

Meta-analysis

Meta-analysis refers to methods used to compare and combine results from different, completed (reported or published), independent studies. It aims to identify patterns, to verify results, and to identify relevant relationships arising from multiple studies.

Meta-analysis can be thought of as 'conducting research about previous research'. In its simplest form, meta-analysis is done by identifying a common statistical measure that is shared between studies, and calculating an average of that common measure.

The reason for doing a meta-analysis is to achieve a higher statistical power, as opposed to a less precise measure calculated from a single study. In performing a meta-analysis, an investigator must make many choices which can affect the results. Such choices may include, for example, how to search for studies, how to select or exclude studies, how to deal with incomplete data, and how best to analyse the data.