

# Lesson: Data Collection Bias

**Collection Bias:** Statistical bias is any factor that favors certain outcomes or responses and hence systematically influences (or skews) the results of a survey.

## Sampling Bias

Sampling bias occurs when the sample does not reflect the characteristics of the population. This can result from poor sampling technique or data collection methods. This should be reduced by planning the study utilizing the appropriate sampling technique.

## Household Bias

Household bias occurs when one type of Household Bias respondent is over represented because different sized groupings are polled equally.

## Non-Response Bias

This is a form of sampling bias caused when a particular group or groups are underrepresented in the survey because they have chosen not to participate.

## Response Bias

If the respondent **deliberately** gives false or misleading answers to the survey this would Response Bias be called response bias. The dishonesty in the answers may be caused by embarrassment or fear to answer the question honestly.

## Measurement Bias

Measurement bias is a consistent measurement error which skews the results of the survey. Often the data collection process affects the variable that is being measured. Sometimes these effects (if known) can be accounted for in the analysis.

**Two types of measurement bias questions:**

(a) Leading Questions

is a question that suggests an answer which otherwise may not have been chosen by the respondent without prompting.

(b) Loaded Questions

is a question contains wording or information which influences the respondents.