

# KEY TERMS

Categorical variables can be either **nominal**, values that have no inherent order, or **ordinal**, values that have an inherent order. The inherent order of the values of an ordinal categorical variable should be preserved in tables and charts involving that variable.

A **two-way table** of counts (or frequencies) organizes data about two categorical variables taken from the same individuals or subjects. Values of the **row variable** label the rows of the table; values of the **column variable** label the columns of the table. A two-way table in which the row variable has  $n$  values and the column variable has  $m$  values is called an  $n \times m$  table.

The sum of the row entries or the sum of the column entries are called the **marginal totals**. **Marginal distributions** are computed by dividing the row or column totals by the overall total. Marginal distributions provide information about the individual variables but do not provide any information about the relationship between the two variables.

A two-way table of counts can be converted into a **joint distribution** by dividing each cell count by the grand total and multiplying by 100%.

There are two sets of **conditional distributions** for a two-way table:

- distributions of the row variable for each fixed level of the column variable
- distributions of the column variable for each fixed level of the row variable

Conditional distributions provide one way to explore the relationship between the row and column variables.