	.03		103
carrier coronavirus	(2.03)			
Cover-up: Iran refuses to hand over black box data of	0.79 (1.48)	.45	11	No
plane that crashed over Tehran	0.77 (1.40)	.43	11	110
"Undeniable evidence": Explosive classified docs	0.57 (1.63)	.62	13	Yes
reveal Afghan war mass deception	0.37 (1.03)	.02	13	168
The same people who lied about WMDs in Iraq are	0.52 (1.52)	.50	07	Yes
pushing conflict with Iran	0.32 (1.32)	.50	07	168
±	0.67 (1.65)	.61	27*	Yes
Alarming report reveals secretive surveillance state	0.67 (1.65)	.01	27	1 68
powered by your phone's location services	0.20 (1.76)	52	22**	Vac
New "Out of Shadows" documentary exposes the	0.39 (1.76)	.53	33**	Yes
media and Hollywood for manipulating the masses				
with lies and propaganda	0.27 (1.91)	12	21**	No
Ads warning about dangers of 5G banned by Great	0.27 (1.81)	.43	31**	No
Britain's advertising "authority"	0.20	41	20***	Vas
What Happened on the Planes on September 11,	-0.29	.41	38***	Yes
2001? The 9/11 Cell Phone Calls. The 9/11	(1.94)			
Commission "Script" Was Fabricated	0.00 (1.41)	50	20**	37
US Congress cracks down on ABC News for 'Epstein	0.80 (1.41)	.50	28**	Yes
coverup,' demands to know who killed the story and				
why	0.21	~ ~	2044	37
Did someone murder the wife of a Google	-0.31	.55	30**	Yes
whistleblower whose research implicated the tech	(1.97)			
giant in election meddling?				
Non-Conspiracy Statements				

WHO warning: No evidence that antibody tests can	1.13 (1.53)	.20	.21	Yes
show coronavirus immunity				
Pentagon to extend troop movement freeze to June 30	1.27 (1.41)	.22	04	Yes
American voters worry they can't spot misleading	1.40 (1.39)	.30	.16	Yes
information, poll finds				
Iranian Missile Accidentally Brought Down	0.90 (1.52)	.28	03	Yes
Ukrainian Jet, Officials Say				
New Google site shows where people in a community	1.44 (1.30)	.21	.07	Yes
are taking social distancing seriously — and where				
they're not				
FDA approves new drug for patients with metastatic	1.38 (1.16)	.18	02	Yes
breast cancer				
Canada shooting: gunman kills 16 people after	1.32 (1.47)	.20	.24*	Yes
rampage in Nova Scotia				
Appeals court sides with feds on Jeffrey Epstein deal	0.65 (1.46)	.20	10	Yes
World News Updates: Singapore's Control Slips, as	1.30 (1.31)	.18	.20	Yes
Europe Begins to Ease Coronavirus Limits				
East Bay student who made 'terrorists' video settles	0.63 (1.53)	.20	14	Yes
with school district over free speech lawsuit				
DOJ review finds material errors in two 2019	1.07 (1.18)	.21	.08	Yes
surveillance applications				
Iran president says Iran responded, will respond to	1.00 (1.61)	.24	02	Yes
assassination of Soleimani				
Wikileaks founder Julian Assange denied bail by	1.11 (1.50)	.22	.01	Yes
London court	,			
New York 9/11 victim identified 18 years later	1.04 (1.59)	.21	.03	Yes
Afghan conflict: US and Taliban sign deal to end 18-	1.12 (1.38)	.19	15	Yes
year war	` ,			

*Note.* Headlines selected for the final study are in italics.

To select the final stimuli for Study 1, I selected the 10 conspiracy headlines with the highest proportion of participants that saw all three features of conspiracy theories in the headline, and the 10 mainstream headlines with the lowest proportion of participants that saw all three features of conspiracy theories in the headline. In the case of a tie, I selected the headline with the highest belief score, to ensure that conspiracy statements had relatively high levels of belief. The headlines of the final stimuli are printed in italics in Table 1.

*Table 2.* Means and standard deviations of belief, the proportion of participants who saw all three conspiracy features, correlations between political orientation and belief, and interrater agreement on the presence of all three conspiracy features

Statement	Belief M (SD)	Proportion	r	Agreement
Conspiracy Statements				
Lobbyists for pharmaceutical companies are pushing state governments to require vaccinations.	0.40 (1.81)	.52	39***	Yes
The Chinese government is using its influence to force Google to suppress unfavorable information.	0.92 (1.70)	.52	06	Yes
Companies that sell smart technology like Google Home and Alexa are collecting information on their customers without their customers' knowledge and selling that information to third parties.	0.77 (1.59)	.62	11	Yes
COVID-19 ("the coronavirus") was created in a lab in China as a bioweapon.	-0.61 (2.16)	.62	51***	Yes
Technology companies are suppressing information on the negative health effects of 5G networks.	-0.39 (1.96)	.64	44***	Yes
Several members of UK's Parliament were behind the 2005 London bombings in an attempt to increase support for military intervention in the Middle East.	-0.11 (1.98)	.63	34**	Yes
Amazon's publicity department has been paying television stations to air scripted statements disguised as news reports.	0.30 (1.65)	.45	15	Yes
Researchers have discovered a cure for cancer, but pharmaceutical companies are suppressing	-0.15 (2.08)	.59	39***	Yes
information about it.  Jeffery Epstein was assassinated to prevent him from sharing information that would harm powerful	0.57 (1.59)	.59	28*	No
politicians. The New England Patriots won against the Jacksonville Jaguars in the 2018 NFL Playoffs because they'd paid off the referees to make calls in their favor.	-0.12 (1.85)	.65	38***	Yes
The U.S. government faked the moon landing to gain an advantage in the Cold War over Russia.	-0.37 (2.20)	.54	42***	Yes
Paul McCartney died in the 1960s, and his music label replaced him with a look-alike to avoid losing money	-0.86 (2.02)	.40	41***	Yes
Princess Diana was assassinated to prevent her from embarrassing the royal family.	-0.33 (2.01)	.54	36***	Yes
There is a secret weapons testing facility hidden under the Denver Airport.	-0.25 (1.94)	.35	36***	Yes
During the Cold War, the KGB assassinated several scientists that were working on US defense department projects.	0.72 (1.44)	.59	22*	Yes

Non-Conspiracy Statements				
Several army veterans bombed a federal building in	0.69 (1.78)	.29	02	No
Oklahoma City as retaliation for federal				
government's perceived incompetence in several				
investigations.				
The U.S. sent troops to Libya to assist its	1.08 (1.20)	.21	18	Yes
government in its conflict with several militant				
groups.				
Tech companies are investing in new technology that	1.56 (1.17)	.18	.14	Yes
will allow them to automate various tasks including				
checking out customers at stores and packaging				
products for shipment.				
Some governments are tracking the movement of	1.41 (1.28)	.21	.12	Yes
people who were later diagnosed with COVID-19 to				
predict which communities will need the most				
resources.				
All 50 states in the U.S. require that students are	1.43 (1.38)	.19	.11	Yes
vaccinated before enrolling in public schools, though				
some exemptions are available for health and				
religious reasons.				
The man who drove a car into counter-protesters	1.52 (1.40)	.18	.29**	Yes
during the "Unite the Right" rally in Charlottesville,				
Virginia was charged with first-degree murder and				
various other offenses.				
The International Monetary Fund is an international	1.39 (1.37)	.18	.10	Yes
organization that encourages economic cooperation				
and provides loans to countries in need.				
Scientists are developing a method to create 3-D	1.22 (1.40)	.15	02	Yes
printed organs for patients in need.				
John Lennon was murdered by a man who wanted	1.54 (1.54)	.17	.09	Yes
media attention.				
The Toronto Raptors won against the Golden State	1.44 (1.57)	.18	.04	Yes
Warriors in the 2019 NBA finals, winning four of the				
six games in the series.				
Martin Luther King Jr. was assassinated by an	1.31 (1.60)	.23	.05	Yes
escaped prisoner in 1968.				
Heath Ledger died from overdosing on prescription	1.48 (1.54)	.18	.12	Yes
drugs.				
Spanish princess Maria Teresa was the first member	1.13 (1.62)	.18	.09	Yes
of a royal family to die from COVID-19.				
An airport in Wisconsin has put on a drive-through	0.84 (4.56)	.19	.21*	Yes
lights display.			_	
Researchers are making significant progress on	1.30 (1.21)	.18	.24*	Yes
curing HIV.				

*Note.* Headlines selected for the final study are in italics.

To select the final stimuli for Study 2, I selected the 10 conspiracy statements with the highest proportion of participants that saw all three features of conspiracy theories in the statement, and the 10 mainstream statements with the lowest proportion of participants that saw all three features of conspiracy theories in the statement. In the case of a tie, I selected the headline with the highest belief score, to ensure that conspiracy statements had relatively high levels of belief. The statements of the final stimuli are printed in italics in Table 2.

#### III. STUDY 1

Study 1 served as an initial test of the motivated reasoning and conspiracy blindness hypotheses. In this study, participants viewed twenty news article summaries pre-selected to contain (or not contain) conspiracy content and categorize them as either "conspiratorial" or "mainstream."

## A. METHOD

#### **B. PARTICIPANTS**

Two hundred and fifty four participants from Amazon Mechanical Turk (mTurk) completed the survey. This sample size is sufficient for more than 80% power with an alpha of .05, based on 200 simulations with an estimated effect size of Cohen's d = .50 using the simr package (version 1.0.5; Green & MacLeod, 2016). This estimated effect size is based on the results of two similar studies that examined the effect of information processing (i.e., how critically participants thought about their answers) and ideological congeniality (i.e., how consistent the information was with participants' pre-existing beliefs) on participants' ability to identify fake news (Pennycook & Rand, 2019).

The average age of the sample was 34.96 (SD = 9.58). One-hundred and sixty-four participants identified as men, 89 identified as women, and one identified as nonbinary. The majority of the sample (n = 143) had a four-year college degree. Forty-seven had a professional degree, 29 had some college, 15 had a two-year degree, 14 were high school graduates, five had a doctorate, and had less than a high school degree. One-hundred and seventy-three participants identified as White, 44 identified as Black or African American, 22 identified as Asian, 8 identified as Hispanic or Latino, two identified as something else, one identified as American

Indian or Alaska Native, and four identified as multiracial. On a scale of -3 (Very Liberal) to 3 (Very Conservative) the sample averaged 0.21 (SD = 2.01). Ninety-eight participants identified on the liberal side of the spectrum, 122 identified on the conservative side of the spectrum, and 34 identified as moderate.

### C. PROCEDURE

Upon starting the survey, participants read twenty article summaries. Ten of these article summaries were from mainstream news sites (mainstream articles) and ten were from conspiracy news sites (conspiracy articles). None of the mainstream articles contained conspiracy theories, and all of the conspiracy articles contained at least one conspiracy theory. All headlines from the associated article summaries are available in Table 1, and the full summaries are available in the survey Appendix B. To measure participants' belief in the contents of each article summary, participants rated each article summary on a scale of 1 (Completely False) to 7 (Completely True). Then participants stated whether they believed that the article contained a conspiracy theory or not. The number of seconds they took to make their decision (their response time) served as a proxy measure of how much they thought about their decision. Shorter response times are associated with comprehension of information, whereas longer response times are associated with more in-depth assessment of information (Gilbert, Krull, & Malone, 1990). As such, longer response times have been used to measure motivated reasoning in past research (e.g., Matz & Wood, 2005; Petersen, Skov, Serritzlew, & Ramsøy, 2013; Schaffner & Roche, 2016).

Response time was measured using Qualtrics's "Last click" timing data. This feature measures the number of seconds from the time the participant loads the survey page until they make their last click on that page (not including when they click to advance to the next page).

Because the question asking whether the article summary contained a conspiracy theory was on its own page, the number of seconds represents the time from when the page loaded until participants selected their final answer.<sup>2</sup>

After making their decision, they were asked whether they would like to write a justification for their decision (yes or no). If they selected 'yes,' they were given a textbox and asked to explain their reasoning. If they selected 'no,' they moved on to the next article summary. After participants rated and categorized all the article summaries, they wrote their own definition for the term "conspiracy theory." Finally, they provided basic demographic information including age, gender, race and ethnicity, political orientation, and educational background. The full survey is available in Appendix B.

As in the pilot, participants' belief in each article summary was re-scored to a scale of -3 (Completely false) to 3 (Completely true) and centered on 0 such that negative scores indicated disbelief and positive scores indicated belief. Participants' political orientation was rescored to a scale of -3 (Very liberal) to 3 (Very conservative) and centered on 0 such that negative scores indicated a liberal political orientation, and positive scores indicated a conservative political orientation. I operationalized each participant's accuracy by determining whether they correctly identified the conspiracy theory (or lack there-of) in each article summary. From example, correctly stating that the conspiracy articles contained a conspiracy theory was coded as a "hit"

<sup>&</sup>lt;sup>2</sup> Qualtrics's question timing feature is somewhat limited in that it is not strictly designed for measuring response time and is not reliably accurate down to the millisecond. Qualtrics may register a different number of milliseconds for the same response time depending on the participants' internet connection and web browser of choice (Semmelmann & Weigelt, 2017). This means that I cannot use traditional benchmarks for conscious thought (e.g., speeds faster than 300ms representing fast judgments and speeds greater than 3000 ms representing slow thought; Greenwald, Nosek, & Banaji, 2003) as a benchmark in my analyses.

(1) and incorrectly stating that the conspiracy articles did not contain a conspiracy theory was coded as a "miss" (0).

Similar studies have operationalized participants' accuracy using d' (d-prime) in the past. d' quantifies accuracy by taking a participant's number of "hits" (i.e., correctly identifying a conspiracy headline as a conspiracy headline) and subtracting their number of "false positives" (i.e., incorrectly identifying a mainstream headline as a conspiracy headline) from a large set of trials (i.e., many conspiracy and mainstream headlines). Although this statistic is beneficial for many types of research, it has three disadvantages in the context of this study. First, d' collapses across stimuli. This means that d' would reduce the predictive power of the model by treating all conspiracy headlines as equally believable for all participants. Because belief in different genres of conspiracy theories can look very different (e.g., political and apolitical, Enders, Smallpage, & Lupton, 2018), collapsing across genre would be an inappropriate choice when studying conspiracy theory belief. Second, d' compares hits to false positives. The goal of the present research is an examination of when make false negatives (i.e., identifying conspiracy headlines as mainstream), and not how this relates proportionally to their number of hits. Finally, d' is only a valid measure of detection if the variance in accuracy is the same for both mainstream and conspiracy headlines. I predicted little variance for mainstream headlines and considerable variance for conspiracy headlines thereby violating this base assumption. For these reasons, d' is not appropriate measure of accuracy for this study; I used false negative rates instead.

#### D. RESULTS

Both the motivated reasoning and conspiracy blindness hypotheses predicted that the more a participant believed the information in a conspiracy article summary, the less likely they would be to recognize that it contained a conspiracy theory. In other words, for conspiracy articles (but

not mainstream articles) as participants' belief went up, their accuracy should go down. The motivated reasoning hypothesis suggests that these mistakes will be most common when participants take more time to make their decision because they are rationalizing their incorrect decision. The conspiracy blindness hypothesis suggests that these mistakes will be most common when participants take less time to make their decision because they do not take the time to consider if the article they believed could contain a conspiracy theory. The means, standard deviations, and correlations between all demographic and key variables are available in Table 3. The means and standard deviations of belief for each article summary, and correlations with all demographic and key variables are available in Appendix D. Histograms and violin plots of response time by article summary type and article summary are also available in Appendix D.

Table 3. Means, standard deviations, and correlations with confidence intervals

Variable	M	SD	1	2	3	4	5	6
1. Age	34.96	9.58						
2. Education	4.76	1.13	05 [17, .07]					
3. Political Orientation	0.21	2.01	02 [14, .10]	.27** [.16, .38]				
4. Mainstream Belief	4.89	0.85	06 [18, .07]	.02	.05			
5. Conspiracy Belief	4.31	1.11	24** [35,12]	.31** [.19, .41]	.37** [.26, .47]	.39** [.29, .49]		
6. Reaction Time (in Seconds)	4.59	4.89	07	.20**	.12	.03	.26**	
7. Score	12.85	3.95	[19, .05] .22** [.10, .34]	[.08, .31] 40** [50,29]	[00, .24] 36** [46,24]	[09, .15] .10 [02, .22]	[.14, .37] 60** [67,51]	25** [36,13]

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. "Mainstream Belief" is the average reported belief for all mainstream articles. "Conspiracy belief" is the average reported belief for all conspiracy items. Score represents the total number of headlines participants correctly classified as "mainstream" or "conspiracy."

Both the motivated reasoning hypothesis and the conspiracy blindness hypothesis predicted a three-way interaction between belief, article type, and response time (i.e., Model 5 or

6 in Table 4 should be the best fit model). Both predicted that there would not be an interaction between belief and reaction time for mainstream article summaries, but that there would be an interaction between belief and reaction time for conspiracy article summaries. The motivated reasoning hypothesis predicted that slower response times would predict more mistakes for conspiracy theories people believed, and the conspiracy blindness hypothesis predicted that faster response times would predict more mistakes for conspiracy theories that people believed. To test the motivated reasoning and conspiracy blindness hypotheses, I used a logistic mixedeffects model. I took a forward-fitting approach, adding the predictors in stages (Singer & Willett, 2003). I performed all analyses using the lme4 package in R (lme4 ver. 1.1-23; Bates et al., 2015). All models used the same random effects structure. The random effects were crossed. Article summary (item) was nested within article type (mainstream or conspiracy), and article type was nested within subjects. Article summary was treated as a repeated measure for subjects, but a nested variable for article type (Westfall, Judd and Kenny, 2014; Judd, Westfall, & Kenny, 2017). Article summary and subjects were allowed their own intercepts, and article type was entered as a random slope. I blocked the correlation between subjects and article type.

Model 0 contained no fixed effects. Model 1 tested for a relationship between belief (mean centered and z-scored) and accuracy (whether participants correctly identified whether the article was a conspiracy article or a mainstream article). Model 2 included article type (mainstream, coded as -0.5 or conspiracy, coded as 0.5). Model 3 added the interaction between belief and article type. Model 4 added response time (log 10 transformed, mean centered, and z-scored).3 Model 5 added the three-way interaction between belief, article type, and response

<sup>&</sup>lt;sup>3</sup> See Appendix D for histograms of raw reaction time by article type and violin plots of raw reaction time by article summary.

time. Model 6 added education4 (z-scored) and political orientation (centered on the scale's midpoint and standardized) as level two control variables. Model 6, which included the main effects of belief, article type, and response time, and their interactions and control variables was the best fit. All model comparisons are available in Table 5, and all model coefficients are available in Table 4.

<sup>&</sup>lt;sup>4</sup> Low education is a consistent predictor of conspiracy belief (Douglas et al., 2019).

*Table 4.* Multilevel model results predicting the likelihood of a correct answer from belief, article type, and response time

Model 6
1.02
$(0.10)^{***}$
-0.21 (0.06)***
0.83 (0.34)*
-1.07 (0.12)***
-0.14 (0.05)**
$0.12 \\ (0.05)^*$
0.34 (0.10)** 0.23 (0.10)*5
-0.50 (0.09)***
-0.32 (0.09)***
4380.48
4465.41
-2177.24
5080
0.94
23.90
0.05
-

*Note.* \* indicates a *p*-value that is less than .05, \*\* indicates a *p*-value that is less than .01, and \*\*\* indicates a *p*-value that is less than .001. Standard errors are presented in parentheses. *p*-values are based on asymptotic Wald tests (lme4 ver. 1.1-23; Bates et al., 2015).

<sup>&</sup>lt;sup>5</sup> This analysis did not exclude responses with abnormally long response times. The maximum response time for any item for any participant was 483.02 seconds. A later analysis that excluded items with response times three standard deviations above the mean did not change the pattern of results, though the three-way interaction became marginally significant (p = .084) and the interaction between belief and response time was no longer significant (p = .729).

Table 5. Summary of comparisons between models, testing whether adding terms improved model fit

Change in <i>df</i>	Deviance	$\chi^2$	р
+1	4550.45	44.92	< .001
+1	4544.49	5.95	.015
+1	4443.02	101.46	< .001
+1	4431.29	11.73	< .001
+3	4410.58	20.71	< .001
+2	4354.47	56.10	< .001
	+1 +1 +1 +1 +1 +3	+1 4550.45 +1 4544.49 +1 4443.02 +1 4431.29 +3 4410.58	+1 4550.45 44.92 +1 4544.49 5.95 +1 4443.02 101.46 +1 4431.29 11.73 +3 4410.58 20.71

Even though neither the motivated reasoning nor the conspiracy blindness predicted main effects of belief, article type, or response time, all three were significant. The more participants believed the article summary, the better they were at recognizing whether it contained a conspiracy theory. Participants were more accurate when deciding if conspiracy articles contained conspiracy theories than if mainstream articles contained conspiracy theories. Finally, the faster participants made their decision about whether the article contained a conspiracy theory, the more accurate they were.

Consistent with both the motivated reasoning and conspiracy blindness hypotheses, the more participants believed the conspiracy articles, the less likely they were to recognize that they contained conspiracy theories ( $\beta$  = -0.75, SE = 0.07, p < .001, OR = 0.47, Cohen's d = -0.42). Although neither the motivated reasoning nor the conspiracy blindness hypotheses made predictions about the belief and accuracy for mainstream articles, the more participants believed

the mainstream articles, the more likely they were to correctly recognize that they did not contain conspiracy theories,  $\beta = 0.33$ , SE = 0.08, p < .001, OR = 1.39, Cohen's d = 0.18. Overall, belief's relationship with article classification accuracy went in opposite directions for conspiracy and mainstream articles. Belief was associated with less accuracy for conspiracy articles (i.e., thinking conspiracy articles did not contain conspiracy theories), and with more accuracy for mainstream articles (i.e., recognizing that mainstream articles did not contain conspiracy theories).

The amount of time participants took to decide whether an article contained a conspiracy theory did not predict accuracy for conspiracy articles ( $\beta$  = 0.02, SE = 0.07, p = .718, OR = 1.02, Cohen's d = 0.01), but faster decisions predicted more accuracy when evaluating mainstream statements,  $\beta$  = -0.31, SE = 0.07, p < .001, OR = 0.73, Cohen's d = -0.17. In other words, the main effect of response time on belief is likely driven by the belief in mainstream articles and not the conspiracy articles. This finding is inconsistent with the motivated reasoning and conspiracy blindness hypotheses that there would no relationship between response time and accuracy for mainstream headlines and a relationship (negative for the motivated reasoning hypothesis or positive for the conspiracy blindness hypothesis) between response time and accuracy for conspiracy headlines.

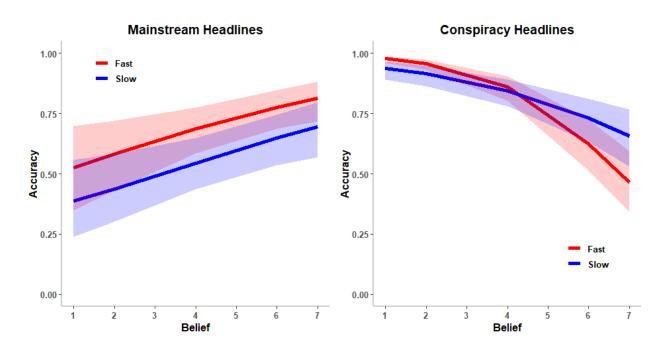
The more participants believed the article, the less accurate they were when they took less time to respond (1 SD below the mean;  $\beta = -0.33$ , SE = 0.07, p < .001, OR = 0.72, Cohen's d = 0.18). There was no relationship between belief and accuracy when they took more time to respond (1 SD above the mean;  $\beta = -0.09$ , SE = 0.08, p = .221, OR = 0.91, Cohen's d = -0.05). In other words, how much participants believed the article only predicted their accuracy when they were making their decision relatively quickly. Although neither the motivated reasoning

hypothesis nor the conspiracy blindness hypotheses made explicit predictions about how belief and response time predicted accuracy, this result is more consistent with the conspiracy blindness hypothesis that people make errors when they do not take the time to think about their decisions, and inconsistent with the motivated reasoning prediction that people make errors when they take the time to engage in motivated reasoning.

As predicted by both the motivated reasoning and conspiracy blindness hypotheses, there was a three-way interaction between belief, article type, and response time. See Figure 1 for a graph of the three-way interaction. There was no interaction between belief and response time for mainstream headlines,  $\beta = 0.01$ , SE = 0.05, p = .883, OR = 1.01, Cohen's d = 0.005. In other words, the more participants believed the mainstream articles, the more accurate they were in recognizing that they did not contain conspiracy theories, regardless of how long they took to come to that conclusion. There was an interaction, however, between belief and response time for conspiracy articles ( $\beta = 0.13$ , SE = 0.04, p = .003, OR = 1.14, Cohen's d = 0.07) such that the more participants believed a conspiracy article and the less time they took to decide if it contained a conspiracy theory, the less likely they were to recognize that it contained a conspiracy theory,  $\beta = -0.98$ , SE = 0.09, p < .001, OR = 0.37, Cohen's d = -0.55. When participants believed a conspiracy article and took more time to decide if it contained a conspiracy theory, the relationship between their belief and their ability to recognize that the article contained a conspiracy theory was weaker,  $\beta = -0.51$ , SE = 0.10, p < .001, OR = 0.60, Cohen's d = -0.28. These results suggest that people have difficulty recognizing that some of their beliefs are conspiracy theories when they do not take the time to consider if they might be conspiracy theories. When they do take the time to consider if their beliefs might be conspiracy theories, they are more likely to recognize when they are conspiracy theories. This pattern of

results is consistent with the conspiracy blindness hypothesis that people have difficulty recognizing their beliefs are conspiracy theories because they do not take the time to consider whether those beliefs might be conspiracy theories.

Figure 1. The three-way interaction between belief, article type, and response time predicting accuracy



*Note*. Response time is graphed as 1SD below the mean (labelled "fast") and 1 SD above the mean (labelled "slow"). The error bars represent the 95% confidence interval. Figures created using lme4 version 1.1-23 (Bates, Mächler, Bolker, & Walker, 2015) and ggplot2 version 3.30 (Wickham, 2016).

#### E. DISCUSSION

Study 1 supported the motivated reasoning and conspiracy blindness hypotheses' predictions that people who believe conspiracy theories have difficulty recognizing their beliefs are conspiracy theories. The more participants believed the conspiracy articles, the more difficulty they had recognizing that they contained conspiracy theories, but only when they did not take much time to consider their answer. People were least likely to decide that conspiracy theories are indeed conspiracy theories when they (1) believed them and (2) did not take much time to think about their decision. This supports the conspiracy blindness hypothesis that people cannot recognize conspiracy theories that they believe as conspiracy theories because they do not bother to consider whether their beliefs could be conspiracy theories.

Although neither hypothesis predicted it, I also found that speed predicted accuracy for mainstream articles. Participants were better at recognizing that mainstream articles did not contain conspiracy theories when they took less time to decide and worse when they took more time. It may be that participants overthought some of their decisions and ultimately read too much into the mainstream article summaries, though the data presented here cannot speak to this.

Although Study 1 supported the conspiracy blindness hypothesis, it sacrificed some internal validity for environmental validity. Study 1 used headlines of real news articles that participants might encounter in their day-to-day life as stimulus materials. Although they were relatively environmentally valid, they were not intentionally written to contain (or not contain) overt conspiracy theories. Although the article summaries attempted to mitigate this issue by mentioning the key parts of the article that did (or did not) contain features of conspiracy theories, this may not have been clear enough.

Study 1 also expected participants to use their own definition for what constitutes a "conspiracy theory" to determine if the articles contained conspiracy theories. It implicitly assumed that all participants shared a common definition of "conspiracy theory" that matched the definition used in this paper. Although this reflects how people evaluate information in their day-to-day lives, it may be an alternative explanation for some of the incorrect responses in Study 1. It may be that participants were "less accurate" overall because their personal definition of "conspiracy theory" differed from my operational definition. I conducted a second study to address these concerns and to provide a second test of the conspiracy blindness and motivated reasoning hypotheses.

#### IV. STUDY 2

Study 1 provided an initial test of the motivated reasoning and conspiracy blindness hypotheses and found evidence for the conspiracy blindness hypothesis. However, some of its findings may have been artefacts of its design. Given the environmentally valid stimuli, it may have been difficult to identify the conspiracy theories in the article summaries. The theories in the articles in Study 1 were also somewhat limited in scope because all of the headlines were collected from the same six-month time period. To address this, Study 2 used a larger variety of conspiracy theories in the form of statements that were intentionally written to contain (or not contain) overt conspiracy theories about a variety of topics from a variety of time periods.

Study 1 also assumed that all participants had a definition of "conspiracy theory" that was consistent with the one typically used in the literature and in this paper. Discrepancies between participants' definitions may explain some of the results in Study 1. For example, if participants think that conspiracy theories are necessarily false, then they would not recognize conspiracy theories that they believe as conspiracy theories. Study 2 manipulated whether participants were provided with my operational definition for conspiracy theory or were not provided with a definition, to see if the lack of a standard definition may explain some of the variance in Study 1.

This manipulation also allowed for a stronger test of the conspiracy blindness hypothesis. If the conspiracy blindness hypothesis is true, then participants should make more accurate decisions when they are asked to apply the definition for conspiracy theory to the statements they read, because this task forces them to consider the possibility that their belief is a conspiracy theory when they would not have considered it otherwise. If the motivated reasoning hypothesis is true, then there should be no difference in accuracy of judgments regardless of the presence or

absence of a definition, because people are motivated to believe that the statements they believe are an exception to the rule.

#### A. METHOD

#### **B. PARTICIPANTS**

My hypotheses suggested a significant four-way interaction between statement type (No Conspiracy or Conspiracy), belief, response time, and definition condition (No Definition or Definition). In anticipation, I conducted a power analysis for this four-way interaction. The power analysis concluded that a sample of 250 would be sufficient for more than 80% power with an alpha of .05, based on 200 simulations with an estimated effect size of Cohen's d = .50 using the simr package (version 1.0.5; Green & MacLeod, 2016). This estimated effect size is based on the results of two similar studies that examined the effect of information processing (i.e., how critically participants thought about their answers) and ideological congeniality (i.e., how consistent the information was with participants' pre-existing beliefs) on participants' ability to identify fake news (Pennycook & Rand, 2019).

Two hundred and fifty-one participants from Amazon Mechanical Turk (mTurk) completed the survey. The average age of the sample was 35.48 (SD = 11.37). One-hundred and sixty-four participants identified as men, 85 identified as women, and two identified as nonbinary. The majority of the sample (n = 141) had a four-year college degree. Fifty-two had a professional degree, 29 had some college, 12 had a two-year degree, 14 were high school graduates, two had a doctorate, and had less than a high school degree. One-hundred and sixty-seven participants identified as White, 47 identified as Black or African American, 19 identified as Asian, 7 identified as Hispanic or Latino, one identified as something else, one identified as American Indian or Alaska Native, and eight identified as multiracial. On a scale of -3 (Very

Liberal) to 3 (Very Conservative) the sample averaged 0.26 (SD = 1.96). Ninety participants identified on the liberal side of the spectrum, 122 identified on the conservative side of the spectrum, and 39 identified as moderate.

#### C. PROCEDURE

Upon beginning the survey, participants were randomly assigned to one of two conditions: The conspiracy definition condition and the no definition condition. Participants in the conspiracy definition condition were asked to read the definition of "conspiracy theory" used in the introduction of this paper. In the no definition condition, participants did not read a definition.

After reading (or not reading) the definition, participants read instructions for the rest of the study with a sample statement and response to ensure that they understood the task. After they read the instructions, they were presented with twenty statements selected from the thirty tested in the pilot study. Ten of these statements were conspiracy theories, and ten of these statements were not conspiracy theories. All statements are available in Table 2. Participants viewed the statements in a random order, and each statement was presented on its own page of the survey. In the conspiracy definition condition, the definition for "conspiracy theory" was available above each statement. In the no definition condition, there was no definition above the statement.

To ensure that participants applied the definition to the statements, participants completed the checklist from the pilot study for each statement. This checklist contained three major features of the definition for "conspiracy theory": 1) a group of powerful people is working together to accomplish a goal, 2) while attempting to keep their activity secret, and 3) acting at

the expense of others. Participants indicated every feature they believed was present in that statement. If they did not believe that any of the features are present in the statement, they had the option to select a fourth box that read "none of the three apply."

Once they selected all the features that they believed were present in the statement, participants were asked whether the statement is a conspiracy theory (yes or no). The survey software recorded how long it took them to make their decision. After making their decision, they were asked whether they would like to write a justification or their decision (yes or no). If they selected 'yes,' they were given a textbox and asked to explain their reasoning. If they selected 'no,' they moved on to the next question. Finally, to measure how much participants believe each statement, participants rated each statement on a scale of 1 (Completely False) to 7 (Completely True). After responding to all questions for all twenty statements, participants provided demographic information including age, gender, race and ethnicity, political orientation, and education. As in the pilot and Study 1, participants' belief in each statement was re-scored to a scale of -3 (Completely false) to 3 (Completely true) and centered on 0 such that negative scores indicated disbelief and positive scores indicated belief. Participants' political orientation was rescored to a scale of -3 (Very liberal) to 3 (Very conservative) and centered on 0 such that negative scores indicated a liberal political orientation and positive scores indicated a conservative political orientation. The full survey is available in Appendix C.

#### D. RESULTS

The means and correlations between all key and demographic variables are available in Table 7. Some of the correlations between variables in Study 2 were different than in Study 1.

Whereas education was negatively correlated with belief in conspiracy article summaries in Study 1 (and in much of the past literature), it was not correlated with belief in conspiracy statements in Study 2. Although belief in mainstream article summaries was positively correlated with belief in conspiracy article summaries in Study 1, belief in mainstream statements was not correlated with belief in mainstream statements in Study 2. The means and standard deviations of belief for each statement, and correlations with all demographic and key variables are available in Appendix E. Histograms of response time by statement type and definition, as well as violin plots of response time for each statement, are also available in Appendix E.

Table 6. Means, standard deviations, and correlations with confidence intervals

Variable	M	SD	1	2	3	4	5	6
1. Age	35.48	11.37						
2. Education	4.76	1.12	.01 [11, .14]					
3. Political Orientation	0.26	1.96	.09	.08				
4. Mainstream Belief	5.24	0.97	10 [22, .02]	18** [29,05]	15* [27,03]			
5. Conspiracy Belief	4.34	1.16	25** [36,13]	.04 [08, .17]	.26** [.14, .37]	.03		
6. Reaction Time	4.79	5.86	.04 [08, .17]	.09 [04, .21]	.02 [10, .15]	09 [21, .04]	.11	
7. Score	13.76	4.12	.08 [04, .21]	25** [37,14]	27** [38,15]	.52** [.43, .61]		14* [26,02]

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. "Mainstream Belief" is the average reported belief for all mainstream articles. "Conspiracy belief" is the average reported belief for all conspiracy items. Score represents the total number of headlines participants correctly classified as "mainstream" or "conspiracy."

The motivated reasoning hypothesis predicted a three-way interaction between belief, statement type, and response time (i.e., Model 6 in Table 7 should be the best fit model). The

conspiracy blindness hypothesis predicted a four-way interaction between belief, article type, response time, and definition condition (i.e., Model 7 or 8 in Table 7 should be the best fit model). Both predicted that there would not be an interaction between belief and reaction time for mainstream article summaries, but that there would be an interaction between belief and reaction time for conspiracy article summaries. The motivated reasoning hypothesis predicted that slower response times would predict more mistakes for conspiracy theories people believed, regardless of whether participants had access to the definition or not. The conspiracy blindness hypothesis predicted that faster response times would predict more mistakes for conspiracy theories that people believed when participants did not have access to the definition, but the interaction between belief and response time would disappear when participants had access to the definition. Model 8, which included the main effects of belief, article type, response time, condition, and their four-way interaction, was the best fit. All model coefficients are available in Table 7.

To test the motivated reasoning and conspiracy blindness hypotheses, I used a logistic mixed-effects model. I took a forward-fitting approach, adding the predictors in stages (Singer & Willett, 2003). I performed all analyses using the lme4 package in R (lme4 ver. 1.1-23; Bates et al., 2015). All models used the same random effects structure. The random effects were crossed. Statement (item) was nested within statement type (mainstream or conspiracy), and article type was nested within subjects. Statement was treated as a repeated measure for subjects, but a nested variable for statement type (Westfall, Judd and Kenny, 2014; Judd, Westfall, & Kenny, 2017). Statements and subjects were allowed their own intercepts, and statement type was entered as a random slope. I blocked the correlation between subjects and statement type.

As can be seen in Table 7, Model 0 contained no fixed effects. Model 1 tested for a relationship between belief (mean centered and *z*-scored) and accuracy (whether participants correctly identified whether the article was a conspiracy article or a mainstream article). Model 2 included statement type (mainstream, coded as -0.5 or conspiracy, coded as 0.5). Model 3 added the interaction between belief and statement type. Model 4 added response time (log 10 transformed, mean centered, and *z*-scored). Model 5 added the three-way interaction between belief, article type, and response time. Model 6 added the fixed effect of definition condition (no definition, coded as -0.5, or conspiracy definition, coded as 0.5). Model 7 added the four-way interaction between belief, article type, response time, and definition condition. Model 8 added education (*z*-scored) and political orientation (centered on the scale's midpoint and standardized) as level two control variables. All model comparisons are available in Table 8.

<sup>&</sup>lt;sup>6</sup> See Appendix E for histograms of raw reaction time by article type and violin plots of raw reaction time by article summary.

<sup>&</sup>lt;sup>7</sup> Low education is a consistent predictor of conspiracy belief (Douglas et al., 2019).

Table 7. Multilevel model results predicting the likelihood of a correct answer from belief, article type, response time, and condition

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
(Intercept)	1.68 (0.15)***	1.67 (0.15)***	1.51 (0.13)***	1.51 (0.13)***	1.51 (0.13)***	1.51 (0.13)***	1.49 (0.13)***	1.50 (0.13)***
Belief	-0.12 (0.06)*	-0.09 (0.06)	-0.01 (0.06)	-0.02 (0.06)	-0.02 (0.06)	-0.02 (0.06)	-0.00 (0.06)	-0.00 (0.06)
Statement Type		1.77 (0.36)***	1.79 (0.35)***	1.79 (0.35)***	1.80 (0.35)***	1.77 (0.35)***	1.77 (0.35)***	1.72 (0.35)***
Belief * Statement Type			-0.94 (0.13)***	-0.93 (0.13)***	-0.93 (0.13)***	-0.93 (0.13)***	-0.88 (0.13)***	-0.87 (0.13)***
Response time				-0.09 (0.05)	-0.09 (0.05)·	-0.08 (0.05)·	-0.09 (0.05)·	-0.08 (0.05)
Belief * Response time					0.06 (0.05)	0.06 (0.05)	0.03 (0.06)	0.03 (0.06)
Statement Type * Response time					0.26 (0.10)*	0.25 (0.10)*	0.24 (0.10)*	0.24 (0.10)*
Belief * Statement Type * Response time					0.19 (0.11)·	0.19 (0.11)·	0.18 (0.11)	0.18 (0.11)
Condition						-0.08 (0.22)	-0.08 (0.22)	0.00 (0.21)
Belief * Condition							0.15 (0.13)	0.13 (0.13)
Statement Type * Condition							1.57 (0.65)*	1.53 (0.67)*
Response time * Condition							0.08 (0.10)	0.06 (0.10)
Belief * Statement Type * Condition							0.22 (0.26)	0.24 (0.26)
Belief * Response time * Condition							-0.08 (0.11)	-0.07 (0.11)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Statement Type * Response time *							-0.03	-0.02
Condition							(0.21)	(0.21)
Belief * Statement Type * Response							-0.53	-0.56
time * Condition							(0.22)*	(0.23)* <sup>8</sup>
Education								-0.56
Lucation								(0.11)***
Political Orientation								-0.39
								(0.10)***
AIC	4182.44	4160.88	4109.73	4108.35	4103.88	4105.64	4104.20	4068.56
BIC	4215.05	4200.01	4155.38	4160.52	4175.61	4183.89	4228.11	4205.51
Log Likelihood	-2086.22	-2074.44	-2047.87	-2046.18	-2040.94	-2040.82	-2033.10	-2013.28
Random Effects								
Intercept	2.63	2.60	2.02	1.98	1.98	1.97	1.98	1.56
Statement Type	25.00	23.18	22.83	22.83	22.19	22.82	21.91	22.89
Statement	0.11	0.08	0.06	0.06	0.06	0.06	0.06	0.06

*Note*. \* indicates a *p*-value that is less than .05, \*\* indicates a *p*-value that is less than .01, and \*\*\* indicates a *p*-value that is less than .001. Standard errors are presented in parentheses. *p*-values are based on asymptotic Wald tests (lme4 ver. 1.1-23; Bates et al., 2015).

<sup>&</sup>lt;sup>8</sup> This analysis did not exclude responses with abnormally long response times. The maximum response time for any participant was 1013.90 seconds. A later analysis that excluded items with response times three standard deviations above the mean did not change the overall pattern of results and the four-way interaction remained significant, p = .027.

Table 8. Summary of comparisons between models, testing whether adding terms improved model fit

Model Comparison	Change in <i>df</i>	Deviance	$\chi^2$	р
Model 1 versus Model 0 (Null)	+1	4172.44	3.88	.049
Belief				
Model 2 versus Model 1	+1	4148.88	23.56	< .001
Belief + Article Type				
Model 3 versus Model 2	+1	4095.73	53.15	< .001
Belief * Article Type				
Model 4 versus Model 3	+1	4092.35	3.38	.066
Belief * Article Type + Response Time				
Model 5 versus Model 3	+4	4081.88	13.85	.008
Belief * Article Type * Response Time				
Model 6 versus Model 5	+1	4081.64	0.24	.621
Belief * Article Type * Response Time +				
Condition				
Model 7 versus Model 5	+8	4066.20	15.67	.047
Belief * Article Type * Response Time *				
Condition				
Model 7 versus Model 8	+1	4040.41	25.79	< .001
Belief * Article Type * Response Time *				
Condition + Education + Political Orientation				

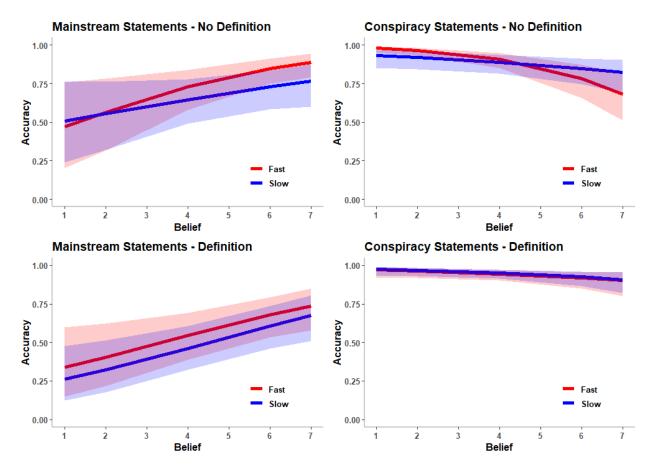
Participants were more accurate when deciding if conspiracy statements contained conspiracy theories than if mainstream statements contained conspiracy theories. There were no main effects of belief, response time, or condition.

There was a two-way interaction between belief and article type that replicated the interaction observed in Study 1. Consistent with both the motivated reasoning and conspiracy blindness hypotheses, the more participants believed the conspiracy statements, the less likely they were to recognize that they contained conspiracy theories ( $\beta = -0.43$ , SE = 0.08, p < .001, OR = 0.65, Cohen's d = -0.24), and the more participants believed the mainstream articles, the more likely they were to correctly recognize that they did not contain conspiracy theories,  $\beta = 0.000$ 

0.43, SE = 0.10, p < .001, OR = 1.54, Cohen's d = 0.24. The interaction between statement type and response time also replicated the interaction observed in Study 1. The amount of time participants took to decide whether a statement contained a conspiracy theory did not predict the accuracy of their decision for conspiracy statements ( $\beta = 0.04$ , SE = 0.07, p = .607, OR = 1.04, Cohen's d = 0.02), but faster decisions predicted more accurate decisions for mainstream statements,  $\beta = -0.20$ , SE = 0.07, p = .006, OR = 0.82, Cohen's d = -0.11. This result is inconsistent with the motivated reasoning and conspiracy blindness hypotheses that there would no relationship between response time and accuracy for mainstream headlines and a relationship (negative for the motivated reasoning hypothesis or positive for the conspiracy blindness hypothesis) between response time and accuracy for conspiracy headlines. There were no other two-way interactions. Unlike in Study 1, none of the three-way interactions were significant.

<sup>&</sup>lt;sup>9</sup> Simple slopes calculated using emmeans ver 1.5.3 (Length, 2020).

Figure 2. The three-way interaction between belief, article type, response time, and condition predicting accuracy



*Note*. Response time is graphed as 1SD below the mean (labelled "fast") and 1 SD above the mean (labelled "slow"). The error bars represent the 95% confidence interval. Figures created using lme4 version 1.1-23 (Bates, Mächler, Bolker, & Walker, 2015) and ggplot2 version 3.30 (Wickham, 2016).

Finally, there was a four-way interaction between belief, statement type, response time, and definition condition. See Figure 2 for a graph of the four-way interaction. There was no interaction between belief and response time for mainstream statements for participants who did not receive the definition ( $\beta$  = -0.14, SE = 0.08, p = .105, OR = 0.87, Cohen's d = -0.08), for mainstream statements for participants who did receive the definition ( $\beta$  = 0.01, SE = 0.07, p = .827, OR = 1.01, Cohen's d = 0.005), or for conspiracy statements for participants who did receive the definition,  $\beta$  = -0.03, SE = 0.08, p = .683, OR = 0.97, Cohen's d = -0.02. In other words, how long participants took to decide whether a statement contained a conspiracy theory did not change the relationship between belief and accuracy for mainstream statements at all, or for conspiracy statements when participants had the definition for "conspiracy theory."

There was, however, an interaction between belief and response time for conspiracy statements for participants who did not receive the definition,  $\beta = 0.23$ , SE = 0.07, p = .001, OR = 1.26, Cohen's d = 0.13. The interaction mirrored the interaction between belief and response time for conspiracy articles in Study 1. The more participants believed a conspiracy statement and the less time they took to decide if it contained a conspiracy theory, and the less likely they were to recognize that the statement contained a conspiracy theory,  $\beta = -0.85$ , SE = 0.14, p < .001, OR = 0.43, Cohen's d = -0.46. Belief was not related to accuracy when they took more time to think about their decision,  $\beta = -0.26$ , SE = 0.15, p = .078, OR = 0.77, Cohen's d = -0.14.

In short, the results supported the conspiracy blindness hypothesis. Participants had difficulty identifying the conspiracy theories they believed as conspiracy theories when they did not take the time to consider whether they might be conspiracy theories. However, when participants were forced to consider whether their beliefs might be conspiracy theories (by actively applying the definition for "conspiracy theory" to the statement), they were able to

recognize them as conspiracy theories. Overall, this pattern of results supports the hypothesis that people simply do not bother to evaluate their own beliefs about conspiracy theories unless instructed or otherwise motivated to do so.

#### E. DISCUSSION

Study 2 replicated the results of Study 1. Once again, the results supported the conspiracy blindness hypothesis: The more participants believed the conspiracy statements, the less likely they were to recognize that they contained conspiracy articles, but only when they did not take much time to consider their answer. People were least likely to correctly identify conspiracy statements when they did not think very long (or perhaps at all) about whether the statement contained a conspiracy theory.

Study 2 provided additional support for the conspiracy blindness hypothesis by demonstrating that, when people take the time to consider whether their beliefs are conspiracy theories, they are capable of recognizing them as such. In other words, it seems that participants' difficulty recognizing the conspiracy theories they believed as conspiracy theories was due to a lack of consideration rather than motivated reasoning. This provides some hope: Although people may not realize that some of their beliefs are conspiracy theories, if they critically examine their beliefs and are given the right tools, they are capable of recognizing them for what they are.

#### V. GENERAL DISCUSSION

#### A. SUMMARY OF RESULTS

This collection of studies tested whether people can recognize their own conspiracy beliefs as conspiracy theories using both headlines from real articles (Study 1) and statements written to contain conspiracy theories (Study 2). Both Studies 1 and 2 demonstrated that people do not recognize that the conspiracy theories that they believe are in fact conspiracy theories. In addition to demonstrating this bias, Studies 1 and 2 examined its source. I tested two possible explanations for the failure to recognize that one believes a conspiracy theory: 1) The *motivated reasoning hypothesis*, that people do not recognize their own beliefs as conspiracy theories because they take the time to rationalize why their belief is not an "irrational" conspiracy theory, and 2) the *conspiracy blindness hypothesis* that people do not recognize their own beliefs as conspiracy theories because they do not take the time to consider whether their belief might be a conspiracy theory.

The results of both Studies 1 and 2 were more consistent with the conspiracy blindness hypothesis than the motivated reasoning hypothesis. Participants who took less time to decide if their beliefs were conspiracy theories were more likely to incorrectly decide that their conspiracy beliefs were not conspiracy theories (consistent with the conspiracy blindness hypothesis) and participants who took more time to decide if their beliefs were conspiracy theories were less likely to incorrectly decide that their conspiracy beliefs were not conspiracy theories (contrary to the motivated reasoning hypothesis). Study 2 provided further support for the conspiracy blindness hypothesis by demonstrating that when people were forced to stop and consider whether their beliefs might be conspiracy theories, their conspiracy blindness was significantly reduced. Specifically, when participants were forced to evaluate their conspiracy beliefs using a check list of features of conspiracy theories and a definition for "conspiracy theory," they were

able to correctly identify conspiracy theory features over 90% of the time, regardless of how much they believed the conspiracy theory or how long they took to make their decision.

#### **B. THEORETICAL IMPLICATIONS**

The ability to overcome conspiracy blindness, however, does not guarantee a reduction in conspiracy belief. In Study 2, participants reported their belief in each statement after reporting whether they believed the statement contained a conspiracy theory. Many participants were still willing to report that they thought the conspiracy statements were "completely true," even when they acknowledged that they contained conspiracy theories.

Conspiracy blindness may explain popular perceptions of conspiracy theorists.

Conspiracy theorists are generally perceived as a fringe group that makes up a very small portion of the population. In reality, conspiracy belief is fairly common. More than half of the U.S. population believes at least one conspiracy theory (Oliver & Wood, 2014), and at two points in American history, over 80% of the U.S. population believed a conspiracy theory about the Kennedy assassination (Swift, 2013).

#### C. PRACTICAL IMPLICATIONS

There are a number of implications of the finding that people tend to be blind to the idea that they believe conspiracy theories. For example, people may believe that conspiracy theorists are rare because they are not aware of their own conspiracy beliefs. In many situations, people tend to think that their beliefs and behaviors are relatively common (the false consensus effect; Mullen, Atkins, Champion, Edwards, Hardy, Story, & Vanderklok, 1985; Ross, Greene, & House, 1977). If people recognize that some of their beliefs are conspiracy theories and believe that others share those beliefs, they may begin to wonder if conspiracy belief is more common

than they'd previously thought. For example, people who are opposed to vaccinations tend to believe that many others share their concerns (Rabinowitz, Latella, Stern, & Jost, 2016). If they recognize that some of their concerns about vaccinations qualify as conspiracy theories, they are more likely to recognize that people who share those concerns also believe conspiracy theories.

Overcoming conspiracy blindness and gaining self-awareness of one's own conspiracy beliefs may have other consequences like reducing negative stereotypes about conspiracy theorists. Conspiracy theories and conspiracy theorists are treated as if they are mentally ill or foolish in popular media (Carter, 1993; Colbert, 2017) and occasionally academia (Bjerg & Presskorn-Thygesen, 2017). Conspiracy theories may seem strange or irrational to people who do not realize that they hold similar beliefs. It may be that making people self-aware of their own conspiracy beliefs could reduce some of the negative stereotypes about conspiracy theorists. More perceived similarity with an outgroup is associated with less stereotyping of that outgroup (Ames, Weber, & Zou, 2012). If people realize that they believe conspiracy theories, they may realize that they have something in common with so-called "conspiracy theorists" and be less likely to believe negative stereotypes about them. That said, there are a wide variety of conspiracy beliefs, so this hypothetical reduction in negative stereotypes may only occur when the perceiver believes their target's conspiracy beliefs are similar to their own.

Given the negative stereotypes about conspiracy theorists and conspiracy theories, it is tempting to think that overcoming conspiracy blindness might reduce conspiracy belief. Most people consider themselves to be rational (Pronin, Gilovich, & Ross, 2004) and think that they are capable of recognizing fake and biased news. Unfortunately, the average person has difficulty recognizing false information that is consistent with their pre-existing beliefs (Pennycook & Rand, 2019). Conspiracy blindness may reinforce peoples' confidence in their

ability to evaluate the legitimacy of information. If they are unaware that they hold beliefs that might be considered "irrational" (e.g., conspiracy theories) they may have undue confidence in their own rationality. If they are made aware of one or more of their conspiracy beliefs, they may become more critical of their other beliefs and where they are receiving their information.

Unfortunately, given the data in these studies and in past research, this seems unlikely. Labeling peoples' conspiracy beliefs as conspiracy theories does not reduce self-reported belief in those conspiracy theories on an anonymous survey (Wood, 2016).

Although overcoming conspiracy blindness may not change belief, it may change behavior. Calling a claim a conspiracy theory in a public setting (e.g. one member of British Parliament calling another member's claim a conspiracy theory) can reduce repetitions of that claim in that setting (McKenzie-McHarg & Fredheim, 2017). Overcoming conspiracy blindness may not reduce belief in conspiracy theories, but if people are aware that some of their beliefs are conspiracy theories, they may be less likely to share those beliefs, thereby slowing the spread of conspiracy theories. That said, McKenzie-McHarg et al. (2017)'s findings come from a very specific context (British parliamentary debates). British politicians may have very different social concerns than, for example, the average American citizen. Further research should examine whether overcoming conspiracy blindness can deter people from repeating a conspiracy theory in other contexts, such as on social media or during informal social gatherings. It may be that people only refrain from expressing conspiracy belief if they believe that the people around them consider their claims to be conspiracy theories.

#### D. POSSIBLE LIMITATIONS

Although people are capable of recognizing that others would consider their beliefs conspiracy theories, they may not agree with them. In other words, people may acknowledge

that others consider their belief to be a conspiracy theory, but they may not acknowledge that it is a conspiracy theory. Consistent with this possibility, one participant in Study 2 mentioned that they were not sure "whether [they were] supposed to be using [their] own judgment" or whether they were supposed to use the study's definition for "conspiracy theory" to make their decision about whether a given belief was a conspiracy theory. Other, more recent research demonstrates that many peoples' personal definitions for "conspiracy theory" prevent them from concluding that anything they believe to be true is a conspiracy theory (e.g., they believe that a conspiracy theory is always false; Nera, Leveaux, & Klein, 2020). Regardless of whether participants accept researchers' definition for "conspiracy theory" as a legitimate one, Studies 1 and 2 demonstrate that they have considerable difficulty recognizing conspiracy theories without a unified definition and have very little difficulty recognizing them when provided with a unified definition. In other words, regardless of people's personal definition, they can overcome their conspiracy blindness and recognize that others might consider their belief a conspiracy theory when given the right tools (e.g., more awareness of the expert definition and incentive to evaluate their belief).

Access to these tools may have negative consequences as well. Although having access to the definition for "conspiracy theory" increased participants' ability to recognize conspiracy theories, it also made them more skeptical of mainstream information. They were more likely to label conspiracy theories as conspiracy theories, but they were also more likely to label mainstream statements as conspiracy theories. This finding raises concerns about attempts to debunk conspiracy theories and research that tests methods of debunking conspiracy theories (e.g., Martin, 2020; Stojanov, 2015). Few studies in the debunking literature examine how efforts to debunk misinformation influences perceptions of true information (e.g., Chen, Jones, Hall, &

Albarracin, 2017; van der Meer & Jin, 2020). Although debunking strategies may reduce conspiracy belief, they may also reduce belief in information from official sources.

#### E. FUTURE DIRECTIONS

It is not clear whether believers would need these same tools to recognize conspiracy theories with supernatural elements (e.g., lizard people ruling the earth, alien spacecrafts hidden in Area 51). Supernatural conspiracy theories are generally considered more outlandish because they include elements that are either outside the bounds of or inconsistent with scientific knowledge. It may be that people who believe these supernatural conspiracy theories do not experience the same conspiracy blindness as people who believe more mundane conspiracy theories and are aware that their beliefs constitute conspiracy theories. That said, belief in mundane conspiracy theories is likely to be more widespread than belief in supernatural conspiracy theories and likely has more of an influence on the average person's attitudes and behavior. Overall, belief in supernatural conspiracy theories, and whether people experience conspiracy blindness for these theories, are outside the scope of this paper but represent interesting domains for future research into the full extent of conspiracy theory blindness.

There is also the matter of people who embrace the label "conspiracy theorist." Some people are drawn to conspiracy theories because they have embraced the identity of being a conspiracy theorist. The choice to identify as a conspiracy theorist is at least partially attributable to people's need for uniqueness (Imhoff & Lamberty, 2017). These people are aware that their beliefs are conspiracy theories. However, both Studies 1 and 2 found a negative association between belief and recognition of conspiracy theories, suggesting that these individuals are not representative of the average person that believes conspiracy theories.

#### F. CONCLUSION

In summary, the results of the studies presented here suggest that people suffer from conspiracy blindness: They have difficulty recognizing their own beliefs as conspiracy theories. Conspiracy theory blindness is not due to a refusal of people to believe that they believe conspiracy theories, but exists because they are not self-critical of their beliefs. Although they recognize that conspiracy theories and theorists exist, it does not occur to them that they might be one of them.

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#### VII. APPENDICES

#### A. APPENDIX A

#### hel COVID-19: Perfect cover for mandatory biometric ID

The article went on to say that...

- Pharmaceutical and technology companies are pushing for Biometric ID.
- These companies claim this is to track COVID-19, but they intend to use it for other purposes.
- The Biometric ID could be used to share private health information with these companies without the consent of the patient.

# hc2 CNN heavily revises article called out for looking suspiciously like Chinese news release The article went on to say that:

- CNN wrote the original article in cooperation with the Chinese media.
- The original article was copied from a Chinese military news release. When readers noticed this, the original article was deleted and is no longer available on CNN's website.
- The original article was propaganda, intended to decrease faith in the United States' government.

# hc3 Coming to a wall or lamppost near you – 5G and fake diseases to cover up its effects The article went on to say that:

- Governments and technology companies are working to roll out 5G over the next two years.
- These companies claim that 5G is safe, and are suppressing information about its negative health effects.
- 5G radiation can cause illnesses and damage DNA, cells, and organs.

### hc4 New WikiLeaks Documents Expose Doctoring of Chemical Weapons Report to Justify 2018 US Attack on Syria

The article went on to say that...

- The U.S. Government modified official documents.
- The government modified the documents to suppress evidence that Syria's leader was not behind a chemical attack.
- They doctored the report to frame Syria's leader and justify going to war with Syria.

# hc5 Psychologist: big tech will use "subliminal methods" to shift 15 million votes on election day

The article went on to say that...

- Search engines and social media websites are intentionally modifying their code to shift voter opinion.
- These companies have not told anyone. This was uncovered by a reporter.
- If their plan succeeds, this risks undermining the will of the people.

### hc6 China launches biological warfare agenda: Covertly infiltrates plane with "Trojan Horse" coronavirus carrier

The article went on to say that...

- The Chinese government placed someone infected with COVID-19 on a plane to Taiwan.
- This was a covert operation.
- This infected everyone on the plane, and may have accelerated the rate of infection in Taiwan.

# hc7 Cover-up: Iran refuses to hand over black box data of plane that crashed over Tehran The article went on to say that...

- The Iranian government is not allowing investigators to examine evidence of the cause of a

plane crash.

- They are doing this to cover up the true cause of the crash.

- That some sort of incident occurred on the plane that caused it to crash.

#### hc8 "Undeniable Evidence": Explosive Classified Docs Reveal Afghan War Mass Deception

The article went on to say that...

- Pentagon leaders were behind the deception.
- Though they knew that the war was 'unwinnable,' they lied to prolong it.
- They spent \$1 trillion in taxpayer money and prolonged a war that cost many people their lives.

#### hc9 The same people who lied about WMDs in Iraq are pushing conflict with Iran

The article went on to say that...

- The U.S. government was behind the plot.
- They claimed that people from Iran were behind terrorist attacks, when there is no evidence that this is the case.
- This war would lead to many deaths.

### hc10 Alarming report reveals secretive surveillance state powered by your phone's location services

The article went on to say that...

- Tech companies are using location information to track people from one location to another.
- They claim that their location information is anonymized, but it is not.
- They can sell this information to others without your consent.

## hc11 New "Out of Shadows" documentary exposes the media and Hollywood for manipulating the masses with lies and propaganda

The article went on to say that...

- The media and Hollywood engage in social engineering to manipulate the public.
- The media often neglects reporting on the misdeeds of its members.
- Crimes members of the media commit are swept under the rug.

### hc12 Ads warning about dangers of 5G banned by Great Britain's advertising "authority"

The article went on to say that...

- The part of the U.K.'s government that regulates advertisements has banned ads questioning the safety of 5G.
- By doing this, the U.K. is hiding 5G's negative health effects.
- An Italian study suggested that exposure to 5G could increase the risk of cancer.

## hc13 What Happened on the Planes on September 11, 2001? The 9/11 Cell Phone Calls. The 9/11 Commission "Script" Was Fabricated

The article went on to say that...

- The 9/11 commission wrote the report.
- The commission claimed they had information from cell phone calls originating from the planes, but the technology to make cell phone calls from airplanes was not available in 2001.
- This suggests that the 9/11 commission fabricated most of its information and may have lied about the real cause of the 9/11 attacks.

### hc14 US Congress cracks down on ABC News for 'Epstein coverup,' demands to know who killed the story and why

The article went on to say that...

- ABC network executives were aware of Epstein's crimes many years before they were revealed to the public.

- These executives told their reporters not to report on the story.
- If ABC's executives did not bury this story, many of Epstein's victims may have been saved.

# hc15 Did someone murder the wife of a Google whistleblower whose research implicated the tech giant in election meddling?

The article went on to say that...

- Google was manipulating search results to influence elections.
- One of their employees discovered this and tried to share this information.
- The employee's wife died shortly after. He believes that she was murdered in retaliation.

# mh1 WHO warning: No evidence that antibody tests can show coronavirus immunity The article went on to say that...

- The World Health Organization (WHO) said there is no evidence that contracting and recovering from COVID-19 makes someone immune to the virus.
- They issued a warning about this information to the public.
- The WHO hopes this information will prevent further spread of the virus.

### mh2 Pentagon to extend troop movement freeze to June 30

The article went on to say that...

- The Pentagon has asked troops not to engage in international travel until June 30th.
- A Pentagon official is quoted, discussing the decision.
- The Pentagon hopes to slow the spread of COVID-19.

mh3 American voters worry they can't spot misleading information, poll finds

The article went on to say that...

- A PBS/NPR/Marist poll found that the majority of Americans think that identifying misinformation is difficult.

- The percentages of each response from the poll is reported.
- The article expresses concern that misinformation may affect upcoming elections.

mh4 Iranian Missile Accidentally Brought Down Ukrainian Jet, Officials Say

The article went on to say that...

- U.S. intelligence and Canadian intelligence suggests that the missile strike was unintentional.
- The Prime Ministers of Canada and Britain and the President of the United States expressed their belief that it was a mistake to reporters. There will be an investigation, and all information from the investigation will be shared with the public.
- 176 people died.

mh5 New Google site shows where people in a community are taking social distancing seriously — and where they're not

The article went on to say that...

- Google has launched a website that uses population data to show social distancing in locations like groceries, stores, parks, and homes.
- The website allows anyone to view its data.
- They hope this data will be useful for public health departments.

mh6 FDA approves new drug for patients with metastatic breast cancer

The article went on to say that...

- Seattle Genetics created the drug.

- The director of the FDA made a statement announcing the drug's approval.

- This provides an additional treatment option for people with this disease.

#### mh7 Canada shooting: gunman kills 16 people after rampage in Nova Scotia

The article went on to say that...

- A single gunman killed 16 people in Nova Scotia.

- This was done in and around a single house.

- It was the worst mass shooting in modern Canadian history.

### mh8 Appeals court sides with feds on Jeffrey Epstein deal

The article went on to say that...

- The appeals court concluded that the prosecution's actions in the Epstein case did not violate victims' rights.

- The appeals court wrote a public opinion to explain its decision.

- A representative of the appeals court further said that, while their decision was consistent with the law, he did not believe that the law was morally sound.

### mh9 World News Updates: Singapore's Control Slips, as Europe Begins to Ease

#### **Coronavirus Limits**

- Singapore's government has loosened restrictions set in place due to COVID-19.
- Singapore's citizens have taken advantage, going outside and socializing.
- As a consequence, Singapore is seeing another spike in cases.

# mh10 East Bay student who made 'terrorists' video settles with school district over free speech lawsuit

The article went on to say that...

- A student released a video that some claimed was racist and insensitive. His high school punished him, and he filed a lawsuit claiming that the school district was restricting his free speech.

- After three years, the school district agreed to settle the case.
- The school district will issue a public apology and pay him and his family \$665,000.

## mh11 DOJ review finds material errors in two 2019 surveillance applications

The article went on to say that...

- The Department of Justice (DOJ) found errors in two applications for surveillance warrants.
- The DOJ wrote a report that explained the errors, and steps it was taking to prevent such errors in the future.
- After a review, the DOJ concluded that, without the errors, their agency would have still reached the same decision for both applications.

### mh12 Iran president says Iran responded, will respond to assassination of Soleimani

The article went on to say that...

- Soleimani was killed in a U.S. drone strike.
- The President announced that the U.S. assassinated Soleimani because he was both directly and indirectly responsible for many deaths.
- Iran's president stated that Soleimani was a national hero.

### mh13 Wikileaks founder Julian Assange denied bail by London court

The article went on to say that...

- Assange was charged with 18 criminal counts of hacking.
- The court and Assange's lawyer both discussed the decision with the media.
- Assange's lawyer is concerned that his health is too poor for him to attempt to run.

### mh14 New York 9/11 victim identified 18 years later

The article went on to say that...

- This is the 1645th victim to be identified after the attack.
- The press is withholding his name at the request of the family.
- 40% of those who died remain unidentified.

## mh15 Afghan conflict: US and Taliban sign deal to end 18-year war

The article went on to say that...

- The US and NATO allies have agreed to withdraw all of their troops from Afghanistan within 14 months, assuming that the Taliban upholds its end of the deal.
- The US President made a statement about the agreement at a recent press conference.
- This would end a war that has killed many soldiers and civilians.

## cs1 Lobbyists for pharmaceutical companies are pushing state governments to require vaccinations.

- Pharmaceutical companies are motivated to sell vaccines to turn a profit.
- While they are aware that there are potentially harmful effects of vaccines, they are hiding those effects.
- These lobbyists are trying to pass laws that require every child to be vaccinated, even against their parents' wishes.

## cs2 The Chinese government is using its influence to force Google to suppress unfavorable information.

- The Chinese government has been putting pressure on Google for many years.
- They have used their power to suppress unfavorable search results, and silence activists.
- This makes it more difficult for other countries to learn about human rights abuses in China.

cs3 Companies that sell smart technology like Google Home and Alexa are collecting information on their customers without their customers' knowledge, and selling that information to third parties.

- Tech companies have created devices that can record and broadcast information from consumers' homes.
- They do not inform customers that they are collecting this data, or what they do with this data.
- They are sharing private information with others without their customers' consent for their own profit.

### cs4 COVID-19 ("the coronavirus") was created in a lab in China as a bioweapon.

- The Chinese government funded the creation of the virus.
- Their researchers are spreading misinformation that the virus emerged naturally.
- COVID-19 has killed many people and infected many more.

# cs5 Technology companies are suppressing information on the negative health effects of 5G networks.

- Technology companies have created 5G technology and are building 5G towers all over the world.
- They claim that 5G is safe and hide information that contradicts them.
- Studies show that 5G can have negative health effects, including increasing a risk of cancer.

# cs6 Several members of UK's Parliament were behind the 2005 London bombings in an attempt to increase support for military intervention in the Middle East.

- This group acted without the knowledge of the majority of the members of parliament.
- They framed several Islamic men for the attacks.
- The attack killed 52 people and injured 700 more.

cs7 Amazon's publicity department has been paying television stations to air scripted statements disguised as news reports.

- Amazon's publicity department is responsible for ensuring that the company maintains a good reputation.
- While Amazon told the station to claim that their source for the stories was a reporter, one station let slip that their source was an Amazon employee.
- Amazon is using these statements to push its personal political interests.
- cs8 Researchers have discovered a cure for cancer, but pharmaceutical companies are suppressing information about it.
- If there was a widely available cure for cancer, pharmaceutical companies would lose money because they produce the medication for long-term treatment.
- Pharmaceutical companies are using their money and influence to prevent news of the cure from becoming widespread.
- Patients who would otherwise be cured are dying in the absence of a widely available cure.
- cs9 Jeffery Epstein was assassinated to prevent him from sharing information that would harm powerful politicians.
- Many powerful people were involved in Epstein's sex-trafficking ring. Epstein was in custody and may have revealed their names to the public.
- These powerful people assassinated Epstein to prevent him from implicating them in the ring.
- Many people involved in the ring may never be caught and prosecuted and may go on to commit further crimes.
- cs10 The New England Patriots won against the Jacksonville Jaguars in the 2018 NFL Playoffs because they'd paid off the referees to make calls in their favor.

- The Patriots' coaches and owner bribed the referees to help them win.
- The transaction was done in cash to prevent anyone from finding out.
- As a result, the Jaguars lost the NFL Playoffs.

# cs11 The U.S. government faked the moon landing to gain an advantage in the Cold War over Russia.

- The footage that is currently available was filmed on a television set. There are several clues indicating this, including the flag waving when there is no wind on the moon.
- The U.S. government is suppressing evidence that the moon landing to this day, and attempting to discredit people who have found flaws in the footage.
- Millions of taxpayer dollars have been wasted to maintain this lie.

# cs12 Paul McCartney died in the 1960s, and his music label replaced him with a look-alike to avoid losing money

- The Beatles were the music label's most popular band at the time. If they lost a member, it would have cost them a huge amount of money.
- If anyone found out that Paul was replaced, it would be a scandal that would tarnish the label's reputation.
- The replacement took credit for Paul's accomplishments, and the label continued to make money under false pretenses.

### cs13 Princess Diana was assassinated to prevent her from embarrassing the royal family.

- The Royal Family has a long-standing reputation to protect. Princess Diana had done something that would have embarrassed the family.
- The official investigation claimed that Diana was killed in a car accident, but the crash was not

an accident.

- Diana was popular among the public, and her death devastated people all over the world.

### cs14 There is a secret weapons testing facility hidden under the Denver Airport.

- The U.S. government has built a testing facility under the Denver airport. Its location allows them to move people and supplies in large quantities without arousing suspicion.
- The government has consistently denied this facility's existence.
- This facility creates weapons with massive destructive power.

# cs15 During the Cold War, the KGB assassinated several scientists that were working on US defense department projects.

- Six scientists that were working on classified projects died under suspicious circumstances in the space of a year.
- Most of the deaths were ruled as suicides or accidents.
- Several more scientists working on classified projects died under suspicious circumstances in the following years.

# ms1 Several army veterans bombed a federal building in Oklahoma City as retaliation for federal government's perceived incompetence in several investigations.

- These veterans drove a truck containing explosives into the building.
- Both perpetrators were caught on the day of the bombing.
- 168 people died in the attack and hundreds more were injured.

# ms2 The U.S. sent troops to Libya to assist its government in its conflict with several militant groups.

- Various countries, including Russia, have sent troops to Libya in recent years.

- In early 2020, the U.S. announced it was withdrawing all of these troops from Libya.
- Libya has requested that the U.S. send them troops again to reduce Russia's influence in the country.

ms3 Tech companies are investing in new technology that will allow them to automate various tasks including checking out customers at stores and packaging products for shipment.

- Other tasks would include stocking shelves and additional manufacturing processes.
- Amazon has recently opened a store that uses some of this technology.
- While this technology would eliminate some jobs, it would create others.

ms4 Some governments are tracking the movement of people who are diagnosed with COVID-19 to predict which communities will need the most resources.

- This technology is being used in several countries, and primarily operates using smart phone GPS.
- The countries using this technology have announced that it is largely successful in slowing the spread of the virus.
- The ability to predict which communities will be hardest hit has allowed these countries to get ahead of the virus, and prepare hospitals for flare-ups in cases.

ms5 All 50 states in the U.S. require that students are vaccinated before enrolling in public schools, though some exemptions are available for health and religious reasons.

- State governments have different laws regarding vaccinations.
- Individual states' laws are available on their official web pages.
- Vaccination prevents the contraction and spread of serious diseases. However, some people

cannot safely receive vaccinations due to compromised immune systems. They rely on others being vaccinated to avoid contracting these diseases.

ms6 The man who drove a car into counter-protesters during the "Unite the Right" rally in Charlottesville, Virginia was charged with first-degree murder and various other offenses.

- While the man was attending the rally, he acted alone while driving the car.
- There were hundreds of witnesses, and his actions were caught on camera.
- One person was killed, and several more were injured.

ms7 The International Monetary Fund (IMF) is an international organization that encourages economic cooperation and provides loans to countries in need.

- The IMF employs people from all over the world.
- Information about its activities are available on its website.
- The IMF's mission is ensuring international economic stability to the extent it is possible.

ms8 Scientists are developing a method to create 3-D printed organs for patients in need.

- Different labs have created 3D printed organs that can be made of either artificial or organic materials.
- New breakthroughs are announced frequently, and clinical trials are in progress.
- There is a shortage of organ donors. Advances in artificial organs would help thousands of people across the world.

### ms9 John Lennon was murdered by a man who wanted media attention.

- The killer's name was Mark David Chapman.
- He shot John Lennon in front of his apartment building. He then waited at the scene for the police to arrest him.

- John Lennon was a member of the popular band, the Beatles, which he left several years before his death. People all over the world were saddened by the news.

# ms10 The Toronto Raptors won against the Golden State Warriors in the 2019 NBA finals, winning four of the six games in the series.

- They won the final game of the series with a score of 114 to 110.
- The 2019 NBA finals received 20.5 million viewers across the United States and Canada.
- While the Raptors' fans were delighted, the Warriors' fans were disappointed.

## ms11 Martin Luther King Jr. was assassinated by an escaped prisoner in 1968.

- The assassin was named James Earl Ray.
- MLK was shot on the balcony of his motel room in view of pedestrians.
- He later died in the hospital without regaining consciousness.

## ms12 Heath Ledger died from overdosing on prescription drugs.

- Heath Ledger was an award-winning actor.
- The overdoes appears to have been accidental.
- His many fans were saddened by his death.

# ms13 Spanish princess Maria Teresa was the first member of a royal family to die from COVID-19.

- Princess Maria died on March 26th, 2020.
- Her memorial service was held the next day and her death was announced on an official website.
- She was dedicated to democracy and social justice in Spain.

## ms14 An airport in Wisconsin has put on a drive-through lights display.

- The employees put on the display in response to COVID-19.
- The display was publicized on several travel websites and various news sites. It included lights displays representing destinations like New York City and Las Vegas.
- The goal of the display was to provide entertainment while maintaining social distancing.

## ms15 Researchers are making significant progress on curing HIV.

- Researchers all over the world have been working to find a cure for decades.
- They recently announced that stem cell transplants appear to have cured HIV in two individuals.
- Formerly an extremely deadly autoimmune disease, we may have a widely available cure for HIV within the next decade.

Appendix**B.** APPENDIX B

In this study, you will be presented with headlines and summaries of various articles.

**First** you will rate how true you believe the statement is. If you are not sure if it is true or false, please select 4 (neither false nor true).

**Second** you will be asked if the article contains a conspiracy theory. Please use your best judgment.

**Third** you will be asked if you would like to explain your answer to the previous question. If you would like to explain your answer, you will be given the opportunity to write an explanation. If you would not like to explain your answer, you will advance to the next headline.

Page Break

You will now see and respond to twenty headlines and article summaries.

Some of these articles contain conspiracy theories, and some do not.

Once you are done responding to the headlines and article summaries, you will provide some demographic information, and the survey will end.

**End of Block: Instructions** 

Start of Block: CS1

**COVID-19: Perfect cover for mandatory biometric ID** 

The article went on to say that...

- Pharmaceutical and technology companies are pushing for Biometric ID.
- These companies claim this is to track COVID-19, but they intend to use it for other purposes.

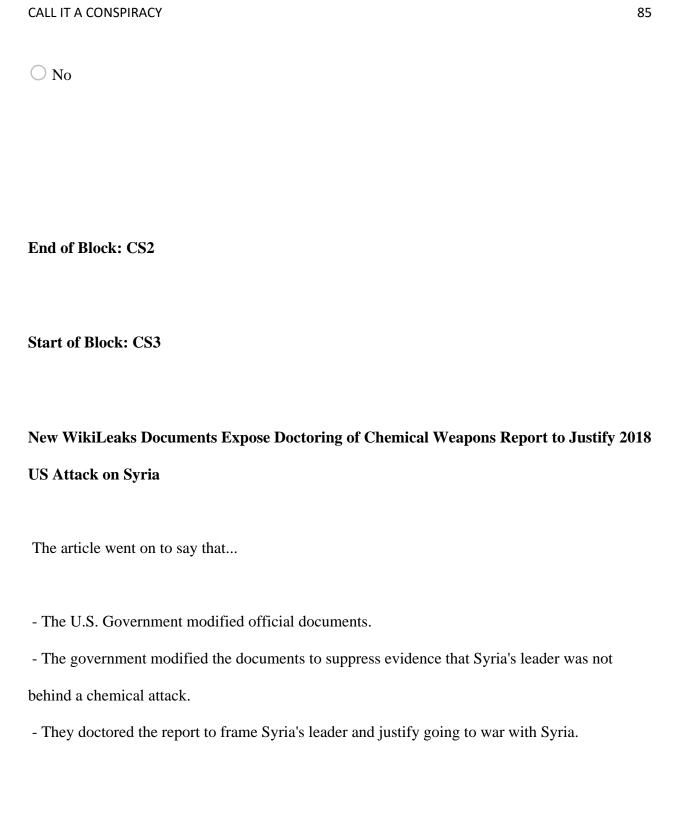
- The Biometric ID could be used to share private health information with these companies
without the consent of the patient.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
O 2
$\bigcirc$ 3
○ 4- Neither False nor True
O 5
O 6
O 7 - Completely True

Does this article contain a conspiracy theory? O Yes O No **End of Block: CS1** Start of Block: CS2 Coming to a wall or lamppost near you – 5G and fake diseases to cover up its effects The article went on to say that: - Governments and technology companies are working to roll out 5G over the next two years. - These companies claim that 5G is safe, and are suppressing information about its negative health effects. - 5G radiation can cause illnesses and damage DNA, cells, and organs.

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**CALL IT A CONSPIRACY** 

How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
$\bigcirc$ 2
O 3
4- Neither False nor True
O 5
O 6
O 7 - Completely True
Does this article contain a conspiracy theory?
○ Yes



How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
○ 1 - Completely False
$\bigcirc$ 2
$\bigcirc$ 3
O 4- Neither False nor True
O 5
O 6
○ 7 - Completely True
Does this article contain a conspiracy theory?
○ Yes
○ No

End of Block: CS3 Start of Block: CS4 New WikiLeaks Documents Expose Doctoring of Chemical Weapons Report to Justify 2018 **US Attack on Syria** The article went on to say that... - The U.S. Government modified official documents. - The government modified the documents to suppress evidence that Syria's leader was not behind a chemical attack.

- They doctored the report to frame Syria's leader and justify going to war with Syria.

CALL IT A CONSPIRACY

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How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
O 3
O 4- Neither False nor True
O 5
O 6
O 7 - Completely True
Does this article contain a conspiracy theory?
○ Yes
○ No

End of Block: CS4
Start of Block: CS5
Psychologist: big tech will use "subliminal methods" to shift 15 million votes on election
day
The article went on to say that
- Search engines and social media websites are intentionally modifying their code to shift voter opinion.
- These companies have not told anyone. This was uncovered by a reporter.
- If their plan succeeds, this risks undermining the will of the people.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?

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Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
O 2
O 3
○ 4- Neither False nor True
O 5
O 6
O 7 - Completely True
Does this article contain a conspiracy theory?
○ Yes
○ No

End of Block: CS5

Start of Block: CS6
"Undeniable Evidence": Explosive Classified Docs Reveal Afghan War Mass Deception
The article went on to say that
<ul> <li>Pentagon leaders were behind the deception.</li> <li>Though they knew that the war was 'unwinnable,' they lied to prolong it.</li> <li>They spent \$1 trillion in taxpayer money and prolonged a war that cost many people their</li> </ul>
lives.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
○ 1 - Completely False ○ 2

4- Neither False nor True
5
6
7 - Completely True

Does this article contain a conspiracy theory?

Yes

End of Block: CS6

 $\bigcirc$  No

Start of Block: CS7

Alarming report reveals secretive surveillance state powered by your phone's location
services
The article went on to say that
- Tech companies are using location information to track people from one location to another.
- They claim that their location information is anonymized, but it is not.
- They can sell this information to others without your consent.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
○ 1 - Completely False
$\bigcirc$ 2
$\bigcirc$ 3

O 4- Neither False nor True

O 5

O 6
7 - Completely True
Does this article contain a conspiracy theory?
○ Yes
○ No
End of Block: CS7
Start of Block: CS8
New "Out of Shadows" documentary exposes the media and Hollywood for manipulating
the masses with lies and propaganda
The article went on to say that

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- The media and Hollywood engage in social engineering to manipulate the public.
- The media often neglects reporting on the misdeeds of its members.
- Crimes members of the media commit are swept under the rug.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
$\bigcirc$ 3
○ 4- Neither False nor True
O 5
O 6
O 7 - Completely True

Does this article contain a conspiracy theory?
○ Yes
○ No
End of Block: CS8
Start of Block: CS9
US Congress cracks down on ABC News for 'Epstein coverup,' demands to know who
killed the story and why
The article went on to say that
- ABC network executives were aware of Epstein's crimes many years before they were revealed
to the public.

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- These executives told their reporters not to report on the story.
- If ABC's executives did not bury this story, many of Epstein's victims may have been saved.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
O 2
O 3
○ 4- Neither False nor True
O 5
O 6
O 7 - Completely True

Does this article contain a conspiracy theory? O Yes O No **End of Block: CS9** Start of Block: CS10 Did someone murder the wife of a Google whistleblower whose research implicated the tech giant in election meddling? The article went on to say that... - Google was manipulating search results to influence elections. - One of their employees discovered this and tried to share this information.

- The employee's wife died shortly after. He believes that she was murdered in retaliation.

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**CALL IT A CONSPIRACY** 

How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
$\bigcirc$ 2
$\bigcirc$ 3
O 4- Neither False nor True
O 5
O 6
○ 7 - Completely True
Does this article contain a conspiracy theory?
Does this article contain a conspiracy theory?
○ Yes
○ No

End of Block: CS10
Start of Block: MS1
WHO warning: No evidence that antibody tests can show coronavirus immunity
The article went on to say that
- The World Health Organization (WHO) said there is no evidence that contracting and recovering from COVID-19 makes someone immune to the virus.
- They issued a warning about this information to the public.
- The WHO hopes this information will prevent further spread of the virus.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely True)?

100

Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
$\bigcirc$ 2
$\bigcirc$ 3
O 4- Neither False nor True
O 5
O 6
○ 7 - Completely True
Does this article contain a conspiracy theory?
○ Yes
○ No

End of Block: MS1
Start of Block: MS2
New Google site shows where people in a community are taking social distancing seriously
— and where they're not
The article went on to say that
- Google has launched a website that uses population data to show social distancing in locations
like groceries, stores, parks, and homes.
- The website allows anyone to view its data.
- They hope this data will be useful for public health departments.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?

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CALL IT A CONSPIRACY

Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
O 3
O 4- Neither False nor True
O 5
O 6
O 7 - Completely True
Does this article contain a conspiracy theory?
O Yes
○ No

End of Block: MS2

Start of Block: MS3
FDA approves new drug for patients with metastatic breast cancer
The article went on to say that
- Seattle Genetics created the drug.
<ul><li>The director of the FDA made a statement announcing the drug's approval.</li><li>This provides an additional treatment option for people with this disease.</li></ul>
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False

105

CALL IT A CONSPIRACY

Start of Block: MS4

## Canada shooting: gunman kills 16 people after rampage in Nova Scotia The article went on to say that... - A single gunman killed 16 people in Nova Scotia. - This was done in and around a single house. - It was the worst mass shooting in modern Canadian history. How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely True)? Please select 4 (Neither False nor True) if you are not sure. 1 - Completely False $\bigcirc$ 2 $\bigcirc$ 3

4- Neither False nor True

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CALL IT A CONSPIRACY

The article went on to say that...

- The appeals court concluded that the prosecution's actions in the Epstein case did not violate
victims' rights.
- The appeals court wrote a public opinion to explain its decision.
- A representative of the appeals court further said that, while their decision was consistent with
the law, he did not believe that the law was morally sound.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
O 2
O 3
O 4- Neither False nor True
O 5
O 6

7 - Completely True
Does this article contain a conspiracy theory?
○ Yes
○ No
End of Block: MS5
Start of Block: MS6
World News Updates: Singapore's Control Slips, as Europe Begins to Ease Coronavirus
Limits
- Singapore's government has loosened restrictions set in place due to COVID-19.

109

- Singapore's citizens have taken advantage, going outside and socializing.
- As a consequence, Singapore is seeing another spike in cases.
How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
O 2
O 3
○ 4- Neither False nor True
O 5
O 6
7 - Completely True

Does this article contain a conspiracy theory?
○ Yes
○ No
End of Block: MS6
Start of Block: MS7
DOJ review finds material errors in two 2019 surveillance applications
The article went on to say that
- The Department of Justice (DOJ) found errors in two applications for surveillance warrants.
- The DOJ wrote a report that explained the errors, and steps it was taking to prevent such errors
in the future.
- After a review, the DOI concluded that, without the errors, their agency would have still

reached the same decision for both applications.

O 5

0 6

7 - Completely True

Does this article contain a conspiracy theory?

O Yes

O No

**End of Block: MS7** 

Start of Block: MS8

East Bay student who made 'terrorists' video settles with school district over free speech

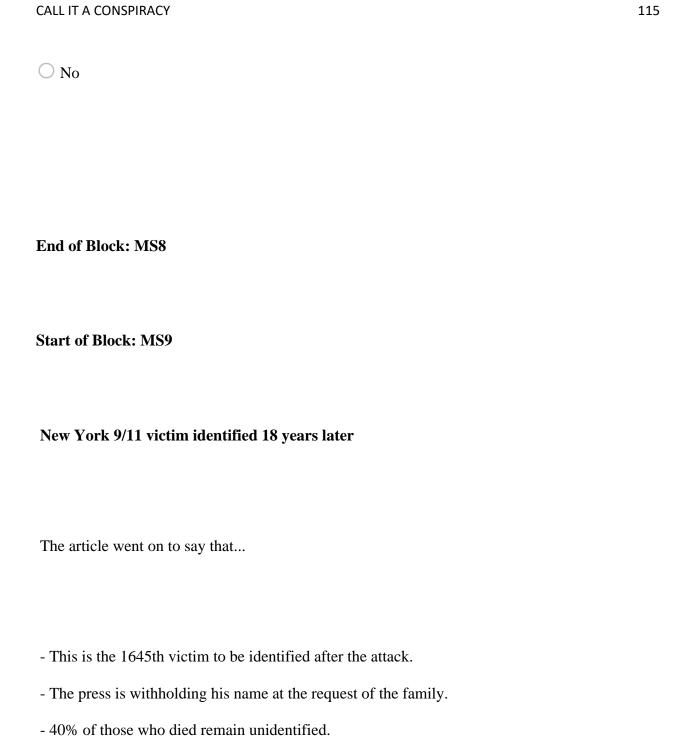
lawsuit

The article went on to say that...

- A student released a video that some claimed was racist and insensitive. His high school punished him, and he filed a lawsuit claiming that the school district was restricting his free speech.

- After three years, the school district agreed to settle the case.
- The school district will issue a public apology and pay him and his family \$665,000.

How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
rease select + (retailer raise nor true) if you are not sure.
1 - Completely False
O 2
O 3
○ 4- Neither False nor True
O 5
O 6
O 7 - Completely True
Does this article contain a conspiracy theory?
○ Yes



How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely
True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
$\bigcirc$ 2
$\bigcirc$ 3
○ 4- Neither False nor True
O 5
O 6
○ 7 - Completely True
Does this article contain a conspiracy theory?
○ Yes
○ No

**End of Block: MS9** Start of Block: MS10 Afghan conflict: US and Taliban sign deal to end 18-year war The article went on to say that... - The US and NATO allies have agreed to withdraw all of their troops from Afghanistan within 14 months, assuming that the Taliban upholds its end of the deal. - The US President made a statement about the agreement at a recent press conference. - This would end a war that has killed many soldiers and civilians. How true is the information in this article on a scale of 1 (Completely False) to 7 (Completely True)?

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End of Block: MS10

Start of Block: Demographics		
*		
Please define the term "conspiracy theory" in your own words.		
What is your age?		
What is your gender?		
○ Man		
○ Woman		
O Non-binary		
O Prefer to self-identify		

What is your political orientation?	
O Very liberal	
O Liberal	
O Slightly liberal	
O Moderate	
O Slightly conservative	
O Conservative	
O Very conservative	
What is your highest level of education?	
O Less than high school	
O High school graduate	
O Some college	
O 2-year degree	
O 4-year degree	
O Professional degree	

O Doctorate			
What is your race/ethnicity? (Check all that apply):			
	White		
	Black or African American		
	American Indian or Alaska Native		
	Hispanic/Latino		
	Asian		
	Native Hawaiian or Pacific Islander		
	Other		
What is your favorite movie?			

## C. APPENDIX C

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

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In this study, you will be presented with statements.

**First** you will rate how true you believe the statement is. If you are not sure if it is true or false, please select 4 (neither false nor true).

**Second** you will be asked if the statement contains a conspiracy theory. Please use your best judgment.

**Third** you will be asked if you would like to explain your answer to the previous question. If you would like to explain your answer, you will be given the opportunity to write an explanation. If you would not like to explain your answer, you will advance to the next headline.

Page Break

**Example Statement:** Government now forcing tractor manufacturers to build them like smartphones so they can "brick" themselves and become unusable

- Government officials are working with a prominent tractor manufacturer to change how tractors are made.- They are telling farmers that this is for the sake of keeping tractors updated, but it is really to ensure that they make more money. - Farmers now spend more money every year for less reliable equipment.

Please select all that apply.				
A group of	They are trying	They are acting	None of the 3	
people Is trying	to keep their	at the expense of	apply (4)	
to accomplish a	activity secret	others. (3)		
goal (1)	(2)			

First, select all that apply:

1. A group of people Is trying to accomplish a goal

This statement mentions that the "government" is doing something to tractor

manufacturers. The government is a group of people.

2. These parties are trying to keep their activity secret. (They are trying to hide their methods

and/or their goal from the public. This can include things like cover-ups, hoaxes, or simply not

sharing information with the public.)

There is no indication in this statement that the government is hiding its actions.

3. Their actions come at the expense of others. (Their actions hurt or disadvantage many people.)

By making tractors less reliable, the government is hurting the people that use those

tractors.

Second, rate the truth of the statement:

Rate how true you believe the statement is on a scale of 1 (Completely False) to 7 (Completely

True)

If I think that this statement is slightly true: I will select 5

If I think the statement is completely false: I will select 1

timin the statement is equally true t	and false, or I do not think that I	nave enough information to
now if it is true or false: I will selec	t 4.	
$\circ$		
you believe the statement fits the	first and third criteria, and t	hat the statement is slightly
ue, your response will look like th	nis:	
, <b>.</b>		
$\bigcirc$		
	Please select all that apply.	
A group of people Is trying to	They are trying to keep their activity secret	They are acting at the expense of others.
accomplish a goal	activity secret	•

Page Break

You will now see and respond to twenty statements.

Some of these statements contain conspiracy theories, and some do not.

Once you are done responding to the statements, you will provide some demographic information, and the survey will end.

**End of Block: Instructions** 

Start of Block: CS1

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

Companies that sell smart technology like Google Home and Alexa are collecting information on their customers without their customers' knowledge, and selling that

information to third parties.

- Tech companies have created devices that can record and broadcast information from consumers' homes.
- They do not inform customers that they are collecting this data, or what they do with this data.
- They are sharing private information with others without their customers' consent for their own profit.

Please select all that apply.				
A group of	They are trying	They are acting	None of the 3	
people Is trying	to keep their	at the expense of	apply (4)	
to accomplish a	activity secret	others. (3)		
goal (1)	(2)			

Does this article contain a conspiracy theory?
○ Yes
○ No
How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
$\bigcirc$ 2

 $\bigcirc$  3

4- Neither False nor True

0 5

0 6

7 - Completely True

**End of Block: CS1** 

CD

**Start of Block: CS2** 

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

## COVID-19 ("the coronavirus") was created in a lab in China as a bioweapon.

- The Chinese gov	ernment funded the	creation of the viru	S.	
- Their researchers	s are spreading mising	nformation that the	virus emerged natur	ally.
- COVID-19 has k	illed many people a	nd infected many m	nore.	
	Please select all that apply.			
	A group of	They are trying	They are acting	None of the 3
	people Is trying	to keep their	at the expense of	apply (4)
	to accomplish a	activity secret	others. (3)	
	goal (1)	(2)		
	'			
$\circ$				
Does this article contain a conspiracy theory?				
○ Yes				
O No				

0 5

0 6

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CALL IT A CONSPIRACY

7 - Completely True

End of Block: CS2

Start of Block: CS3

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

Technology companies are suppressing information on the negative health effects of 5G networks.

- Technology companies have created 5G technology and are building 5G towers all over the world.

- They claim that 5	- They claim that 5G is safe and hide information that contradicts them.			
- Studies show that 5G can have negative health effects, including increasing a risk of cancer				
	Please select all that apply.			
	A group of	They are trying	They are acting	None of the 3
	people Is trying	to keep their	at the expense of	apply (4)
	to accomplish a	activity secret	others. (3)	
	goal (1)	(2)		
$\circ$				
Does this article contain a conspiracy theory?				
○ Yes				
○ No				

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
$\bigcirc$ 2
O 3
○ 4- Neither False nor True
O 5
O 6
○ 7 - Completely True
End of Block: CS3

Start of Block: CS4

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

Several members of UK's Parliament were behind the 2005 London bombings in an attempt to increase support for military intervention in the Middle East.

- This group acted without the knowledge of the majority of the members of parliament.
- They framed several Islamic men for the attacks.
- The attack killed 52 people and injured 700 more.

Please select all that apply.

A group of They are trying They are acting None of the 3 people Is trying to keep their at the expense of apply (4) to accomplish a activity secret others. (3) goal (1) (2)

0					
Does this article of	contain a conspi	racy theory?			
O Yes					
○ No					
0					
How true is this s	statement on a sc	cale of 1 (Completel	y False) to 7 (Com	npletely True)?	
Please select 4 (N	Jeither False nor	True) if you are no	t sure.		

CALL IT A CONSPIRACY

140

1 - Completely False

2

3

4- Neither False nor True

5

O 6

O 7 - Completely True

**End of Block: CS4** 

**Start of Block: CS5** 

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

CALL IT A CONSPIRACY	141

Researchers have discovered a cure for cancer, but pharmaceutical companies are suppressing information about it.

- If there was a widely-available cure for cancer, pharmaceutical companies would lose money because they produce the medication for long-term treatment.
- Pharmaceutical companies are using their money and influence to prevent news of the cure from becoming widespread.
- Patients who would otherwise be cured are dying in the absence of a widely available cure.

Please select all th	at apply.		
A group of	They are trying	They are acting	None of the 3
people Is trying	to keep their	at the expense of	apply (4)
to accomplish a	activity secret	others. (3)	
goal (1)	(2)		

Does this article contain a conspiracy theory?
○ Yes
○ No
How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False

 $\bigcirc$  2

 $\bigcirc$  3

4- Neither False nor True

0 5

0 6

7 - Completely True

**End of Block: CS5** 

Start of Block: CS6

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

Jeffery Epstein was assassinated to prevent him from sharing information that would harm powerful politicians.

- Many powerful people were involved in Epstein's sex-trafficking ring. Epstein was in custody and may have revealed their names to the public.
- These powerful people assassinated Epstein to prevent him from implicating them in the ring.
- Many people involved in the ring may never be caught and prosecuted and may go on to commit further crimes.

Please select all that apply.					
A group of	They are trying	They are acting	None of the 3		
people Is trying	to keep their	at the expense of	apply (4)		
to accomplish a	activity secret	others. (3)			
goal (1)	(2)				

Does this article contain a conspiracy theory?
○ Yes
○ No
How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
O 3
4- Neither False nor True

0 5

0 6

7 - Completely True

**End of Block: CS6** 

Start of Block: CS7

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

The New England Patriots won against the Jacksonville Jaguars in the 2018 NFL Playoffs because they'd paid off the referees to make calls in their favor.

- The Patriots' coa	iches and owner bril	ped the referees to h	nelp them win.	
- The transaction v	was done in cash to	prevent anyone fror	n finding out.	
- As a result, the J	aguars lost the NFL	Playoffs.		
	Please select all that apply.			
	A group of	They are trying	They are acting	None of the 3
	people Is trying	to keep their	at the expense of	apply (4)
	to accomplish a	activity secret	others. (3)	
	goal (1)	(2)		
0				
Does this article co	ontain a conspiracy t	heory?		
O Yes				
O No				

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
O 2
$\bigcirc$ 3
○ 4- Neither False nor True
O 5
O 6
○ 7 - Completely True
End of Block: CS7

**Start of Block: CS8** 

Conspiracy theories are explanations for events or circumstances that claim a group of powerful

people is working together to accomplish a goal that comes at the expense of others, while

attempting to keep their actions or intentions a secret.

The U.S. government faked the moon landing to gain an advantage in the Cold War over

Russia.

- The footage that is currently available was filmed on a television set. There are several clues

indicating this, including the flag waving when there is no wind on the moon.

- The U.S. government is suppressing evidence that the moon landing to this day, and

attempting to discredit people who have found flaws in the footage.

- Millions of taxpayer dollars have been wasted to maintain this lie.

Please select all that apply.

	A group of	They are trying	They are acting	None of the 3
	people Is trying	to keep their	at the expense of	apply (4)
	to accomplish a	activity secret	others. (3)	
	goal (1)	(2)		
$\bigcirc$				
Does this article co	ntain a conspiracy th	neory?		
O Yes				
O No				
$\circ$				

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
O 3
O 4- Neither False nor True
O 5
O 6
O 7 - Completely True
End of Block: CS8
Start of Block: CS9

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

Princess Diana was assassinated to prevent her from embarrassing the royal family.

- The Royal Family has a long-standing reputation to protect. Princess Diana had done something that would have embarrassed the family.
- The official investigation claimed that Diana was killed in a car accident, but the crash was not an accident.
- Diana was popular among the public, and her death devastated people all over the world.

Please select all that apply.

A group of They are trying They are acting None of the 3 people Is trying to keep their at the expense of apply (4) to accomplish a activity secret others. (3) goal (1) (2)

O				
Does this article co	ontain a conspiracy	theory?		
O Yes				
O No				
0				
How true is this sta	atement on a scale o	of 1 (Completely Fal	se) to 7 (Completely	True)?
Please select 4 (Ne	either False nor True	e) if you are not sure		
1 - Comple	etely False			

 $\bigcirc$  2

 $\bigcirc$  3

4- Neither False nor True

0 5

0 6

7 - Completely True

**End of Block: CS9** 

**Start of Block: CS10** 

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

During the Cold War, the KGB	assassinated several	scientists that were	e working on US
defense department projects.			

- Six scientists that were working on classified projects died under suspicious circumstances in the space of a year.
- Most of the deaths were ruled as suicides or accidents.
- Several more scientists working on classified projects died under suspicious circumstances in the following years.

Please select all th	at apply.		
A group of	They are trying	They are acting	None of the 3
people Is trying	to keep their	at the expense of	apply (4)
to accomplish a	activity secret	others. (3)	
goal (1)	(2)		

Does this article contain a conspiracy theory?
○ Yes
○ No
How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
O 3
O 4- Neither False nor True
$\bigcirc$ 5

 $\bigcirc$  6

7 - Completely True

**End of Block: CS10** 

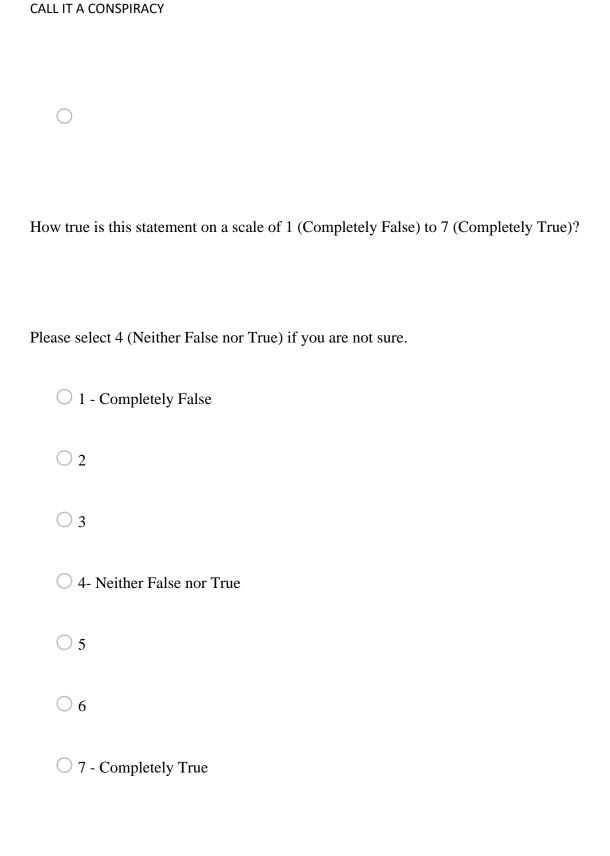
Start of Block: MS1

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

Tech companies are investing in new technology that will allow them to automate various tasks including checking out customers at stores and packaging products for shipment.

- Other tasks would include stocking shelves and additional manufacturing processes.

- Amazon has recently opened a store that uses some of this technology.				
- While this techno	ology would elimina	ate some jobs, it wo	uld create others.	
	Please select all th	at apply.		
	A group of people Is trying to accomplish a goal (1)	They are trying to keep their activity secret (2)	They are acting at the expense of others. (3)	None of the 3 apply (4)
0				
Does this article co	ontain a conspiracy t	heory?		
O Yes				
○ No				



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End of Block: MS1

Start of Block: MS2

Conspiracy theories are explanations for events or circumstances that claim a group of powerful

people is working together to accomplish a goal that comes at the expense of others, while

attempting to keep their actions or intentions a secret.

All 50 states in the U.S. require that students are vaccinated before enrolling in public

schools, though some exemptions are available for health and religious reasons.

- State governments have different laws regarding vaccinations.
- Individual states' laws are available on their official web pages.
- Vaccination prevents the contraction and spread of serious diseases. However, some people

cannot safely receive vaccinations due to compromised immune systems. They rely on others

being vaccinated to avoid contracting these diseases.

	Please select all that apply.			
	A group of	They are trying	They are acting	None of the 3
	people Is trying	to keep their	at the expense of	apply (4)
	to accomplish a	activity secret	others. (3)	
	goal (1)	(2)		
$\circ$				
Does this article c	ontain a conspiracy	theory?		
O Yes				
○ No				
$\bigcirc$				

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
O 3
O 4- Neither False nor True
O 5
O 6
O 7 - Completely True
End of Block: MS2
Start of Block: MS3

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

The man who drove a car into counter-protesters during the "Unite the Right" rally in Charlottesville, Virginia was charged with first-degree murder and various other offenses.

- While the man was attending the rally, he acted alone while driving the car.
- There were hundreds of witnesses, and his actions were caught on camera.
- One person was killed, and several more were injured.

Please select all that apply.

A group of They are trying They are acting None of the 3 people Is trying to keep their at the expense of apply (4) to accomplish a activity secret others. (3) goal (1) (2)

Does this article contain a conspiracy theory?
○ Yes
○ No
How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
$\bigcirc$ 2

34- Neither False nor True56

7 - Completely True

End of Block: MS3

. . .

Start of Block: MS4

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

The International Monetary Fund (IMF) is an international organization that encourages economic cooperation and provides loans to countries in need.

- The IMF employs people from all over the world.
- Information about its activities are available on its website.
- The IMF's mission is ensuring international economic stability to the extent it is possible.

Please select all th	at apply.		
A group of	They are trying	They are acting	None of the 3
people Is trying	to keep their	at the expense of	apply (4)
to accomplish a	activity secret	others. (3)	
goal (1)	(2)		

Does this article contain a conspiracy theory?

○ Yes
○ No
How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
$\bigcirc$ 2
○ 3
O 4- Neither False nor True
O 5
O 6

7 - Completely True

**End of Block: MS4** 

**Start of Block: MS5** 

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

Scientists are developing a method to create 3-D printed organs for patients in need.

- Different labs have created 3D printed organs that can be made of either artificial or organic materials.
- New breakthroughs are announced frequently, and clinical trials are in progress.

- There is a shortage of organ donors. Advances in artificial organs would help thousands of			
people across the world			
	Please select all that ap	pply.	
	A group of people Is trying to accomplish a goal	They are trying to keep their activity secret	They are acting at the expense of others.
0			
Does this article contain	a conspiracy theory?		
○ Yes			
○ No			

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
$\bigcirc$ 3
O 4- Neither False nor True
O 5
O 6
○ 7 - Completely True
End of Block: MS5

Start of Block: MS6

Conspiracy theories are explanations for events or circumstances that claim a group of powerful

people is working together to accomplish a goal that comes at the expense of others, while

attempting to keep their actions or intentions a secret.

John Lennon was murdered by a man who wanted media attention.

- The killer's name was Mark David Chapman.

- He shot John Lennon in front of his apartment building. He then waited at the scene for the police to arrest him.

- John Lennon was a member of the popular band, the Beatles, which he left several years before his death. People all over the world were saddened by the news.

Please select all that apply.

A group of They are trying They are acting None of the 3

people Is trying to keep their at the expense of apply (4)

others. (3)

	to accomplish a	activity secret	
	goal (1)	(2)	
0			
Does this article co	ntain a conspiracy tl	neory?	
O Yes			
○ No			
0			

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?

Please select 4 (Neither False nor True) if you are not sure.
1 - Completely False
O 2
O 3
4- Neither False nor True
O 5
O 6
7 - Completely True
End of Block: MS6
Start of Block: MS7

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

The Toronto Raptors won against the Golden State Warriors in the 2019 NBA finals, winning four of the six games in the series.

- They won the final game of the series with a score of 114 to 110.
- The 2019 NBA finals received 20.5 million viewers across the United States and Canada.
- While the Raptors' fans were delighted, the Warriors' fans were disappointed.

Please select all that apply.

A group of They are trying They are acting None of the 3 people Is trying to keep their at the expense of apply (4) to accomplish a activity secret others. (3) goal (1) (2)

Does this article contain a conspiracy theory?	
○ Yes	
○ No	
How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?	
Please select 4 (Neither False nor True) if you are not sure.	
1 - Completely False	
$\bigcirc$ 2	

O 3 4- Neither False nor True 0 5 0 6

7 - Completely True

**End of Block: MS7** 

Start of Block: MS8

Conspiracy theories are explanations for events or circumstances that claim a group of powerful people is working together to accomplish a goal that comes at the expense of others, while attempting to keep their actions or intentions a secret.

# Heath Ledger died from overdosing on prescription drugs.

- Heath Ledger was an award-winning actor.							
- The overdoes app	pears to have been a	ccidental.					
- His many fans w	ere saddened by his	death.					
	Please select all th	at apply.					
	A group of	They are trying	They are acting	None of the 3			
	people Is trying	to keep their	at the expense of	apply (4)			
	to accomplish a	activity secret	others. (3)				
	goal (1)	(2)					
$\bigcirc$							
Does this article co	ontain a conspiracy t	heory?					
○ Yes							
○ No							

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
$\bigcirc$ 3
○ 4- Neither False nor True
O 5
O 6
○ 7 - Completely True

**End of Block: MS8** 

Start of Block: MS9

Conspiracy theories are explanations for events or circumstances that claim a group of powerful

people is working together to accomplish a goal that comes at the expense of others, while

attempting to keep their actions or intentions a secret.

Spanish princess Maria Teresa was the first member of a royal family to die from COVID-

**19.** 

- Princess Maria died on March 26th, 2020.
- Her memorial service was held the next day and her death was announced on an official website.
- She was dedicated to democracy and social justice in Spain.

Please select all that apply.

	A group of people Is trying to accomplish a goal (1)	They are trying to keep their activity secret (2)	They are acting at the expense of others. (3)	None of the 3 apply (4)
Does this article co	ntain a conspiracy th	neory?		
O Yes				
O No				
0				

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?
Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
O 2
O 3
O 4- Neither False nor True
O 5
O 6
O 7 - Completely True
End of Block: MS9

Start of Block: MS10

Conspiracy theories are explanations for events or circumstances that claim a group of powerful

people is working together to accomplish a goal that comes at the expense of others, while

attempting to keep their actions or intentions a secret.

Researchers are making significant progress on curing HIV.

- Researchers all over the world have been working to find a cure for decades.

- They recently announced that stem cell transplants appear to have cured HIV in two individuals.

- Formerly an extremely deadly autoimmune disease, we may have a widely available cure for HIV within the next decade.

Please select all that apply.

A group of They are acting They are trying None of the 3

people Is trying to keep their at the expense of apply (4)

others. (3)

	to accomplish a	activity secret	
	goal (1)	(2)	
Does this article co	ntain a conspiracy tl	heory?	
O Yes			
O No			
0			

How true is this statement on a scale of 1 (Completely False) to 7 (Completely True)?

Please select 4 (Neither False nor True) if you are not sure.
O 1 - Completely False
$\bigcirc$ 2
$\bigcirc$ 3
O 4- Neither False nor True
O 5
O 6
○ 7 - Completely True
End of Block: MS10
Start of Block: Demographics
*

What is your age?

0			
What is your gender?			
O Man			
O Woman			
O Non-binary			
O Prefer to self-id	lentify		
0			
What is your political of	orientation?		
O Very liberal			
O Liberal			

O Slightly liberal	
O Moderate	
O Slightly conservative	
O Conservative	
O Very conservative	
What is your highest level of education?	
O Less than high school	
O High school graduate	
O Some college	
O 2-year degree	
O 4-year degree	
O Professional degree	

O Docto	rate
0	
What is your	race/ethnicity? (Check all that apply):
	White
	Black or African American
	American Indian or Alaska Native
	Hispanic/Latino
	Asian
	Native Hawaiian or Pacific Islander
	Other

What is your favorite movi	e?	
$\circ$		
Is there anything you'd like	e to add?	

# D. APPENDIX D

Additional statistics for Study 1.

Table 9. Means and standard deviations for belief in each article summary and correlations with demographic variables in Study 1

	M (SD)	Age	Education	Political Orientation	Mainstream Belief	Conspiracy Belief	Response Time	Score
ConAr1	4.25 (1.68)	19**	.24**	.37**	.22**	.79**	.23**	52**
ConAr2	3.84 (1.90)	19**	.34**	.36**	0.11	.72**	.24**	59**
ConAr3	4.41 (1.43)	16*	.14*	.25**	.39**	.67**	.19**	40**
ConAr4	4.39 (1.36)	15*	.13*	.23**	.32**	.69**	.19**	38**
ConAr5	3.98 (1.74)	25**	.32**	.39**	.21**	.84**	.24**	62**
ConAr6	4.36 (1.41)	14*	.20**	.13*	.37**	.68**	.16*	33**
ConAr7	4.76 (1.53)	10	.01	.08	.29**	.56**	.05	17**
ConAr8	4.45 (1.49)	21**	.16*	.27**	.25**	.71**	.18**	30**
ConAr9	4.67 (1.44)	13*	.20**	.14*	.44**	.61**	.10	19**
ConAr10	3.98 (1.70)	17**	.37**	.34**	.26**	.79**	.22**	62**
MainAr1	4.98 (1.37)	.04	04	11	.56**	.12*	05	.17**
MainAr2	4.88 (1.38)	03	03	.04	.63**	.37**	.07	.06
MainAr3	4.95 (1.17)	04	.09	.09	.65**	.27**	03	.11
MainAr4	4.94 (1.28)	02	04	05	.67**	.23**	02	.11
MainAr5	4.68 (1.36)	03	.09	.09	.68**	.29**	.08	05

MainAr6	5.17 (1.20)	.01	09	05	.61**	.15*	05	.16*
MainAr7	4.99 (1.28)	.08	.00	.04	.71**	.18**	.02	.13*
MainAr8	(1.55)		.14*	0.11	.66**	.41**	.07	09
MainAr9	4.77 (1.34)	12	.00	.11	.72**	.28**	.06	.01
MainAr10	4.94 (1.28)	13*	01	.07	.65**	.25**	.00	.09

The means for each item are the average of truth ratings for that item. Truth ratings were on a scale of 1 (Completely False) to 7 (Completely True). "Mainstream Belief" is the average truth ratings for all mainstream article summaries. "Conspiracy Belief" is the average truth ratings for conspiracy article summaries. As the ratings for each individual article are incorporated into the averaged Mainstream Belief and Conspiracy Belief measures, the correlations between mainstream article belief and the mainstream belief composite variable and the conspiracy article belief and the conspiracy belief composite variable are essentially item analyses.

Table 10. A full list of headlines for the article summaries in Study 1

Label	Headline
<b>Conspiracy Articles</b>	
ConAr1	COVID-19: Perfect Cover for Mandatory Biometric ID
ConAr2	Coming to a wall or lamppost near you – 5G and fake diseases to cover up its effects
ConAr3	New WikiLeaks Documents Expose Doctoring of Chemical Weapons Report to Justify 2018 US Attack on Syria
ConAr4	New WikiLeaks Documents Expose Doctoring of Chemical Weapons Report to Justify 2018 US Attack on Syria
ConAr5	Psychologist: big tech will use "subliminal methods" to shift 15 million votes on election day
ConAr6	"Undeniable evidence": Explosive classified docs reveal Afghan war mass deception
ConAr7	Alarming report reveals secretive surveillance state powered by your phone's location services
ConAr8	New "Out of Shadows" documentary exposes the media and Hollywood for manipulating the masses with lies and propaganda
ConAr9	US Congress cracks down on ABC News for 'Epstein coverup,' demands to know who killed the story and why
ConAr10	Did someone murder the wife of a Google whistleblower whose research implicated the tech giant in election meddling?
<b>Mainstream Articles</b>	
MainAr1	WHO warning: No evidence that antibody tests can show coronavirus immunity
MainAr2	New Google site shows where people in a community are taking social distancing seriously — and where they're not
MainAr3	FDA approves new drug for patients with metastatic breast cancer
MainAr4	Canada shooting: gunman kills 16 people after rampage in Nova Scotia
MainAr5	Appeals court sides with feds on Jeffrey Epstein deal
MainAr6	World News Updates: Singapore's Control Slips, as Europe Begins to Ease Coronavirus Limits
MainAr7	East Bay student who made 'terrorists' video settles with school district over free speech lawsuit
MainAr8	DOJ review finds material errors in two 2019 surveillance applications
MainAr9	New York 9/11 victim identified 18 years later
MainAr10	Afghan conflict: US and Taliban sign deal to end 18-year war

Figure 3. Histograms of response time in seconds by article summary type

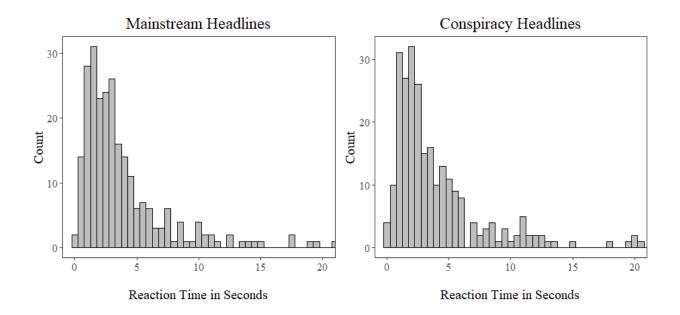


Figure 4. Violin plots of response time by article summary

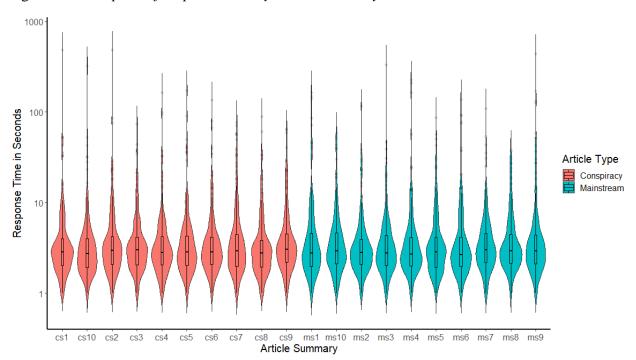
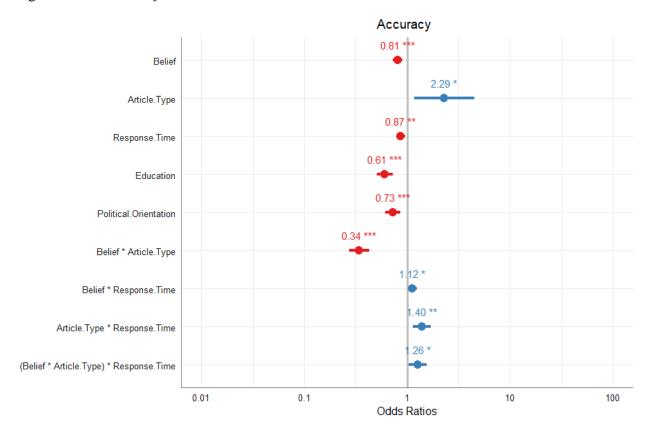


Figure 5. Odds ratios for Model 7



# E. APPENDIX E

Additional statistics for Study 2.

Table 11. Means and standard deviations for belief in each article summary and correlations with demographic variables in Study 2

	M (SD)	Age	Education	Political Orientation	Mainstream Belief	Conspiracy Belief	Response Time	Score
ConSt1	4.90 (1.34)	14*	20**	.04	.35**	.39**	04	.04
ConSt2	4.28 (1.79)	10	.07	.29**	09	.76**	.11	39**
ConSt3	4.17 (1.79)	11	.07	.26**	13*	.78**	.14*	46**
ConSt4	4.15 (1.63)	26**	.10	.20**	06	.81**	.13*	45**
ConSt5	4.27 (1.66)	15*	.01	.24**	05	.85**	.07	47**
ConSt6	4.65 (1.43)	19**	08	.09	.23**	.64**	03	09
ConSt7	4.05 (1.64)	27**	.14*	.18**	04	.75**	.07	47**
ConSt8	3.87 (1.86)	19**	.11	.23**	17**	.80**	.14*	59**
ConSt9	4.22 (1.63)	20**	.03	.21**	01	.78**	.12	43**
ConSt10	4.74 (1.20)	17**	06	.00	.37**	.54**	01	-0.1
MainSt1	5.37 (1.30)	.05	22**	20**	.75**	.00	04	.46**
MainSt2	5.29 (1.33)	.01	09	14*	.70**	.05	06	.40**
MainSt3	5.21 (1.31)	10	24**	24**	.72**	10	07	.43**
MainSt4	5.37 (1.39)	08	13*	08	.78**	.05	04	.42**
MainSt5	5.16 (1.39)	15*	08	08	.65**	.14*	10	.23**

MainSt6	5.13 (1.37)	04	18**	10	.71**	.01	09	.28**
MainSt7	5.26 (1.39)	11	12	14*	.74**	10	16*	.47**
MainSt8	5.26 (1.44)	.01	13*	01	.72**	09	.03	.50**
MainSt9	5.15 (1.29)	15*	05	04	.70**	.18**	04	.27**
MainSt10	5.21 (1.30)	19**	04	10	.73**	.06	06	.33**

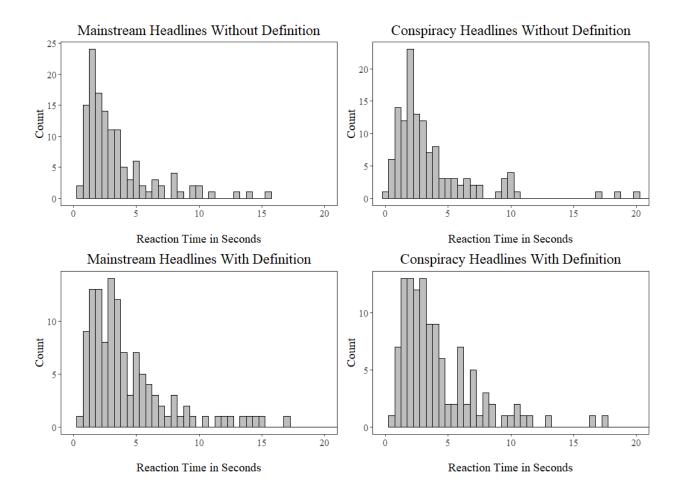
The means for each item are the average of truth ratings for that item. Truth ratings were on a scale of 1 (Completely False) to 7 (Completely True). "Mainstream Belief" is the average truth ratings for all mainstream statements. "Conspiracy Belief" is the average truth ratings for conspiracy statements. As the ratings for each individual statement are incorporated into the averaged Mainstream Belief and Conspiracy Belief measures, the correlations between mainstream statement belief and the mainstream belief composite variable and the conspiracy statement belief and the conspiracy belief composite variable are essentially item analyses.

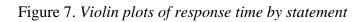
Table 12. A full list of headlines for the article summaries in Study 2  $\,$ 

Label	Statement
Conspiracy	
Statements	
	Companies that sell smart technology like Google Home and Alexa
ConSt1	are collecting information on their customers without their
	customers' knowledge and selling that information to third parties.
ConSt2	COVID-19 ("the coronavirus") was created in a lab in China as a
CONSTE	bioweapon.
ConSt3	Technology companies are suppressing information on the negative
Consts	health effects of 5G networks.
	Several members of UK's Parliament were behind the 2005 London
ConSt4	bombings in an attempt to increase support for military intervention
	in the Middle East.
ConSt5	Researchers have discovered a cure for cancer, but pharmaceutical
Consts	companies are suppressing information about it.
ConSt6	Jeffery Epstein was assassinated to prevent him from sharing
Consto	information that would harm powerful politicians.
	The New England Patriots won against the Jacksonville Jaguars in
ConSt7	the 2018 NFL Playoffs because they'd paid off the referees to make
	calls in their favor.
ConSt8	The U.S. government faked the moon landing to gain an advantage in
CONSTO	the Cold War over Russia.
ConSt9	Princess Diana was assassinated to prevent her from embarrassing
CONSIS	the royal family.
ConSt10	During the Cold War, the KGB assassinated several scientists that
	were working on US defense department projects.
Non-Conspiracy	
<b>Statements</b>	
	Tech companies are investing in new technology that will allow them
MainSt1	to automate various tasks including checking out customers at stores
	and packaging products for shipment.
	All 50 states in the U.S. require that students are vaccinated before
MainSt2	enrolling in public schools, though some exemptions are available
	for health and religious reasons.
	The man who drove a car into counter-protesters during the "Unite
MainSt3	the Right" rally in Charlottesville, Virginia was charged with first-
	degree murder and various other offenses.
	The International Monetary Fund is an international organization
MainSt4	that encourages economic cooperation and provides loans to
	countries in need.
MainSt5	Scientists are developing a method to create 3-D printed organs for
	patients in need.
MainSt6	John Lennon was murdered by a man who wanted media attention.

MainSt7	The Toronto Raptors won against the Golden State Warriors in the 2019 NBA finals, winning four of the six games in the series.
MainSt8	Heath Ledger died from overdosing on prescription drugs.
MainSt9	Spanish princess Maria Teresa was the first member of a royal family to die from COVID-19.
MainSt10	Researchers are making significant progress on curing HIV.

Figure 6. Histograms of response time in seconds by article summary type and definition condition





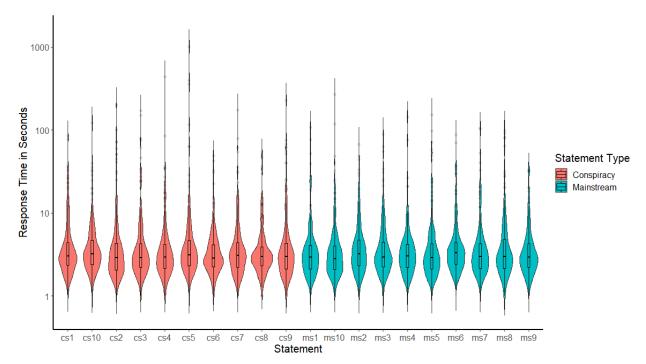
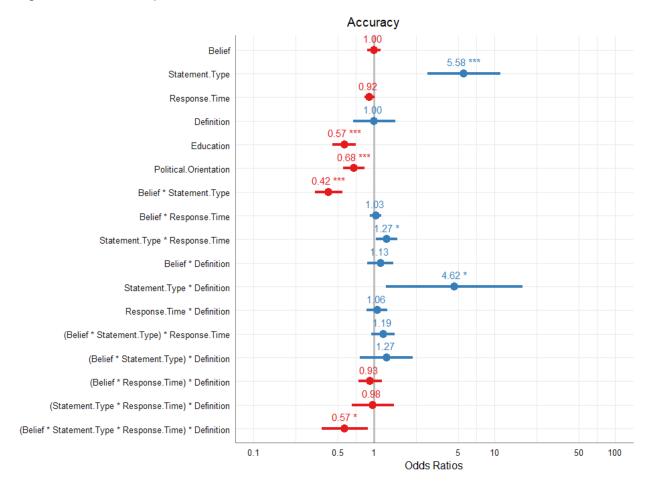


Figure 8. Odds ratios for Model 9



### VIII. VITA

### J.P. Y. Prims

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#### **Education**

Ph.D., Social Psychology – University of Illinois at Chicago (expected Spring 2021)

Advisers: Linda Skitka & Matt Motyl

- Ph.D., Expected Spring 2021
- *M.A.*, 2018
  - o Major: Social Psychology
  - o Minor: Statistics, Methods, & Measurement

University of Colorado at Boulder, 2009 - 2012

Adviser: Diane Martichuski

- B.S., 2012
  - o Major: Psychology
  - o Minor: Technology, Arts, & Media
  - Thesis: "Societal Challenge and Depression, Self-Esteem, and Self-Concept Clarity in Asexuals"

### Awards, Honors, and Scholarships

0	2018	University of Illinois at Chicago Graduate Student Council Travel
	Award	
0	2015-Present	University of Illinois at Chicago University Fellowship
0	2013	Rocky Mountain Psychology Association (RMPA) Paper Award
0	2012	Summa cum Laude: Psychology
0	2012	Honors: Technology, Arts, and Media
0	2012	Bachelor's with Distinction
0	2012-Present	Phi Beta Kappa
0	2012-Present	Psi Chi
0	2009-2012	Dean's List, College of Arts and Sciences
0	2009-2012	Chancellor's Achievement Scholarship

### **Papers**

Adam-Troian, J., Wagner-Egger, P., Motyl, M., Arciszewski, T., Imhoff, R., Zimmer, F., ... Prims, J. ... & Blanuša, N. (2020). Investigating the Links Between Cultural Values and Belief in Conspiracy Theories: The Key Roles of Collectivism and Masculinity. *Political Psychology*.

- o Brandt, M. J., Kuppens, T., Spears, R., Andrighetto, L., Autin, F., Babincak, P., ... **Prims, J.**, ... & Bocian, K. (2020). Subjective Status and Perceived Legitimacy across Countries. *European Journal of Social Psychology*, *50*(5).
- o Motyl, M., **Prims, J.**, & Iyer, R. (2019). How Ambient Cues Facilitate Political Segregation. *Personality and Social Psychology Bulletin*, 0146167219875141.
- Washburn, A., Hanson, B., Motyl, M., Skitka, L., Yantis, C., Wong, K., Prims, J., Mueller, A., Melton, Z., & Carsel, T. (2018). Why do some psychology researchers resist adopting proposed reforms to research practices? A description of researchers' rationales. Advances in Methods and Practices in Psychological Science, 1(2), 166-173.
- Motyl, M., Demos, A., Carsel, T., Hanson, B., Melton. Z., Mueller A., Prims, J., Sun, J., Washburn, A., Wong, K., Yantis, C., & Skitka, L. (2017). Rotten to the core, not so bad, or getting better? The state of social and personality science. *Journal of Personality and Social Psychology*. 113(1). 34-58.
- o **Prims, J.** & Moore, D. (2017). Overconfidence Over the Lifespan. *Judgment and Decision Making*. *12*(1). 29-41.

### **Book Chapters**

o **Prims, J.,** Melton, Z., Motyl, M. (2017). Morality and political choices: Twitter and the 2016 elections. In Fitzduff, M. (Eds.), *Why irrational politics appeals*. Westport, CT: Praeger.

### **Presentations**

- o **Prims, J.** (February, 2020). The Language of Conspiracies: Features and Perceptions of Conspiracy News Sites. Paper presented at the University of Illinois at Chicago's Social Personality Brownbag, Chicago, IL.
- Prims, J. (To be presented March, 2020). Political Misfit and Conspiracy Belief.
   Paper to be presented at the University of Miami Conspiracy Theories Conference,
   Miami, FL. Cancelled due to COVID-19.
- Prims, J. (February, 2020). The Language of Conspiracies: Features and Perceptions of Conspiracy News Sites. Poster presented at the Society of Personality and Social Psychology's Convention, New Orleans, LA.

 Prims, J. & Demos, A. (October, 2019). Institutional Prestige: A Help or Hindrance to Large Samples? Paper presented at the University of Illinois at Chicago's Social Personality Brownbag, Chicago, IL.

- o **Prims, J.,** & Motyl, M. (April, 2019). Comforting Conspiracies: Conspiracy theories buffer against anxiety. Poster presented at the University of Illinois at Chicago's annual Impact and Research Day, Chicago, IL.
- o **Prims, J.,** & Motyl, M. (February, 2019). Comforting Conspiracies: Conspiracy theories buffer against anxiety. Poster presented at the Society of Personality and Social Psychology's Convention, Portland, OR.
- o **Prims, J., &** Motyl, M. (October, 2018). Bots, Bots Everywhere, and Not a Tool to Find Them. Paper presented at the University of Illinois at Chicago's Social Personality Brownbag, Chicago, IL.
- Prims, J., Mueller, A., & Demos, A. (April, 2018). Institutional Prestige: A Help or Hindrance to Large Samples? Paper presented at the Midwest Psychological Association Conference, Chicago, IL.
- Prims, J., Motyl, M. (March, 2018). How do people feel about conspiracy theorists?
   Paper presented at the University of Illinois at Chicago's Cross Program Conference,
   Chicago, IL.
- Prims, J., Motyl, M. (March, 2017). How do people feel about conspiracy theorists?
   Paper presented at the University of Illinois at Chicago's Social Personality
   Brownbag, Chicago, IL.
- o **Prims, J.,** Motyl, M., Iyer, R. (March, 2018) *How ambient cues facilitate ideological segregation*. Paper presented at the Society of Personality and Social Psychology's Convention, Atlanta, GA.
- o **Prims, J.**, Motyl, M. (November, 2017). *How do people feel about conspiracy theorists?* Paper presented at the University of Illinois at Chicago's Social Psychology Brownbag, Chicago, IL.
- o **Prims, J.**, Motyl, M. (January, 2017). *Conspiracy belief and political fit.* Poster presented at the Society for Personality and Social Psychology Conference, San Antonio, TX.
- o **Prims, J.** (November, 2016). *Making morality great again: Twitter and the 2016 presidential election.* Paper presented at the University of Illinois at Chicago's Social Psychology Brownbag, Chicago, IL.
- o **Prims, J.** (February, 2016). Where and when do people believe political conspiracies? Paper presented at the University of Illinois at Chicago's Social Psychology Brownbag, Chicago, IL.
- o **Prims, J.** (April, 2013). *Societal challenge and depression, self-esteem, and self-concept clarity in asexuals.* Paper presented at the Rocky Mountain Psychological Association Convention, Denver, CO.

#### **Resources Created for Researchers**

o **Prims, J.** (2019). R script reference. A document of helpful functions and R script useful for analyzing data. <a href="http://jyprims.com/RScriptReference.R">http://jyprims.com/RScriptReference.R</a>

- o **Prims, J.**, Sisso, I., & Bai, H. (2018). Suspicious IP Online Flagging Tool. Retrieved from <a href="https://itaysisso.shinyapps.io/Bots">https://itaysisso.shinyapps.io/Bots</a>
  - A tool that flags responses from suspicious IP addresses and geolocations in datasets collected from online survey platforms like mTurk.
  - o Accompanying R function: https://github.com/SICLab/detecting-bots
- o **Prims, J.**, & Motyl, M. (2018). Suspicious Response Detector. Retrieved from https://jprims.shinyapps.io/SuspicionScoreswithDataDownload/
  - A tool that counts suspicious features in datasets collected from online survey platforms like mTurk.
  - o Accompanying R function: https://github.com/jprims/flag.suspects
- o **Prims, J.** (2016). Intro to Shiny. In Demos, A. (Eds). A Language not a letter: Learning statistics in R. <a href="https://ademos.people.uic.edu/index.html">https://ademos.people.uic.edu/index.html</a>
  - o A step-by-step breakdown of how to create a simple Shiny app in R.

### **Teaching Experience**

#### **Lecturer of Record**

Statistical Methods in Behavioral Sciences (Spring 2020, Fall 2020)

#### **Guest Lecturer**

- Statistical Methods in Behavioral Sciences
  - o Single-Sample *t*-Test (October 2019)
- Cultural Psychology
  - o Culture and Health (June 2016 & 2017)
- Research Methods
  - o Text Analysis (May 2017)

### **Teaching Assistant**

- o The Psychology of Resilience (Summer 2020)
- o Psychological Research Methods (Fall 2019)
- o Cultural Psychology (Summer 2016, Summer 2017)
- o Social Psychology (Fall 2016)
- o Social Psychology Lab (Spring 2017, Spring, 2018, Fall 2018, Spring 2019)
- o Personality Psychology (Fall 2017)
- o Introduction to Psychology (Fall 2017)

# **Honor's Thesis Supervisor:**

- o Ummesalmah Abdulbaseer (2018)
- o Letoria Overton (2018)
- o Nica Lorenz Lim (2016)

### **Media Coverage**

o Forbes - Three ways overconfidence can sink your ship (8/15/2017)

## **Memberships**

- o Member of the American Psychological Association.
- o Member of the Society for Personality and Social Psychologists.
- o Member of the Psi Chi Psychology honors society.
- o Member of the Phi Beta Kappa honors society.

# **Research Experience**

0	2015 – present	Researcher, University of Illinois at Chicago
0	2018 - 2019	Research Consultant, Civil Politics
0	2018 - 2019	Research Consultant, Open Mind
0	2014 - 2015	Laboratory Manager, Haas School of Business, UC Berkeley
0	2014 - 2015	Administrative Assistant, Good Judgment Project, UC Berkeley