



Hypothesis testing



What is hypothesis

A hypothesis is an educated guess about something in the world around you, in simple terms it should be testable either by experiments or observations

If i..... (do this to my independent variable) this(will happen to my dependent variable)

What is hypothesis testing

Hypothesis testing is a way of testing a datasets,survey,experiments to get valuable insights/ valuable/meaningful results

Steps:

1. Figure out your null hypothesis (H_0)
2. State your null hypothesis
3. Select what kind of test need to be performed as per the dataset
4. Either support or reject null hypothesis(H_1)

How to perform testing

1. While analyzing data we get significant values (p)
2. If $p \leq 0.05$ (Reject H_0)
3. If $p \geq 0.05$ (consider H_0)

Types of tests

Chi square test (2 categorical features)

T test (1 categorical features and 1 continuous feature)

Anova test (categorical data having three unique values)

Errors:

Type-1 : If H_0 was true and it was ignored by analysis

Type-2 : If H_0 was false and it was considered by analysis