

(Media Attention to) Misinformation can Undermine Trust in
Scientists

August 11, 2025

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A Descriptive trends

To find newspaper mentions of “fake news”, “misinformation” and “disinformation” as presented in the first figure of the main paper, we used the selection of “Major U.S. Newspapers” on Lexis+ (<https://advance.lexis.com>). The service describes the selection of newspapers as follows:

“Contains English language newspapers published in the United States that are listed in the top 50 in circulation in Editor & Publisher Year Book. Covers the following sources”:

Arkansas Democrat-Gazette
The Courier-Journal (Louisville, Kentucky)
Chicago Sun-Times
The Daily News Journal, Murfreesboro, TN
Chicago Tribune The Daily Oklahoman (Oklahoma City, OK)
Daily News (New York)
The Dallas Morning News Detroit Free Press (Michigan)
The Denver Post
Fort Worth Star-Telegram
The Detroit News (Michigan) Journal of Commerce The Indianapolis Star (Indiana)
Los Angeles Times
The Kansas City Star Newsday (New York)
The Miami Herald Pittsburgh Post-Gazette
The Milwaukee Journal Sentinel
Sacramento Bee
The New York Post
San Antonio Express News
The New York Times
St. Louis Post-Dispatch (Missouri)
The Orange County Register
Star Tribune (Minneapolis MN)
The Oregonian Tampa Bay Times
The Philadelphia Daily News (PA)
The Arizona Republic (Phoenix)
The Philadelphia Inquirer
The Atlanta Journal-Constitution
The Plain Dealer
The Boston Globe
The San Francisco Chronicle (California)
The Boston Herald
The Seattle Times
The Buffalo News (New York)
The Tampa Tribune (Florida)

The Charlotte Observer
The Wall Street Journal The Christian Science Monitor
Times - Picayune (New Orleans)
The Cincinnati Enquirer (Ohio)
USA Today
The Columbus Dispatch (Ohio)

B Study 1

B.1 Pre- & Post-Treatment Questionnaire

Table B.1: Variable descriptives

Variable	Question	Mean	SD
Age	‘Which of the following categories includes your current age?’ (1 ‘18-24’ - 5 ‘65+’)	4.73	1.52
Gender	‘What is your gender?’ (proportion female)	0.53	0.5
Education	‘What is the highest level of education you have completed?’ (1 ‘High School or Less’ - 5 ‘Masters Degree/Doctorate Degree’)	3.01	1.12
Political Ideology	‘How would you rate yourself on this scale?’ (1 ‘Very liberal’ - 5 ‘Very conservative’)	3.19	1.17
Party Affiliation	‘Please select the option that best describes your political party affiliation’ (1 ‘A strong Democrat’ - 7 ‘A strong Republican’)	3.89	2.16
Political interest	‘Generally, how interested are you in politics?’ (1 ‘Not at all interested’ - 5 ‘Extremely interested’)	3.14	1.22
Misperceptions	‘You will see a series of statements. We’d like to know how accurate you think each of the statements are to the best of your knowledge’ (1-4)		
	‘Local government officials in Michigan have been found to be funneling state funds to build a swimming pool on their private property’ (Wave 1)	2.18	0.96
	‘Local government officials in Michigan have been found to be funneling state funds to build a swimming pool on their private property’ (Wave 2)	2.19	0.96
	‘Local public health officials failed to report a new disease outbreak in Arizona, which threatens to take the lives of thousands of U.S. citizens’ (Wave 1)	2.01	0.96
	‘Local public health officials failed to report a new disease outbreak in Arizona, which threatens to take the lives of thousands of U.S. citizens’ (Wave 2)	1.91	0.91
	‘Nevada’s Department of Justice was recently hacked, which led to the leaking of thousands of legal documents of the state’s residents’ (Wave 1)	2.32	0.94

Belief in factual information on unrelated political topics	‘Nevada’s Department of Justice was recently hacked, which led to the leaking of thousands of legal documents of the state’s residents’ (Wave 2)	2.32	0.92
	‘You will see a series of statements. We’d like to know how accurate you think each of the statements are to the best of your knowledge’ (1-4)		
	‘In the US, roughly nine-in-ten adults get at least some news online (either via mobile or desktop)’ (Wave 1)	2.89	0.89
	‘In the US, roughly nine-in-ten adults get at least some news online (either via mobile or desktop)’ (Wave 2)	2.88	0.88
	‘Between February and June 2020, the share of young adults who are neither enrolled in school nor employed has more than doubled’ (Wave 1)	2.51	0.88
	‘Between February and June 2020, the share of young adults who are neither enrolled in school nor employed has more than doubled’ (Wave 2)	2.51	0.89
	‘Over 70% of the US population has a social media account’ (Wave 1)	2.94	0.83
	‘Over 70% of the US population has a social media account’ (Wave 2)	2.94	0.87
Trust	‘How much do you trust the following institutions/groups?’ (1-7)		
	‘Traditional media’ (Wave 1)	3.45	1.78
	‘Traditional media’ (Wave 2)	3.44	1.77
	‘Social media’ (Wave 1)	2.28	1.55
	‘Social media’ (Wave 2)	2.24	1.5
	‘Journalists’ (Wave 1)	3.46	1.74
	‘Journalists’ (Wave 2)	3.5	1.8
	‘Scientists’ (Wave 1)	4.72	1.73
	‘Scientists’ (Wave 2)	4.77	1.76
	‘Fact-checkers’ (Wave 1)	3.88	1.8
	‘Fact-checkers’ (Wave 2)	3.94	1.82
	‘University professors’ (Wave 1)	3.87	1.76
	‘University professors’ (Wave 2)	3.96	1.82
	‘US government’ (Wave 1)	3.37	1.71
	‘US government’ (Wave 2)	3.39	1.78
Perceived Salience of Misinformation	‘Please indicate to what extent you agree or disagree with the following statements’ (1-7)		
	‘Fake news is an important topic’ (Wave 1)	5.25	1.84
	‘Fake news is an important topic’ (Wave 2)	5.38	1.73
	‘Fake news is a problem’ (Wave 1)	6.03	1.34
	‘Fake news is a problem’ (Wave 2)	6.02	1.33

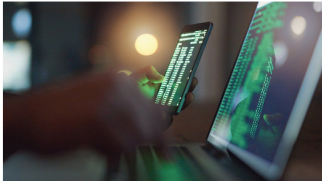
Information Seeking	‘It is important to do something about fake news’ (Wave 1)	5.88	1.42
	‘It is important to do something about fake news’ (Wave 2)	5.86	1.39
	‘Measures should be taken to solve the problem of fake news’ (Wave 1)	5.88	1.41
	‘Measures should be taken to solve the problem of fake news’ (Wave 2)	5.84	1.4
	‘How likely are you to engage in the following activities?’ (1-7)		
	‘Look up information about topics such as corruption in local governments’ (Wave 1)	4.21	1.88
	‘Look up information about topics such as corruption in local governments’ (Wave 2)	4.29	1.84
	‘Reach out to experts to find out about topics such as corruption in local governments’ (Wave 1)	3.65	1.87
	‘Reach out to experts to find out about topics such as corruption in local governments’ (Wave 2)	3.52	1.84
	‘Have a conversation with friends or family to learn more about topics such as corruption in local governments’ (Wave 1)	4.22	1.87
	‘Have a conversation with friends or family to learn more about topics such as corruption in local governments’ (Wave 2)	4.26	1.87

B.1.1 Debriefing

Thank you for taking part in this study. Your participation is very important to us. The study was designed to test the effects of exposure to misinformation versus exposure to the media coverage of misinformation. as a participants, you were randomly assigned to one of the conditions with different instructions. Some of you read mock social media posts and some of you did not read any information. If you remember these posts, please note that you read incorrect information that we, as researchers, wrote ourselves specifically for the purpose of this study in this survey. The claims made in the mock social media posts were purely made up to avoid any prior exposure that might influence the results of the study. In order to make the study realistic, we did not tell you any of this at the beginning of the experiment. If you would like to discuss anything about this study or your participation in it, please contact the principal investigator [name, email address]

B.2 Stimulus Materials

Treatment: Actual Misinformation



There is a lot of information going around about security breaches online. Recently, it was revealed that Nevada's Department of Justice was hacked, which resulted in thousands of Nevadans legal documents being released. A growing number of people are finding out more about it.

247 108 Comments 96 Shares

Like Comment Share



There is a lot of information going around about disease outbreaks. Recently, it was revealed that local public health officials failed to report a new disease outbreak in Arizona, which may kill thousands of U.S. citizens. A growing number of people are finding out more about it.

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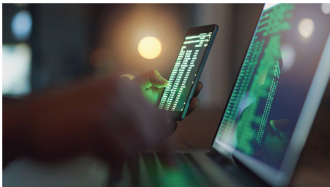


There is a lot of information going around about corruption in local governments. Recently, it was revealed that local government officials in Michigan have been caught funneling state funds to build swimming pools at their homes. A growing number of people are finding out more about it.

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Treatment: Coverage of Misinformation



There is a lot of fake news about security breaches online. The false claim that Nevada's Department of Justice was recently hacked, which resulted in thousands of Nevadans legal documents being released, has been circulated widely. A growing number of people are trying to fight fake news by stopping the spread of such false claims.

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There is a lot of fake news about disease outbreaks. The false claim that local public health officials failed to report a new disease outbreak in Arizona, which may kill thousands of U.S. citizens, has been circulated widely. A growing number of people are trying to fight fake news by stopping the spread of such false claims.

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There is a lot of fake news about corruption in local governments. The false claim that local government officials in Michigan have been caught funneling state funds to build swimming pools at their homes has been circulated widely. A growing number of people are trying to fight fake news by stopping the spread of such false claims.

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B.3 Pre-test

- Statement 1: Local government officials in Michigan have been found to be funneling state funds to build a swimming pool on their private property
- Statement 2: Local government officials in Wisconsin have engaged in drug trafficking in order to receive financial benefits, according to high-level informants who prefer to remain anonymous
- Statement 3: New evidence suggests that the condominium building collapse in Florida was actually targeting a local businessman
- Statement 4: Local public health officials failed to report a new disease outbreak in Arizona, which threatens to take the lives of thousands of U.S. citizens
- Statement 5: The director of Wildland Fire office went on vacation in Montana when wildfire raged through Northern California last year
- Statement 6: Nevada's Department of Justice was recently hacked, which led to the leaking of thousands of legal documents of the state's residents

Table B.2: Pre-test statements ratings

	Stat. 1	Stat. 2	Stat. 3	Stat. 4	Stat. 5	Stat. 6
This statement is easy to read	6.068	5.878	5.893	6.137	5.990	6.010
This statement is interesting	5.863	5.946	5.873	5.844	5.849	5.800
This statement is easy to understand	6.059	5.863	5.990	5.946	6.059	6.049
This statement is likely to be true	5.629	5.478	5.424	5.420	5.541	5.707
This statement is believable	5.702	5.576	5.488	5.459	5.771	5.785
Aggregated mean	5.864	5.748	5.734	5.761	5.842	5.870
Democrats (coding "Independent, lean toward Democrat" as Democrat)	5.908	5.822	5.783	5.832	5.931	5.881
Republicans (coding "Independent, lean toward Republican" as Republican)	5.809	5.688	5.703	5.694	5.697	5.879
Democrats	5.987	5.900	5.887	5.936	5.996	5.966
Republicans	5.811	5.639	5.714	5.753	5.678	5.933

B.4 Sample and attrition statistics

Table B.3: Demographics of population/sample and wave attrition Study 1

	Population	Wave 1	Wave 2	p-value
Gender: Male	49	46.94	49.94	0.001
Gender: Female	51	53.06	50.06	
Age: 18-24	18	3.00	3.80	
Age: 25-34	17	9.60	11.18	
Age: 35-44	17	11.10	13.91	
Age: 45-54	18	11.41	14.98	
Age: 55-64	14	14.47	22.00	
Age: 65+	16	47.42	34.13	
Education: Less than high school	13	2.34	2.02	0.001
Education: High school graduate	30	43.16	24.61	
Education: Some college completed	20	17.83	22.95	
Education: College graduate	28	24.67	33.77	
Education: Post-graduate training/professional school after college	10	12.00	16.65	

Note:

p-values indicate whether W2 sample is significantly different from W1 sample, tested with a chi2 test.

B.5 Full model results

B.5.1 Main outcomes

Table B.4: Study 1: Misperceptions

	Misperception index
Age	−0.080*** (0.014)
Gender (ref: male)	0.015 (0.040)
Education	−0.046* (0.018)
Race (ref: white)	−0.039 (0.045)
Political Ideology	0.079*** (0.017)
Political Interest	0.001 (0.016)
Coverage of misinformation	−0.240*** (0.047)
Misinformation	0.302*** (0.048)
Constant	2.428*** (0.114)
Observations	1,662
R ²	0.102
Adjusted R ²	0.098
Residual Std. Error	0.786 (df = 1653)
F Statistic	23.474*** (df = 8; 1653)
<i>Note:</i>	*p<0.05; **p<0.01; ***p<0.001

Table B.5: Study 1: Trust

	Trust						
	Index	Traditional media	Social media	Journalists	Scientists	Fact-checkers	Professors
Age	−0.093*** (0.021)	−0.036 (0.028)	−0.365*** (0.025)	−0.062* (0.027)	0.023 (0.027)	−0.068* (0.028)	−0.117*** (0.027)
Gender (ref: male)	0.090 (0.062)	0.061 (0.081)	−0.041 (0.072)	0.027 (0.077)	0.227** (0.079)	0.134 (0.082)	0.058 (0.078)
Education	0.059* (0.028)	0.069 (0.037)	−0.084* (0.033)	0.071* (0.035)	0.066 (0.036)	0.111** (0.038)	0.096** (0.036)
Race (ref: white)	0.022 (0.071)	−0.025 (0.093)	−0.110 (0.083)	−0.047 (0.088)	0.198* (0.090)	−0.019 (0.094)	0.190* (0.089)
Political Ideology	−0.513*** (0.027)	−0.607*** (0.035)	−0.119*** (0.031)	−0.648*** (0.033)	−0.583*** (0.034)	−0.540*** (0.035)	−0.649*** (0.033)
Political Interest	0.150*** (0.026)	0.159*** (0.033)	0.082** (0.030)	0.185*** (0.032)	0.175*** (0.033)	0.224*** (0.034)	0.089** (0.032)
Coverage of misinformation	−0.017 (0.074)	0.075 (0.097)	0.015 (0.086)	0.038 (0.092)	−0.054 (0.094)	−0.013 (0.098)	−0.065 (0.093)
Misinformation	0.062 (0.074)	0.059 (0.097)	0.003 (0.087)	0.111 (0.093)	0.081 (0.095)	0.118 (0.099)	0.059 (0.094)
Constant	4.934*** (0.177)	4.796*** (0.233)	4.476*** (0.207)	4.993*** (0.221)	5.460*** (0.227)	4.812*** (0.237)	5.763*** (0.224)
Observations	1,662	1,662	1,662	1,662	1,662	1,662	1,662
R ²	0.243	0.190	0.150	0.234	0.185	0.181	0.229
Adjusted R ²	0.239	0.186	0.146	0.230	0.181	0.177	0.226
Residual Std. Error (df = 1653)	1.225	1.608	1.430	1.529	1.565	1.634	1.546
F Statistic (df = 8; 1653)	66.190***	48.415***	36.530***	63.129***	46.774***	45.678***	61.508***

Note:

*p<0.05; **p<0.01; ***p<0.001

B.5.2 All other pre-registered outcomes

Table B.6: Study 1: Misperceptions Wave 2

	Misperception index
Age	−0.024 (0.018)
Gender (ref: male)	0.080 (0.055)
Education	0.001 (0.025)
Race (ref: white)	−0.020 (0.061)
Political Ideology	0.072** (0.023)
Political Interest	0.046* (0.023)
Coverage of misinformation	0.010 (0.065)
Misinformation	0.027 (0.067)
Constant	1.834*** (0.151)
Observations	838
R ²	0.020
Adjusted R ²	0.011
Residual Std. Error	0.780 (df = 829)
F Statistic	2.129* (df = 8; 829)
<i>Note:</i>	*p<0.05; **p<0.01; ***p<0.001

Table B.7: Study 1: Trust Wave 2

	Trust						
	Index	Traditional media	Social media	Journalists	Scientists	Fact-checkers	Professors
Age	−0.083** (0.030)	−0.009 (0.038)	−0.351*** (0.033)	−0.068 (0.037)	0.038 (0.037)	−0.042 (0.039)	−0.117** (0.039)
Gender (ref: male)	0.132 (0.089)	0.137 (0.114)	−0.070 (0.097)	−0.014 (0.110)	0.246* (0.110)	0.166 (0.115)	0.200 (0.115)
Education	0.127** (0.041)	0.102 (0.052)	0.028 (0.045)	0.115* (0.050)	0.156** (0.051)	0.170** (0.053)	0.164** (0.053)
Race (ref: white)	−0.076 (0.099)	−0.131 (0.126)	−0.148 (0.109)	−0.213 (0.122)	0.099 (0.123)	−0.168 (0.128)	0.026 (0.128)
Political Ideology	−0.512*** (0.038)	−0.564*** (0.048)	−0.091* (0.041)	−0.660*** (0.047)	−0.585*** (0.047)	−0.576*** (0.049)	−0.624*** (0.049)
Political Interest	0.180*** (0.036)	0.202*** (0.047)	0.090* (0.040)	0.243*** (0.045)	0.222*** (0.045)	0.226*** (0.047)	0.118* (0.047)
Coverage of misinformation	0.151 (0.105)	0.179 (0.134)	0.236* (0.115)	0.230 (0.130)	0.095 (0.131)	0.136 (0.136)	0.101 (0.136)
Misinformation	0.007 (0.108)	−0.037 (0.138)	−0.056 (0.118)	0.048 (0.133)	0.122 (0.134)	0.064 (0.140)	0.032 (0.139)
Constant	4.484*** (0.242)	4.210*** (0.311)	3.772*** (0.267)	4.741*** (0.300)	4.912*** (0.302)	4.585*** (0.314)	5.312*** (0.314)
Observations	838	838	838	838	838	838	838
R ²	0.252	0.188	0.158	0.260	0.215	0.207	0.214
Adjusted R ²	0.244	0.180	0.150	0.253	0.208	0.199	0.206
Residual Std. Error (df = 829)	1.255	1.608	1.380	1.555	1.564	1.627	1.626
F Statistic (df = 8; 829)	34.834***	24.024***	19.431***	36.437***	28.464***	26.972***	28.184***

Note:

*p<0.05; **p<0.01; ***p<0.001

Table B.8: Study 1: Factual beliefs

	Belief		
	Item 1	Item 2	Item 3
Age	−0.076*** (0.015)	−0.067*** (0.015)	−0.076*** (0.014)
Gender (ref: male)	−0.098* (0.044)	−0.122** (0.044)	−0.128** (0.041)
Education	0.002 (0.020)	0.031 (0.020)	−0.017 (0.019)
Race (ref: white)	0.126* (0.051)	0.055 (0.050)	0.112* (0.048)
Political Ideology	0.003 (0.019)	0.043* (0.019)	0.019 (0.018)
Political Interest	0.070*** (0.018)	0.079*** (0.018)	0.065*** (0.017)
Coverage of misinformation	0.026 (0.053)	−0.076 (0.052)	−0.070 (0.049)
Misinformation	0.009 (0.053)	−0.031 (0.053)	−0.036 (0.050)
Constant	2.958*** (0.127)	2.402*** (0.126)	3.106*** (0.119)
Observations	1,662	1,662	1,662
R ²	0.025	0.029	0.029
Adjusted R ²	0.021	0.024	0.024
Residual Std. Error (df = 1653)	0.878	0.871	0.822
F Statistic (df = 8; 1653)	5.359***	6.145***	6.088***

Note:

*p<0.05; **p<0.01; ***p<0.001

Table B.9: Study 1: Factual beliefs Wave 2

	Belief		
	Item 1	Item 2	Item 3
Age	−0.084*** (0.021)	−0.030 (0.021)	−0.122*** (0.020)
Gender (ref: male)	−0.059 (0.061)	−0.031 (0.063)	−0.125* (0.060)
Education	−0.009 (0.028)	0.023 (0.029)	−0.001 (0.028)
Race (ref: white)	0.117 (0.068)	0.018 (0.070)	0.173* (0.067)
Political Ideology	−0.019 (0.026)	0.012 (0.027)	−0.007 (0.026)
Political Interest	0.086*** (0.025)	0.051 (0.026)	0.087*** (0.025)
Coverage of misinformation	−0.051 (0.073)	−0.020 (0.075)	−0.055 (0.071)
Misinformation	−0.090 (0.075)	−0.017 (0.077)	0.002 (0.073)
Constant	3.055*** (0.168)	2.387*** (0.173)	3.184*** (0.165)
Observations	838	838	838
R ²	0.035	0.008	0.060
Adjusted R ²	0.026	−0.002	0.050
Residual Std. Error (df = 829)	0.869	0.895	0.852
F Statistic (df = 8; 829)	3.783***	0.788	6.556***

Note: *p<0.05; **p<0.01; ***p<0.001

Table B.10: Study 1: Misinformation salience

	Salience	
	Wave 1	Wave 2
Age	0.108*** (0.022)	0.096*** (0.029)
Gender (ref: male)	-0.028 (0.063)	0.024 (0.087)
Education	0.039 (0.029)	-0.017 (0.040)
Race (ref: white)	0.201** (0.072)	-0.076 (0.096)
Political Ideology	-0.125*** (0.027)	-0.094* (0.037)
Political Interest	0.163*** (0.026)	0.211*** (0.036)
Coverage of misinformation	0.043 (0.075)	0.047 (0.102)
Misinformation	-0.034 (0.076)	-0.028 (0.105)
Constant	4.886*** (0.181)	5.055*** (0.237)
Observations	1,662	838
R ²	0.062	0.071
Adjusted R ²	0.057	0.062
Residual Std. Error	1.248 (df = 1653)	1.226 (df = 829)
F Statistic	13.572*** (df = 8; 1653)	7.898*** (df = 8; 829)
<i>Note:</i> *p<0.05; **p<0.01; ***p<0.001		

Table B.11: Study 1: Information seeking

	Information seeking	
	Wave 1	Wave 2
Age	−0.196*** (0.026)	−0.242*** (0.035)
Gender (ref: male)	−0.091 (0.075)	−0.112 (0.103)
Education	0.048 (0.035)	0.097* (0.047)
Race (ref: white)	−0.246** (0.086)	−0.217 (0.115)
Political Ideology	−0.046 (0.032)	−0.062 (0.044)
Political Interest	0.534*** (0.031)	0.526*** (0.042)
Coverage of misinformation	−0.068 (0.089)	−0.034 (0.122)
Misinformation	−0.064 (0.090)	−0.111 (0.125)
Constant	3.549*** (0.216)	3.536*** (0.282)
Observations	1,662	838
R ²	0.194	0.207
Adjusted R ²	0.190	0.199
Residual Std. Error	1.490 (df = 1653)	1.460 (df = 829)
F Statistic	49.579*** (df = 8; 1653)	27.013*** (df = 8; 829)
<i>Note:</i> *p<0.05; **p<0.01; ***p<0.001		

C Study 2

C.1 Qualitative coding of misinformation coverage

Table 1.1: Description and percentage of coverage of misinformation categories

Category	Description	Share (%)
About Fact-checking	The article covers a fact-check of a statement by the media/political figure/actor/etc.	47%
About Politician	The article mentions a politician who has lied or mislead the public. This category differs from 'About Fact-checking' such that it is <u>not</u> clearly presented as a fact-check	19%
About Content	The article mentions that certain media (liberal/conservative/social media) or media in general are full of misinformation/are spreading falsehoods	15%
About Election	The article mentions misinformation as an interference with the 2016 US Elections (i.e. Russian propaganda, Cambridge Analytica)	7%
About Trump anti-media	The article mentions that Trump blames mainstream or liberal media for being fake news/spreading lies etc.	7%
About Conspiracies	The article discusses the presence of a conspiracy theory	2%
About Business, Movement, or Social Group	The article mentions lies/falsehoods/misleadings statements spread by a business (i.e. a pharmaceutical company), (social) movement (i.e. LGBT) or social group.	2%

Considering the coverage of misinformation as a type of media exposure is rather unexplored territory, the 281 sampled articles that mentioned misinformation were additionally manually coded into several categories in order to provide a descriptive account of the type of content these articles cover. After reading a first batch of 100 articles, seven 'themes' (categories) occurred repeatedly to which all articles were subsequently attributed. Table 4.1 below lists these categories, their description, and the share of each category across the total ($n = 281$).

The category 'About Content' was further specified into four subcategories, namely 1) 'General', 2) 'Social Media', 3) 'Liberal' and 4) 'Conservative'. The first subcat-

egory refers to articles that mention that the media (i.e. no clear specification of what media) is full of misinformation (36% of all 'About Content' articles). The second refers to articles that mention specific social media (e.g., Facebook/Reddit/Twitter), is rife with misinformation (26%). The subcategory 'Liberal' refers to articles that blame liberal/left-leaning/democrat media for spreading falsehoods (26%) while the last subcategory 'Conservative' refers to articles that blame conservative/right-leaning/republican media (8%). Moreover, noteworthy is that the most mentioned politicians across the categories 'About Fact-checking' and 'About Politician' are Trump, Obama, Hillary Clinton, and as a topic climate change.

We give a couple of examples to illustrate the three main categories 'About Fact-checking', 'About Politicians' and 'About Content'. Most fact-checking examples come from three major US fact-checking websites Snopes, Politifact, and Factcheck.org. For example, an article on Snopes titled "Who Is Barack Obama?", asks if Obama is a radical Muslim who will not recite the Pledge of Allegiance, after which the article answers the claim is false and is consequently debunked ¹. The category 'About Politician' can be illustrated well with an article on Vox about Obama warning against the spread of fake news through so-called 'deepfakes', which is an algorithmic machine learning technology that allows anyone to create a convincing simulation of a human subject - which in this case concerned Obama himself ². Another example of this category is an article on Foxnews describing how Trump accuses Elizabeth Warren of lying about the fact she is of native American heritage to help in securing jobs³. One example of the category 'About Content' is an article titled "The Terrifying Future of Fake News". As the title suggests, the article describes the consequences of fake news in our current news environment: "The incentives that govern its biggest platforms are calibrated to reward information that is often misleading and polarizing, or both" ⁴. A second example of the same category is an article titled "About 3 in 4 Say Major Outlets Report 'Fake News', and describes through results of a poll among US citizens how trust in the media is declining and that almost half of the polled respondents believe news sources to report fake news stories to intentionally push an agenda ⁵.

¹<https://www.snopes.com/fact-check/who-is-barack-obama/>

²<https://www.vox.com/2018/4/18/17252410/jordan-peelee-obama-deepfake-buzzfeed>

³<https://www.foxnews.com/politics/trump-claims-maxine-waters-iq-in-mid-60s-slams-fake-pocahontas-elizabeth-warren-in-rally-to-unseat-jon-tester>

⁴<https://www.buzzfeednews.com/article/charliwarzel/the-terrifying-future-of-fake-news>

⁵<https://www.newsmax.com/newsfront/poll-americans-media-fake-news/2018/04/02/id/852019/>

Table C.13: Demographics of population/sample and wave attrition

	Population	Wave 1	Wave 2	p-value
Gender: Male	49.23	43.35	43.83	0.869
Gender: Female	50.77	56.65	56.17	
Age: 18-24	11.90	8.89	8.98	0.981
Age: 25-34	17.90	22.75	22.78	
Age: 35-44	16.40	25.39	26.58	
Age: 45-54	16.00	18.07	18.30	
Age: 55-64	16.60	15.72	14.73	
Age: 65+	21.20	9.18	8.63	
Education: Less than high school	10.60	1.08	1.15	0.963
Education: High school graduate	28.32	13.89	14.07	
Education: Completed some college, but no degree	17.97	19.47	20.18	
Education: Associate Degree + Other post-high school vocational training	11.05	15.56	14.42	
Education: Bachelor	21.28	33.37	34.49	
Education: Master's degree + Doctoral degree	10.78	16.63	15.69	

Note:

p-values indicate whether W2 sample is significantly different from W1 sample, tested with a chi2 test.

C.2 Sample statistics

C.3 Survey questions

Table C.14: Variable descriptives

Variable	Question	Mean	SD
Age	'What is your age?'	43.44	14.63
Gender	'What is your gender?' (proportion female)	0.57	0.5
Education	'What is the highest level of education you have completed?' (proportion Bachelor or higher)	0.5	0.5
Partisanship	'Please select the option that best describes your political party affiliation.' (1 'A strong Democrat' - 7 'A strong Republican')	3.57	2.1
Political interest	'How interested would you say you are in politics?' (1-7)	5.09	1.56
Political knowledge	Index of five statements on self-ascribed knowledge (1-7)	3.7	0.85
Misinformation beliefs	'Do you think the following statements are false or true? Not everyone is expected to know these answers. Please just try to answer to the best of your ability. If you do not know the answer, please feel free to select "unsure."' (1-7)		
	'Vaccines are dangerous.' (Wave 1)	1.82	1.24
	'Vaccines are dangerous.' (Wave 2)	1.84	1.24
	'Having more gun owners in society reduces gun-related crimes.' (Wave 1)	2.44	1.47
	'Having more gun owners in society reduces gun-related crimes.' (Wave 2)	2.52	1.46
	'Human activity is responsible for global warming' (Wave 1)	1.99	1.27
	'Human activity is responsible for global warming' (Wave 2)	2	1.32
	Index (W1)	2.09	0.96
	Index (W2)	2.12	0.98
Trust	'How much do you trust the following groups?' (1-7)		
	'The federal government in Washington' (Wave 1)	3.25	1.51
	'The federal government in Washington' (Wave 2)	3.23	1.52
	'Scientists' (Wave 1)	5.21	1.39
	'Scientists' (Wave 2)	5.29	1.4
	'University professors' (Wave 1)	4.51	1.58
	'University professors' (Wave 2)	4.53	1.58
	'Reporters and journalists' (Wave 1)	3.83	1.74
	'Reporters and journalists' (Wave 2)	3.88	1.68
	'The U.S. Supreme court' (Wave 1)	4.37	1.47
	'The U.S. Supreme court' (Wave 2)	4.42	1.44

'Police' (Wave 1)	4.54	1.6
'Police' (Wave 2)	4.54	1.62
Index (Wave 1)	4.28	1.04
Index (Wave 2)	4.32	1.03

C.4 Distribution of exposure variables

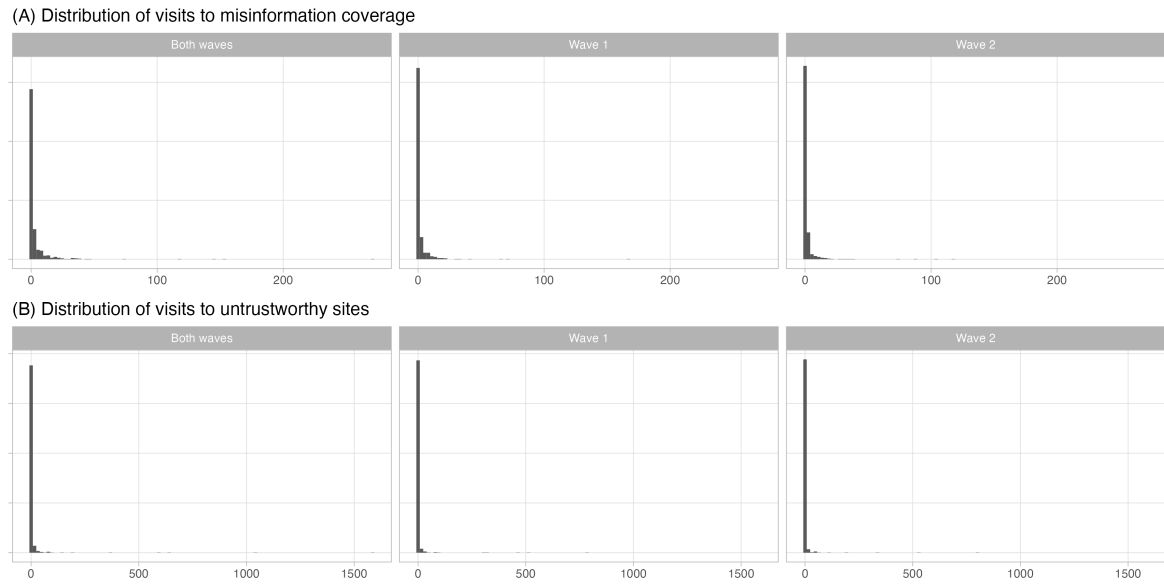


Figure C.1: Distribution of exposures

C.5 Full model results

Tables [C.15](#) and [C.16](#) shows regression results for effects on both the misperception index and the individual items, for both the lagged-dependent variable and fixed-effects models. Tables [C.17](#) and [C.18](#) shows regression results for the trust index as well as the individual items.

Table C.15: Study 2: Misperception models (LDV)

	Misperceptions			
	Vaccine	Guns	Climate change	Misperception index
Misinfo coverage	0.064 (0.049)	−0.021 (0.065)	−0.029 (0.057)	0.006 (0.034)
Untrustworthy sites	0.064 (0.043)	0.082 (0.056)	−0.023 (0.049)	0.029 (0.029)
Left-wing sites	−0.039 (0.023)	−0.077* (0.030)	−0.062* (0.027)	−0.051** (0.016)
Right-wing sites	−0.039 (0.024)	0.034 (0.031)	0.024 (0.027)	0.003 (0.016)
Misperceptions W1	0.740*** (0.026)	0.476*** (0.030)	0.600*** (0.032)	0.731*** (0.026)
Age	−0.0002 (0.002)	0.001 (0.003)	0.006* (0.003)	0.002 (0.001)
Gender	0.095 (0.060)	−0.004 (0.078)	−0.030 (0.068)	0.020 (0.041)
Education	−0.072 (0.059)	−0.156* (0.077)	−0.177** (0.068)	−0.118** (0.040)
Partisanship	0.030* (0.014)	0.189*** (0.021)	0.105*** (0.019)	0.065*** (0.011)
Political interest	−0.003 (0.020)	−0.040 (0.026)	0.025 (0.023)	−0.010 (0.013)
Political knowledge	0.063 (0.037)	0.037 (0.048)	0.016 (0.041)	0.016 (0.025)
Total web visits	0.026 (0.031)	0.027 (0.040)	0.039 (0.035)	0.031 (0.021)
Constant	0.040 (0.317)	0.637 (0.415)	−0.110 (0.363)	0.131 (0.216)
Observations	786	786	786	786
Log Likelihood	−945.324	−1,156.757	−1,052.257	−644.387
Akaike Inf. Crit.	1,916.648	2,339.513	2,130.515	1,314.775

Note:

*p<0.05; **p<0.01; ***p<0.001

Table C.16: Study 2: Misperception models (FE)

Dependent Variable:	outcome			
Model:	Vaccine (1)	Guns (2)	Climate change (3)	Misperception index (4)
<i>Variables</i>				
Misinfo coverage	0.0419 (0.0371)	0.0388 (0.0638)	-0.0296 (0.0494)	0.0170 (0.0307)
Untrustworthy sites	0.0669* (0.0393)	0.0017 (0.0699)	0.0055 (0.0478)	0.0247 (0.0332)
Left-wing sites	-0.0122 (0.0249)	-0.0247 (0.0353)	-0.0059 (0.0320)	-0.0143 (0.0164)
Right-wing sites	-0.0192 (0.0279)	-0.0236 (0.0360)	0.0233 (0.0323)	-0.0065 (0.0178)
Total web visits	0.0204 (0.0344)	0.0291 (0.0436)	-0.0035 (0.0420)	0.0154 (0.0193)
<i>Fixed-effects</i>				
person_id	Yes	Yes	Yes	Yes
wave	Yes	Yes	Yes	Yes
<i>Fit statistics</i>				
Observations	1,596	1,596	1,596	1,596
R ²	0.87392	0.82010	0.84737	0.90894
Within R ²	0.00446	0.00120	0.00097	0.00192

Clustered (person_id) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

Table C.17: Study 2: Trust models (LDV)

	Trust			
	Scientists	Professors	Media	Trust index
Misinfo coverage	−0.133* (0.058)	−0.036 (0.062)	−0.032 (0.065)	−0.057 (0.039)
Untrustworthy sites	−0.110* (0.051)	−0.066 (0.054)	−0.118* (0.057)	−0.094** (0.034)
Left-wing sites	0.066* (0.027)	0.021 (0.029)	0.038 (0.031)	0.026 (0.018)
Right-wing sites	0.052 (0.028)	−0.029 (0.030)	−0.008 (0.031)	0.011 (0.019)
Trust W1	0.651*** (0.027)	0.662*** (0.027)	0.634*** (0.026)	0.738*** (0.023)
Age	−0.001 (0.003)	−0.005 (0.003)	0.004 (0.003)	0.001 (0.002)
Gender	−0.096 (0.071)	−0.051 (0.074)	0.027 (0.079)	−0.0005 (0.047)
Education	0.154* (0.070)	0.156* (0.074)	0.096 (0.078)	0.094* (0.047)
Partisanship	−0.116*** (0.018)	−0.115*** (0.020)	−0.132*** (0.021)	−0.028* (0.011)
Political interest	−0.040 (0.024)	0.052* (0.025)	0.044 (0.027)	0.021 (0.016)
Political knowledge	0.011 (0.043)	−0.047 (0.045)	0.024 (0.048)	−0.004 (0.028)
Total web visits	−0.028 (0.036)	−0.0004 (0.038)	−0.016 (0.041)	−0.020 (0.024)
Constant	2.596*** (0.406)	2.076*** (0.417)	1.481*** (0.427)	1.225*** (0.259)
Observations	786	786	786	786
Log Likelihood	−1,077.497	−1,118.455	−1,165.631	−755.753
Akaike Inf. Crit.	2,180.993	2,262.911	2,357.261	1,537.507

Note:

*p<0.05; **p<0.01; ***p<0.001

Table C.18: Study 2: Trust models (FE)

Dependent Variable:	outcome			
Model:	Scientists (1)	Professors (2)	Media (3)	Trust index (4)
<i>Variables</i>				
Misinfo coverage	-0.1210** (0.0567)	-0.0553 (0.0561)	0.0019 (0.0609)	-0.0470 (0.0338)
Untrustworthy sites	-0.1351** (0.0586)	0.0745 (0.0690)	-0.0546 (0.0628)	-0.0252 (0.0369)
Left-wing sites	0.0118 (0.0332)	-0.0396 (0.0340)	-0.0396 (0.0368)	-0.0169 (0.0213)
Right-wing sites	0.0793** (0.0361)	0.0420 (0.0337)	0.0486 (0.0392)	0.0590*** (0.0216)
Total web visits	-0.0129 (0.0426)	0.0274 (0.0465)	-0.0153 (0.0504)	-0.0186 (0.0333)
<i>Fixed-effects</i>				
person_id	Yes	Yes	Yes	Yes
wave	Yes	Yes	Yes	Yes
<i>Fit statistics</i>				
Observations	1,596	1,596	1,596	1,596
R ²	0.85662	0.87670	0.87796	0.88975
Within R ²	0.01620	0.00680	0.00465	0.01159

Clustered (person_id) standard-errors in parentheses

*Signif. Codes: ***: 0.01, **: 0.05, *: 0.1*

D Pre-Analysis Plan

Pre-Analysis Plan

For Better or for Worse?

Comparing the Effects of Exposure to Actual Misinformation to the Media's Coverage
of Misinformation

September 22, 2021

1 General Information

1.1 Short Description

Media coverage of misinformation aims to increase the quality of news as well as audiences' trust in it. However, in amplifying misinformation, this approach may have unintended effects. We argue that indirect exposure to misinformation may have negative effects on a host of democratically important outcomes. These unintended effects may be comparable to, or even greater than, those of direct misinformation exposure. This project will systematically examine how exposure to the coverage of misinformation – i.e., (social) media that reports on the amount of false information in the news environment – influences misperceptions, trust in a host of democratic institutions, skepticism, the perceived salience of misinformation, and information-seeking behaviors. We address a fundamental question: “Compared to exposure to actual misinformation, in what ways is the coverage of misinformation harmful, and in what ways is it beneficial?” Our project thus raises the idea that the problem may not be misinformation *per se*, but that reporting about misinformation may achieve undesired next to possible positive outcomes. To test these effects, we recruit 1600 US citizens to take part in an online experiment. We randomly assign the participants to two treatments, the actual misinformation or the coverage of misinformation, or to a control group. To test for sleeper-effects, the same participants are invited to take part in a follow-up survey a week after completing the first survey, with an estimated final $n = 800$.

1.2 Theory & Background

Few people see misinformation or visit fake news sites (Guess et al., 2019) and behavioral effects of such exposure are limited (Allcott and Gentzkow, 2017). Although more people see information *about* misinformation and some speculate about its effects (Lazer et al., 2019), to our knowledge, only one recent study examines the effects of this indirect exposure on media trust (see Thorson, unpublished manuscript). Moreover, other democratically relevant outcomes, such as information-seeking and skepticism of verified facts, have been overlooked. May media coverage of misinformation turn people away from accurately informing themselves? Can it increase public skepticism of verified facts? Furthermore, can the coverage of misinformation – as the context in which misinformation is presented – may fade from memory – induce misperceptions over-time?

1.3 Research Questions & Hypotheses

1.3.1 Misperceptions

Question 1: How does exposure to coverage of misinformation influence people's misperceptions?

We argue that next to exposure to actual misinformation, the coverage of misinformation may

unintentionally foster misperceptions. Articles about misinformation in news media typically repeat falsehoods, making them more familiar (Swire, Ecker, & Lewandowsky, 2017), and increasing the chances that people accept information that sounds familiar as true (i.e., the mere familiarity effect; (Zajonc, 1968)). Moreover, the media’s coverage often addresses misinformation alongside fact-checking, which may not fully erase the effects of exposure to misinformation and lead to lingering effects (Thorson, 2016). In short, “research on fluency, the ease of information recall – and familiarity bias in politics shows that people tend to remember information, or how they feel about it, while forgetting the context within which they encountered it” (Lazer et al., 2018, p. 1095). For example, if news media address Trump’s false claim that mail-in voting would increase fraud risks, people could forget the context -especially over-time -, and simply recall that mail-in voting increases fraud risk, rather than remembering that this false claim was presented in the context of media covering this claim. In short, the coverage of misinformation may come with the risk that, in familiarizing people with false claims, it increases the likelihood that individuals accept false claims as true. We thus predict:

Treatment effects

- **Hypothesis 1_a:** The levels of misperceptions will be highest among participants exposed to actual misinformation, followed by those exposed to the coverage of misinformation, compared to participants in the control group, and;
- **Hypothesis 1_b:** One week after exposure to the treatment, the levels of misperceptions of *both* participants exposed to actual misinformation *and* participants exposed to the coverage of misinformation will be higher than among participants in the control group

1.3.2 Belief in factual information on unrelated political topics

Question 2: How does exposure to coverage of misinformation influence people’s beliefs in factual information on other topics?

We expect that exposure to the coverage of misinformation may have negative spill-over effects: By being more aware of the possibility that not everything you are exposed to is true, such exposure might increase general skepticism (Guess, Lockett, et al., 2020). As a result, exposure to the coverage of misinformation may make people not only more critical of potential *misinformation* but also skeptical of *any* information they are exposed to (Guess, Lerner, et al., 2020), thereby increasing skepticism of verified facts on other socio-political topics.

Treatment effects

- **Hypothesis 2:** Participants exposed to the coverage of misinformation will be most likely to think that factual information on other topics is untrue, followed by participants exposed to actual misinformation, and by participants in a control group

1.3.3 Trust

Question 3: Compared to exposure to misinformation, how does exposure to the coverage of misinformation influence people's trust in key societal institutions?

We expect that exposure to the coverage of misinformation will lower people's levels of trust in key societal institutions, as misinformation coverage often speaks directly to the fact that it is difficult to know who and what to trust (Thorson, unpublished manuscript). We expect the largest decrease in trust in media and journalists, because - after all - exposure to media coverage of misinformation indirectly implicates the media and journalists in disseminating this coverage.

Treatment effects

- **Hypothesis 3_a:** The levels of trust will be lowest for participants exposed to the coverage of misinformation, followed by those exposed to actual misinformation, and by the participants in a control group, and;
- **Hypothesis 3_b:** we expect the largest difference for trust in media and journalists

1.3.4 Perceived Salience of Misinformation

Question 4: How does the coverage of misinformation influence perceiving misinformation as an important problem?

One of the main ideas behind agenda-setting function of the media, is that the mass media "may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about" (Cohen, 1963, p. 13). This means that if a certain topic is covered frequently and prominently, the audience is likely to regard the issue as being more important (McCombs & Shaw, 1972; McCombs, 2005).

More recent research focusing on the agenda-setting function of social media as opposed to traditional mass media, shows that "Facebook yields an agenda-setting effect by raising participants' perceived importance of certain policy issues" (Feezell, 2018, p. 482), despite concerns that the traditional agenda-setting power of mass media may be threatened by the increased selectivity and audience fragmentation in today's digital media environment. Therefore, in line with theories of agenda-setting, we expect that the coverage of misinformation in (social) media will increase perceived

importance of misinformation as a problem that needs dealing with.

Treatment effects

- **Hypothesis 4:** Participants exposed to the coverage of misinformation will find misinformation to be a more important problem, followed by participants exposed to actual misinformation, and by participants in a control group

1.3.5 Information-seeking

Question 5: Compared to exposure to misinformation, how does exposure to the coverage of misinformation influence people's information-seeking behavior as related to the issue at hand?

In line with the aforementioned theories of agenda-setting (Cohen, 1963; Feezell, 2018; McCombs & Shaw, 1972; McCombs, 2005), we expect that being exposed to the coverage of misinformation will increase its salience and thereby also the likelihood to engage with the issue (i.e. information-seeking) (Tandoc et al., 2018). The Affective Intelligence Theory (AIT) suggests that if people start to experience feelings of fear or anxiety, they will stop and search for more information (Marcus, Neuman, & MacKuen, 2000). However, we expect that the coverage of misinformation will *decrease* the likelihood to look up information. Indeed, the AIT predicts that "those experiencing aversion to the news will be less likely to seek more information" (MacKuen, Marcus, Neuman, & Miller, 2010, p. 7). In other words, learning that misinformation is prevalent could make people feel overwhelmed and less likely to want to find out more - compared to those exposed to actual misinformation (Valentino, Hutchings, Banks, & Davis, 2008).

Treatment Effects

- **Hypothesis 5:** Participants exposed to the coverage of misinformation will engage in information-seeking least, followed by participants exposed to actual misinformation, and by participants in a control group

1.4 Additional Analyses

While we have no clear directional hypotheses, we will additionally test the sleeper-effects of the other outcome variables (see Appendix B).

2 Design

2.1 Study Type

Online Experiment

2.2 Blinding

Experiment participants will not be aware of the group assignment nor manipulations

2.3 Study Design

We have a between-subject design: Respondents are randomly assigned to one of two treatment groups or a control group. The following procedures are involved:

First, respondents complete a pre-survey (answering questions about their socio-demographic characteristics, political attitudes and beliefs). Then, participants are randomly assigned to one of the three treatment conditions:

1. In condition one, after the pretest, participants are exposed to misinformation (three professionally designed mock Facebook posts with a blurred source).
2. In condition two, after the pretest, participants are exposed to *coverage of misinformation* (three professionally designed mock Facebook posts with a blurred source).
3. In condition three, after the pretest, participants are not exposed to any stimulus and are redirected to the post-survey directly.

The three mock Facebook posts are sequentially presented in random order. After exposure to treatment, participants are asked to complete the post-survey which assesses their trust in various institutions and misperceptions. Moreover, participants are asked to answer questions concerning the perceived accuracy of several factually accurate statements, the perceived salience of misinformation and information-seeking.

As our target sample-size is 1600 participants, ± 530 participants are randomly assigned to each group. Estimating around 50% attrition, from these 1600 we expect 800 participants to additionally complete the follow-up survey. This follow-up survey only consists of the post-survey (see Appendix B).

3 Sampling Plan

3.1 Randomization

We use simple randomization, not conditional on any observable characteristics of participants. Each participant is randomly assignment to one of the three equally sized, predetermined groups.

3.2 Existing Data

Registration prior to creation of data: As of the date of submission of this research plan for pre-registration, the data have no yet been collected.

3.3 Data Collection Procedures

We recruit participants from the United States via Dynata (a US opinion polling company) using stratification based on census information on Age, Gender and Education Level.

3.4 Sample Size

We recruit 1600 participants for the main experiment. All 1600 participants are also invited to take part in the follow-up survey.

3.5 Sample Size Rationale

We used the software program G*Power to conduct a power analysis. Our goal was to obtain .80 power to detect a small effect size of 0.02 at the standard .05 alpha error probability. We also use a Bonferroni adjustment by dividing the nominal alpha level, 0.05, by the number of models tested, 18, yielding an alpha of 0.00278. The adjusted alpha level was used in the power analysis. The analysis revealed that we will need to recruit at least 740 participants.

3.6 Stopping Rule

We do not have any stopping rule in place.

4 Variables

4.1 Manipulated Variables

We manipulate the presence of exposure to (the coverage of) misinformation by asking participants:

- to look at three mock Facebook posts containing made-up misinformation

- to look at three mock Facebook posts containing news coverage of made-up misinformation

We carried out a pilot study in which we tested six made-up statements (see Appendix A). From these six, we picked three statements that were rated as similarly easy to read, interesting, easy to understand, likely to be true, and believable, and therefore all equally plausible among Democrats and Republicans (see Appendix C for the stimuli).

4.2 Measured Variables

The following variables are measured in the pre-survey only (i.e. not in the post-survey, and not in the follow-up survey):

- Gender ("How do you describe yourself?" Male Female Other)
- Age ("Which of the following categories includes your current age" with seven age categories)
- Race ("How do you describe yourself" with seven races)
- Education ("What is the highest level of school you have completed?" with seven levels)
- Ideology ("How would you rate yourself on this scale?" very liberal - very conservative; 5-point scale)
- Party identification ("Please select the option that best describes your political party affiliation" a strong Democrat - a strong Republican; 7-point scale)
- Political interest ("How interested are you in politics?" not at all - extremely; 5-point scale)
- Attention check ("To check whether you are reading the questions, click the second answer from the top" with 6 options)

Participants who fail the attention-check will be replaced by new participants by DYNATA.

See the post-survey in Appendix B for a more detailed description of how variables are measured. The following variables are measured in the post- and follow-up survey:

- **Misperceptions (3 statements) & Perceived accuracy of factual information (3 statements):**
Participants are asked how accurate they think each of the seven statements are to the best of their knowledge (4-point scale)
- **Trust (7 issues):** Participants are asked to report how much they trust various institutions (7-point scale)

- **Salience of Misinformation (4 issues):** Participants are asked how much they agree or disagree with several statements on the salience of misinformation (7-point scale)
- **Information-seeking (3 issues):** Participants are asked how likely they are to engage in several information-seeking activities

4.3 Indices

For all aggregate measures in this study, all items that will result in a alpha-score lower than 0.7 will be omitted and analyzed separately; the results for these items will be included in the appendix.

- **Trust:** We will aggregate all trust items to create a single measure. We will also explore the effects of the media and journalist items separately.
- **Misperceptions:** We will aggregate all the items to create a single measure of misperceptions, where higher values indicate more belief in false statements. We will also explore and show the results per item, in an appendix of the paper.
- **Perceived accuracy of factual information:** We will aggregate all the items to create a single measure of factual accuracy, where lower values indicate higher skepticism of verified facts. We will also explore and show the results per item, in an appendix of the paper.
- **Salience of Misinformation** We will aggregate all items measuring perceived importance of the problem of misinformation to create a single measure of salience. We will also explore and show the results per item, in an appendix of the paper.
- **Information-seeking:** We will aggregate the three information-seeking items to create a single measure. We will also explore and show the results per item, in an appendix of the paper.

5 Analysis Plan

5.1 Manipulation Check

5.2 Hypothesis Testing

All hypotheses will be tested using a set of OLS-regressions with the assigned treatment as the independent variable and trust, misperceptions, fake news salience, skepticism and information-seeking as dependent variables, and all seven pre-survey variables as covariates.

5.2.1 Misperceptions, Skepticism, Trust, Salience of Misinformation, and Information-seeking

- **Hypothesis 1 to 5** Two linear regressions. One with assignment to condition 1 or 2 and condition three as the baseline, and one with assignment to condition 2 or 3 and condition one as the baseline. Additional linear regressions are run with the three separate items on trust in social and traditional media, and journalist, to test Hypothesis 3_b

5.3 Inference Criteria

We will use the standard $p < .05$ criteria for determining if the regression models are significantly different from those expected if the null hypothesis were correct.

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