

VassarStats Printable Report
2x2 Factorial ANOVA for Independent Samples
standard weighted-means analysis

Thu Mar 06 2014 08:55:29 GMT-0800 (Pacific Standard Time)

Data Entered				
	Col 1	Col 2	Col 3	Col 4
Row 1	4	3	---	---
	4	4		
	5	5		
	1	5		
	5	4		
	4	3		
	4	5		
	4	4		
	4	5		
	5	3		
	5	5		
Row 2	5	2	---	---
	2	5		
	5	3		
	4	2		
	4	4		
	4	3		
	2	5		
	2	5		
	4	5		
Row 3	---	---	---	---
Row 4	---	---	---	---

Summary Data		Within each box: Item 1 = N Item 2 = $\sum X$ Item 3 = Mean Item 4 = $\sum X^2$ Item 5 = Variance Item 6 = Std. Dev. Item 7 = Std. Err.			
	C1	C2	C3	C4	Tot.
R1	11	11	---	---	22
	45	46			91
	4.0909	4.1818			4.1364
	197	200			397

	1.29 1.14 0.34	0.76 0.87 0.26			0.98 0.99 0.21
R2	9 32 3.5556 126 1.53 1.24 0.41	9 34 3.7778 142 1.69 1.3 0.43	---	---	18 66 3.6667 268 1.53 1.24 0.29
R3	---	---	---	---	---
R4	---	---	---	---	---
Tot.	20 77 3.85 323 1.4 1.18 0.26	20 80 4 342 1.16 1.08 0.24	---	---	40 157 3.925 665 1.25 1.12 0.18

ANOVA Summary					
Source	SS	df	MS	F	P
Rows	2.18	1	2.18	1.69	0.2019
Columns	0.23	1	0.23	0.18	0.6739
r x c	0.04	1	0.04	0.03	0.8635
Error	46.32	36	1.29		
Total	48.78	39			

Critical Values for the Tukey HSD Test				
	HSD[.05]	HSD[.01]	HSD=the absolute [unsigned] difference between any two means (row means, column means, or cell means) required for significance at the designated level: HSD[.05] for the .05 level; HSD[.01] for the .01 level. The HSD test between row means can be meaningfully performed only if the row effect is significant; between column means, only if the column effect is significant; and between cell means, only if the interaction effect is significant.	
Rows [2]	0.73	0.98		
Columns [2]	0.73	0.98		
Cells [4]	1.38	1.71		