

# Exercise 31 hlt 362v

Sport & Tourism, Fitness



Name: \_ Class: \_GCU\_HLT-362 V\_\_\_\_\_ Date: \_\_ ? EXERCISE 31

Questions to be Graded 1. What are the two groups whose results are reflected by the t ratios in Tables 2 and 3? Table 2 reflects theHealthPromotion Program’s effects on cardiovascular risk factors and Table 3 is reflective of the program’s effects on health behavior. 2. Which t ratio in Table 2 represents the greatest relative or standardized difference between the pretest and 3 months outcomes? Is this t ratio statistically significant? Provide a rationale for your answer. 3.\n

Which t ratio listed in Table 3 represents the smallest relative difference between the pretest and 3 months? Is this t ratio statistically significant? What does this result mean? The T-ratio is 0. 80. This value is not statistically significant since it is less than the tabulated value of 1. 96. This is indicative of the program having no effect on health behaviors. 4. What are the assumptions for conducting a t-test for dependent groups in a study? Which of these assumptions do you think were met by this study? Several assumptions for t-test for dependent/matched groups in a study are applied.

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First, it is assumed that the difference between the two groups of the dependent t-test is approximately or normally distributed. Second, the dependent variable is interval or ratio (continuous in nature). Third, any independent variable consists of one group or two “ matched pair” groups. Finally, all subjects are assumed to have been surveyed the same and data collection was unbiased. The assumption that was met in this study is the

normal distribution. 5. Compare the 3 months and 6 months t ratios for the variable Exercise from Table 3.

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What is your conclusion about the long-term effect of the health-promotion intervention on Exercise in this study? After comparing the t-ratios for the Exercise variable, I conclude that there is an effect on long term exercise and health behaviors. 6. What is the smallest, significant t ratio listed in Table 2? Provide a rationale for your answer. The smallest t-ratio in Table 2 is 2.04. It is statistically significant because it is  $> 1.96$ . 7. Why are the larger t ratios more likely to be statistically significant? The larger t-ratios are statistically significant because they tend to be larger than the table value of 1.96. 8. Did the health-promotion program have a statistically significant effect on Systolic blood pressure (BP) in this study? Provide a rationale for your answer. No. The program did not have a statistically significant effect on systolic BP. The t-test values are lower than 1.96 on the t-distribution. 9. Examine the means and standard deviations for Systolic BP at pretest, 3 months (completion of the treatment), and 6 months. What do these results indicate? Are these results clinically important? Provide a rationale for your answer.

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The results for standard deviations for Systolic BP at pretest, 3 months (completion of the treatment), and 6 months indicate that the programs did not affect it. This is clinically important because it supports that the data is normally distributed and there is not a high likelihood that data was widely

dispersed. 10. Is this study design strong or weak? Provide a rationale for your answer. The study design is strong. This is because it has been carried out using the right procedures for research. The presented results show a stronger impact in the intervention.

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Also, the sample could easily be representative of the population in question. Bonus Question: Would you, as a health care provider, implement this intervention at your facility based on the Total Risk Score results? Provide a rationale for your answer. Yes, I would implement the intervention at my facility because it was clear, concise and showed that the program had long lasting positive effects while utilized. The fact that some of the data started decreasing (showing that intervention was helpful) at the 6 month follow up reinforces the good outcomes with such a program in place.