

Definitions

1 Population and Samples

Statistic - A random variable, a function of known observations from a population, no unknown parameters

Sampling unit - An individual unit of the population

Sampling frame - A list of all sampling units

Sampling distribution - All possible samples are chosen from the population

Census - When every member of the population is investigated

Population - A collection of all items

Finite Population - One in which each individual member can be given a number

Infinite population - One where it is impossible to number each individual member

Sample - A selection of items from a population

Bias - Anything which prevents a sample from being truly representative

2 Hypothesis Tests

Significance level - The probability of incorrectly rejecting H_0

Hypothesis test - A mathematical procedure to examine a value of a population parameter proposed by the null hypothesis compared with an alternative hypothesis

Critical Region - The range of values that would lead to the rejection of H_0 , and so the acceptance of H_1

Hypothesis - A statement concerning a population parameter

Test Statistic - Data collected to test a hypothesis