

CHAPTER OVERVIEW

12: Chi-square Tests for Categorical Data

Often we want to conduct tests claims about the characteristics of qualitative or categorical non- numeric data. In Chapter 10, we covered a test of one population proportion. In reality, this was a test of a categorical variable with 2 choices (success, failure). Now in this section, we will expand our study of hypothesis tests involving categorical data to include categorical random variables with more than two choices using a goodness-of-fit test. In addition, we will compare two categorical variables for independence. Both of these models will use a Chi-square test statistic, which looks at deviations between the observed values and expected values of the data.

[12.1: Chi-square Goodness-of-fit Test](#)

[12.2: Chi-square Test of Independence](#)

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