

Steps of an Analysis

SSEP 2022 Morning Day 7

Dr. Ab Mosca (they/them)

Slides based on slides courtesy of Jordan Crouser: <https://jcrouser.github.io/MassMutual-IntroR/>, <https://jcrouser.github.io/MassMutual-DataVis/>, <https://beanumber.github.io/sds192/>

Analysis

Confirmatory Data Analysis

- Using data to test a specific, statistical hypothesis
- Requires statistical modeling

Exploratory Data Analysis

- Becoming familiar with and understanding data through summarization of variables and visualizations
- May use statistical modeling, but doesn't have to

Analysis

Confirmatory Data Analysis

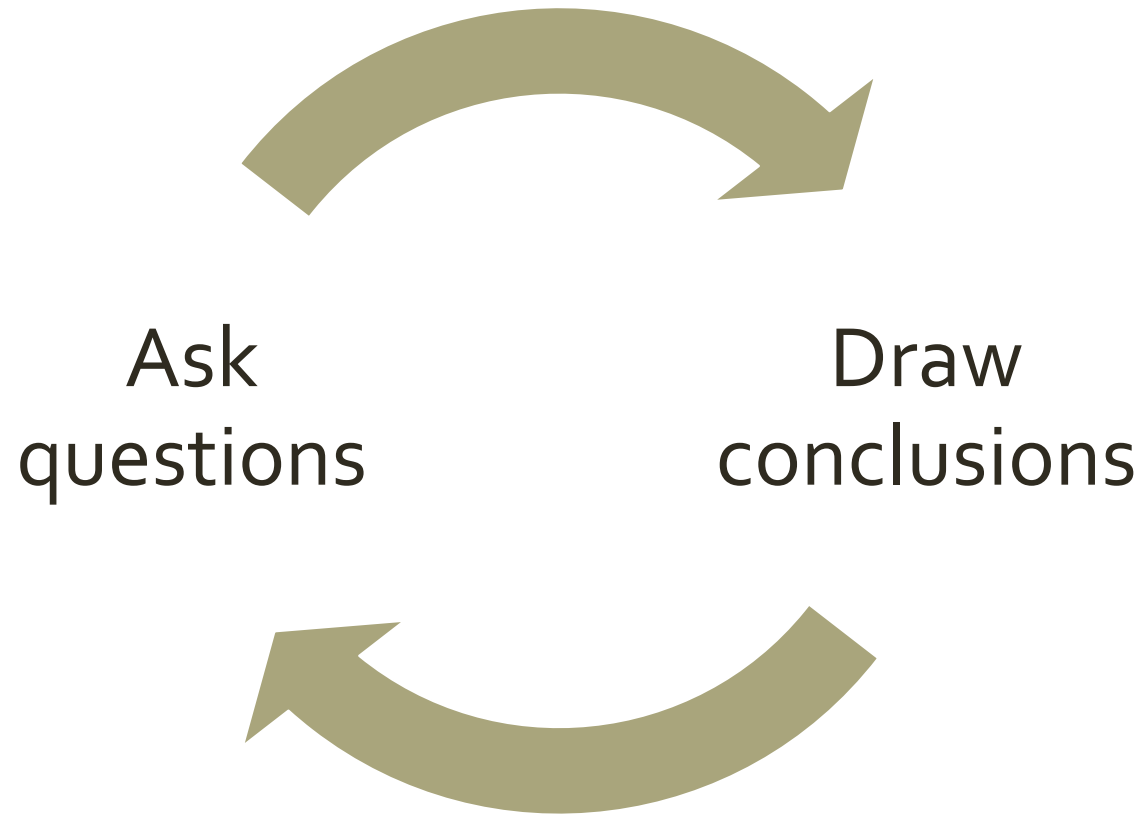
- Using data to test a specific, statistical hypothesis
- Requires statistical modeling

Exploratory Data Analysis

- Becoming familiar with and understanding data through summarization of variables and visualizations
- May use statistical modeling, but doesn't have to

Exploratory Data Analysis

1. Think critically about the data
2. Explore:



Exploratory Data Analysis

1. Think critically about the data

Ask questions like:

- Who collected this data? What biases might come from this?
- What is included in this dataset? What data is missing?
- What data types am I working with?
- How clean is the data?

Exploratory Data Analysis

2. Explore:

