

## **Abstract**

As data becomes increasingly important in contemporary society, data journalism and data literacy also become more important. This project explores these concepts and examines the role each can play in writing about and understanding data intensive information. To test the effects of data visualizations and data literacy on comprehension, this project uses a quantitative experimental design where subjects read different versions of an article followed by a comprehension test. The article treatments include a text-only version, a version with a bar graph and a version with a data table. In addition, subjects were classified as data literate and non-data literate based on a survey. As hypothesized, the results showed a significant comprehension benefit for both groups of subjects with access to a data visualization, with the text-only group scoring lowest in comprehension. The results also showed significant comprehension differences based on data literacy in the bar graph test condition. These results can be used to inform future study, as well as to inform best practices in data journalism and in data science education.