**Psyc450 Factorial ANCOVA Lab**

The main purpose of the study was to examine the relationship between marital status and loneliness. In particular, we wanted to determine whether this relationship was different for males and females, and if this interaction was further moderated by the amount of social support participants felt they received.

Use the data from 🡺 factorial\_ancovalab\_walkthrough\_141.sav

**#1 Preliminary Analyses**

Select just the single and married participants from the database.

**#2 Factorial ANOVA**

Show the SPSS code to get the Factorial ANOVA for Marital Status and Sex for Loneliness – including the marginal means and the pairwise comparisons to describe the pattern of the interaction.

Copy the ANOVA summary table below

Fill in the various “means & pointees” below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Male |  | Female |  |
| Single |  |  |  |  |
|  |  |  |  |  |
| Married |  |  |  |  |
|  |  |  |  |  |

#3 Factorial ANCOVA

Show the SPSS code to get the Factorial ANcOVA for Marital Status and Sex for Loneliness with Total Social Support as the covariate – including the marginal means and the pairwise comparisons to describe the pattern of the interaction.

Copy the ANCOVA summary table below

Fill in the various “means & pointees” below.

What “changed” with the covariate included in the model?

What assumption is this model making? Should we care?

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Male |  | Female |  |
| Single |  |  |  |  |
|  |  |  |  |  |
| Married |  |  |  |  |
|  |  |  |  |  |

#4 “Full” Factorial ANCOVA – with Covariate interactions

Show the SPSS code to get the Factorial ANOVA for Marital Status and Sex for Loneliness with Total Social Support as the covariate –the pairwise comparisons to describe the pattern of the Marital Status \* Sex interaction at TTS values of 3.5, 6 & 8.

Copy the ANCOVA summary table below – anything different from earlier analyses?

Was the including of the covariate interactions “interesting”??

Fill in the various “means & pointees” below.

What “changed” with the covariate interactions included in the model?

For TSS = 3.5

|  |  |  |  |
| --- | --- | --- | --- |
|  | Male |  | Female |
| Single |  |  |  |
|  |  |  |  |
| Married |  |  |  |

For TSS = 6.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Male |  | Female |
| Single |  |  |  |
|  |  |  |  |
| Married |  |  |  |

For TSS = 8

|  |  |  |  |
| --- | --- | --- | --- |
|  | Male |  | Female |
| Single |  |  |  |
|  |  |  |  |
| Married |  |  |  |