Denialism or Conspiricism?
The Causes and Consequences of Rejecting Official Accounts

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Abstract: Social-psychologists and political scientists have attributed both the denial of authoritative accounts and the acceptance of conspiracy theories to underlying conspiracy thinking. However, the extant literature conflates the tendency to deny authoritative accounts with the tendency to believe in conspiracy theories, even though these are substantively different phenomena. For instance, one may deny manmade global warming or the safety of genetically modified food without accepting any specific conspiracy theories. Using nationally representative survey data, we show that to one extent or another, people harbor both a tendency to accept conspiracy theories and to deny official accounts. While these tendencies are correlated, they are distinct and account for the denial of authoritative accounts and acceptance of conspiracy theories in predictable ways. We show that the tendency toward denialism leads people to reject the consensuses on climate change and gm foods, and to disbelieve politicians and mainstream news. The underlying tendency toward conspiracy thinking leads people to believe in Kennedy assassination, 9/11, and Zika conspiracy theories and also to be more accepting of violence and other behaviors. These findings have implications for scholars attempting to overcome the prevalence of misinformation and for those attempting to understand and guide human behaviors.

Many people reject authoritative accounts. Sizable minorities, and sometimes even majorities, of Americans reject scientific consensuses, election results, government findings, and medical recommendations. This causes myriad problems. Citizens who deny climate change elect politicians who reject policies intended to mitigate the potential damage caused by a changing climate (Brulle 2014); this leaves the climate at further risk. Citizens who believe that election results are rigged are likely to abstain from voting (Uscinski and Parent 2014). Those who reject government accounts are in danger of losing trust in government and of acting on incorrect information (Einstein and Glick 2014). Those who reject medical consensuses are less likely to see medical doctors, get vaccinated, vaccinate their children, or take appropriate medical and health related actions. Why do people reject authoritative accounts?

Many have assumed that an information deficit is to blame, that if people had access to authoritative information they would believe authoritative accounts (Sunstein and Vermeule 2009). However, when provided with authoritative information people are often not persuaded by it (Nyhan, Reifler and Ubel 2013, Thorson 2015). Others have suggested that partisanship drives the rejection authoritative accounts, so that if partisan elites accept such accounts, then partisan masses will as well (Berinsky 2015, Swire, et al. 2017). However, there is significant heterogeneity within parties (i.e. some Republicans accept global warming while others reject it), and people often reject official accounts in instances where party elites have not staked out strong positions against the authoritative account (i.e. party elites rarely question authoritative accounts of vaccine safety yet near equal minorities of both parties reject vaccine safety) (Dunlap, McCright and Yarosh 2016, Funk, Kennedy and Hefferon 2017).

A recent approach by both social psychologists and political scientists has been to attribute the rejection of authoritative accounts to conspiracy thinking.[1] Conspiracy thinking is a

predisposition toward believing that events and circumstances are the product of conspiracy (Bruder, et al. 2013, Brotherton, French and Pickering 2013). Those who think strongly in this way are more likely to believe in specific conspiracy theories than those who think less strongly in such terms (Uscinski, Klofstad and Atkinson 2016). The underpinning of this approach is that just as political predispositions such as partisanship drive how partisans interpret information depending on how attached one is and to which party (Jerit and Barabas 2012, Gaines, et al. 2007), conspiracy thinking drives how people interpret information depending on how much one views events and circumstances as the product of conspiracy (Edelson, et al. 2017). For example, studies show that conspiracy thinking predicts rejection of the scientific consensuses (Lewandowsky, Gignac and Oberauer 2013, Uscinski and Olivella 2017). Exploring conspiracy thinking as a predictor of rejectionism has been driven by the ubiquitous use of conspiracy theories in justifying the rejection of authoritative accounts (i.e. pharmaceutical companies are hiding the true dangers of vaccines; scientists are faking climate data to institute communism) (Goertzel 2010, Lewandowsky, Cook and Lloyd 2016).

With this said, the effects of conspiracy thinking on the rejection of authoritative accounts vary in size and are often small. But more importantly, people can reject authoritative accounts for reasons that have nothing to do with a supposed conspiracy and for reasons not having to do with seeing the world through a conspiratorial lens. People could engage in rejectionism simply because they are predisposed to not accept authoritative accounts.

In what follows, we discuss a new dimension of opinion which we term “denialism.” This dimension of opinion drives people, to one degree or another, to reject authoritative accounts. While denialism is correlated with conspiracy thinking, we argue it is a substantively different concept. We show that both the conceptualization of conspiracy thinking and all of the current

strategies for measuring the latent concept of conspiracy thinking have confused denialism with notions of conspiracy. Using nationally representative survey data from the 2016 Cooperative Congressional Election Study, we show that our measures of denialism and conspiracy thinking substantively predict different beliefs, which were previously attributed to conspiracy thinking. Our findings have implications for the measurement of conspiracy thinking, for understanding the concept of conspiracy theory, for understanding why people deny authoritative accounts, and for those who wish to overcome the rejection of authoritative accounts.

Denialism or Conspiracy Thinking?

The watershed moment in the study of conspiracy theories was the publication of Wood, Douglas and Sutton's "Dead and Alive" (2012). The authors showed that those who believed in conspiracy theories such as Osama bin Laden is still alive, also believed in contradictory theories that bin Laden was already dead when U.S. special forces raided his compound. This led the authors to conclude that a higher order belief system drove people to accept conspiracy theories, rather than an attribute unique to each specific theory. Following the publication of "Dead and Alive" scholars made many attempts to measure this higher order belief system (Bruder, et al. 2013, Imhoff and Bruder 2013, Swami, et al. 2017, Lantian, et al. 2016, Uscinski, et al. 2016, Drinkwater, Dagnall and Parker 2012, Brotherton, et al. 2013, Swami, et al. 2011). While each of these several scales differed both in the items employed and the number of items employed, they each attempted to measure latent conspiracy thinking.

Undergirding each of these scales was the notion that asking about only one or a few specific conspiracy theories could bias the resultant measure. As Uscinski and Parent (2014) argued, "if a researcher asked about beliefs in death panels, Hawaiian birth certificates, and communist plots, and then created a summary measure to represent consistorial predispositions,

she would find that conspiratorial predispositions afflict solely right-leaning people." This is best demonstrated by Miller, Saunders and Farhart (2016) who construct two separate scales of current partisan conspiracy theories to measure belief in liberal and conservative conspiracy theories.

Hence, Uscinski and Parent's scale excludes questions that touch on specific conspiracy theories that accuse partisan actors. If conspiracy thinking is a latent thought process in which "powerful groups covertly controlling events against the common good" then the scales should be comprised of instruments that measure such, rather than other dispositions such as partisanship, political ideology, paranormal and supernatural beliefs, new age mysticism, and religiosity. This would allow researchers to measure conspiracy thinking as impartially and broadly as possible, and then use those estimates to explain other beliefs. We note that several of the existing scales conflate other dispositions with their conspiracy thinking measures. For example, Rob Brotherton's Generic Conspiracist Beliefs Scale (GCBS) taps supernatural and paranormal beliefs with items such as "secret organizations communicate with extraterrestrials…" and "evidence of alien contact is being concealed…" The problem is that such items might be rejected by those with a strong conspiracy mentality, but because they do not believe in aliens and not because they do not share an inclination towards conspiracy theories.

Our more pressing concern in this paper is the confusion of conspiracy thinking—beliefs that powerful groups covertly controlling events against the common good—and beliefs that authoritative accounts are wrong. In the Wood, Douglas and Sutton (2012) study, there is a conflation (perhaps for good reason) between a worldview in which powerful groups secretly and malevolently control events and a worldview in which official accounts are wrong. As they

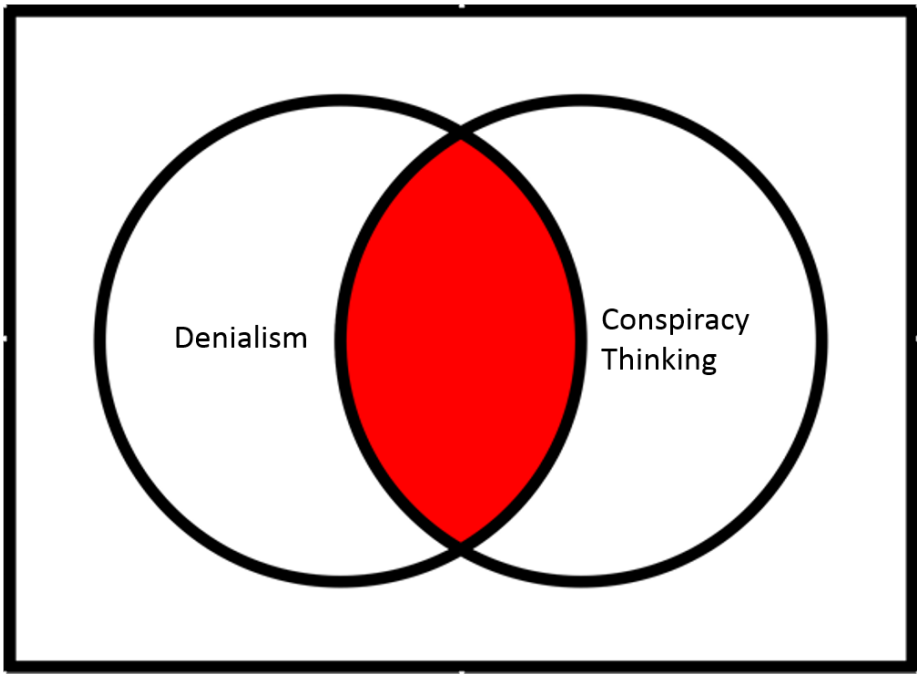
argue, conspiracy thinking should engender a belief in powerful malevolent groups acting in secret, but it should also “inhibit the acceptance of official narratives.” Our argument is that conspiracy thinking is first and foremost about powerful malevolent groups acting in secret and that the rejection of official narratives comes as a necessary consequence after the fact if needed to justify the belief. For example, a belief that the Jews control the economy is not so much a rejection of an official narrative, but a belief that a powerful malevolent group is exerting undue influence. Therefore, the concept of conspiracy thinking should be separated from a worldview in which official narratives are incorrect.

One can reject the official consensus that anthropogenic climate change is occurring without looking to a conspiracy as an explanation: one could believe that the scientists are wrong or unintentionally biased. Conversely, one can believe that President Kennedy was killed by a conspiracy rather than a lone gunman without ever having heard of the Warren Commission. For this reason, we suggest that there may be a unique dimension of opinion that drives people to reject authoritative accounts. We call this opinion “denialism” and suggest that it is a stable predisposition towards the rejection of authoritative accounts. Denialism does not necessarily have to have anything to do with notions of conspiracy, and conspiracy thinking does not necessarily have anything to do with denying official accounts. This is not to say that that denialism could not lead a person to believe in a conspiracy theory or that conspiracy thinking could not lead a person to believe in that an official account is wrong. For example, conspiracy thinking predicts the denial of climate change (Lewandowsky, et al. 2013, Uscinski, et al. 2017, Uscinski and Olivella 2017). To put this another way, the truth may be out there, but it does not mean that the truth has been concealed by a conspiracy.

Unfortunately, the ways in which researchers have measured conspiracy thinking has conflated conspiracy thinking with denialism. Rob Brotherton's GCBS scale asks respondents to respond to items which touch on the denial of authoritative accounts. Phases in the battery include: "keeps this a secret," "keep this fact from the public," "concealed efforts," "manipulate, fabricate, or suppress evidence," "disguising its involvement," "concealed from the public," "without their knowledge," and "important information is deliberately concealed." Bruder and Manstead (2009) developed a questionnaire which includes phrases in its items such as "the public is never informed," "keep their findings secret," "approaches that are denounced by the authorities… although their effectiveness is proven," "covers up," "there are many public figures that are actually murdered, although the media reports that they have been killed in accidents or by illness," "kept from the public," and "information is kept from the public" (Darwin, Neave and Holmes 2011). Conspiracies operate in secret (or else they are no longer conspiracies), so it is not necessarily wrong to include the use of secrecy into the scales. But such measures may be tapping into denialism.

Other scales and measurement techniques do this more directly. Drinkwater, Dagnall and Parker (2012) ask respondents "to indicate the degree to which they believed the official explanation to be true…the second question asked respondents to indicate the extent to which they believed alternative explanations to be more truthful." Lantian, Muller, Nurra, and Douglas (2016) develop a single item "I think that the official version of the events given by the authorities very often hides the truth." Such items tap less a worldview in which powerful malevolent groups operate in secret, but rather a worldview in which official accounts are incorrect. Again, conspiracy theories often involve the faking of authoritative accounts, but that is only one part of conspiracy. See Figure 1.

Figure 1. Conspiracy Thinking and Denialism.



As science communicators struggle to correct beliefs that are at odds with authoritative accounts, they must get a better handle on the underlying dispositions that drive beliefs. Just as underlying conspiracy thinking drives the acceptance of conspiratorial accounts, an underlying disposition towards denialism may be driving people to reject authoritative knowledge. This builds upon traditional views of public opinion which incorporate dispositions into the acceptance or rejections of new information (Zaller 1992). We suspect that a disposition – which we call denialism – to accept or reject authoritative accounts plays a large role in determining if induvial' accept specific authoritative accounts. That many of the measures of latent conspiracy thinking conflate denialism with conspiracy thinking may mask this. Science communicators may need to overcome individuals' disposition toward rejection authoritative accounts in order to get them to accept specific authoritative accounts.

Data

We use data from the 2016 pre-election Cooperative Congressional Election Study (CCES) Survey, which YouGov conducted from September 28th to November 7th (N = 1000 American adults).[2] Each of the individuals in the sample responded to questions about authoritative accounts as well as to questions about partisanship, education, age, income, gender, and race (Ansolabehere and Schaffner 2017).[3]

Methods

We provided respondents with a series of items to measure their denialism and their conspiracy thinking, both of which are latent traits. We use principal components analysis to create a score for each individual's denialism and conspiracy thinking. Regression analysis is then used to see whether denialism or conspiracy thinking best predicts the rejection of authoritative accounts.

To measure the latent trait of denialism, we provided respondents with three statements with which they could respond "strongly agree" to "strongly disagree": The truth is often hidden from us", "Events are not always what they seem," and "A lot of important information is deliberately concealed from the public" ($\bar{x}$ = .72, SE = .01). These are intended to the latent disposition that would lead individuals to reject authoritative accounts.

To measure conspiracy thinking, we employ a scale which includes four statements. Respondents could respond from "strongly agree" to "strongly disagree." These are "Much of our lives are being controlled by plots hatched in secret places," "Even though we live in a democracy, a few people will always run things anyway," "The people who really 'run' the country are not known to the voters," and "Big events like wars, the recession, and the outcomes of elections are controlled by small groups of people who are working in secret against the rest

of us” ($\bar{x}$ = .59, SE = .01). This scale has been used previously (Edelson, et al. 2017, Uscinski, et al. 2016, Uscinski and Parent 2014, Uscinski and Olivella 2017) and is based upon items developed in McClosky and Chong (1985). While the measures of denialism and conspiratorial thought are distinct, in line with Figure 1 they are correlated significantly, ($r = .64$, $p < .001$).

We provide 10 dependent variables. To begin, respondents could answer “President John F. Kennedy was assassinated by a single gunman, Lee Harvey Oswald” from “strongly agree” to “strongly disagree” ($\bar{x}$ = 2.57, SE = .04).

We asked respondents to pick from a series of conspiracy theories about the origin of the Zika virus. This is expressed as a numerical variable from 0-6 ($\bar{x}$ = .33, SE = .03).

We asked respondents about their feeling towards violence, “Violence is sometimes an acceptable way for Americans to express their disagreement with the government.” Responses ranged from “strongly agree” to “strongly disagree” ($\bar{x}$ = 2.22, SE = .04).

Belief in voter fraud, prior to the 2016 election, was measured with “If [your preferred candidate] does not win the presidential election, how likely do you think election fraud would have been involved?” Responses ranged from “very likely” to “very unlikely” ($\bar{x}$ = 3.18, SE = .05).

Belief in 9/11 conspiracy theories was measured with “The terror attacks of 9/11/2001 were perpetrated solely by Al-Qaeda terrorists.” Responses ranged from “strongly agree” to “strongly disagree” ($\bar{x}$ = 2.32, SE = .03).

Belief in media malfeasance was measured with “Much of the mainstream news is deliberately slanted to mislead us.” Responses ranged from “strongly agree” to “strongly disagree” ($\bar{x}$ = 3.74, SE = .04).

Distrust in government was measured with “The government can be trusted most of the time” Responses ranged from “strongly agree” to “strongly disagree” ($\bar{x}$ = 3.36, SE = .03).

The acceptance of authoritative accounts from government was measured with “Official government accounts of important events can be trusted.” Responses ranged from “strongly agree” to “strongly disagree” ($\bar{x}$ = 3.24, SE = .03).

We asked about opinion toward climate change with “Climate change is real and caused by manmade carbon emissions.” Responses ranged from “strongly agree” to “strongly disagree” ($\bar{x}$ = 2.42, SE = .04).

Opinions toward genetically modified food was measured with “Genetically-Modified foods are safe for humans to consume and safe for the environment.” Responses ranged from “strongly agree” to “strongly disagree” ($\bar{x}$ = 3.15, SE = .04).

Control variables includes measures of education level (1 = no high school, 6 = post-graduate education; $\bar{x}$ = 3.21, SE = .05), income (1 = “less than $10,000,” 17 = “$150,000 or more”; $\bar{x}$ = 6.10, SE = .11), race (1=non-white; $\bar{x}$ = .27, SE = .01), birth year ($\bar{x}$ = 1969, SE = .56), sex (1 = female, 0 = male; $\bar{x}$ = .52, SE = .02), and partisanship (1 – “Strong Democrat,” 7 = “Strong Republican”; $\bar{x}$ = 3.64, SE = .07).

Results

The regression results are presented in Table 1 and 2. For organizational purposes, the dependent variables are arranged by result. In Table 1, our measure of conspiracy thinking is most predictive of our dependent variables regarding JFK, Zika conspiracy theories, violence against government, voter fraud, and 9/11. With this said, Denialism is a significant predictor of belief in Zika conspiracy theories (although in the wrong direction) and of belief in voter fraud.

In Table 2, Denialism is the strongest predictor of belief in purposeful media slant, distrust in government, distrust in official government documents, disbelief in climate change, and skepticism of genetically modified foods. Conspiracy thinking however is a significant predictor of media slant and distrust of government accounts.

Discussion

Social scientists have of late been concerned with the correction of "wrong" beliefs (Nyhan and Reifler 2010, Nyhan, et al. 2013). We contend that to best correct wrong beliefs, social scientists first need to understand the causes of wrong beliefs. Here, we are most concerned with the rejection of authoritative accounts.

Much literature as of late has correlated conspiracy thinking with the denial of authoritative accounts. For example, conspiracy thinking has been found to be a significant, though small, predictor of the rejection of the climate change consensus. It may be that case that climate change the effects in the previous studies are small because it is really denialism, rather than conspiracy thinking, that is a better predictor of climate change denial. It has been fashionable as of late to blame conspiracy thinking for the rejection of many authoritative accounts, but it may be instead that some people just don't want to believe authoritative accounts.

More work should be done exploring denialism. What predicts denialism and what are its consequences? Also, studies should be able to predict which authoritative accounts will be denied due to denialism and which will be denied due to conspiracy thinking.

References

Ansolabehere, Stephan, and B Schaffner. 2017. "Cooperative Congressional Election Study (Cces) Common Content."

Berinsky, Adam J. 2015. "Rumors and Health Care Reform: Experiments in Political Misinformation." *British Journal of Political Science* 47: 241-62.

Brotherton, Rob, Christopher C. French, and Alan D. Pickering. 2013. "Measuring Belief in Conspiracy Theories: The Generic Conspiracist Beliefs Scale." *Frontiers in Psychology* 4.

Bruder, Martin, Peter Haffke, Nick Neave, Nina Nouripanah, and Roland Imhoff. 2013. "Measuring Individual Differences in Generic Beliefs in Conspiracy Theories across Cultures: The Conspiracy Mentality Questionnaire (Cmq)." *Frontiers in Psychology* 4.

Brulle, Robert J. 2014. "Institutionalizing Delay: Foundation Funding and the Creation of U.S. Climate Change Counter-Movement Organizations." *Climatic change* 122: 681-94.

Darwin, Hannah, Nick Neave, and Joni Holmes. 2011. "Belief in Conspiracy Theories. The Role of Paranormal Belief, Paranoid Ideation and Schizotypy." *Personality and Individual Differences* 50: 1289-93.

Drinkwater, Ken, Neil Dagnall, and Andrew Parker. 2012. "Reality Testing, Conspiracy Theories, and Paranormal Beliefs." *The Journal of Parapsychology* 76: 57.

Dunlap, Riley E., Aaron M. McCright, and Jerrod H. Yarosh. 2016. "The Political Divide on Climate Change: Partisan Polarization Widens in the U.S." *Environment: Science and Policy for Sustainable Development* 58: 4-23.

Edelson, Jack, Alexander Alduncin, Christopher Krewson, James A. Sieja, and Joseph E. Uscinski. 2017. "The Effect of Conspiratorial Thinking and Motivated Reasoning on Belief in Election Fraud." *Political Research Quarterly*.

Einstein, Katherine Levine, and David M. Glick. 2014. "Do I Think Bls Data Are Bs? The Consequences of Conspiracy Theories." *Political Behavior* 1-23.

Funk, Cary, Brian Kennedy, and Meg Hefferon. 2017. "Vast Majority of Americans Say Benefits of Childhood Vaccines Outweigh Risks." Pew Research Center: Internet & Technology. (1/25/2018).

Gaines, Brian J, James H Kuklinski, Paul J Quirk, Buddy Peyton, and Jay Verkuilen. 2007. "Interpreting Iraq: Partisanship and the Meaning of Facts." *Journal of Politics* 69: 957-74.

Goertzel, Ted. 2010. "Conspiracy Theories in Science." *EMBO reports* 11: 493-99.

Imhoff, Roland, and Martin Bruder. 2013. "Speaking (Un-)Truth to Power: Conspiracy Mentality as a Generalised Political Attitude." *European Journal of Personality*.

Jerit, Jennifer, and Jason Barabas. 2012. "Partisan Perceptual Bias and the Information Environment." *The Journal of Politics* 74: 672-84.

Lantian, Anthony, Dominique Muller, Cécile Nurra, and Karen Douglas. 2016. "Measuring Belief in Conspiracy Theories: Validation of a French and English Single-Item Scale." *International Review of Social Psychology* 29.

Lewandowsky, Stephan, John Cook, and Elisabeth Lloyd. 2016. "The 'Alice in Wonderland' Mechanics of the Rejection of (Climate) Science: Simulating Coherence by Conspiracism." *Synthese* 1-22.

Lewandowsky, Stephan, Gilles E Gignac, and Klaus Oberauer. 2013. "The Role of Conspiracist Ideation and Worldviews in Predicting Rejection of Science." *PLoS ONE* 8: e75637.

McClosky, Herbert, and Dennis Chong. 1985. "Similarities and Differences between Left-Wing and Right-Wing Radicals." *British Journal of Political Science* 15: 329-63.

Miller, Joanne M, Kyle L Saunders, and Christina E Farhart. 2016. "Conspiracy Endorsement as Motivated Reasoning: The Moderating Roles of Political Knowledge and Trust." *American Journal of Political Science* 60: 824-44.

Nyhan, Brendan, and Jason Reifler. 2010. "When Corrections Fail: The Persistence of Political Misperceptions." *Political Behavior* 32: 303-30.

Nyhan, Brendan, Jason Reifler, and Peter A Ubel. 2013. "The Hazards of Correcting Myths About Health Care Reform." *Medical care* 51: 127-32.

Sunstein, Cass R, and Adrian Vermeule. 2009. "Conspiracy Theories: Causes and Cures*." *Journal of Political Philosophy* 17: 202-27.

Swami, Viren, David Barron, Laura Weis, Martin Voracek, Stefan Stieger, and Adrian Furnham. 2017. "An Examination of the Factorial and Convergent Validity of Four Measures of Conspiracist Ideation, with Recommendations for Researchers." *PLoS ONE* 12: e0172617.

Swami, Viren, Rebecca Coles, Stefan Stieger, Jakob Pietschnig, Adrian Furnham, Sherry Rehim, and Martin Voracek. 2011. "Conspiracist Ideation in Britain and Austria: Evidence of a Monological Belief System and Associations between Individual Psychological Differences and Real-World and Fictitious Conspiracy Theories." *British Journal of Psychology* 102: 443-63.

Swire, Briony, Adam J. Berinsky, Stephan Lewandowsky, and Ullrich K. H. Ecker. 2017. "Processing Political Misinformation: Comprehending the Trump Phenomenon." *Royal Society Open Science* 4.

Thorson, Emily. 2015. "Belief Echoes: The Persistent Effects of Corrected Misinformation." *Political Communication* 1-21.

Uscinski, Joseph E, Casey Klofstad, and Matthew Atkinson. 2016. "Why Do People Believe in Conspiracy Theories? The Role of Informational Cues and Predispositions." *Political Research Quarterly* 69: 57-71.

Uscinski, Joseph E, and Joseph M. Parent. 2014. American Conspiracy Theories. New York: Oxford University Press.

Uscinski, Joseph E., Karen Douglas, and Stephan Lewandowsky. 2017. "Climate Change Conspiracy Theories." *Oxford Research Encyclopedia of Climate Science* 1-43.

Uscinski, Joseph E., and Santiago Olivella. 2017. "The Conditional Effect of Conspiracy Thinking on Attitudes toward Climate Change." *Research & Politics* 4: 2053168017743105.

Wood, Michael, Karen Douglas, and Robbie Sutton. 2012. "Dead and Alive: Beliefs in Contradictory Conspiracy Theories." *Social Psychological and Personality Science* 3: 767-73.

Zaller, John. 1992. The Nature and Origins of Mass Opinion Cambridge, UK: Cambridge University Press.

[1] This is sometimes referred to as conspiratorial thinking, conspiratorial dispositions, or conspiracist ideation (Uscinski, Douglas and Lewandowsky 2017).

[2] YouGov maintains panels of individuals who volunteer to complete surveys over the Internet. More individuals participated in the study than were included in the data set. The subset of participants included in the data set was selected using YouGov's matched sample methodology. This method entailed two steps. First, a representative target sampling frame of U.S. citizens was created using demographic data from a variety of sources, including the American Community Survey, the Current Population Survey, and the Pew U.S. Religious Landscape Survey. Second, for each member of the target sample at least one member from the pool of opt-in participants was selected for inclusion in the data set. This matching process was based on the following variables: sex, age, race, years of education, interest in politics, employment status, Evangelical or "born again" Christian status, marital status, partisanship, and political ideology. The result is a data set comprised of participants who have the same measured characteristics as the target sample.

[3] Prior approval to conduct all elements of the study was granted by the University of [REDACTED FOR REVIEW] Human Subjects Research Office on 09/13/2016 (Protocol #20120757/MOD00013692). YouGov, the provider of the research subjects, complies fully with European Society for Opinion and Marketing Research (ESOMAR) standards for protecting individuals' privacy and information. YouGov respects the privacy of all of its visitors and participants. YouGov's privacy policy outlines what personally identifiable information is collected, how the information is used, with whom the information may be shared, and the security procedures in place to help prevent loss, misuse, or alteration of information under their

control. All YouGov panelists join voluntarily through a double opt-in procedure, where respondents must confirm their consent by responding to an email. YouGov invites people to complete self-administered surveys via the web using a panel of respondents. Panelists are provided the privacy policy when they voluntarily sign up, and are provided a link to this policy with each study request. Specifically, each invitation states that their participation is voluntary and confidential. YouGov's detailed privacy policy is available online (today.yougov.com/about/privacy). Participants were free to stop participating at any time by closing their web browser. Participation in the study was confidential. Identifying information, such as names or addresses, was not collected during the study.

Table 1: Regression Analysis of Beliefs Predicted by Conspiratorial Belief

	JFK not killed by single shooter[a]	Number of Zika conspiracy beliefs[b]	Agreement with violence against government as acceptable[a]	Belief in 2016 voter fraud[a]	Deny that 9/11 was solely committed by Al-Qaeda[a]
Conspiratorial belief	.77***	3.33***	1.50***	1.42***	1.21***
	(.23)	(.71)	(.24)	(.26)	(.24)
Denial belief	-.01	-1.68*	-.37	.93**	-.03
	(.26)	(.85)	(.27)	(.30)	(.26)
Education	.01	-.13	-.01	.03	-.01
	(.03)	(.08)	(.03)	(.03)	(.03)
Income	-.03**	-.01	-.01	-.04**	-.05***
	(.01)	(.04)	(.01)	(.01)	(.01)
Race (non-white)	.20*	.39^	.16^	.41***	.42***
	(.08)	(.23)	(.09)	(.10)	(.09)
Birth year (older – younger)	.001	.03***	.01***	-.01***	-.005*
	(.002)	(.01)	(.002)	(.002)	(.002)
Sex (female)	.02	.08	-.17*	.04	.03
	(.07)	(.24)	(.08)	(.08)	(.07)
Partisanship (DEM – REP)	.05**	-.03	-.03^	.12***	.03^
	(.02)	(.07)	(.02)	(.02)	(.02)
Chi^2	46.13***	62.18***	97.98***	188.23***	104.11***
R^2	.02	.09	.04	.08	.04
N	874	681	874	740	874

^p <= .10, *p <=.05, **p <=.01, ***p<=.001

Model type: [a]ordinal probit, [b]negative binomial

Note: Cases with missing data were excluded using listwise deletion. Standard errors in parentheses.

Table 2: Marginal Effects of High Conspiratorial Belief and Denial Belief for Beliefs Hypothesized to be Predicted by Conspiratorial Belief

	Conspiratorial belief	Denial belief
Probability "strongly agree" JFK not killed by single shooter	.11 (.07, .16)	.06 (.04, .09)
Predicted number of Zika conspiracy beliefs	.96 (.42, 1.51)	.15 (.07, .23)
Probability "strongly agree" violence against government as acceptable	.14 (.09, .20)	.04 (.02, .05)
Probability "very likely" voter fraud committed in 2016	.47 (.38, .56)	.34 (.27, .41)
Probability "strongly agree" 9/11 was not solely committed by Al-Qaeda	.10 (.06, .14)	.03 (.02, .05)

Note: Cell entries based on results in Table 1. 95% confidence intervals in parentheses.

Table 3: Regression Analysis of Beliefs Predicted by Denialism

	Media are slanted to mislead the public	Distrust in government	Official government accounts of important events cannot be trusted	Disbelief in climate change caused by human activity	Skepticism about safety of genetically modified foods (“GMMs”)
Conspiratorial belief	1.79***	.44^	.54*	.16	.23
	(.24)	(.23)	(.23)	(.24)	(.23)
Denial belief	2.52***	1.63***	1.80***	.54*	.71**
	(.27)	(.26)	(.26)	(.27)	(.26)
Education	.03	-.04	-.02	-.10***	-.08**
	(.03)	(.03)	(.03)	(.03)	(.03)
Income	.01	-.01	-.02	.01	-.02^
	(.01)	(.01)	(.01)	(.01)	(.01)
Race (non-white)	-.03	-.07	.17*	.19*	.22**
	(.09)	(.08)	(.09)	(.09)	(.09)
Birth year (older – younger)	.002	-.01***	-.01***	-.01***	-.004*
	(.002)	(.002)	(.002)	(.002)	(.002)
Sex (female)	-.22**	-.01	.09	-.22**	.54***
	(.08)	(.07)	(.07)	(.08)	(.07)
Partisanship (DEM – REP)	.13***	.13***	.11***	.27***	.06***
	(.02)	(.02)	(.02)	(.02)	(.02)
Chi^2	438.40***	216.91***	231.96***	290.01***	128.33***
R^2	.17	.08	.09	.11	.05
N	874	874	874	874	874

^p <= .10, *p <=.05, **p <=.01, ***p<=.001

Model type: ordinal probit

Note: Cases with missing data were excluded using listwise deletion. Standard errors in parentheses.

Table 2: Marginal Effects of High Conspiratorial Belief and Denial Belief for Beliefs Hypothesized to be Predicted by Denial Belief

	Conspiratorial belief	Denial belief
Probability “strongly agree” media are slanted to mislead the public	.54 (.46, .63)	.53 (.46, .60)
Probability “strongly disagree” government can be trusted “most of the time”	.18 (.12, .23)	.26 (.20, .31)
Probability “strongly agree” official government accounts of important events cannot be trusted	.11 (.07, .15)	.18 (.13, .22)
Probability “strongly disagree” climate change caused by human activity	.06 (.03, .08)	.07 (.04, .09)
Probability “strongly disagree” GMMs are safe	.13 (.09, .18)	.16 (.11, .20)

Note: Cell entries based on results in Table 3. 95% confidence intervals in parentheses.