

Can Generative AI improve social science?

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Acknowledgments

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Abstract

Generative AI that can produce realistic text, images, and other human-like outputs is currently transforming many different industries. Yet it is not yet known how such tools might influence social science research. I argue Generative AI has the potential to improve survey research, online experiments, automated content analyses, agent-based models, and other techniques commonly used to study human behavior. In the second section of this article, I discuss the many limitations of Generative AI. I examine how bias in the data used to train these tools can negatively impact social science research—as well as a range of other challenges related to ethics, replication, environmental impact, and the proliferation of low-quality research. I conclude by arguing that social scientists can address many of these limitations by creating open-source infrastructure for research on human behavior. Such infrastructure is not only necessary to ensure broad access to high-quality research tools, I argue, but also because the progress of AI will require deeper understanding of the social forces that guide human behavior.