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 Lower Bound	95% Confidence Interval for Mean Upper Bound	Minimum	Maximum
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. Are the differences among the means for the SES groups statistically significant at the .05 level?
The differences among the means
are statistically significant at the .05 level (F [2, 9] =1.67, p = .241).

g. Write a statement of the results of the significance test.
Report of the results of a one-way ANOVA.
The Internet was reported on a scale on which lower scores indicated less internet . For the High SES group, the mean reported Internet level was 2.00 (sd = 2.16. The mean internet levels for the middle SES and low SES groups were 12.25 (sd=1.70) and 10.(sd= 1.8), respectively.