

# Research Terms: Quick Reference

Plain-English definitions for every research terms term on Shrinktionary, in one printable sheet.

**12 entries | Updated July 25, 2026**

Created and reviewed under the direction of Shariq Refai, MD, MBA, FAPA, a board certified psychiatrist.

**Please read**

Educational information only, not medical or legal advice. This resource is created under the direction of Shariq Refai, MD, MBA, FAPA, a board certified psychiatrist, and published by Shrinktionary, part of The Shrink Network. It's evidence informed but general, it's not a substitute for evaluation or treatment by a licensed clinician, and it doesn't create a doctor-patient relationship. It may not fit your situation or the laws and clinical standards of your area, so please do your own research and talk with a qualified professional about your circumstances. If you're in crisis or thinking about suicide, call or text 988 in the US, call 911, or go to the nearest emergency room.

## Bias

*Also: Systematic error*

In research, bias is a systematic error that pushes a study's results in a particular direction. It distorts findings in ways that random chance doesn't.

## Confidence Interval

*Also: CI*

A confidence interval is a range of values that likely contains the true result. It shows how precise a study's estimate is.

## Correlation and Causation

*Also: Correlation versus causation*

Correlation means two things tend to move together.

Causation means one actually makes the other happen. A correlation alone doesn't prove cause.

## Double-Blind

*Also: Double-blinded, Double-masked*

Double-blind means neither the participants nor the researchers know who is getting the real treatment versus the comparison during a study. Hiding this reduces bias and makes results more trustworthy.

## Effect Size

*Also: Magnitude of effect*

Effect size is a number that describes how large an effect is, not just whether it exists. It tells you whether a result is big enough to matter in real life.

## Meta-Analysis

*Also: Pooled analysis*

A meta-analysis is a study that statistically combines the results of many separate studies on the same question. Pooling the data gives a clearer, more reliable estimate than any single study can on its own.

## P-Value

*Also: Probability value*

A p-value is a statistic that estimates how likely a result would be if there were no real effect. It's widely misunderstood and often mistaken for proof.

## Peer Review

*Also: Refereeing, Peer-reviewed*

Peer review is the process where independent experts evaluate a study before it's published. It's a quality check that catches many problems, but it doesn't guarantee a study is correct.

## Placebo

*Also: Sugar pill, Dummy treatment*

A placebo is an inactive treatment, like a sugar pill, used as a comparison in research. Comparing a real treatment against a placebo helps show whether the treatment itself is what's working.

## Randomized Controlled Trial

*Also: RCT, Randomized clinical trial*

A randomized controlled trial is a study that randomly assigns participants to a treatment group or a comparison group. That random assignment is what makes it the strongest design for showing whether a treatment actually causes an effect.

## Statistical Significance

*Also: significant result*

Statistical significance means a result is unlikely to be due to chance alone. It does not tell you whether the result is large or important.

## Systematic Review

*Also: Evidence synthesis*

A systematic review is a structured summary that gathers and appraises all the studies on a specific question. It sits near the top of the evidence hierarchy.

---

**Learn more: see all research terms terms at [shrinktionary.com/categories/research-terms](https://shrinktionary.com/categories/research-terms)**