Angeles City Science High School

Research 10

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Activity 3. Inferential Statistics. WHAT IS IT

Direction: Analyze results in Table 3 and refer to the given correlation coefficient below:

Table 3. **Correlation analysis of anxiety level and classroom participation**

Anxiety level	Correlation with Class Participation
Low anxiety level	-0.518*
Medium anxiety level	-0.071
High anxiety level	-0.327*
Note: *The coefficient of significance level is 0.05, the correlation coefficient r>0 is positive correlation, r<0 is negative correlation	

(Chang, 2020)

Data Interpretation:

The correlation or r between class participation and low anxiety level is -0.518 which is medium negative correlation. This indicates that those variables are inversely proportional to each other. Meanwhile, both medium anxiety level and high anxiety level have -0.071 and -0.327 respectively, they can be interpreted as low negative correlation. This means that class participation and medium or high anxiety level are unlikely to be correlated to each other and is inversely proportional. However, only low and high anxiety level shows that they are statistically significant to class participation. For low anxiety level, there are 12 participants in this category and the df or degree of freedom is (df = n - 2; n = 12; df = 12 - 2 = 10) 10 with the coefficient of significance level of 0.05 (a = 0.05). We can see through the use of table of critical values for pearson r that the value interecting df = 10 and a = 0.05 is -/+0.576,

comparing that to the r that we get between low anxiety level and class participation of -0.518. We can conclude that they are statistically significant. Same goes through high anxiety levels with 56 participants in this category, df being 54 and a = 0.05. The value in which we can determine if the variable is significant is -/+0.273 comparing that with the r that we get of -0.327. We can conclude that high anxiety level and class participation is statistically significant. For the medium anxiety level, the coefficient significance level is 0.01 and the number of participants in this category is 32. The df (df = n - 2; n = 32; df = 32 - 2 = 30) and table of critical values for pearson r shows that the value that we can determine whether or not this variable is significant is -/+0.449. Since r=-0.071 is lower than -0.449, we can conclude that this is not statistically significant.

Guide Questions.

1. What specific type of inferential statistics was utilized in the processing the data?

The inferential statistics used was correlation.

2. Which among the variables are significant? Justify your answer.

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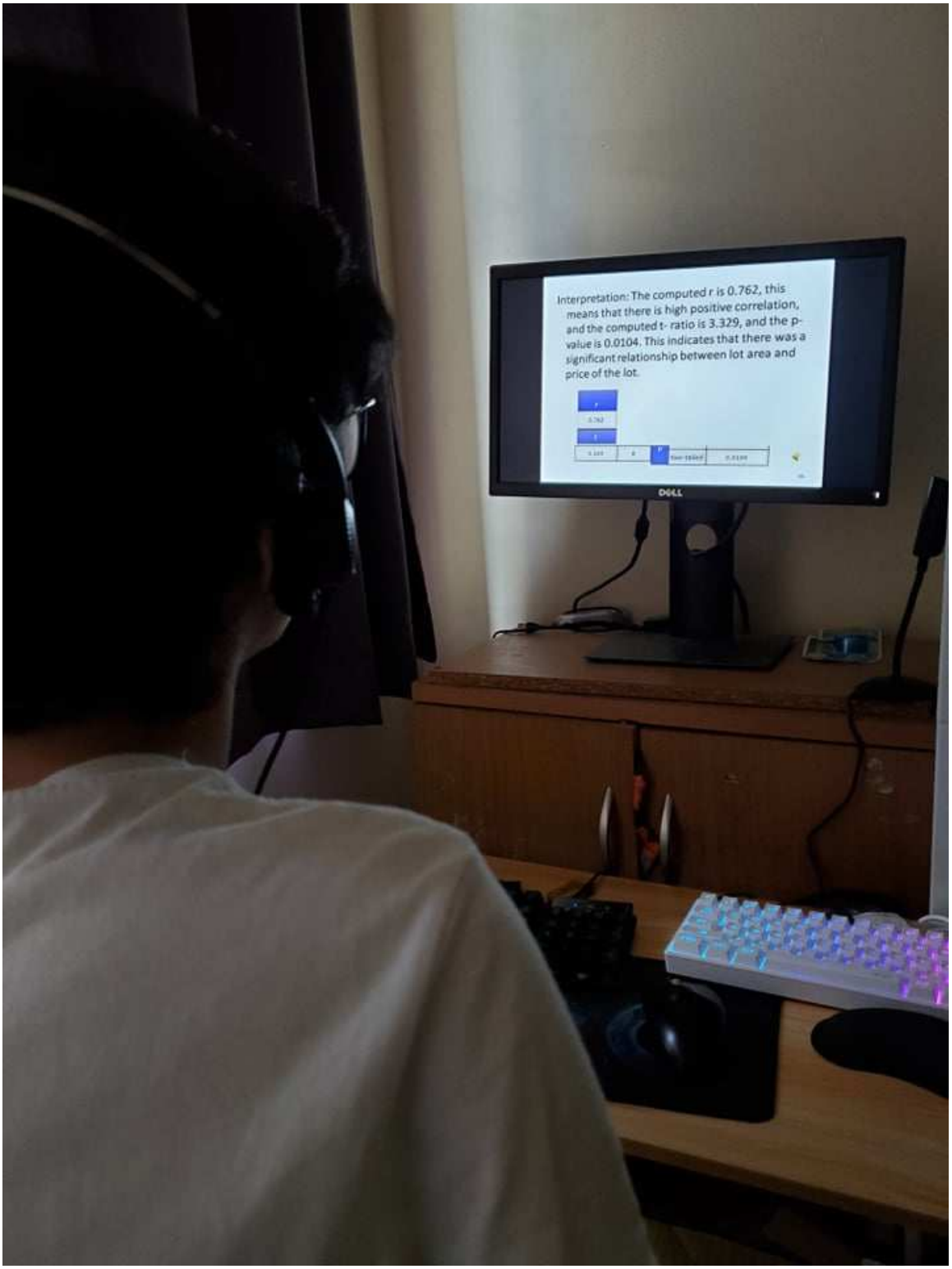
3. The correlation between medium anxiety level and classroom participation is low. In this type of inferential analysis, what does it mean by the term "low"?

Low means two variables are very unlikely correlated or have a relationship to each other


Interpretation: The computed r is 0.762, this means that there is high positive correlation, and the computed t- ratio is 3.329, and the p-value is 0.0104. This indicates that there was a significant relationship between lot area and price of the lot.
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