

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

Tue Feb 11 2014 08:52:14 GMT-0800 (Pacific Standard Time)

Data Entered				
	Col 1	Col 2	Col 3	Col 4
Row 1	4	4	---	---
	4	5		
	4	5		
	4	4		
	4	4		
	4	5		
	4	4		
	2	5		
	3	5		
	2	5		
	3	5		
Row 2	4	4	---	---
	4	4		
	4	2		
	4	4		
	4	3		
	5	4		
	3	3		
	5	4		
	5	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 38 3.4545 138	11 51 4.6364 239	---	---	22 89 4.0455 377

	0.67 0.82 0.25	0.25 0.5 0.15			0.81 0.9 0.19
R2	9 38 4.2222 164 0.44 0.67 0.22	9 33 3.6667 127 0.75 0.87 0.29	---	---	18 71 3.9444 291 0.64 0.8 0.19
R3	---	---	---	---	---
R4	---	---	---	---	---
Tot.	20 76 3.8 302 0.69 0.83 0.19	20 84 4.2 366 0.69 0.83 0.19	---	---	40 160 4 668 0.72 0.85 0.13

ANOVA Summary					
Source	SS	df	MS	F	P
Rows	0.1	1	0.1	0.19	0.6655
Columns	1.6	1	1.6	3.06	0.0888
r x c	7.47	1	7.47	14.28	0.0006
Error	18.83	36	0.52		
Total	28	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]	0.47	0.62		
Columns [2]	0.46	0.62		
Cells [4]	0.88	1.09		