

Section 1.2 - Types of Data

Parameter - A numerical measurement describing some characteristic of a population.

Statistic - A numerical measurement describing some characteristic of a sample.

Quantitative (numerical) data - Numbers representing counts or measurements.

Categorical (qualitative) data - Names or labels that are not numbers representing counts or measurements.

Discrete data - Data that take on a finite or "countable" number of values.

Continuous data - Data that are numerical, but not discrete. Continuous data may take on *any* numerical values.

To better understand the differences between discrete and continuous data, see the paragraph following example 3 on page 16.

Levels of measurement

Nominal level - characterized by data that consist of names, labels, or categories

Ordinal level - characterized by data that can be ordered, but differences between values cannot be determined or are meaningless

Interval level - similar to ordinal level, except differences between data values are meaningful. An additional feature of this level is that there is no natural zero value.

Ratio level - interval level with a natural zero value, which represents none of a quantity