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The Structure of Everyday Choice: Insights from 100K Real-life Decision Problems

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Abstract

The complexity of everyday choices make them difficult to formally study. We address this challenge by constructing a dataset of over 100K real-life decision problems based on a combination of social media and large-scale survey data. Using large language models (LLMs) for automated coding, we are able to extract hundreds of choice attributes at play in these problems and map them onto a common representational space. This representation allows us to quantify both the content (e.g. broader themes) and the structure (e.g. specific tradeoffs) inherent in everyday choices. We also present subsets of these decision problems to human participants, and find consistency in choice patterns, allowing us to predict naturalistic choices with established decision models. Overall, our research provides new insights into the attributes and tradeoffs that underpin important life choices. In doing so, our work shows how LLM-based structure extraction can be used to study real-world cognition and behavior.