

# Public Trust in News Reporting

By Randy Nance

## Introduction

In the last several years, our society has seen a notable shift in the public perception of the journalism industry. The issue of “fake news”, while not new, has taken hold of the spotlight and prompted many to question exactly how much they can trust the press to report the news fully, accurately, and fairly.

This study analyzes the results from a 2017 survey on how access to data affects trust in news. The main goal of this study is to determine how different demographic groups (age, gender, political viewpoint, etc) differ in their trust in the reporting of news. By finding where some of our societal divisions and similarities lie, this study aims to provide a basis for further research and a springboard for discussion of the state of news reporting today.

## About the data

The dataset used is the results of a survey of over 1021 “online news consumer adults across the United States” ages 18 and over. The survey was conducted online April 27th-May 1st 2017 via the Survey Monkey Audience Panel, and has a reported margin of error of  $\pm 3.1\%$ . The survey measures trust in news reporting and the effect of easy access to the data behind its claims. The results are also broken down by various demographics (age, income, political view, etc).

There are some potential limitations to this dataset. One being the large proportion of ‘Prefer not to answer’ responses to the question concerning income. For this reason, I will be omitting the income feature from my research in this study. The other potential limitation being the somewhat limited selection of individual news organizations for which there is outlet-by-outlet data on respondents trust. The given selection of 11 (plus an ‘Other’ write in option) does span a variety of the most popular online news sources, and should be diverse enough to give us a general sense of where other sources may lie. This limitation will be addressed by my third line of inquiry in this study.

Additionally, it should be noted that this is a one time survey, conducted 5 years prior to this particular analysis. The data can only give a glimpse of what public sentiment may have been at that time, which may or may not hold true at the time of analysis.

The dataset can be found on data.world’s website (<https://data.world/ddjdemos/survey-how-access-to-data-affects-trust-in-news>).

# Research methods

The goal of this research is to determine where various demographic groups agree and differ on trust in two different areas:

1. The reporting of news in general
2. The reporting of specific news organizations.

Before beginning the analysis, the data needed to be cleaned and organized into a usable format. Because of the coded format of the survey data, each and every answer needed to be consolidated into new features for each survey question. For ease of use, the new dataset also was melted into a tidy format with human readable features and observations.

Once the data was cleaned, I established a baseline of overall responses for each line of inquiry. I then ran a series of Chi Square tests on my target feature (amount of trust in news reporting) when broken down by various demographic groups. For each test, I used the following hypotheses:

- $H_0$  = There is no difference between responses from different demographic groups
- $H_a$  = There is a difference between responses from different demographic groups

In testing these hypotheses, I applied the Chi Square test with an adopted significance level of  $\alpha = 0.05$ .

After determining features with statistically significant correlations to my target features, I used an assortment of bar charts, heat maps, and raw numbers to compare and contrast with my baseline to determine where the similarities and differences between groups are.

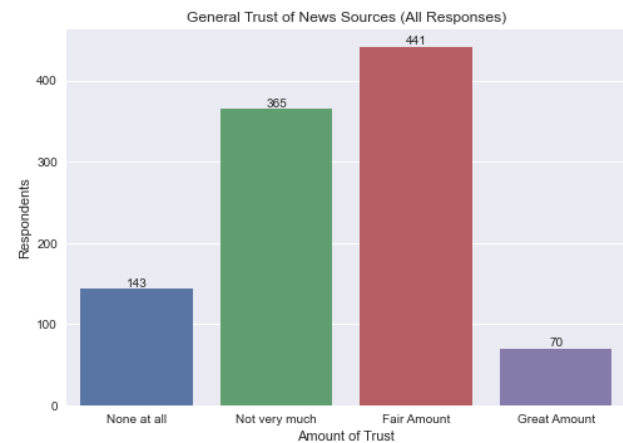
In a third line of inquiry, I also analyzed the “Others” write-in responses for trusted news sources in an additional notebook, which required some data cleaning and text manipulation. My goal here was to find any additional news organizations that were both not included by name in the original survey, and were at least as trusted as the least trusted organization named in the survey.

# Results

## General Trust in News Reporting

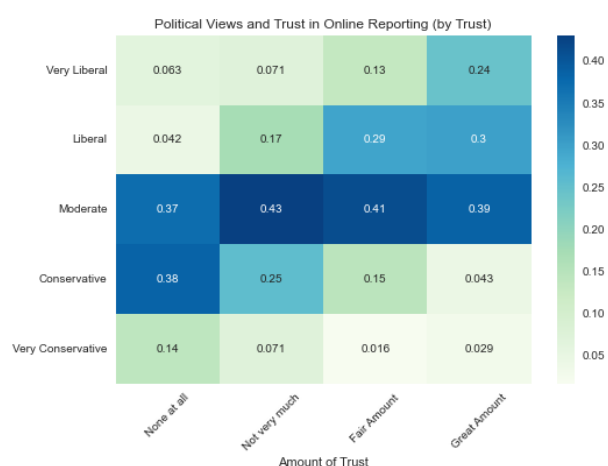
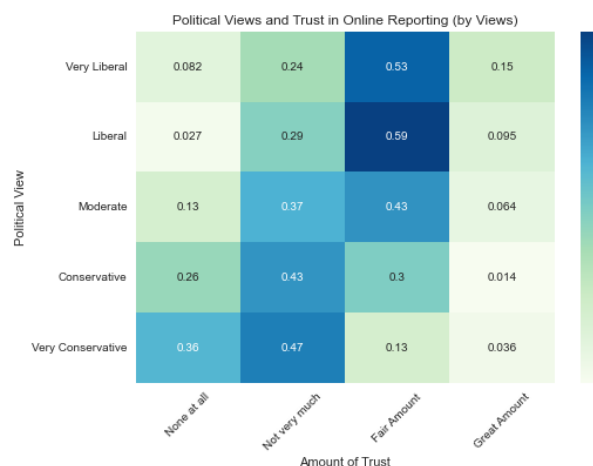
I found that respondents' gender, political viewpoint, and whether they paid for access to online news had statistically significant relationships with their general trust in the reporting of news, while age did not.

When broken down by gender, I found that women were more likely than men to have a fair amount of trust, while men were more likely to not have any trust at all in the reporting of news.



Only 20% of respondents said they pay for access to some source of online news, but they accounted for 37% of those who indicated a great amount of trust. Otherwise, this breakdown followed the distribution of the overall sample.

Differences in political viewpoints showed the most dramatic changes in trust. The following heat maps show the breakdowns of political viewpoints and amount of trust within each political viewpoint (by views) and within each "level of trust" (by trust).



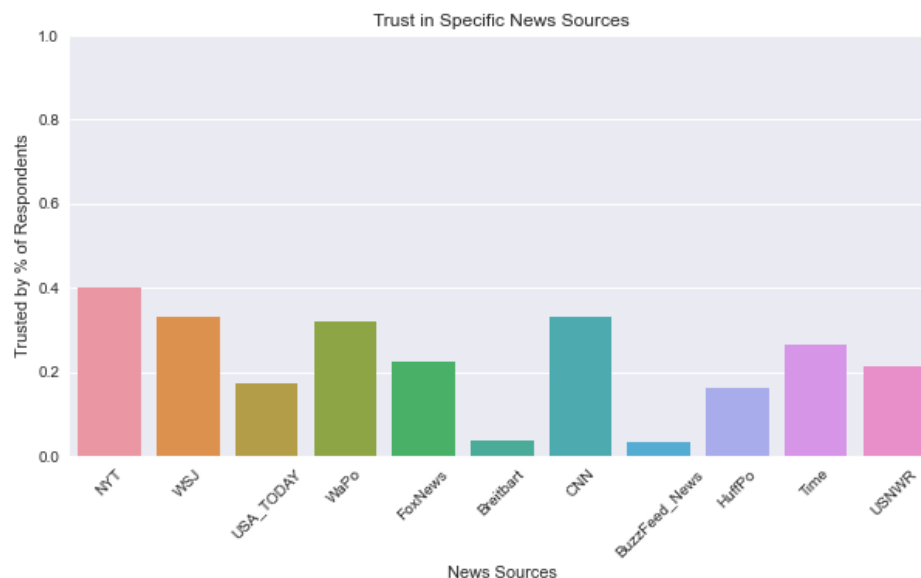
Moderates, making up 41% of respondents, reflected the distribution of trust levels of the general population. As I moved away from the political center, I saw the amount of trust in news reporting shifted towards the extremes. Those who identified as conservative or very conservative were disproportionately represented in the two lower trust groups (“none at all” and “not very much”), while those who identified as liberal or very liberal accounted for a disproportionate amount of the two higher trust groups (“fair amount” and “great amount”).

Of all respondents indicating a great amount of trust in news reporting, over 54% identified themselves as being on the left side of the political spectrum, 39% as moderate, and less than 8% on the right. For context, only 32% of all respondents identified as being left leaning, 41% as moderate, and 26% as right leaning. A similar, opposite, pattern can be seen within the “no trust at all” group. (See the “by Trust” heat map on page 3).

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## Trust in Individual News Sources

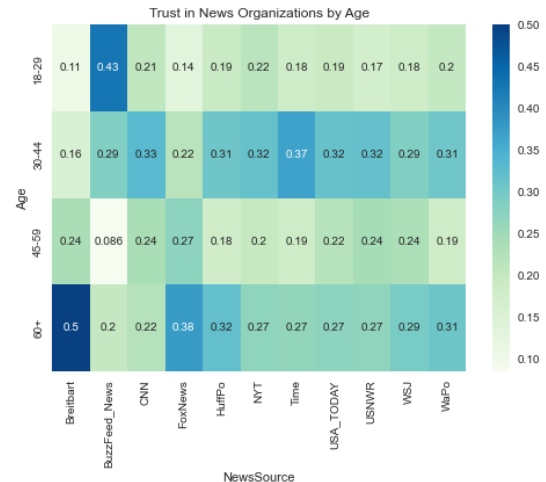
My second line of inquiry was to look at the public trust in individual news sources, and how trust in the reporting of specific organizations differed between demographic groups. Below is a chart showing the percentage of respondents who indicated trust in each of the individually listed news sources.



The most trusted source was the New York Times at 40% of respondents indicating trust in their reporting. The Wall Street Journal and CNN were tied with 33% each, and The Washington Post being the only other outlet trusted by more than 30% of respondents. Breitbart and BuzzFeed News each had the trust of less than 5% of respondents.

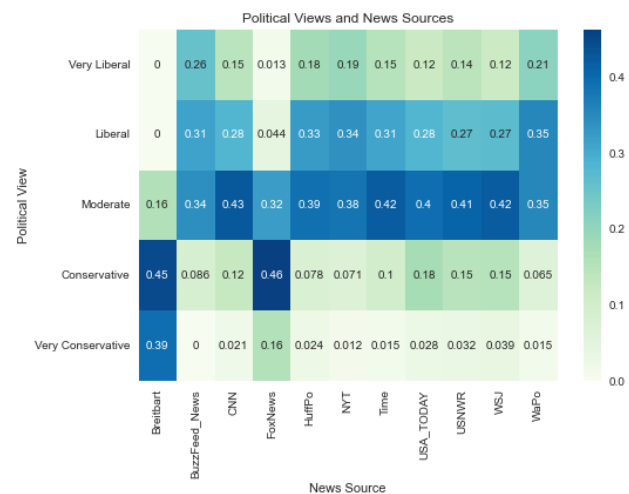
I again used a series of Chi Square tests to look for statistically significant relationships between the breakdown of different demographic groups and the trust in each listed news outlet. From these tests, I found statistically significant relationships for age, gender, political view, general trust in news reporting, and whether the respondent paid for access to some news source.

While the distribution of those trusting the reporting of most listed news outlets follow the survey's age breakdown, I see that Breitbart (and to a lesser extent, Fox News) is disproportionately skewed towards the older age groups. Half of those who indicated a trust in Breitbart's reporting are 60+, and 24% are in the 45-59 age group. Fox News follows a similar, albeit less dramatic, skew towards the older groups. In contrast, 43% of those who trust BuzzFeed News are in the youngest age group, and 72% are under the age of 45.



When broken down by gender, the same two sources (Breitbart and Fox News) stick out from the crowd. The 9 other outlets roughly follow the sample's gender breakdown (56% women to 44% men), whereas those trusting Breitbart and Fox News are disproportionately male. In the case of Breitbart, nearly 4 men reported trust in their reporting for every 1 woman who also did so.

Breitbart and Fox News were again outliers when organizing the results by political views. Of those who trusted Breitbart, 84% were conservative or very conservative, and all of the remaining 16% identified as moderate. The opposite is true for BuzzFeed News, with over 90% of those reporting trust in their reporting identifying as moderate or left of center, and 0% being very conservative. Trust in the reporting by The Wall Street Journal is the least affected by differences in political views.



Next, I examined how the amount of trust in the general reporting of the news correlated with the trust in specific news sources. Just as in the last three breakdowns, Breitbart and Fox News showed very different distributions of those who trusted their reporting than other news sources. Over a quarter of each group indicating trust in Breitbart or Fox News reported having no trust at all in the reporting of news in general, and virtually none with a great amount.

Lastly, I took a closer look at the relationships between the demographic groups in an attempt to determine if those trusting Breitbart and/or Fox News are a single group or multiple distinct groups. In these examinations, I found an intersection of the demographics disproportionately represented among those trusting Breitbart and/or Fox News. Among the people surveyed, those who are conservative or very conservative tend to be men over the age of 45. This particular group is the most likely to trust the online reporting of Breitbart and/or Fox News.

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## Additional Trusted News Organizations from Write-Ins

The survey dataset included a write-in feature for respondents to submit news sources they trust that were not included in the survey. After a process of data cleaning and text wrangling, I found 3 additional news sources that were written in at least 20 times.

News Source	# of Write-ins
NPR	47
<i>Breitbart</i>	38
BBC	36
<i>Buzzfeed News</i>	35
MSNBC	22

Two listed news outlets, Breitbart and BuzzFeed News, have been included for purposes of comparison

## Conclusion

The key takeaway from this research is that political viewpoint is likely the biggest factor in determining how much a given person trusts news reports in general and which sources they trust. Age and gender, while also correlated with trust, seem to be a byproduct of the demographic makeup of political viewpoints. Those with conservative viewpoints are more likely to be distrustful of the reporting of news in general, and keep their trust in two sources (Breitbart and Fox News) that are not as trusted by non-conservatives.

This research focused on the personal perceptions of respondents, and therefore does not reflect an objective evaluation of any news source's tendency or track record to report the news fairly, accurately, and in full. While insightful, the conclusions from this study bring up additional questions for possible further research: What are people's reasonings for their amount of trust in the reporting of news? How does the trust in specific sources compare to an

objective measure of their reporting fairly, accurately, and in full? How much influence does a persons choice of news source have on their political views?

Included in the dataset, but not addressed in this study, is the impact of easy access to the data behind news reports on the amount of trust people have in news reports. Additional research in how this feature interacts with those in the study would likely add even more questions and possibly aid in directing future research.