Types of Evidence

- Anecdotal evidence
  Single interesting story or event or example, its accumulation often leads to conjecture or investigation.

- Observational study
  Researcher systematically collects data without manipulating conditions. Rely on measuring existing conditions.

  **PROS:** (1) you see how subjects behave in a natural setting, (2) study can be used as starting point for further more controlled research, (3) it is often used to study **correlations**, (4) **typically faster and cheaper**

  **CONS:** (1) in some cases the presence of observers could influence the behavior of the subjects, (2) you cannot make casual relationship with it, (3) it is **difficult to replicate** an observation, (4) sometimes misleading due to **confounding variables**, that are extra-variables that you didn't account for (and they can ruin the study).

- Experimental study
  Researcher randomly imposes conditions and then measures a result/outcome. Rely on manipulating the independent variables.
PROS: (1) They can be used to determine causation or casual relationship. (2) Easier to avoid confounding variables. (3) Replication of conditions - subject behavior.

CONS: (1) They can be costly.