2024/3/6 التاريخ: Task-5 الموضوع:

Quantitative | Qualitative

Numbers | Words

Can describe it in
* taste * feel
* See * hear
* Smell

Discrete | Continuous

int number | float number

3 | 3.5

Scales:

1- Nominal scale data: use qualitative Data, No order

2- ordinal scale data: Differences not measured, ordered, Ranked

3- interval scale data: difference measured, ordered

4- Ratio Scale data: difference measured, ordered

interval vs Ratio

doesn't start '0' | start from '0'

التاريخ :

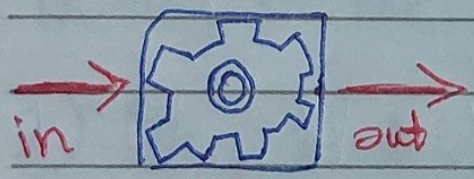
الموضوع :

فرضية

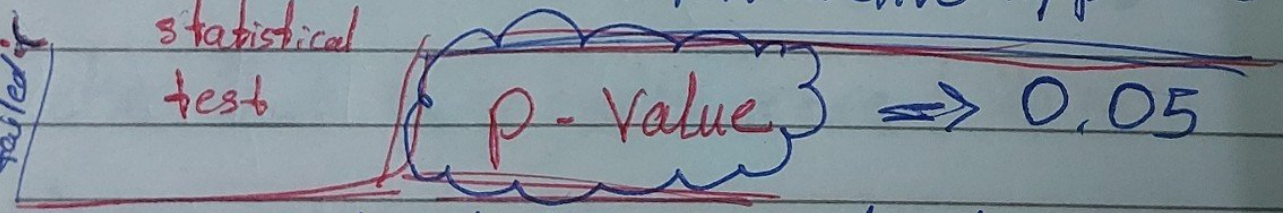
Hypotheses : an assumption that is made based on evidence

if no difference we simply use Null Hypothesis.

to reject or fail to reject the Null Hypothesis we need to use Statistical test



* need Data
* Null, primary Hypthesis
* Alternative Hypothesis



* the p-value helps you decide if should reject the null Hypothesis or not.
* it's not tell you how difference

التاريخ :

الموضوع :

p-value ⇒ are determinal by adding up probabilis.

one sided — barly use

two sided — most used

it contains 3 partes :

1) the probability random chance would result in the observation (Normal coin)

2) the probability of observing something else that is equally rare (2 rares)

3) the probability of observing somthing rarer or more extreme.

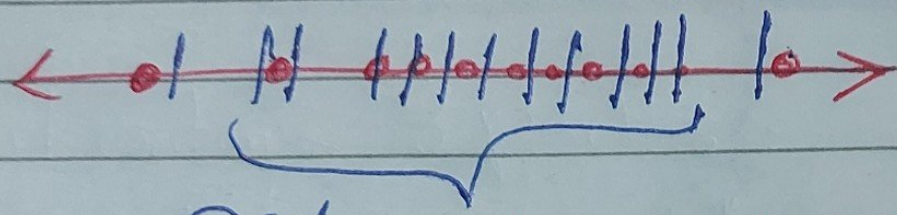
Why we care about rare & extreme

التاريخ :

الموضوع :

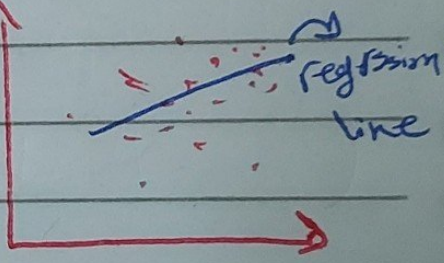
Confidence intervals : CI

interval which is expected to typically Contain the parameter being estimated.



every time we take mean

95% Confidence intervals



Regression analysis

reliable method of identifying which variables have impact on a topic of interest, or model the relationship between our dependent & independent variables.

Just estimation Not perfectly