



https://en.wikipedia.org/wiki/Null_hypothesis

Null hypothesis

In [inferential statistics](#), the **null hypothesis** (often denoted H_0 ,^[1]) is a general statement or default position that there is no relationship between two phenomena or no difference between two phenomena.^{[2][3][4]}

Testing (accepting, approving, rejecting, or disproving) the null [hypothesis](#) — and thus concluding that there are (or are not) grounds for believing that there *is* a relationship between two phenomena or a difference between two phenomena — is a central task in the modern practice of science.

The field of statistics, more specifically [hypothesis testing](#), gives precise criteria for rejecting or accepting a null hypothesis within a confidence level.^[4]

The null hypothesis is generally assumed to be true until evidence indicates otherwise (similar to the case that a defendant of a jury trial is presumed innocent until guilty).^[4]