Forming Research Questions:

- **Qualitative**
    - Open Ended
    - Not numerical (e.g, analysis of text)
    - Hypothesis generation
    - Data: text or visual
    - Data collection: flexible
    - Analysis: describe meaning, contexts, relationships
    - Inductive Process
    - Meaning behind data/context
    - Benefits:
        - Indepth
        - Identify reasons or themes (harder with just numbers)
        - Open-ended
- **Quantitative**
    - Questions: closed response, forced
    - Hypothesis: testing
    - Data: numerical and nominal
    - Data collection: standardized
    - Analysis: quantify, statistical significance
    - Deductive Process
    - Benefits:
        - Numerical data
        - Sometimes more convincing/objective
        - Easier comparison with other studies
        - Looking at the “average” person

Bias

- Bias is generally defined as prejudice in the favor of or against a thing person or group
- Publication bias - significant or positive results are more likely to be published
    - Studies that show no statistically significant findings or results are less likely to be published
    - Researchers and journals are less likely to publish them

- Reporting bias refers to focusing on some desirable results will often omit or suppress undesirable or non significant results
    - Omitting or hiding unexpected undesirable or non significant results

- Confirmation bias which - researcher consciously or unconsciously looks for and possibly favors an expected result or a result that conforms to their opinion
    - Researcher ignores or suspects the protocol or some step was wrong when the results are contrary to their prior beliefs but there could be an actual error
    - They overlook it because the results met their expectations

- Recall bias - participant of a study misremembers an event that happened to them in the past (not on purpose)
    - We're more likely to remember certain events and obscure our memories to fit some narrative over time
    - Results can be skewed because a person miss remembers it