



Australian Bureau of Statistics

Statistical Language - What are Statistics?



Statistical Language



What are Statistics?

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This animation explains what are statistics, if you are unable to access the video a Transcript (.doc 32kb) has been provided. The animation requires [Adobe Flash Player](#) to run. The animation contains no audio.

How can statistics help us?

A **statistic** is a value that has been produced from a data collection, such as a summary measure, an estimate or projection. Statistical information is data that has been organised to serve a useful purpose.

Statistics is also a term that refers to the practice of collecting, analysing, interpreting and communicating data. It is the science of interacting with data.

How can statistics help us?

Statistics represent a common method of presenting information helping us to understand what the data are telling us.

Descriptive (or summary) statistics summarise the raw data and allow data users to interpret a dataset more easily.

Descriptive statistics can describe the shape, centre and spread of a dataset..

Inferential statistics are used to infer conclusions about a population from a sample of that population. Inferential statistics are the result of techniques that use the data collected from a sample to make generalisations about the whole population from which the sample was taken.

Inferential statistics include estimation, and hypothesis testing.

Why are statistics important?

Statistics form an evidence base for decision making and help us identify issues and opportunities, develop options and recommendations, monitor progress, evaluate outcomes, and understand the world.

Statistics that are published by government agencies, such as the ABS, or other official organisations are called "official statistics".

Principle 1 of the United Nations Statistical Commission's Fundamental Principles of Official Statistics states that:

'Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honor citizens' entitlement to public information.'

Further information:

ABS:

1500.0 - A guide for using statistics for evidence based policy

External links:

United Nations Statistical Commission's Fundamental Principles of Official Statistics

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