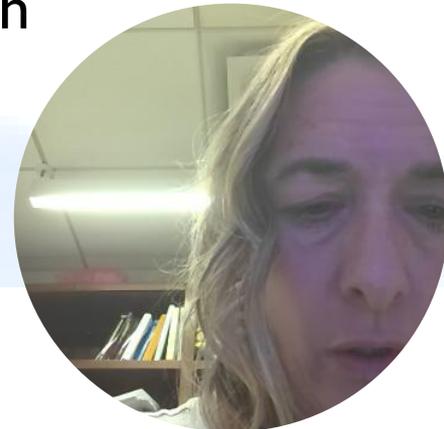


# VI - Descriptive Statistics

## Part 0

Course: Statistical Testing & Regression  
Dr. Renee Clark  
Swanson School of Engineering  
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University of Pittsburgh



# Descriptive Statistics – Part 0

- ❑ Two main types of data
  - ❑ Quantitative vs. Qualitative
  - ❑ Why important?
- ❑ Subtypes of quantitative data (and examples)
- ❑ Subtypes of qualitative data (and examples)



# Two Main Types of Data

1.

2.

Enables you to *choose and apply* the correct statistical technique



# Quantitative Data

## ❖ Measurements and numbers

2 *subtypes*:

a. \_\_\_\_\_

- Has whole-number and fractional (decimal) part

\_\_\_\_\_

- Finer and finer precision
  - Any value possible – for example, 10.11234667633444 inches
  - Does equipment exist to measure it?

b. \_\_\_\_\_

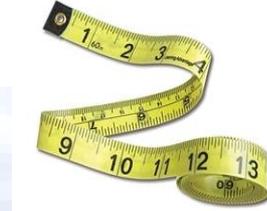
- Can *only* have certain or fixed values



# Quantitative Data Examples

## a. Continuous

- Height, weight, time, length, temperature
  - 6.25 cm, 2.19 sec, etc.



## b. Discrete

- Count data
  - e.g.: number of pets in household
- Shoe size
- Dollar amount



Shoe Size (men's)
6
6.5
7
7.5
8
8.5
9
9.5
10
10.5
11
11.5
12
12.5
13
13.5
14
14.5
15
15.5



# Qualitative Data

Aka categorical data, since data comprise **categories of variable**

*Two subtypes:*

a. \_\_\_\_\_

❖ Categories naturally-ordered and ranked

❑ **OMET survey response (variable)**

Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree

❑ **Severity of pain (variable)**

None, Mild, Moderate, Severe

b. \_\_\_\_\_

❖ Categories have no natural ordering.

❑ **Candy color (purple, red, orange)**

❑ **Region of U.S.**





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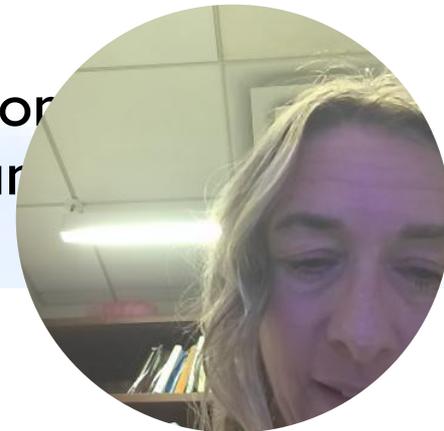


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**THE END**

