DIFFERENT STATISTICAL TESTING IDENTIFICATION 8/2/2024

08 February 2024 18:39

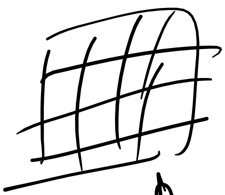
t Z χ^2 f

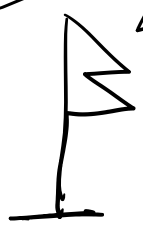
✓ ✓ ✓ ✓

Parametric Tests

Person vs Uncertainty

Compare





Nepal

Occur 11 12 13 8

2500

Buffet

Delhi Casino

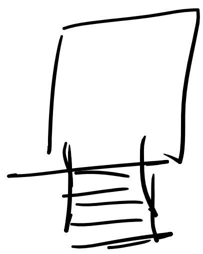
Black X Risky

5 2 → 1/25

1 - - - 30 50

2

$500 + Drinks



Black Jacks

52

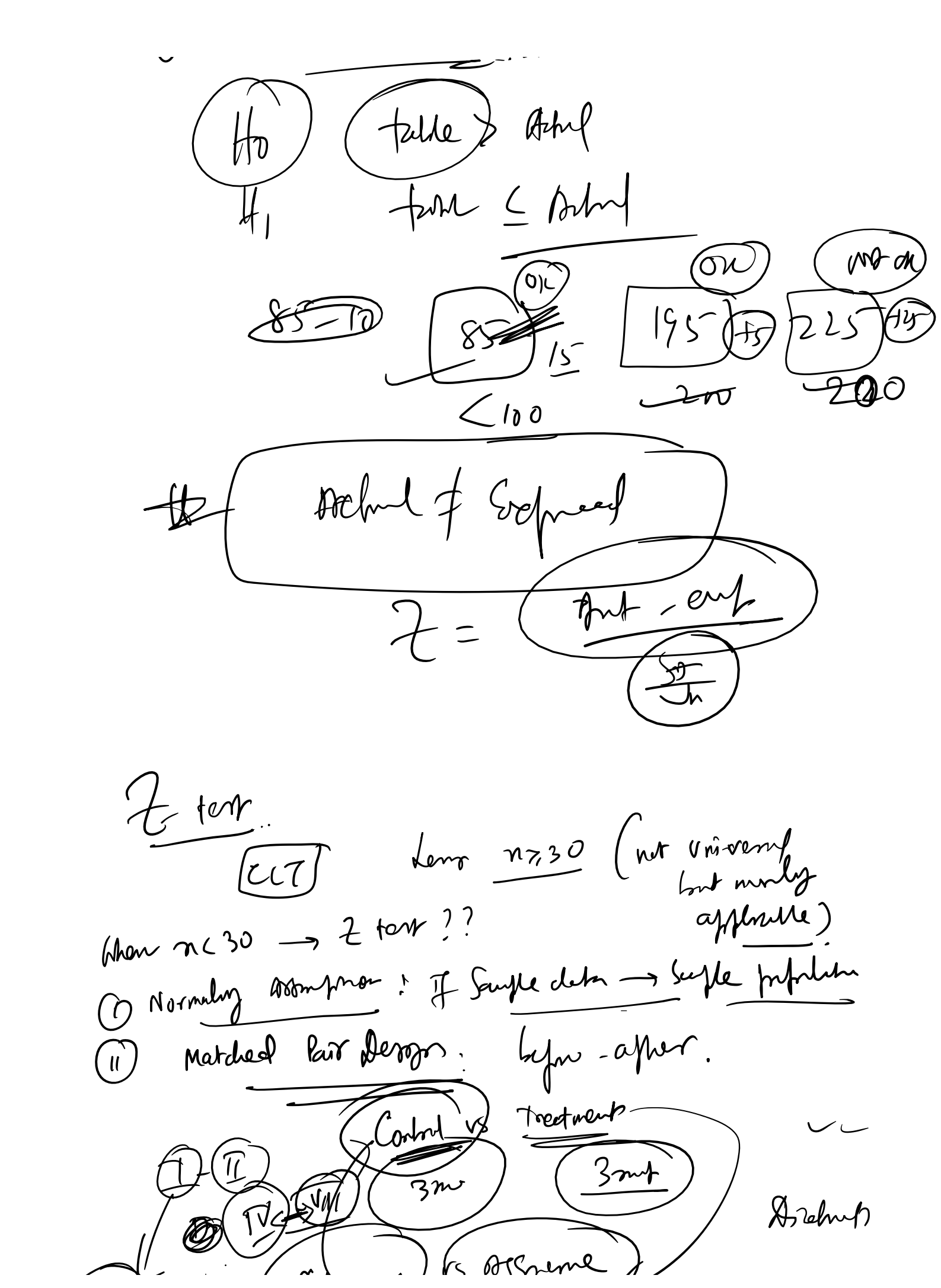
t $n < 30$

z $n \geq 30$

$n = 10$

$n = 0, 1, 2$

Customized testing zones . . .



Z test..

CLT

Large $n \geq 30$ (not universal but mostly applicable)

When $n < 30$ → Z test ??

(I) Normality assumption : If Sample data → Sample population

(II) Matched Pair Design : before - after.

2 vs

Deferment vs aggressive

Based on what you know / decided / proceed

Non - parametric Z - tests ..

U - Statistics : Similar Rank - based distribution

Large → Normal →

Wilcoxon - Signed Rank ..

Similar under Ho → ND → Z tests ..

Bootstrapping : Generating a Resampled data sets .. σ^2

Give CI for non-normal cases ..

T - test independent small samples $n < 30$

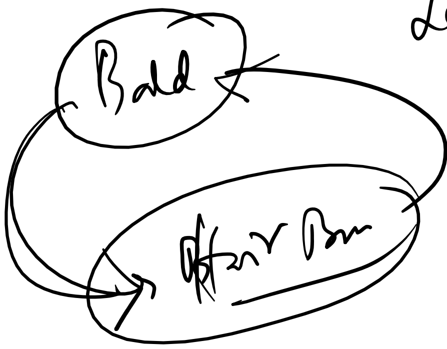
Large samples If the data is asymptotically equivalent to ND → Z

Multiple Comparisons: False discovery Rate (FDR)

or Bonferroni Correction ?

When Conducting multiple t-tests. to Control for family wise errors.

Lessens the Error when More parameters are Added to the System



$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \dots + u_i$

$\epsilon_i = U_i = e_i =$ Error Term

9062395123

Power Analysis: Summary the Sample Size

Student's t-test

1908 chemist ~~Dublin~~

William Sealy Gosset

By Student

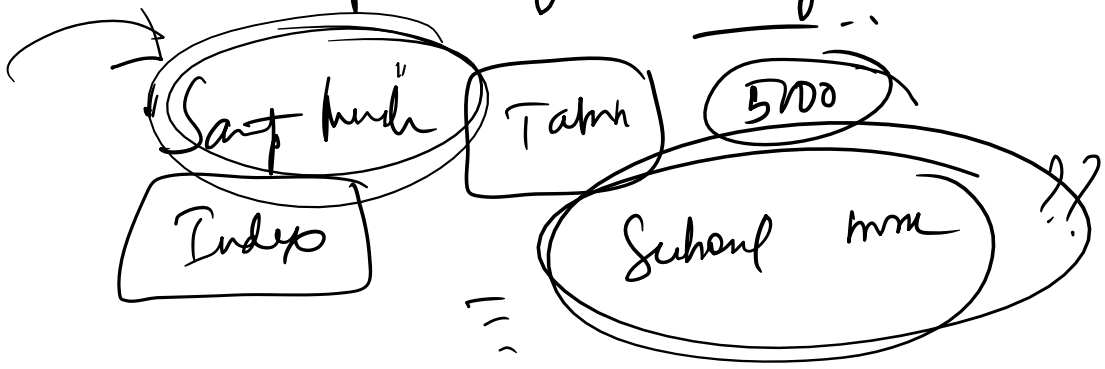
χ^2 test. (when Z-value)^2

Ordinal Data

Mantel-Haenszel chi-square

Cochran's Q-test ..

for category change ..



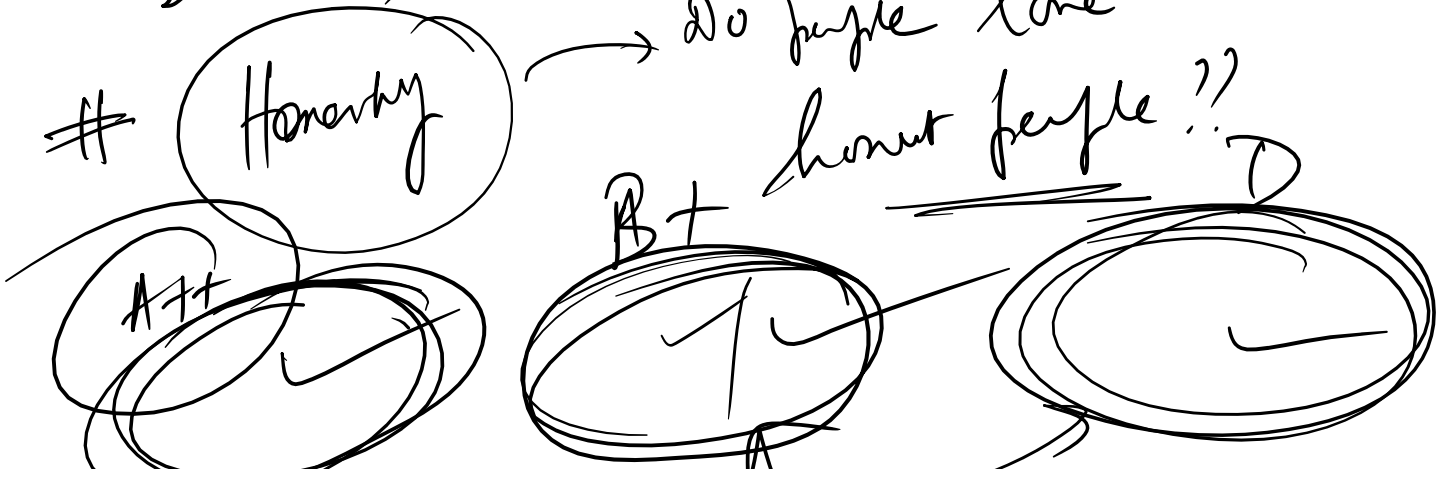
Problem of fit : observed → pre-specified distribution

Degrees of freedom - for a valid statistical system
df ≥ 0

$x+y=10$
$2x+3y=50$
$x-y=0$
$2x=20$
→ (2)

$3x+2y+3z=45$
$x+y=22$
$df = (-1)$

Honesty → Do purple love honest people !!



$n \geq 30$ | χ^2 when n $X \to X^2$

$n < 20$ X

20 to 30 → χ^2

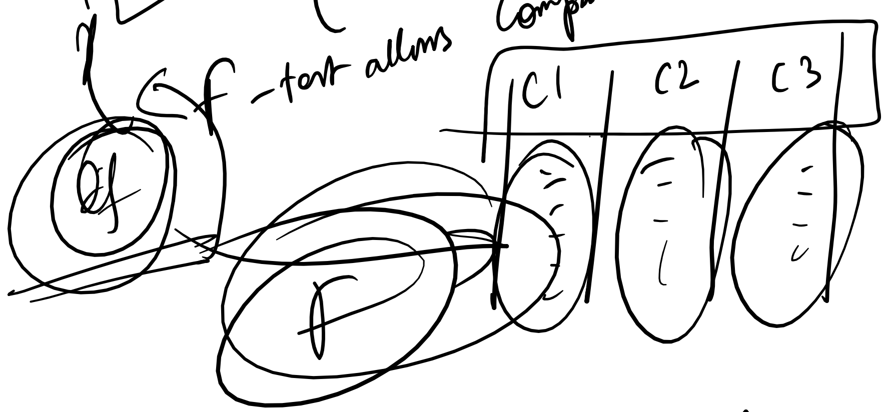
F-test

1 one way
2 way } ANOVA

Random Effect ANOVA

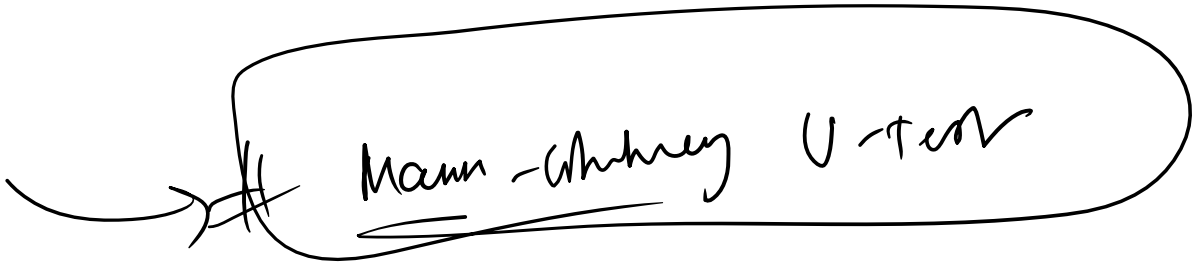
In nested designs with Random factors (e.g. classrooms and school) levels

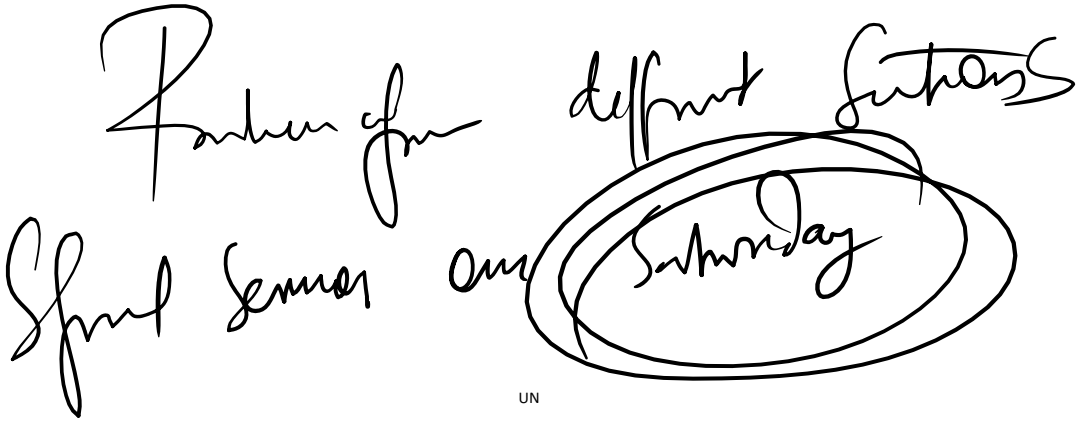
F-test allows comparisons within and between



Stability of Boulders. → F test

10 → 2 Roll





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