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 EDG 500
 April 3, 2023

Chapter 15

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	.57735	4.5159	9.4841	6.00	8.00
Moderate Dosage	3	5.6667	2.08167	1.20185	.4955	10.8378	4.00	8.00
High Dosage	3	2.0000	1.00000	.57735	-.4841	4.4841	1.00	3.00
Total	9	4.8889	2.57121	.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	.014
Within Groups	12.667	6	2.111		
Total	52.889	8			

ANOVA Effect Sizes^{a,b}

Reported Pain Level		Point Estimate	95% Confidence Interval	
			Lower	Upper
Reported Pain Level	Eta-squared	.761	.069	.857
	Epsilon-squared	.681	-.242	.809
	Omega-squared Fixed-effect	.655	-.209	.790

Omega-squared Random-effect	.486	-.095	.653
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- a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.
b. Negative but less biased estimates are retained, not rounded to zero.

Multiple Comparisons

Dependent Variable: Reported Pain Level

Tukey HSD

(I) Dosage Level	(J) Dosage Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low Dosage	Moderate Dosage	1.33333	1.18634	.535	-2.3067	4.9734
	High Dosage	5.00000*	1.18634	.013	1.3600	8.6400
Moderate Dosage	Low Dosage	-1.33333	1.18634	.535	-4.9734	2.3067
	High Dosage	3.66667*	1.18634	.049	.0266	7.3067
High Dosage	Low Dosage	-5.00000*	1.18634	.013	-8.6400	-1.3600
	Moderate Dosage	-3.66667*	1.18634	.049	-7.3067	-.0266

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

Reported Pain Level

Tukey HSD^a

Dosage Level	N	Subset for alpha = 0.05	
		1	2
High Dosage	3	2.0000	
Moderate Dosage	3		5.6667
Low Dosage	3		7.0000
Sig.		1.000	.535

Means for groups in homogeneous subsets are displayed.

- a. Uses Harmonic Mean Sample Size = 3.000.

Exercise 15

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	.91287	7.0948	12.9052	8.00	12.00
Middle SES	4	12.2500	1.70783	.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	.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	.241
Within Groups	32.750	9	3.639		
Total	44.917	11			

ANOVA Effect Sizes^{a,b}

		Point Estimate	95% Confidence Interval	
			Lower	Upper
Hours of Internet Usage (Weekly)	Eta-squared	.271	.000	.537
	Epsilon-squared	.109	-.222	.435
	Omega-squared Fixed-effect	.101	-.200	.413
	Omega-squared Random-effect	.053	-.091	.261

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

Multiple Comparisons

Dependent Variable: Hours of Internet Usage (Weekly)

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	.269	-6.0160	1.5160
	High SES	-2.00000	1.34887	.343	-5.7660	1.7660
Middle SES	Low SES	2.25000	1.34887	.269	-1.5160	6.0160
	High SES	.25000	1.34887	.981	-3.5160	4.0160
High SES	Low SES	2.00000	1.34887	.343	-1.7660	5.7660
	Middle SES	-.25000	1.34887	.981	-4.0160	3.5160

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.		.269

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 4.000.

- a. The mean for the low-SES group is 10.00.
- b. The mean for the middle-SES group is 12.25.
- c. The mean for the high-SES group is 12.00.
- d. The value of F is 1.67.
- e. The value of the associated probability is 0.24.

- f. The differences among the means for the SES groups are not statistically significant at the 0.05 level.
- g. For the high-SES group, the average internet usage was 12.00. For the medium and low-SES groups the averages were 12.25 and 10.00 respectively. The differences among the means are not statistically significant at 0.05 level ($F [2,9] = 1.67, p = 0.24$).