

# Trusting News Project Report 2017

A Reynolds Journalism Institute research project

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**SUMMARY:** With reports of “fake news” during the 2016 election and the President of the United States referring to the media as “the enemy of the people,” journalists are facing new questions about public trust in news organizations. For instance, in today’s highly charged political climate, which news sources are trusted and which ones are not? And to what degree does media trust explain individual decisions to financially support news organizations? This report—commissioned on behalf of the Trusting News project by the Reynolds Journalism Institute (RJI) at the University of Missouri—sheds light on this topic. The goal of the Trusting News project is to better understand elements of trust and distrust in the relationship between journalists and nonjournalists. Toward this end, the Trusting News project worked with 28 newsrooms to collect data from different media audiences from across the United States. This report provides a description of the data and summarizes the results from statistical analysis of the data.

# Method

## Data collection

Data were collected in February and March of 2017 using an online survey made available to users ( $N = 8,728$ ) of the digital media platforms of twenty-eight different newsrooms across the United States. Newsrooms included Annenberg Media, Ball State Daily News, Casper Star-Tribune, Cincinnati Enquirer, Coloradoan, Columbia Missourian, Dallas Morning News, Denver Post, Evergrey, Fort Worth Star-Telegram, Fresno Bee, Jacksboro, Herald-Gazette, Kansas City Star, KUT, Lima News, Minneapolis Star Tribune, NBC, Ogden Standard-Examiner, Rains County Leader, San Angelo Standard-Times, Skagit Publishing, Springfield News-Leader, St. Louis Magazine, St. Louis Public Radio, Steamboat Pilot & Today, USA TODAY, WCPO, and WDET. Participation was strictly voluntary—no compensation was provided. Most newsrooms made reference to the survey on their websites and social media accounts. Some mentioned it in print and on air. For the most part, the survey was launched by newsrooms around the same time in February 2017. However, the duration and extent of participation between newsrooms, addressed below, varied.

## Newsrooms

Due to imbalances in participation rates across newsrooms, it is possible a single newsroom with a high response rate could systematically bias statistical analyses. To address this concern, several steps were taken. First, in addition to having the names of the newsrooms associated with each observation, zip codes were reported by nearly all respondents (99.6%) in the sample. Although not perfect, a spatial representation of the zip codes like the one presented in the figure below provides evidence of heterogenous geographical coverage above and beyond what one might otherwise expect after only observing the number of responses for each of the newsrooms. Second, weights were calculated under a competing assumption that it would have been more desirable to have an equal number of responses from each news room. Group level weighted means were examined for numerous cross-sections and no discernable pattern distinguishing the weighted and unweighted samples emerged. Finally, in addition to the linear regression models reported in the following section, multilevel models were also conducted in order to more directly model the variability associated with differences between newsrooms (rather than differences between individuals). As was the case with

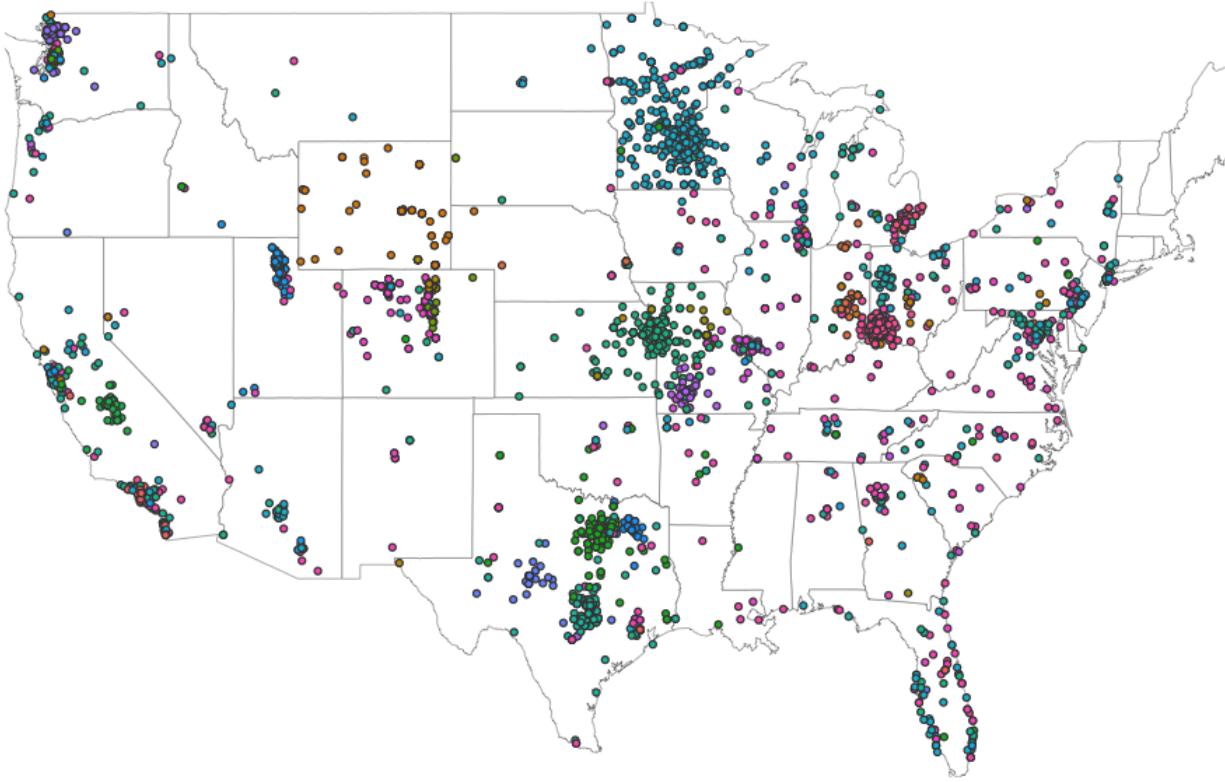


Figure 1:

the survey weights, the results from the multilevel models appeared consistent across all statistical solutions.

**Figure: Scatter plot of zip codes colored by newsroom**

## Sample

The sample ( $N = 8,728$ ) consisted of slightly more females (51.3%) than males (45.6%). Respondents were predominantly white (85.6%) with 3.2% reporting as Hispanic/Latino/Spanish origin, 1.3% as Black, 1.3% as Asian, and .6% as Native American. The most common age range was 50-59 (21.4%) followed by 60-69 (20.1%), 30-39 (19.8%), 40-49 (18.1%), 18-29 (11.0%), 70-79 (8.2%), and 80+ (1.3%). The entire distribution of age ranges can be seen below in the figure below.

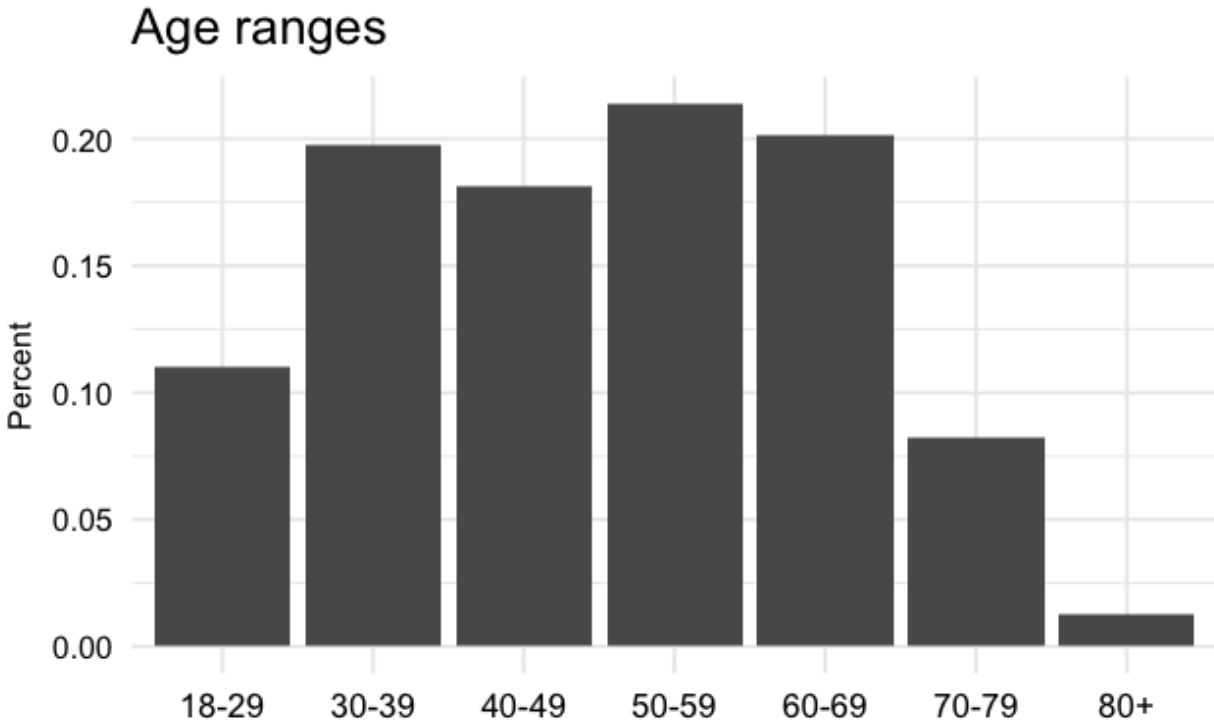


Figure 2:

## Variables

In addition to the demographic variables described above, respondents were asked to report their political ideology on a 5-point scale ranging from 1 (*very conservative*) to 5 (*very liberal*). The distribution for political ideology can be seen in the bar plot below. Overall, the sample leaned slightly liberal ( $M = 3.41$ ,  $SD = 1.03$ ), which could be a reflection of the specific newsrooms participating in the current investigation, a tendency among conservatives to avoid surveys conducted by “the media,” or a general preference among conservatives toward less mainstream news sources. Future research conducted in collaboration with newsrooms should incorporate experimental and/or longitudinal study designs to better explain systematic differences in online samples.

## Trust in news journalism

Trust in news journalism was measured by asking respondents, “*How likely are you to believe what you read, see or hear from mainstream journalism organizations (however you define mainstream)?*” on a scale ranging from 1 (*very unlikely*) to 4 (*very likely*). More than

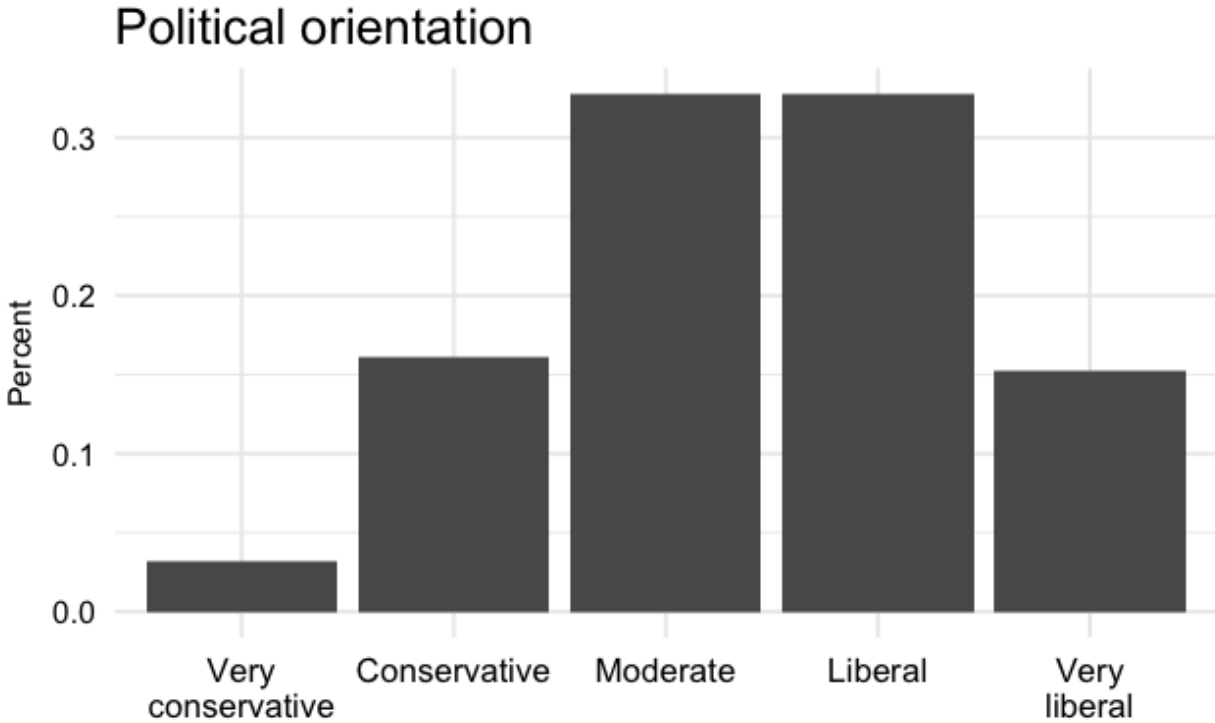


Figure 3:

two-thirds of those sampled (67.3%) reported being “likely” (34.8%) or “very likely” (32.5%) to believe mainstream journalism organizations while 32.7% of respondents reported being “unlikely” (17.3%) or “very unlikely” (15.3%). A visual depiction of the response distribution can be seen in the following bar plot.

### Support of news organizations

To measure support for news organizations, respondents were asked, *How many news organizations do you currently support financially through subscription, donation or membership?*. As can be seen in the below figure, although the most common answer was zero with 30.6% of the responses, a clear majority of respondents answered in the affirmative as 22.8% said they were supporting financially one news organization, 22.1% said two, 12.5% said three, and 11.8% said four.

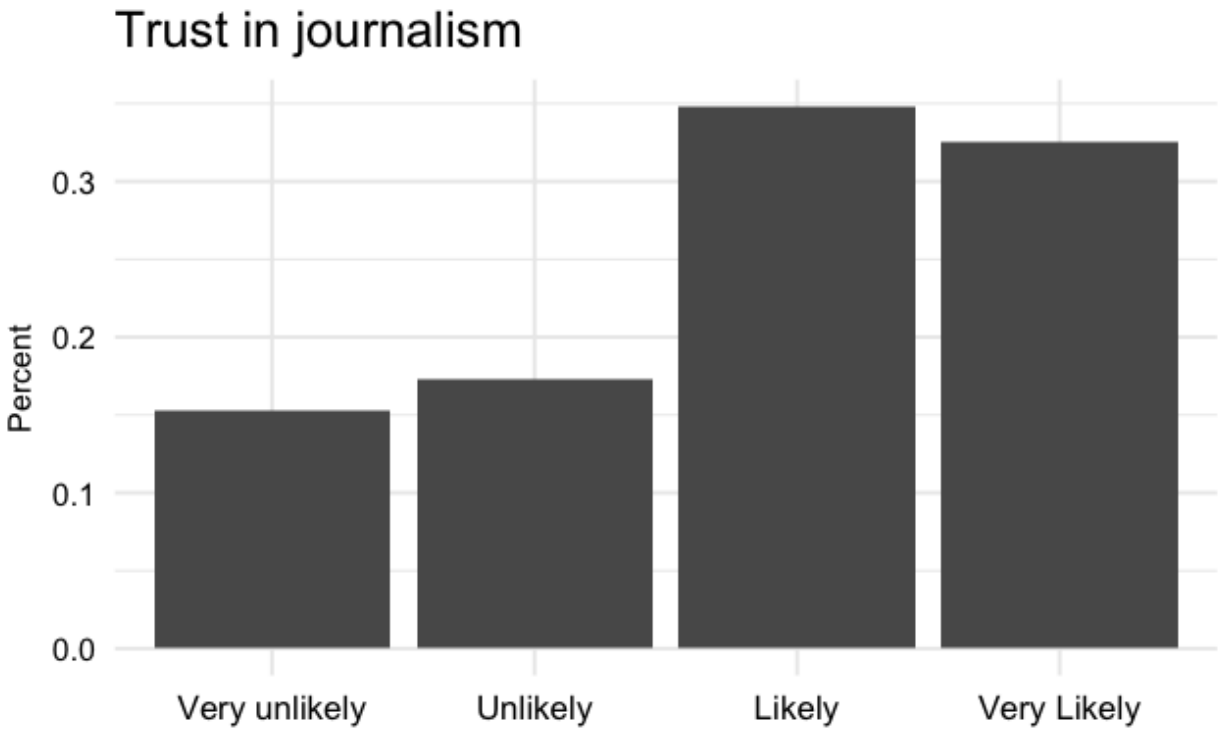


Figure 4:

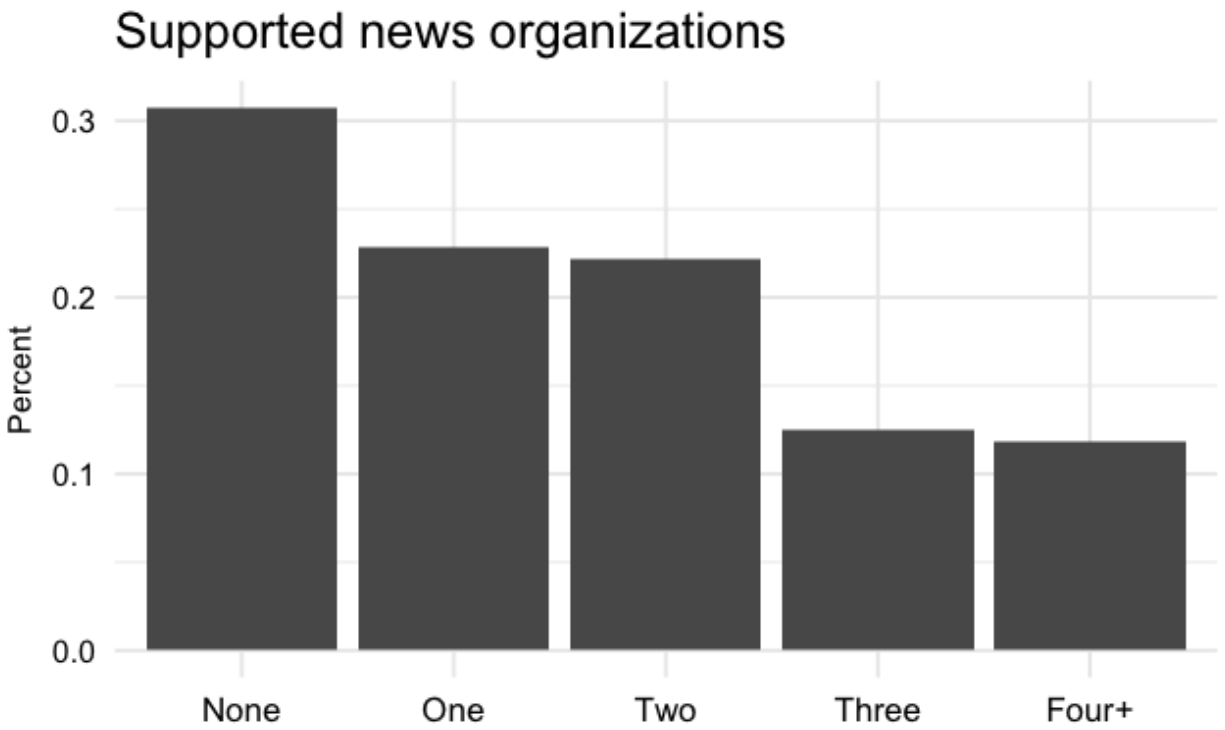


Figure 5:

## **Trusted news sources**

Respondents were asked to name three sources of news they typically trust and three sources of news they typically do not trust. For each question, a text box was provided in which users could type and enter their responses. Due to the open-ended nature of the question and the freedom of respondents to format their responses to their own liking, the diversity in the range of unique responses was, as expected, quite large. Responses were therefore stripped of formatting (extra spaces, capitalization, and punctuation removed) and then keywords were used to group together the different ways in which respondents commonly referred to the same sources. For example, responses, “ny times,” “nytimes,” “new york times”, and “nyt,” were all coded as “new york times,” while “wapost”, “wapo”, “washington post”, and “washpost” were coded as “washington post.” Because the question specifically asked about news sources, references to major networks, e.g., ABC, NBC, FOX, were grouped together with explicit references to their news stations, e.g., ABC News, NBC News, Fox News.

## **Credibility**

Finally, respondents were given a chance to describe how they decide whether news sources are credible. Specifically, respondents were asked, *How do you decide which news sources are credible and which are not?*. On average, responses contained 104.8 characters (SD = 162.61) and 17.41 words (SD = 27.90).

## **Results**

### **Predicting trust and financial support of journalism**

With politically charged rhetoric and numerous claims of “fake news” surrounding the 2016 election, this study sought to gain a better understanding of some of the major questions journalists face today. In particular, the current investigation seeks to better understand what user-level characteristics predict feelings of trust in mainstream journalism and actions of financial support toward news organizations.

To examine user-level characteristics as predictors of trust and support of news journalism, two linear regression models were estimated—one for each outcome variable. To allow for



estimation of categorical predictors, dummy codes were created and values assigned for race[white] (white = 1, non-white = 0), sex[female] (female = 1, male = 0, other = 0), and sex[other] (other = 1, female = 0, male = 0). Partisanship of the respondent ranged from 1 (very conservative/Republican) to 5 (very liberal/Democrat). And age ranges were coded in ascending order with the youngest range (18-29) coded equal to 1 and the oldest range (80+) equal to 7.

Estimates from both models can be seen in the table below. In addition to the predictor variables described above, the predictor variables listed in the left-most column of the table also include the intercept for each model. The intercept describes the expected value of the outcome, or dependent variable, when the value of all the other predictors is zero. In other words, when calculating the expected, or predicted value, of any observation, the intercept represents the starting point from which the remaining coefficients would be added or subtracted.

	Model 1 (Trust)	Model 2 (Support)
(Intercept)	.73*** (.05)	-.58*** (.07)
Race[white]	.25*** (.03)	.09* (.03)
Sex[female]	.09*** (.02)	.00 .03
Sex[other]	-.20*** (.06)	-.18* (.08)
Age[range]	.00 (.01)	.26*** (.01)
Partisan[D]	.54*** (.01)	.32*** (.01)
N (obs.)	8,722	8,721
R <sup>2</sup>	.32	.13
SRMR	.86	1.26

\* p < .05; \*\* p < .01; \*\*\* p < .001

Consider, for example, the expected value of the media trust estimate for a 25-year-old non-white male who identifies as a very conservative

$$Trust = Intercept + b_1 * Race + b_2 * Sex_{female} + b_3 * Sex_{other} + b_4 * Age + b_5 * Partisan$$

$$1.27 = .73 + 0 * .25 + 0 * .09 + 0 * -.2 + 0 * 0 + 1 * .54$$

compared to an 85-year-old white female who identifies as a very liberal

$$Trust = Intercept + b_1 * Race + b_2 * Sex_{female} + b_3 * Sex_{other} + b_4 * Age + b_5 * Partisan$$

$$3.77 = .73 + 1 * .25 + 1 * .09 + 0 * -.2 + 5 * .54$$

A quick comparison of the above estimates suggests the expected value of media trust, which was measured on a 1-4 scale with 1 meaning *very unlikely* to believe information from news media and 4 meaning *very likely* to believe information from news media, is much higher for the the 85-year-old non-white very liberal female, whose expected value of 3.77 for trust in news media approached the maximum possible value, compared to the expected value of the 25-year-old white very conservative male, whose expected value of 1.27 approached the minimum possible value of media trust.

A similar range of values was used to represent the dependent variable in Model 2, which was the number of instances of financial support of news organizations. Instead of 1 to 4, the values used to represent support of news organizations ranged from 0 to 4 with 0 signifying zero instances of financial support to news organizations and 4 signifying four such instances. Using the same examples as provided above, we find that a 25 year-old non-white male who identifies as very conservative would be expected to engage in approximately zero instances of financial support of news organizations

$$Support = Intercept + b_1 * Race + b_2 * Sex_{female} + b_3 * Sex_{other} + b_4 * Age + b_5 * Partisan$$

$$0.00 = -.58 + 0 * .09 + 0 * .00 + 0 * -.18 + 1 * .26 + 1 * .32$$

while an 85 year-old white female who identifies as very liberal would be expected to engage in approximately 2.41 instances of financial support of news organizations.

$$Support = Intercept + b_1 * Race + b_2 * Sex_{female} + b_3 * Sex_{other} + b_4 * Age + b_5 * Partisan$$

$$2.41 = -.58 + 1 * .09 + 1 * .00 + 0 * -.18 + 5 * .26 + 5 * .32$$

Examination of the results from both models reveals at least three notable findings. First, there was a relatively large difference between users with different political ideologies. Specifically, liberal respondents were a lot more trusting and supporting than conservative respondents. Given the rhetoric used in the most recent general election, however, this result may not be entirely surprising. Second, compared to non-white respondents, white respondents were more likely to believe information coming from news media and more likely to provide financial support to news organizations. The difference between white and non-white respondents was especially high in the context of trust in news media. For a visual depiction of support and trust of media by white and non-white respondents see the following figure, which depicts the proportion of responses provided by each group.

Third, although the coefficients generally followed the same pattern across both models, the age of the respondents was irrelevant in the model predicting trust in media but very clearly significant in the model predicting support of news media. This suggests that while levels of *trust* in news media remain fairly consistent regardless of age, the likelihood of providing financial *support* to news media institutions is higher among older adults compared to younger adults. A visual comparison of the relationships between age, political ideology, and the two dependent variables can be found in the plot below.

The other relationship that appeared to vary between the two models was the sex of the respondent. As seen in the figure below, while male and female respondents did not differ in their financial support of news media organizations, female respondents were significantly more likely to trust information from mainstream journalism than male respondents.

## **Trusted versus non-trusted news sources**

As part of the survey, respondents were asked to name three sources of news they typically trust and three sources they typically do not trust. Through a process of cleaning, parsing, and coding the open-ended responses, nearly five ( $M = 4.86$ ) non-unique (meaning, sources

### Trust and support of media by white and non-white respondents

Support (number of financial contributions to news organizations) and trust (likelihood of believing information reported by "mainstream journalism") in white versus non-white respondents

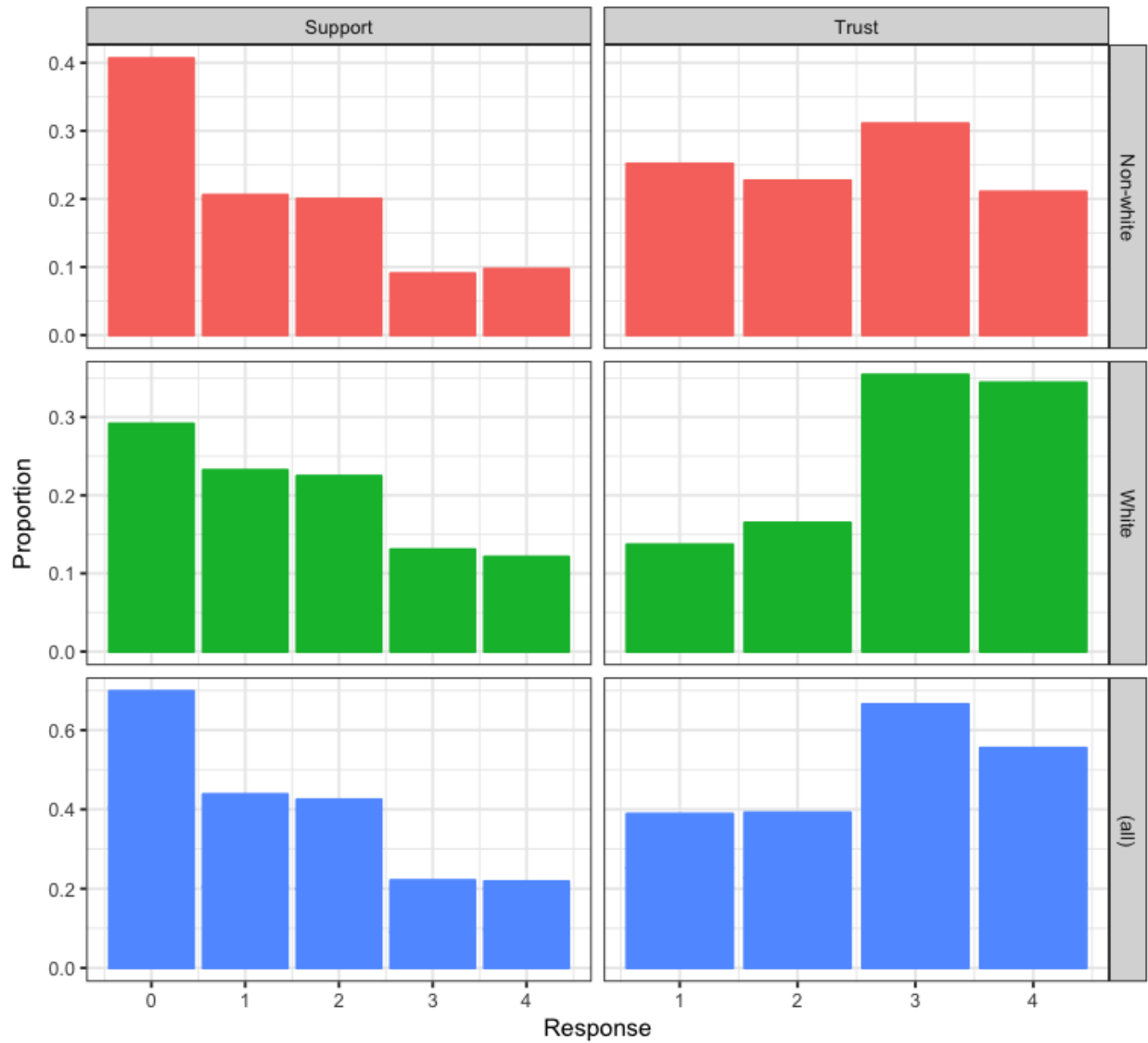


Figure 6:

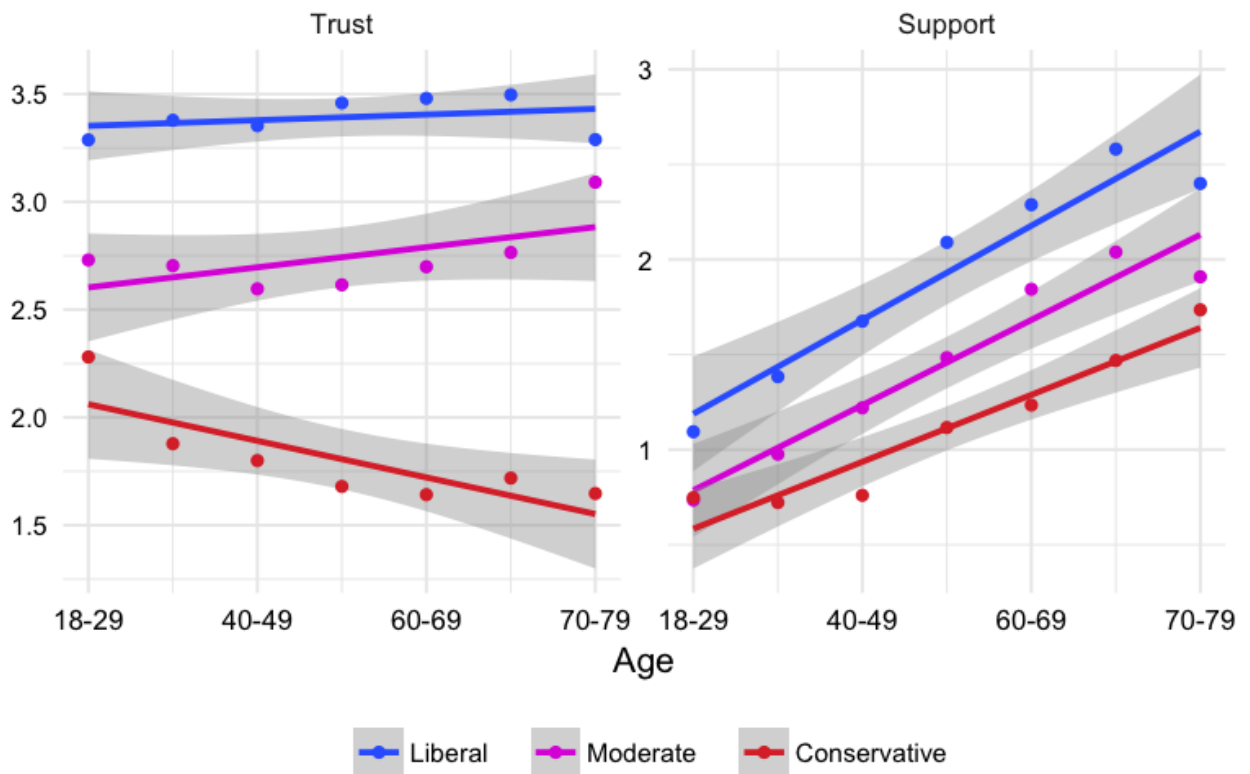


Figure 7:

### Trust and support of media by respondent sex

Support (number of financial contributions to news organizations) and trust (likelihood of believing information reported by "mainstream journalism" in female, male, and other respondents

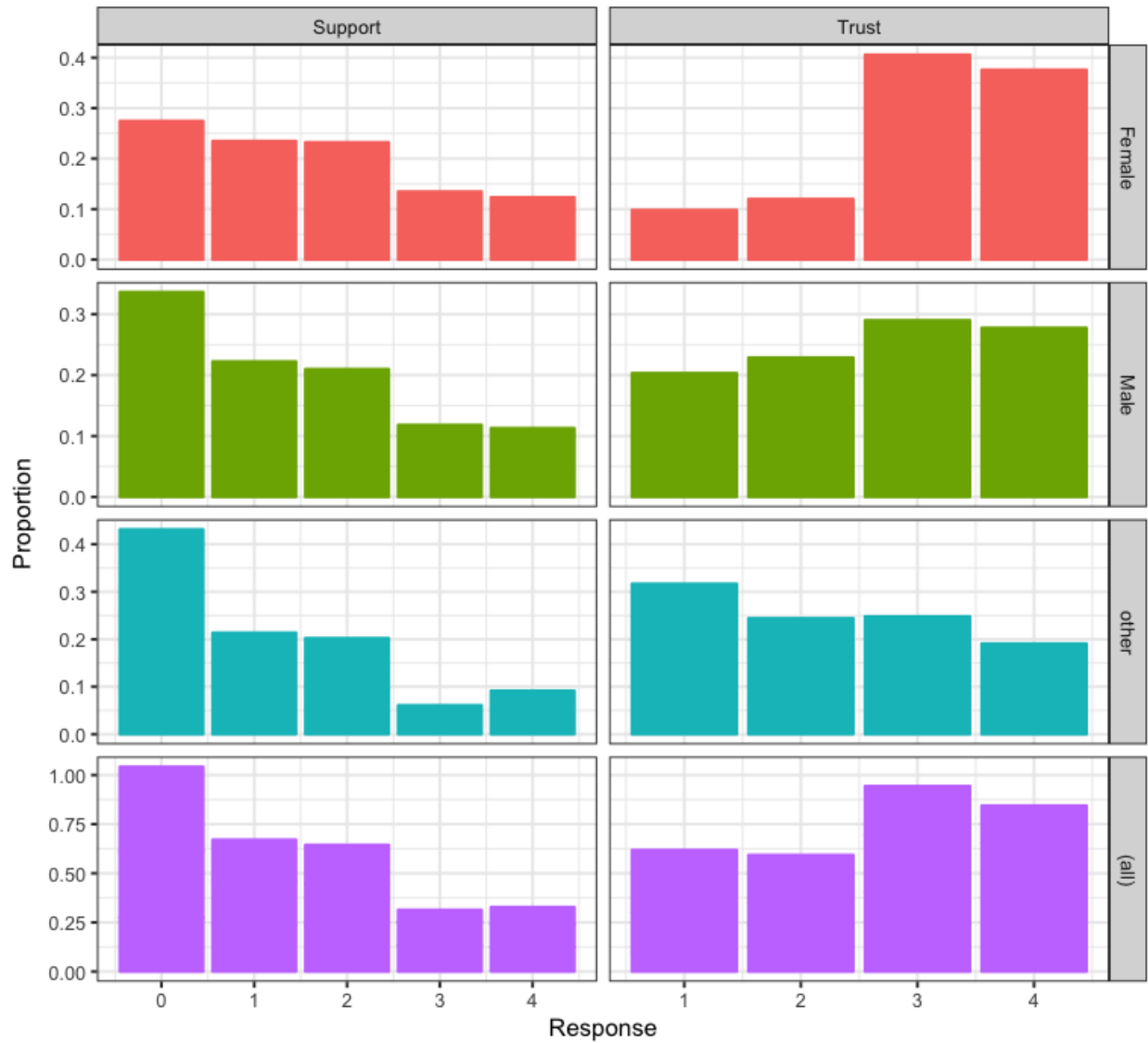


Figure 8:

referenced by multiple respondents) were extracted on average from each respondent. This made it possible to estimate the number of times a news source was mentioned as “trusted” compared to the number of times a news source was mentioned as “not trusted.” Using the proportion of “trusted” versus “not trusted” responses, the figure below displays the least and most trusted sources of news among those sources mentioned in the sample at least 10 times.

Of course, some sources are likely to come up—as popular examples of trusted or not trusted sources of news—as a function of their perceived partisanship. Such predictable behavior among partisans makes it possible to leverage self-report estimates of political ideology to generate estimates of political ideology for news media sources as well. For the sake of clarity, the political ideology variable, which was earlier reported as being measured on a 5-point scale ranging from 1 (very conservative) to 5 (very liberal), was transformed to better represent the common spatial representation of political orientations onto a 5-point scale ranging from -2 (very liberal or the “left”) to +2 (very conservative or the “right”). Using these transformed values, the means were then calculated for each set of respondents who mentioned each of the most popular *trusted* sources of news. The plot below depicts the “trusted” media sources with the highest and lowest mean estimates of political ideology—meaning, on average users who mentioned Rachel Maddow as a trusted source were an average of roughly 1.35 points more liberal than the scale’s midpoint, while users who mentioned Limbaugh were over 1.00 point more conservative than the scale’s midpoint.

## Credibility

Finally, respondents were provided an open text box and asked to describe what made a news source credible to them. Due to the open-ended nature of the question and the diverse range of responses, data analysis was limited to exploration of various *n-grams*, which are essentially different combinations or co-occurrences of words in units of text. Such an approach allows for the most common phrases to be parsed out of the open ended responses. Of course, these phrases often include filler words, or *stop words*, such as “the,” “that,” “is,” and “and.” Because these filler words appear so often, they rarely add much value to identifying unique themes or topics in textual data. Thus, to filter out the more trivial and potentially distracting words, commonly used stop words were first excluded from all responses. Then, after exploring various numbers of the most common n-grams, the tri-gram (three word phrase) was selected as the most interpretable. The most commonly used three

## The least and most trusted news sources

Based on proportion of 'trusted' versus 'not trusted' responses

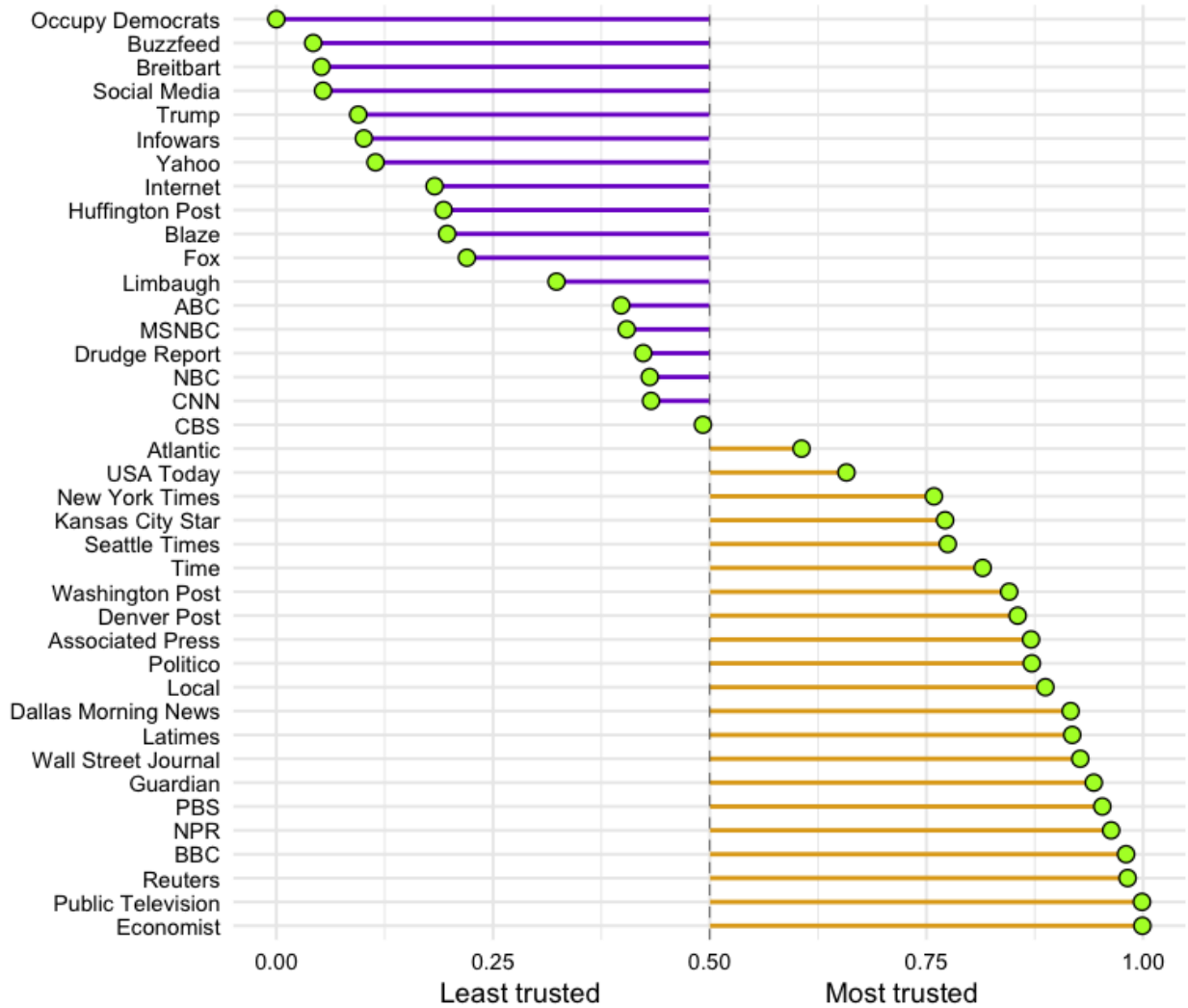


Figure 9:



## Frequency and political ideology of trusted sources

The number and mean political ideology of respondents listing the most liberal and conservative sources

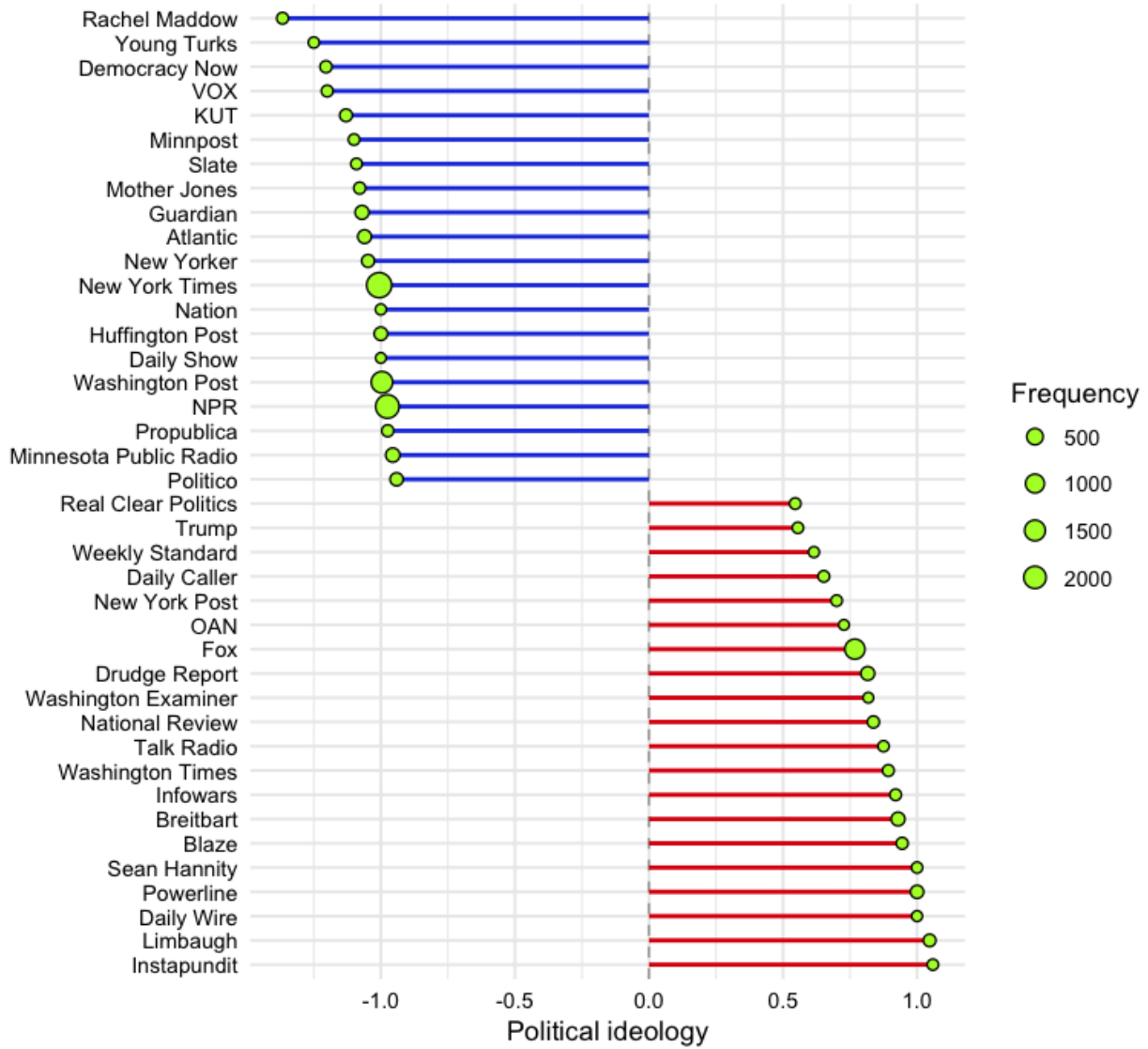


Figure 10:

word phrases—excluding stop words—can be seen in the table below. These phrases appear to reflect three common patterns in the open ended responses about how respondents decide what sources are credible. responses frequently mentioned presenting information on both sides, getting news from multiple sources, and using fact checking.

Table 2: Most common three-word phrases (stop words omitted)

Trigram	N
other news sources	69
both sides issue	56
both sides story	47
check multiple sources	35
present both sides	34
credible news sources	27
check other sources	24
multiple news sources	24
other news outlets	23
read multiple sources	23
trust news sources	21
report both sides	19
critical thinking skills	18
other news organizations	18
sources fact check	17
both sides argument	16
news sources credible	16
sources reporting same	16
checking multiple sources	15
sources fact checking	15
news sources trust	14
several news sources	14
sources same story	14
wall street journal	14
against other sources	13
reporting same thing	13

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Trigram	N
times washington post	13
both sides issues	12
click bait headlines	12
fact checking sites	12
fact checking sources	12
multiple sources same	12
news sources reporting	12

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