

From Survey to SurvAI: The Promises and Precautions of AI for Survey Research

Large language models (LLMs) are rapidly transforming many professional domains, including survey research. Eloundou et al. (2024) rank survey research among the most highly exposed occupations to LLM-driven automation, raising both opportunities and challenges for practitioners. While survey science has a rich tradition of adopting technological tools for tasks like data collection, analysis, and instrument design, the unique affordances and risks associated with LLMs call for a structured examination.

This paper presents findings from a systematic literature review of empirical and theoretical work at the intersection of LLMs and survey research. Specifically, we sought to synthesize examples of how LLMs are being applied across three broad phases of the survey research pipeline including: pre-data collection, data collection and post-data collection. Methodologically, this review identifies uneven distribution of LLM application across the survey pipeline. While pre-data collection stages (e.g., item writing, translation) are well explored, core practices like live interviewing, recruitment, and cross-lingual adaptation remain under-investigated. Additionally, few studies assess LLMs systematically across multiple populations, languages, or survey topics. In this presentation we will highlight not just the breadth of current use cases, but also the methodological and ethical considerations that must accompany them noting examples that are both promising as well as precautionary.