

EDG 500 Educational Research and Statistic

Alliance University

April 10, 2023

Chapter 15 Step by step

Descriptives								
Reported Pain	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	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	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			

Chspttapter 15 exercice

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			

Conduct a one-way ANOVA, and answer the questions that follow.

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?

.241

f. The differences among the means are statistically insignificant at the .05 level ( $F [2, 9] =$

1.67,  $p = .24$ ).

g. 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.