

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

Tue Feb 11 2014 08:45:38 GMT-0800 (Pacific Standard Time)

Data Entered				
	Col 1	Col 2	Col 3	Col 4
Row 1	2	4	---	---
	2	4		
	2	5		
	3	4		
	3	4		
	5	5		
	2	4		
	2	3		
	3	5		
	2	5		
	2	4		
Row 2	4	5	---	---
	3	2		
	2	2		
	2	3		
	4	3		
	5	3		
	3	2		
	5	3		
	4	3		
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 28 2.5455 80	11 47 4.2727 205	---	---	22 75 3.4091 285

	0.87 0.93 0.28	0.42 0.65 0.19			1.4 1.18 0.25
R2	9 32 3.5556 124 1.28 1.13 0.38	9 26 2.8889 82 0.86 0.93 0.31	---	---	18 58 3.2222 206 1.12 1.06 0.25
R3	---	---	---	---	---
R4	---	---	---	---	---
Tot.	20 60 3 204 1.26 1.12 0.25	20 73 3.65 287 1.08 1.04 0.23	---	---	40 133 3.325 491 1.25 1.12 0.18

ANOVA Summary					
Source	SS	df	MS	F	P
Rows	0.35	1	0.35	0.42	0.521
Columns	4.22	1	4.22	5.06	0.0307
r x c	14.19	1	14.19	17.02	0.0002
Error	30.02	36	0.83		
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]	0.59	0.79		
Columns [2]	0.59	0.79		
Cells [4]	1.11	1.37		