In hypothesis testing, the probability that a parameter to be tested has a value as extreme or more extreme than the value that would be observed if the null hypothesis were true.

Note: If the p value associated with the statistical test is equal to or greater than the alpha level that was determined (0.01 or 0.05, for example), this means that the association or difference observed may be due to chance and that the null hypothesis cannot be rejected. However, if the p value is less than the alpha level that was determined, the association or difference is statistically significant and the null hypothesis is rejected.

Alternate spelling: p-value