**Psychology 492 Laboratory Homework #8** data set 🡪 **socskills\_ancova.sav**

Data were collected from participants in a 6-week social skills-building class. Pretest data were obtained during the first meeting and Posttest data were obtained during the last. Look at the nine variables in the database. Which look like grouping variables (IVs) for a between groups design? Which look like part of a repeated-measures design?

First ANCOVA: DV = self-report Post-test IV = Reason for attending class Cov = self-report Pre-test

We wanted to know if the reason that a person attended the social skills-building class was related to their social skills performance at the end of the class – some attended the course because they felt they had a deficit of social skills, while other felt they had adequate social skills, but wanted to build additional skills. For this analysis we were interested in social skills as measured using a **self-report index of social skills**.

#1 ANOVA on the DV

Social skills post-test scores for those who felt they had a deficit mean 🡪 std 🡪

Social skills post-test scores for those who wanted additional skills mean 🡪 std 🡪

F= df = , MSe = p = ­­­­­

Describe the “apparent effect”.

#2 Did the groups start out with equivalent social skills? 🡺 ANOVA on the Pre-test

Social skills pre-test scores for those who felt they had a deficit mean 🡪 std 🡪

Social skills pre-test scores for those who wanted additional skills mean 🡪 std 🡪

F= df = , MSe = p = ­­­­­

Did the groups start out equivalent on social skills, or was their confounding?

#3 Let’s run the ANCOVA DV – post-test COV – pre-test Remember to get the corrected means

Uncorrected Social skills post-test scores for those who felt they had a deficit mean 🡪 std 🡪

Uncorrected Social skills post-test scores for those who wanted additional skills mean 🡪 std 🡪

Corrected Social skills post-test scores for those who felt they had a deficit mean 🡪 std 🡪

Corrected Social skills post-test scores for those who wanted additional skills mean 🡪 std 🡪

Covariate effect F= df = , MSe = p = ­­­­­

Corrected IV effect F= df = , MSe = p = ­­­­­

What happened when we included the covariate? Why?

Second ANCOVA: DV = party roll-play Post-test IV = Reason for attending class Cov = party roll-play Pre-test

We wanted to know if the reason that a person attended the social skills-building class was related to their social skills performance at the end of the class – some attended the course because they felt they had a deficit of social skills, while other felt they had adequate social skills, but wanted to build additional skills. For this analysis we were interested in social skills as measured using a **party roll-playing task**.

#1 ANOVA on the DV

party roll-play post-test scores for those who felt they had a deficit mean 🡪 std 🡪

party roll-play post-test scores for those who wanted additional skills mean 🡪 std 🡪

F= df = , MSe = p = ­­­­­

Describe the “apparent effect”.

#2 Did the groups start out with equivalent roll-playingf skills? 🡺 ANOVA on the Pre-test

party roll-play pre-test scores for those who felt they had a deficit mean 🡪 std 🡪

party roll-play pre-test scores for those who wanted additional skills mean 🡪 std 🡪

F= df = , MSe = p = ­­­­­

Did the groups start out equivalent on roll-playing skills, or was their confounding?

#3 Let’s run the ANCOVA DV – post-test COV – pre-test Remember to get the corrected means

Uncorrected party roll-play post-test scores for those who felt they had a deficit mean 🡪 std 🡪

Uncorrected party roll-play post-test scores for those who wanted additional skills mean 🡪 std 🡪

Corrected party roll-play post-test scores for those who felt they had a deficit mean 🡪 std 🡪

Corrected party roll-play post-test scores for those who wanted additional skills mean 🡪 std 🡪

Covariate effect F= df = , MSe = p = ­­­­­

Corrected IV effect F= df = , MSe = p = ­­­­­

What happened when we included the covariate? Why?

Third ANCOVA: DV = Social Skills Interview Post-test IV = History Cov = Social \Skills interview Pre-test

We wanted to know if the number of social skill-building events they had attended previous to this one was related to their social skills performance at the end of the class. For this analysis we were interested in social skills as measured using a **structured interview**.

Checking – fun a quick frequencies on the IV. What do you discover? Wacha gonna do about it?

#1 ANOVA on the DV

Interview post-test scores for those who felt they had a deficit mean 🡪 std 🡪

Interview post-test scores for those who wanted additional skills mean 🡪 std 🡪

F= df = , MSe = p = ­­­­­

Describe the “apparent effect”.

#2 Did the groups start out with equivalent roll-playingf skills? 🡺 ANOVA on the Pre-test

Interview pre-test scores for those who felt they had a deficit mean 🡪 std 🡪

Interview pre-test scores for those who wanted additional skills mean 🡪 std 🡪

F= df = , MSe = p = ­­­­­

Did the groups start out equivalent on roll-playing skills, or was their confounding?

#3 Let’s run the ANCOVA DV – post-test COV – pre-test Remember to get the corrected means

Uncorrected Interview post-test scores for those who felt they had a deficit mean 🡪 std 🡪

Uncorrected Interview post-test scores for those who wanted additional skills mean 🡪 std 🡪

Corrected Interview post-test scores for those who felt they had a deficit mean 🡪 std 🡪

Corrected Interview post-test scores for those who wanted additional skills mean 🡪 std 🡪

Covariate effect F= df = , MSe = p = ­­­­­

Corrected IV effect F= df = , MSe = p = ­­­­­

What happened when we included the covariate? Why? (hint – check the MSe)