

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

Tue Feb 25 2014 08:58:00 GMT-0800 (Pacific Standard Time)

Data Entered				
	Col 1	Col 2	Col 3	Col 4
Row 1	2	3	---	---
	4	4		
	5	4		
	4	1		
	5	4		
	4	5		
	2	4		
	1	3		
	2	5		
	3	4		
	1	4		
Row 2	5	5	---	---
	3	4		
	4	3		
	3	4		
	4	3		
	4	4		
	1	1		
	5	3		
	4	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	11	---	---	22
	33	41			74
	3	3.7273			3.3636
	121	165			286

	2.2 1.48 0.45	1.22 1.1 0.33			1.77 1.33 0.28
R2	9 33 3.6667 133 1.5 1.22 0.41	9 31 3.4444 117 1.28 1.13 0.38	---	---	18 64 3.5556 250 1.32 1.15 0.27
R3	---	---	---	---	---
R4	---	---	---	---	---
Tot.	20 66 3.3 254 1.91 1.38 0.31	20 72 3.6 282 1.2 1.1 0.24	---	---	40 138 3.45 536 1.54 1.24 0.2

ANOVA Summary					
Source	SS	df	MS	F	P
Rows	0.36	1	0.36	0.23	0.6344
Columns	0.9	1	0.9	0.57	0.4552
r x c	2.24	1	2.24	1.43	0.2396
Error	56.4	36	1.57		
Total	59.9	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]	0.81	1.08	
Columns [2]	0.8	1.08	
Cells [4]	1.52	1.88	