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EDG500

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Lab 15 Step by Step:

Oneway

Descriptives

Reported Pain Level

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Low Dosage	3	7.0000	1.00000	0.57735	4.5159	9.4841	6.00	8.00
Moderate Dosage	3	5.6667	2.08167	1.20185	0.4955	10.8378	4.00	8.00
High Dosage	3	2.0000	1.00000	0.57735	-0.4841	4.4841	1.00	3.00
Total	9	4.8889	2.57121	0.85707	2.9125	6.8653	1.00	8.00

ANOVA

Reported Pain Level

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	40.222	2	20.111	9.526	0.014
Within Groups	12.667	6	2.111		
Total	52.889	8			

Figure 15.7. SPSS Statistics output for a one-way ANOVA.

Post Hoc Tests

Multiple Comparisons

Dependent Variable:

Tukey HSD

(I) Dosage Level		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low Dosage	Moderate Dosage	1.33333	1.18634	0.535	-2.3067	4.9734
	3.00	5.00000*	1.18634	0.013	1.3600	8.6400
Moderate Dosage	Low Dosage	-1.33333	1.18634	0.535	-4.9734	2.3067
	3.00	3.66667*	1.18634	0.049	0.0266	7.3067
High Dosage	Low Dosage	-5.00000*	1.18634	0.013	-8.6400	-1.3600

Moderate Dosage	-3.66667*	1.18634	0.049	-7.3067	-0.0266

*. The mean difference is significant at the 0.05 level.

Homogeneous Subsets

Reported Pain Level

Tukey HSD[a]

		Subset for alpha = 0.05	
Dosage Level	N	1	2
High Dosage	3	2.0000	
Moderate Dosage	3		5.6667
Low Dosage	3		7.0000
Sig.		1.000	0.535

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 3.000.

Lab 15 Exercise:

Oneway

Descriptives

Hours of Internet Usage (Weekly)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Low SES	4	10.0000	1.82574	0.91287	7.0948	12.9052	8.00	12.00
Middle SES	4	12.2500	1.70783	0.85391	9.5325	14.9675	10.00	14.00
High SES	4	12.0000	2.16025	1.08012	8.5626	15.4374	10.00	15.00
Total	12	11.4167	2.02073	0.58333	10.1328	12.7006	8.00	15.00

ANOVA

Hours of Internet Usage (Weekly)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	12.167	2	6.083	1.672	0.241
Within Groups	32.750	9	3.639		
Total	44.917	11			

Figure 15.8. SPSS Statistics output for a one-way ANOVA.

Post Hoc Tests

Multiple Comparisons

Dependent Variable:

Tukey HSD

(I) Socioeconomic Status	(J) Socioeconomic Status	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low SES	Middle SES	-2.25000	1.34887	0.269	-6.0160	1.5160
	High SES	-2.00000	1.34887	0.343	-5.7660	1.7660
Middle SES	Low SES	2.25000	1.34887	0.269	-1.5160	6.0160
	High SES	0.25000	1.34887	0.981	-3.5160	4.0160
High SES	Low SES	2.00000	1.34887	0.343	-1.7660	5.7660
	Middle SES	-0.25000	1.34887	0.981	-4.0160	3.5160

Homogeneous Subsets

Hours of Internet Usage (Weekly)

Tukey HSD[a]

Socioeconomic Status	N	Subset for alpha = 0.05
		1
Low SES	4	10.0000
High SES	4	12.0000
Middle SES	4	12.2500
Sig.		0.269

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

a. What is the mean for the low-SES group? 10.00

b. What is the mean for the middle-SES group? 12.25

c. What is the mean for the high-SES group? 12.00

d. What is the value of *F*? 1.67

e. What is the value of the associated probability? .24

f. Are the differences among the means for the SES groups statistically significant at the .05 level? No

g. Write a statement of the results of the significance test. Internet was reported on a scale on which lower scores indicated less hours of internet usage (weekly). For the low-SES group, the mean reported hours of internet usage was 10.00 (*sd* = 1.83). The mean hours of internet usage for the middle-SES group and the high-SES group were 12.25 (*sd* = 1.71) and 12.00 (*sd* = 2.16), respectively. The differences among the means are statistically insignificant at the .05 level (F [2, 9] = 1.67, p = .24).