

# Reliable Sources?

## Correcting Misinformation in Polarized Media Environments

Patrick W. Kraft  
Amanda Heideman

Nicholas R. Davis  
Jason T. Neumeyer

Taraleigh Davis  
Shin Young Park

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### **Abstract**

Various important issues at the center of today's politics—such as immigration or climate change—are imbued with misinformation. A growing body of research therefore explores whether people's misperceptions can be mitigated by providing corrective information. While such corrections have been shown to reduce factual misinformation, they appear to have little to no effect on underlying attitudes. Our study contributes to this active research area by examining how variations in the source and delivery mode moderate the effectiveness of corrective information. In our pre-registered survey experiment, participants are exposed to a news article published by Fox News or MSNBC, each highlighting the positive economic impact of legal immigration in the United States. While the news content is held constant across sources, our treatment manipulates whether participants are allowed to freely choose a media outlet or are randomly assigned to one of them. Conditional on the delivery mode and news organization, we explore whether the article is effective in correcting factual misperceptions and how it impacts general attitudes towards immigration. Furthermore, we examine differences in the overall engagement with the news article. Our results illustrate how people's political predispositions and media preferences moderate the effectiveness of corrective information and the likelihood of it being further shared with others (e.g., through social media). The implications of our results for the development of more effective strategies to disseminate corrective information are discussed.

# 1 Introduction

- Misinformation is a growing problem, start with motivating example that connects to immigration attitudes
- broad overview of findings: corrective information can change misperceptions but usually no (or weak) effects on underlying attitudes (Hopkins, Sides, and Citrin 2019)
- one important factor that has been examined in the past focuses on source credibility. However, what has been understudied in this process is the opportunity to choose information sources (rather than simply being exposed to them). This is particularly relevant in the context of our changing media environment where people have much more discretion over their information diet. . .

## 2 Theory

### 2.1 Why corrections (often) fail

- Motivated reasoning review: How individuals treat facts and other types of information depends on their incentives (motivation + ability). Reliance on cues/heuristics like ideological predispositions. Absent substantial motivation to accurately process information, individuals interpret new information in light of their extant attitudes. A compelling explanation of this pattern is the tendency to engage in motivated reasoning. Humans = biased information seekers (Kunda 1990, @Taber2006) and asymmetric updaters (Sunstein et al. 2016).

### 2.2 Differentiating factual beliefs, interpretations, and opinions

- discuss Gaines et al. (2007), Hopkins, Sides, and Citrin (2019)

## 2.3 The role of media choice, source credibility, and selective exposure

- Dalton, Beck, and Huckfeldt (1998) found that perception of news is shaped as much by a person's political views as by objective content.
- Source credibility: Additionally, in a time when partisanship colors how people perceive new information, even neutral sources might be less credible than is often presumed (see Berinsky 2018). Source credibility profoundly affects social interpretations of information (Lupia and McCubbins 1998).
- Berinsky (2017): Error correction of fake news is mostly likely to be effective when coming from a co-partisan w/ whom one might expect to agree.
- Messenger overwhelms the message: Kuklinski and Hurley (1994) connected the use of ideological heuristics and source cues. They argued that by focusing their attention on the individual political actor, citizens make quick judgments of the information presented to them based largely on the reputation of the speaker. Experimental subjects presented with a message evaluated that message based largely on their opinion of the speaker.

## 3 Our study

Previous research examining the effectiveness of corrective information showed that it does not always lead to attitude change even if misperceptions are reduced (Hopkins, Sides, and Citrin 2019, @thompson2019might). However, others find that media exposure can persuade people to change their attitudes under certain conditions (e.g., De Benedictis-Kessner et al., n.d.). Our study explores how the way people access corrective information influences the likelihood of its success in reducing misperceptions. In general, we expect that those who were able to choose a news agency are more likely to pick a source similar to their usual media diet. Additionally, we expect those who read a news story from a trusted news source (and who are able to pick the news agency) are more inclined to evaluate the article positively and change their attitudes in the direction of the news article.

### 3.1 Research design

Our study builds on the Preference-Incorporating Choice and Assignment Design proposed by De Benedictis-Kessner et al. (n.d.) and Knox et al. (2019). Participants are randomly assigned to a free choice treatment condition, a forced exposure treatment condition, or a control group. Participants in the free choice condition are asked to choose whether they want to see a recent breaking news tweet from either FoxNews or MSNBC. After viewing the tweet, which links to a news story focusing on immigrant-owned businesses in the US, participants are asked to read the corresponding article. In the forced exposure condition, participants do not have the option to choose a news organization (FoxNews or MSNBC) but are randomly assigned to one or the other. In either condition, the content of the news article is held constant across sources. Finally, participants who are randomly assigned to the control group skip the tweet and article entirely and move directly from the pre-treatment battery (questions on media usage, stereotyping, and political attitudes/behavior) to the post-treatment battery (questions on attitudes toward immigration and trust in different media sources). For more details on the design, see Figure 1 above as well as the full questionnaire including all treatment conditions at the end of this pre-analysis plan.

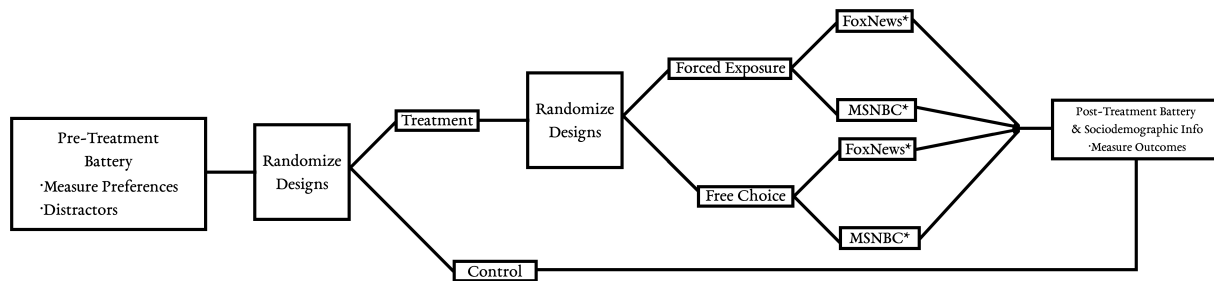


Figure 1: Survey Flow

### 3.2 Corrective information and media choice

For the main outcome measures described above (i.e., immigration attitudes and perceived economic impact), our analysis begins with two basic comparisons between each treatment group

and the control group:

- **H1a** [control vs. forced exposure]: Participants who are assigned to a random news organization update their beliefs and attitudes in the direction of the article .
- **H1b** [control vs. free choice]: Participants who are free to choose a news organization update their beliefs and attitudes in the direction of the article.

In the context of the outcomes described previously, updating beliefs and attitudes in the direction of the article refers to a decrease in factual misperceptions about the economic impact of legal immigration and more positive attitudes towards legal immigration more generally. Of course, our main interest is to assess whether corrective information is more effective if people are allowed to choose their preferred information source than if they are assigned to one. We therefore hypothesize that the free choice condition leads to a stronger attitude/belief change than the forced exposure condition:

- **H1c** [forced exposure vs. free choice]: Participants who are given the opportunity to choose a news organization are more likely to update their beliefs and attitudes in the direction of the article than participants who are randomly assigned to a news organization.

Note that this last comparison (*H1c*) can also be evaluated using the additional outcome measures described above (trust in news sources, engagement with tweet, response latencies, sharing the article, evaluation of the article), which are not included in the control group. For each of these outcomes, we expect that the ability to choose their preferred information source will increase engagement with the article and therefore lead to more positive evaluations. Here, we also plan to explore conditional treatment effects based on pre-treatment measures of people's political predispositions (stereotypes towards immigrants, whether immigration is seen as a major issue, ideology, partisanship) and we will further examine whether the differences in *H1c* are conditional on participants being exposed to a news source that is congruent with their usual media diet. Any difference between the forced exposure and free choice condition could theoretically be driven either by the fact that participants in the free choice condition tend to select news organizations they are more sympathetic towards, or by the fact alone that they are able to choose a source (i.e., the selection process itself makes the information more effective). In order to distinguish both possibilities, we will conduct an additional test where we isolate the effect of forced exposure

vs. free choice while holding the underlying news organization constant. Specifically, we are planning to compare both conditions within groups of individuals who were exposed to a congruent as compared to an incongruent source (either by choice or by random assignment). Additional analyses outlined below will allow us to further assess how endogenous media exposure impacts the effectiveness of corrective information.

### **3.3 Who wants to watch Fox News anyway?**

Beyond this main analysis comparing the free choice and forced exposure conditions, we are going to confirm whether respondents indeed choose information sources that are consistent with their ideological predisposition and usual media diet. This part of the analysis therefore only focuses on the free choice arm of the experiment. Participants are expected to engage in a biased search process, seeking out information that is likely to support their preconceptions and avoiding evidence that undercuts their beliefs (see Taber and Lodge 2006). This leads to the following set of hypotheses regarding endogenous information search:

- **H2a:** When free to choose a news organization, conservatives (liberals) are more likely to pick FoxNews (MSNBC) than vice versa.
- **H2b:** When free to choose a news organization, Republicans (Democrats) are more likely to pick FoxNews (MSNBC) than vice versa.
- **H2c:** When free to choose a news organization, participants who report viewing FoxNews (MSNBC) more regularly are more likely to pick FoxNews (MSNBC).

### **3.4 Source credibility is more important than the ability to choose**

Lastly, we plan to examine whether there are systematic differences in the effectiveness of corrective information by news sources themselves (i.e., FoxNews vs. MSNBC). The pre-treatment section of the questionnaire includes items on respondents' usual media diet and political predispositions. Respondents should be more inclined to update their attitudes and beliefs if the article is published by a news organization that is usually consistent with their priors:

- **H3a:** Conservatives (liberals) update their beliefs and attitudes more if they are randomly assigned to FoxNews (MSNBC).
- **H3b:** Republicans (Democrats) update their beliefs and attitudes more if they are randomly assigned to FoxNews (MSNBC).
- **H3c:** Participants who were randomly assigned to a news organization that is part of their regular media diet update their beliefs more than those who were assigned to a different news organization.

As a first step, these comparisons exclude the free choice arm of the experiment and estimate treatment effects based on the randomly assigned news organizations alone. Additionally, we are going to explore the average choice-specific treatment effect (ACTE) following Knox et al. (2019) to quantify the effect of corrective information conditional on endogenous media search (*H3c*). This quantity of interest captures the conditional average treatment effect for the subset of participants who would choose a particular treatment option (i.e., the effect of the article among those who would have chosen FoxNews or MSNBC voluntarily).

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