

Hoofdstuk 15

Bijlage 15.1

Multinomial Experiment

A multinomial experiment is one that possesses the following properties.

1. The experiment consists of a fixed number n of trials.
2. The outcome of each trial can be classified into one of k categories, called *cells*.
3. The probability p_i that the outcome will fall into cell i remains constant for each trial. Moreover, $p_1 + p_2 + \cdots + p_k = 1$
4. Each trial of the experiment is independent of the other trials.

Bijlage 15.2

Chi-Squared Goodness-of-Fit Test Statistic

$$\chi^2 = \sum_{i=1}^k \frac{(f_i - e_i)^2}{e_i}$$

Bijlage 15.3

$$\chi^2 = \sum_{i=1}^k \frac{(f_i - e_i)^2}{e_i}$$

Bijlage 15.4

Expected Frequencies for a Contingency Table

The expected frequency of the cell in row i and column j is

$$e_{ij} = \frac{\text{Row } i \text{ total} \times \text{Column } j \text{ total}}{\text{Sample size}}$$

Bijlage 15.5

