Sources of bias from sampling

1. Undercoverage. Choosing a sample in a non-representative way. Often arises from a **convenience sample**, when we sample people/cases who are easiest to sample.

2. **Nonresponse bias. P**eople who respond to the survey differ in some important way from those who didn't.

3. **Voluntary response bias**. (type of nonresponse bias) People who didn't respond are different because they chose not to respond.

4. **Response bias.** Asking the questions / gathering the data in a way that influences the responses.

Techniques of sampling to avoid bias

1. **Simple random sample (SRS).** Each sample of our chosen size has an equal chance of being selected.

2. **Stratified random sample.** The sample is forced to have the same percentages of chosen categories as the population. (control for small percentages)

3. **Cluster sample.** Clusters are chosen at random, and all cases from each cluster are included. (makes sampling easier)

4. **Systematic sample.** Non-random technique not related to the variables of interest. (makes sampling easier)

5. **Multistage sample.** a combination of multiple techniques