

## Statistical Representation

**Population:** a target set of people

**Sample:** a part of the population that is used to represent the population

**Size:** the number of elements (e.g. the number of people in a sample)

**Census:** statistical survey of the entire population

- guarantees a high degree of certainty
- requires a lot of resources (human and material)

**Sample Survey:** surveys a part of the population in order to represent the population

- there is some uncertainty
- often used when one cannot use a census (population is too large)

**Poll:** a sample survey that focuses on opinion

**Study:** a more complete statistical survey

- experts use different types of gathering techniques
- used when sample surveys do not give enough information

**Pollster:** the person who asked the questions

**Bias:** occurs when the response is misconstrued

- when the sample does not represent the population
- when the questions are misleading

## Data Gathering Methods

### Written Questionnaire:

a person is given a document to fill out the important information

### Telephone Interview:

pollster asks questions over the phone

### Face-to-face Interview:

pollster asks the questions to the person, usually in a public place

### Direct Observation:

pollster records the behavior of people being observed. The people observed do not usually know they are being observed.

### Documentary Observation:

uses the information already collected and stored in a data base