

Between subjects design: One-Way Analysis of Variance (ANOVA) —3 levels

DATA:

	Gang 1	Gang 2	Gang 3	Mean
	5	6	7	6.00
	4	7	6	5.67
	4	5	6	5.00
	3	5	7	5.00
Mean	4.00	5.75	6.50	
S.D.	0.82	0.95	0.58	Mean total: 5.4

Computations

Sums of squares (SS)	Degrees of freedom (df)
Between Groups SS = $[r (\bar{X}_{\text{group}} - \bar{X}_{\text{total}})^2]$ where r : # of subjects/group	# of Groups - 1
Within Group SS = $[\sum_{\text{group}} (X - \bar{X}_{\text{group}})^2]$ where X : single score	# of Groups (# of Subjects/Group- 1)
Total SS = $(X - \bar{X}_{\text{total}})^2$ where X : single score	# of scores - 1

SS/df
 ↑ like VARIANCE

Source	SS	df	MS (mean square)	F	p
Between Groups	13.167	2	6.583	10.304	0.0047
Within Group	5.75	9	0.639		
Total	18.92	11			