Chp 17 & 18 - Non Parametric Assignment – (83pts)

**Purpose:** The purpose of this assignment is to have you run and interpret several non parametric tests. You will be required to enter the data into SPSS. NOTE, you can just add columns rather than have an SPSS file for each question

You will turn in

1. The Word document
2. Your SPSS file

Please answer the following questions:

1. The following listing shows the rank order of hours worked and years of presidency of Presidents of Higher Ed who completed . The researcher is interested in knowing if there is a relationship between the number of hours a president works per day and the years that person has been a president.

|  |  |
| --- | --- |
| Hours worked per day | Years of presidency |
| 8 | 6 |
| 5 | 7 |
| 4 | 5 |
| 6 | 4 |
| 9 | 9 |
| 2 | 1 |
| 7 | 8 |
| 10 | 10 |
| 3 | 2 |
| 1 | 3 |

|  |  |
| --- | --- |
| 1. What non parametric test will be run on the data and how do you know this? (3pts) |  |
| 2. What would be a null hypothesis for this study? (3pts) |  |

3. Run the analysis and determine if there is a significant relationship between the rankings. Copy and paste your tables here. (6pts)

|  |  |
| --- | --- |
| 4. Report the results of the study (4pts) |  |
| 5. What would you say to your friend about this finding? (3pts) |  |

2. In the national collegiate football rankings, the Eastern teams seemed to have an advantage. The following listing shows the ranking of the top 25 teams by area of country. A football fanatic is interested in determining if there is a significant difference in the rankings between the East and West.

Enter the data into SPSS and answer the questions that follow. Hint: how you enter the data here will matter.

|  |  |
| --- | --- |
| West | East |
| 5 | 1 |
| 6 | 2 |
| 8 | 3 |
| 12 | 4 |
| 15 | 7 |
| 19 | 9 |
| 20 | 10 |
| 24 | 11 |
| 25 | 13 |
|  | 14 |
|  | 16 |
|  | 17 |
|  | 18 |
|  | 21 |
|  | 22 |
|  | 23 |

|  |  |
| --- | --- |
| 6. What statistical analysis will be run on this data and how do you know this? (3pts) |  |
| 7. What is the research question for this study? (2pts) |  |
| 8. What would be a null hypothesis for this study? (3pts) |  |
| 9. What would be a research hypothesis for this study? (3pts) |  |

10. Run the analysis and paste your tables here. (6pts)

|  |  |
| --- | --- |
| 11. Report the results here (4pts) |  |
| 12. What would you say to your friend regarding the rankings between East and West? (3pts) |  |

3. To determine the effectiveness of leadership training to help leaders lead a group. A leadership coach randomly divided 15 leaders into three groups. One group was the control and were told they are good leaders and to keep doing what they are doing. A second group (video) watched a video of effective leadership techniques. A third group (live) had a live coaching session on being effective leaders. All subjects were then ranked on their ability to lead a group.

Data for this question are labeled **TypeOfTraining (1=control, 2=Video, 3=Live)** and **ability to lead**

|  |  |  |
| --- | --- | --- |
| Control | Video | Live |
| 8 | 2 | 1 |
| 12 | 5 | 3 |
| 13 | 7 | 4 |
| 14 | 9 | 6 |
| 15 | 11 | 10 |

|  |  |
| --- | --- |
| 13. What is the dependent variable? (2pts) |  |
| 14. What statistical test will be run on this and how do you know this? (3pts) |  |

15. Run the analysis and paste your tables here. You should have multiple tables here. (6pts)

|  |  |
| --- | --- |
| 16. Report the results here (4pts) |  |
| 17. What would you say to someone regarding this outcome (4pts) |  |

A educational research was interested in the effects of cultural training for faculty. Faculty were measured on cultural intelligence prior to and following the cultural training. The following data were reported. Assume that the data are NOT normally distributed to complete this question.

|  |  |
| --- | --- |
| Pre | Post |
| 45 | 65 |
| 32 | 89 |
| 55 | 78 |
| 22 | 88 |
| 78 | 69 |
| 80 | 85 |
| 25 | 54 |
| 35 | 55 |
| 45 | 55 |
| 23 | 65 |
| 22 | 56 |
| 30 | 65 |

|  |  |
| --- | --- |
| 18. What is the dependent variable? (2pts) |  |
| 19. What statistical test will be run on this and how do you know this? (3pts) |  |

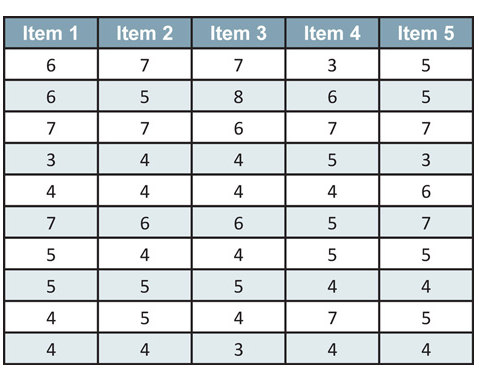
20. Run the analysis and paste your tables here. (6pts)

|  |  |
| --- | --- |
| 21. Report the results here (4pts) |  |
| 22. What would you say to someone regarding this outcome (3pts) |  |

Chapter 18

The following data come from your textbook, question 14:

You are developing a scale to measure focused leadership (*I changed this to leadership 😊).* You have created a five item scale with each item answered on a 1-9 scale.



23. Run a Chronbachs alpha and paste the table below (4pts)

|  |  |
| --- | --- |
| 24. How reliable is the leadership scale? Explain (5pts) |  |