

Analysis of Variance (ANOVA)

Types of ANOVA

① One Way ANOVA : One factor with atleast 2 levels, these levels are independent

Eg: Doctor want to test a new medication to decrease headache.

They split the participant in 3 conditions [10mg, 20mg, 30mg].

Doctor ask the participants to rate the headache [1-10]

Medication → Factor		
10mg	20mg	30mg
5	7	2
9	8	7
-	-	-
-	-	-

② Repeated Measures ANOVA : One factor with atleast 2 levels, levels are dependent

Running → Factor		
Day 1	Day 2	Day 3
8	5	6
7	4	3

9

8

7

- ③ Factorial Anova : Two or more factors (each of which with atleast 2 levels), levels can be either independent and dependent

		Running → Factor		
		Day 1	Day 2	Day 3
Gender	Men	8	5	6
		7	4	3
		6	5	4
	Women	3	2	1