

Two way tables

joint distribution } both counts
marginal distribution } & frequencies
conditional distribution }
Relative Risk }
Simpson's Paradox } independence
↳ two methods

Displaying & Describing

Shape
Symmetric
Right-Left Skewed
Bi/multimodal
Outliers

Stemplot
Side by side Stemplot
Histogram
Population Histogram

Measures of Center

Mean
Median
mode
resistance
IQR

Measures of Spread

Range
 Q_1 , Q_2 , Q_3
IQR
Standard Deviation (Sample & population)
(note that $Q_2 = \text{Median}$)
Empirical Rule

Summary Measures

Box plot

FNS (five number Summary)

Regular

Modified

~~Q-Q~~

Plots

2-dim

Categorical x Categorical

~~not a plot~~
2-way table
Segmented Bar Graph
Side-by-Side Bar

Categorical x Quantitative

~~Stem~~ Side-by-side Stemplot

Population Histogram

Box & Whisker (w/categories on y or x-axis)

Quantitative x Quantitative

Scatterplot

1-dim

Categorical

Bar Chart

Quantitative

Dot plot

Stemplot

Box & whisker (aka boxplot)

Association

Scatterplot

Direction of association

Strength " "

Linear/non-linear

Correlation coefficient

know strengths/limitations ~~?~~
(from class notes)

Calculations

mean

median (for even and odd # sets)

Standard deviation (sample & population)

FNS

Range

IQR

Box & whisker calcs (eg. $1.5 \times \text{IQR}$)

r

~~???~~