

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

Tue Feb 11 2014 08:49:45 GMT-0800 (Pacific Standard Time)

Data Entered				
	Col 1	Col 2	Col 3	Col 4
Row 1	2	4	---	---
	4	4		
	3	5		
	3	4		
	4	4		
	2	5		
	2	4		
	1	4		
	4	5		
	2	5		
	1	4		
Row 2	4	5	---	---
	4	5		
	2	2		
	3	4		
	4	3		
	5	3		
	3	1		
	5	2		
	5	4		
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 84	11 48 4.3636 212	---	---	22 76 3.4545 296

	1.27 1.13 0.34	0.25 0.5 0.15			1.59 1.26 0.27
R2	9 35 3.8889 145 1.11 1.05 0.35	9 29 3.2222 109 1.94 1.39 0.46	---	---	18 64 3.5556 254 1.56 1.25 0.29
R3	---	---	---	---	---
R4	---	---	---	---	---
Tot.	20 63 3.15 229 1.61 1.27 0.28	20 77 3.85 321 1.29 1.14 0.25	---	---	40 140 3.5 550 1.54 1.24 0.2

ANOVA Summary					
Source	SS	df	MS	F	P
Rows	0.1	1	0.1	0.09	0.7659
Columns	4.9	1	4.9	4.44	0.0421
r x c	15.28	1	15.28	13.85	0.0007
Error	39.72	36	1.1		
Total	60	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]	0.68	0.91	
Columns [2]	0.67	0.9	
Cells [4]	1.27	1.58	