**SPSS Homework 4 Assignment Instructions**

Overview

This assignment is designed to increase your statistical literacy and proficiency in conducting and interpreting the two-way independent-measures ANOVA. You will be completing two 2-way ANOVA’s in SPSS, using data that are related to specific research scenarios in the behavioral sciences, such as psychology, social work, and counseling. Behind the scenes knowledge of how this test is conducted is fundamental to being able to understand and apply research in your related field to your practice. Additionally, SPSS skills are professionally valuable, as it is one of the most commonly used statistical software packages in behavioral science settings, both academic and professional.

Instructions

* This assignment includes two problem sets that contain research scenarios and related questions.
* For each scenario, you will run an analysis in SPSS. The required product will include the SPSS output, an APA-style Results section describing the results, and the appropriate graph inserted as a Figure in APA style.
* For all problems, interpret results based on an alpha level of a = **.05**.
* This assignment is worth 60 points.

Please review the SPSS Homework Tutorial in this module for directions on how to run the statistical test, as well as the Results Sections in APA Style presentation, which includes a template for completing the APA-style Results sections for the two-way independent-measures ANOVA. The scenarios begin on the next page.

**Problem Set 1: The Two-Factor ANOVA for Independent Measures**

**Research Scenario:** In response to recent Gallup and Pew Center polls of Americans’ trust in their political leaders (<http://www.gallup.com/poll/195716/americans-trust-political-leaders-public-new-lows.aspx>; <http://www.people-press.org/2014/11/13/public-trust-in-government/>), a social psychologist decides to study people’s trust in politicians among different political parties and regions in his state. The psychologist administers a scale-level questionnaire with possible scores ranging from 1-50, with higher scores indicating higher trust in politicians, and lower scores indicating lower trust. The data from this scale-level questionnaire are shown in the table below.

**Conduct a two-way ANOVA to determine the effect of political party and region on trust in politicians. Create a multiple line graph to display the differences between the groups. Follow the directions below the table to complete the homework.**

|  |  |  |
| --- | --- | --- |
|  | **Urban** | **Rural** |
| **Republican** | 16  32  29  18  18 | 19  28  29  37  26 |
| **Democrat** | 35  36  27  39  22 | 24  19  14  26  30 |
| **Libertarian** | 12  16  10  27  19 | 9  13  7  25  12 |
| **Independent** | 27  17  23  21  12 | 15  16  26  25  13 |

1. Paste SPSS output. (10 pts)
2. Write an APA-style Results section based on your analysis. Include your multiple line graph as an APA-style Figure as demonstrated in the APA writing presentation. (Results = 12 pts; Figure = 8 pts)

**Problem Set 2: The Two-factor ANOVA for Independent Measures**

**Research Scenario:** A social worker practicing in a low-income, high-risk area wants to implement a conflict-resolution program in her community. In working towards this goal, she decides to examine the effects of different types of prevention programs for building effective communication skills for 8th grade students in her local school. She develops two types of programs, one based on a traditional lecture and reading format, and one based on interactive role-play during sessions. She also wants to know whether it’s more effective to deliver this type of program during class hours or in an after-school program. Students in one 8th grade class are randomly assigned to one of the four conditions. After 6 months of the program, they are assessed on a measure of effective communication skills where higher scores indicate more effective communication skills.

**Using this table, enter the data into a new SPSS data file and run a two-way ANOVA to test whether there is an effect of program type and program setting on communication skills. Create a multiple line graph to display the differences between the groups. Follow the directions below the table to complete the homework.**

|  |  |  |
| --- | --- | --- |
|  | **Lecture** | **Role-Play** |
| **In-Class** | 3  4  11  5  10  9 | 11  14  13  6  12 |
| **After-School** | 11  6  9  10  9 | 13  10  12  9  15 |

1. Paste SPSS output. (10 pts)
2. Write an APA-style Results section based on your analysis. Include your multiple line graph as an APA-style Figure as demonstrated in the APA writing presentation. (Results = 12 pts; Figure = 8 pts)

Submit this assignment by 11:59 p.m. (ET) on Monday at the end of Module/Week 4.