

service occupations have more women than the other occupational categories (an ordinal comparison), and that service occupations have 35 percentage points more women (56.7 - 21.7) than production occupations (an interval-ratio comparison).

The types of comparisons possible at each level of measurement are summarized in Table 1.5 and Figure 1.3. Note that differences can be established at each of the three levels, but only at the interval-ratio level can we establish the magnitude of the difference.

### Levels of Measurement of Dichotomous Variables

A variable that has only two values is called a **dichotomous variable**. Several key social factors, such as gender, employment status, and marital status, are dichotomies—that is, you are male or female, employed or unemployed, married or not married. Such variables may seem to be measured at the nominal level: You fit in either one category or the other. No category is naturally higher or lower than the other, so they can't be ordered.

**Dichotomous variable** A variable that has only two values.

Table 1.4 Gender Composition of Five Major Occupational Groups, 2014

Occupational Group	Women in Occupation (%)
Management, professional, and related occupations	51.6
Service occupations	56.7
Production, transportation, and materials occupations	21.7
Sales and office occupations	61.8
Natural resources, construction, and maintenance occupations	4.4

Source: U.S. Department of Labor, 2015, *Labor Force Statistics from the Current Population Survey 2014*, Table 11

Table 1.5 Levels of Measurement and Possible Comparisons

Level	Different or Equivalent	Higher or Lower	How Much Higher
Nominal	Yes	No	No
Ordinal	Yes	Yes	No
Interval-ratio	Yes	Yes	Yes

Figure 1.3 Levels of Measurement and Possible Comparisons: Education Measured on Nominal, Ordinal, and Interval-Ratio Levels