Reading Introduction
Big Data in Psychology

a. What is the question (of the paper)?
With the development of data science, psychologists start to do researches with big data to analyze human's behavior concerning cognitive and experimental psychology, personality and social psychology, industrial psychology and so on.

b. Why should we care about it?
Although from the point of traditional economics, human are assumed to be rational. In reality, such assumption may be far from truth due to some psychological factors. As big data make the psychologists accessible to a great amount of data of human behavior, it is possible for us to get some ideas from empirical studies based on such data and some analysis, which may provide us with some intuitive ideas of human's making choices.

Real Word Example:
In accord with the assumption of the rational man in traditional economics, Expected Utility Theory works when people are making choices. However, the experiment of Ellsberg Paradox shows that people's decision may violate such theory de facto, where risk aversion in people's minds can be an explanation for the paradox.
Another example is about Conjunction Fallacy, where people usually think a relatively more specific description is more possible to be the truth, which is actually against probability theory. This may due to the extension neglect. To know the psychology mechanism relevant to such behavior may help us to think more reasonably.

c. What is your (or the author's) answer?
In the age of Big Data, the amount of data offers the psychologists a new perspective of sub-fields of psychology. Although the conclusions from such empirical analysis may bot be precise, they show us a more comprehensive overview for the better understanding of similarities and differences of mental behavior of human.

d. How did you (or the author) get there?
In the paper, the author introduces some sub-fields of psychology, including cognitive and experimental psychology, personality and social psychology, industrial psychology, as well as clinical psychology. After each brief introduction, the author shows us some simple examples with charts and tables to get the general idea of the conceptions. At the end, the author delivers an overview of the application of big data in psychology.

Notations

Psycholinguistic style 心理語言習慣
DSM 《精神疾病診斷統計手冊》
Diagnostic validity 診斷效度