

BA

Week 2

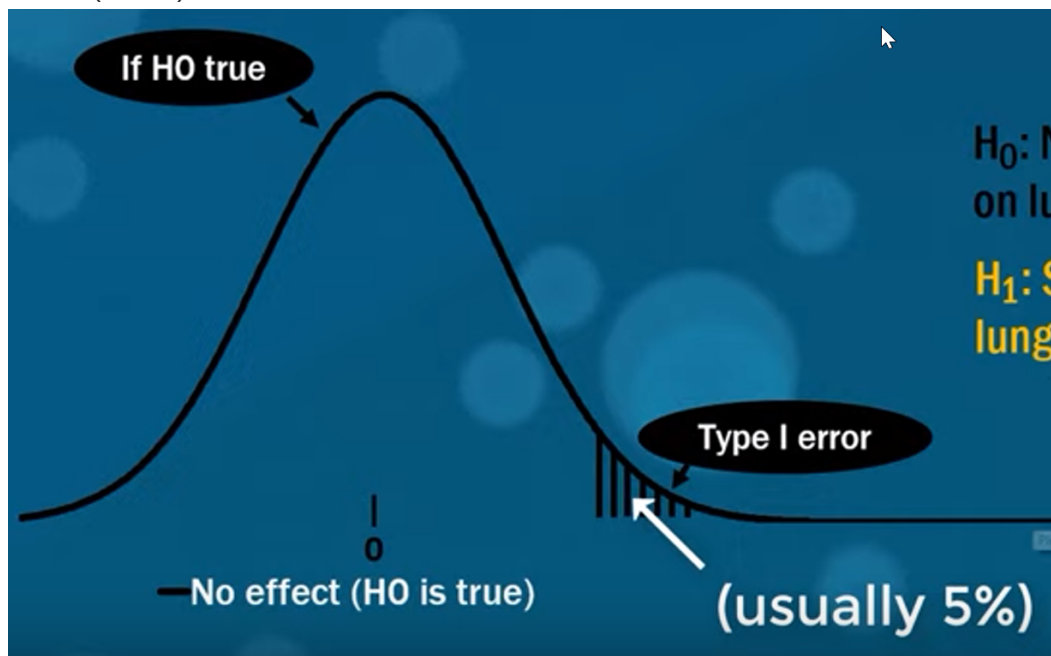
The co-efficient of variation (CV) is a statistical measure of the dispersion of data points in a data series around the mean

$$CV = \frac{\sigma}{\mu}$$

Reject or Do not Reject

Using P-Value

- REJECT the Null if the p-value < level of significant
- DO NOT REJECT the Null if the p-value >= level of significant
 - Example: Say the level of significance is 5%, then for given data set, p-value (0.694) > 0.05 --> DO NOT REJECT THE NULL



Consider black region to be level of significance area(LOS)(5%), if p value inside it($p < LOS$), then reject the Null

Using Tabulated & Computed

- REJECT the Null if the "Computed Test Statistic Value" > "Tabulated Test Statistic Value"
- DO NOT REJECT the Null if the "Computed Test Statistic Value" \leq "Tabulated Test Statistic Value"

Using the empty blue region under graph (Do not reject region), if tabulated is some value to which right side is rejection region

Reject the null: Computed > tabulated

Poisson Distribution

The sample mean and sample variance are same (very close)

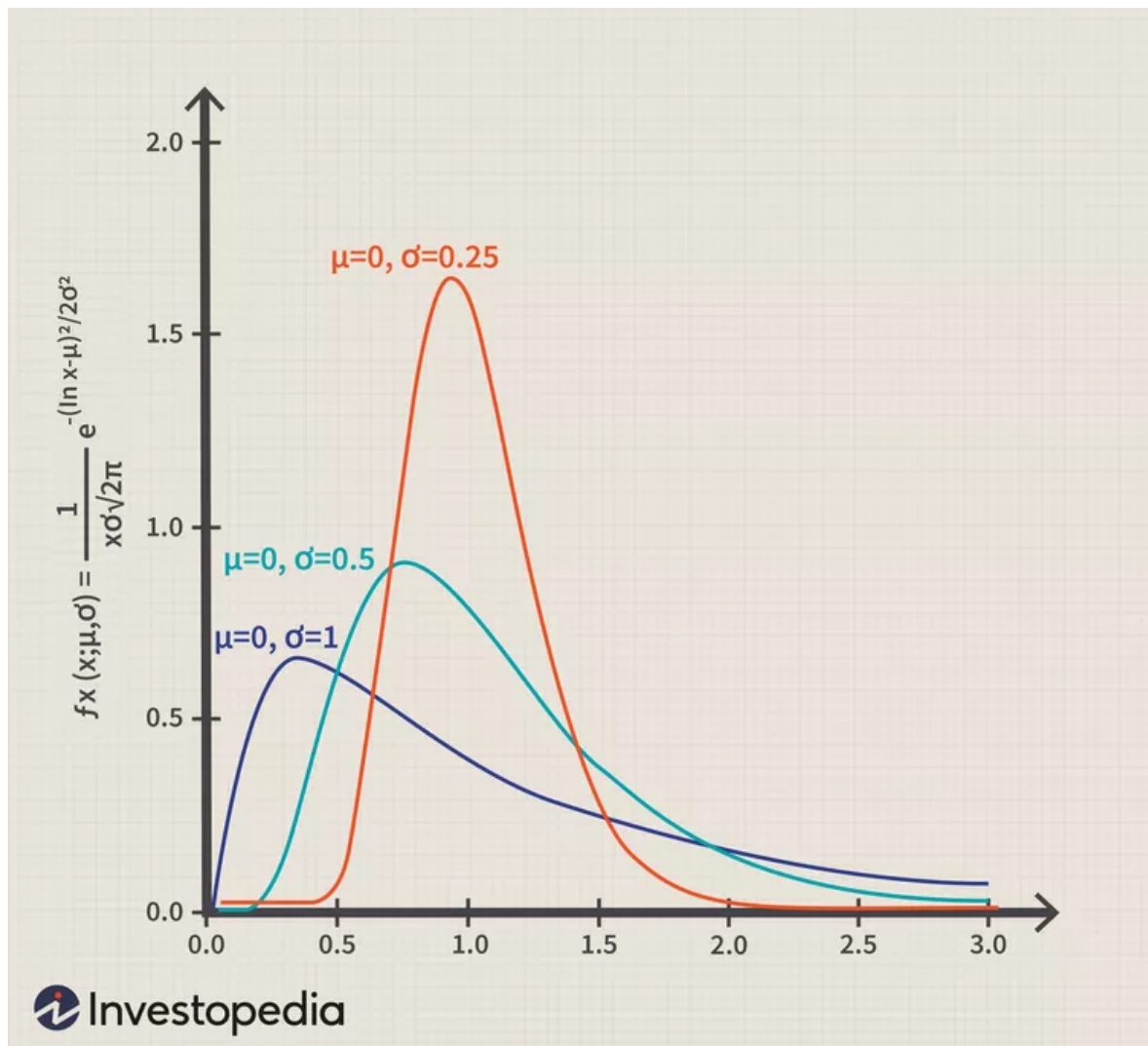
Kurtosis

- Kurtosis indicates how much data resides in the tails.
- Distributions with a large kurtosis have more tail data than normally distributed data, which appears to bring the tails in toward the mean.
- Distributions with low kurtosis have fewer tail data, which appears to push the tails of the bell curve away from the mean.

Skewness

Skewness is demonstrated on a bell curve when data points are not distributed symmetrically to the left and right sides of the median on a bell curve. If the bell curve is shifted to the left or the right, it is said to be skewed.

Left Skewed



QQ Plot

The differences between tails of the model distribution and the sample distribution

PP Plot

The differences in the middle portion of the model and sample distribution