

Q.- value?

The *p-value* is a direct measure of how plausible it is to obtain a sample like the current one if it is true H_0 . Small values indicate that it is very infrequent to obtain a sample like the current one, while high values are frequent. The *p-value* is used to indicate how much (or how little) the alternative hypothesis contradicts the current sample.

Reporting what the *p-value* is has the advantage of allowing anyone to decide which hypothesis to accept based on their **own level of risk α** . This is not possible when reporting, as has been traditional, indicating only the result of the decision, that is, whether H_0 was accepted or rejected with a fixed α .

By providing the *p-value* obtained with the current sample, the decision will be made according to the following rule:

if $p_v \leq \alpha$, accept H_1

if $p_v > \alpha$, accept H_0

Entering the practical field, some statistical packages have provided in their listings the *significance level*, literally meaning *significance level* when often actually refer to the *p-value* (p-value).