**PSY-520 Graduate Statistics Topic 6 – MANOVA Project**

Directions: Complete this assignment in 500-750 words using the following information:

A researcher randomly assigns 33 subjects to one of three groups. Group 1 receives technical dietary information interactively from an online website. Group 2 receives the same information from a nurse practitioner, while Group 3 receives the information from a video made by the same nurse practitioner.

The researcher looked at three different ratings of the presentation: difficulty, usefulness, and importance to determine if there is a difference in the modes of presentation. In particular, the researcher is interested in whether the interactive website is superior because that is the most cost-effective way of delivering the information.

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| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Group** | **Usefulness** | **Difficulty** | **Importance** |  | **Group** | **Usefulness** | **Difficulty** | **Importance** |
| 1 | 20 | 5 | 18 |  | 2 | 29 | 10 | 5 |
| 1 | 25 | 9 | 8 |  | 2 | 26 | 11 | 1 |
| 1 | 23 | 15 | 20 |  | 2 | 22 | 5 | 2 |
| 1 | 16 | 9 | 22 |  | 2 | 15 | 15 | 14 |
| 1 | 20 | 6 | 22 |  | 2 | 29 | 6 | 4 |
| 1 | 28 | 14 | 8 |  | 2 | 15 | 6 | 3 |
| 1 | 20 | 6 | 13 |  | 3 | 22 | 8 | 12 |
| 1 | 25 | 8 | 13 |  | 3 | 27 | 9 | 14 |
| 1 | 24 | 10 | 24 |  | 3 | 21 | 10 | 7 |
| 1 | 18 | 10 | 20 |  | 3 | 17 | 9 | 1 |
| 1 | 17 | 9 | 4 |  | 3 | 16 | 7 | 12 |
| 2 | 28 | 7 | 14 |  | 3 | 19 | 9 | 7 |
| 2 | 25 | 14 | 5 |  | 3 | 23 | 10 | 1 |
| 2 | 26 | 9 | 20 |  | 3 | 27 | 9 | 5 |
| 2 | 19 | 15 | 22 |  | 3 | 23 | 9 | 6 |
| 2 | 29 | 14 | 12 |  | 3 | 16 | 14 | 22 |
| 2 | 15 | 6 | 2 |  |  |  |  |  |

1. Analyze the data and interpret the results using a MANOVA.
2. Run a *t*-test using this data and interpret those results.
3. Compare the outcomes of the MANOVA and *t*-test and identify any differences. Which approach would you use? Why?