Chapter 26 Summary

Josh

CHI-SQUARED TESTS

★ Important things in green (unless black + white) then it's just capitalized stuff.

Goodness-of-Fit ★ - adj. (good-ness of fit)

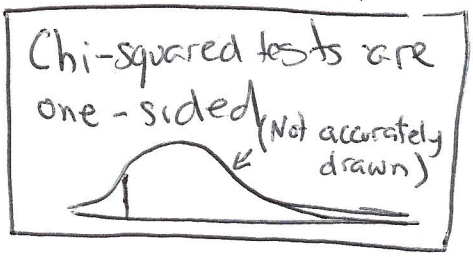
A type of hypothesis test that checks to see if an observed data chart is uniformly distributed

like a 1-proportion z-test but instead being the sum of multiple proportions.

CHECK ASSUMPTIONS + Conditions.

Is data in counts? independent? Random? each cell has > 5 individuals?

USE $\chi^2 = \sum_{\text{all cells}}^{(\text{sum})} \frac{(\text{Obs} - \text{Exp})^2}{\text{Exp}}$ ← Your data ← Formulated data (avg., given, etc...)



General rule: Bigger the χ^2, lower the P-value

CHI-SQUARED TEST OF HOMOGENEITY ★

like a 2-proportion z test but with a group of proportions.

USED To compare two charts or tables of given data

A+C - (Goodness of Fit) - Randomization Condition = All you need. ← (probably mention it somehow though)

degrees of freedom = (# of Rows − 1)(# of columns − 1)

SQUARE-TEST FOR INDEPENDENCE ★

Test to whether two groups are independent of one another

P(A) = P(A|B)

★ State a null + alternative hypothesis and use $\chi^2 = \sum_{\text{all cells}} \frac{(\text{observed} - \text{Expected})^2}{\text{Expected}}$ to find P-value