

Statistics

science of reasoning about *data*, its collection and its analysis

Data

measurements taken of a set of **individuals**, or **cases**, **subjects**, **participants**, **experimental units**, etc. (which need not be people), regarding a particular characteristic or collection of characteristics of interest (information in context). Data can be **quantitative** if measured on some numerical scale, or **categorical**, if not. Quantitative data are measured in some **unit**; categorical data have **labels** as values.

Beware: categorical data can sometimes have numerical labels!

Variable

any characteristic of a person or thing which is measured or categorized. A set of values of a single variable or of multiple variables forms a **data set**. **Variability** in the data exhibit patterns which form the **distribution** of the variable.