

CHARACTERISTICS OF DATA

Define Data:

A body or series of facts or information.

Suppose you had observed that the heights of Grade 9 students were quite varied.

By the time these students reach Grade 12, of course, most are taller.

State a thesis question that gives your study a focus and identifies the population.

- What is the pattern of growth (height) of students from the time enter highschool until they graduate?
 - Need to be more specific about age
 - Need to factor in male/female?

Better:

What is the pattern of growth (height) of males/females at my school from age 14-18?

Inference — a conclusion about the population that is made from the sample

Census — information gathered about an entire population

Cross-sectional study — a study that considers individuals from different groups at the same time

Longitudinal study — a study that considers individuals over a long period of time

Time series data — data that have accumulated over a long period of time

Types of Data:

Quantitative variables — variables that can be measured numerically

Qualitative variables — variables that cannot be measured numerically

Discrete data — data that can be described using whole numbers. A count will always give discrete data.

Continuous data — data that are only measurable with real numbers. A measure of quantity will always be continuous.

Practice: #1-4, 7 (choose 3), 8, 9, 11, 13