

Title: Estimation of the acceptance rate of fake news and reliable information appendix for “Research note: Fighting misinformation or fighting for information?”

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Note: The material contained herein is supplementary to the article named in the title and published in the Harvard Kennedy School (HKS) Misinformation Review.

Appendix A: Estimation of the acceptance rate of fake news and reliable information

The evidence suggests that in experimental settings participants accept approximately 60% of true news and 30% of fake news. We refer to *acceptance rate* as participants saying they believe/accept/find accurate a piece of news (dichotomous measures) or participants saying that they ‘somewhat’ or ‘a lot’ believe/accept/find accurate a piece of news (dichotomization of continuous variables). The most reliable estimate comes from an internal meta-analysis led by Pennycook and Rand (2021). Across 297 different headlines, they found acceptance rates of 61% for true news and 25% for fake news. Altay and colleagues (2021a) found acceptance rates of 64% for true news and 31% for fake news. Pennycook and colleagues (2020) found acceptance rates of 64% for true news and 32% for fake news. In a minor deviation from this pattern, Pennycook and colleagues (Pennycook et al., 2021) found acceptance rates of 70% for true news and 15% for fake news. Guess, Lerner, et al. (2020) found an acceptance rate of 32% for false news, 31% for hyperpartisan news, 65% for reliable news from high-prominence websites (e.g., nytimes.com and wsj.com), and 48% for reliable news from low-prominence websites (e.g., politico.com or theatlantic.com).

These estimates do not come from representative samples of true and fake news. Instead, the news stories in these studies have been hand-picked and are sometimes quite old. Their selection reflects experimental considerations (e.g., avoiding floor effects and ceiling effects), likely biasing these estimates. Few estimates are exempt of these limitations. Recently, Godel et al. (2021), developed an algorithm selecting the most popular news from low-quality sources and had participants rating these news stories 72 hours after their publication at most. This overcomes the self-selection of news bias and reduces the delay between circulation and evaluation. The authors found estimates similar to the ones reported above (57% acceptance of true news and 37% acceptance of fake news).

The baseline in our model was set to 60% for reliable information and 30% for misinformation.