**SPSS Syntax for Mantel-Haenszel DIF Analyses**

/\* OMS commands to strip data from SPSS output \*/

**OMS**

**/SELECT TABLES**

**/IF COMMANDS =** ['Crosstabs']

**SUBTYPES =** ['Mantel-Haenszel Common Odds Ratio Estimate']

**/DESTINATION FORMAT** = SAV

**OUTFILE =** ‘*your folder*\MH\_coefficients.sav'.

**OMS**

**/SELECT TABLES**

/**IF COMMANDS** =['Crosstabs']

**SUBTYPES =** ['Tests of Conditional Independence']

/**DESTINATION FORMAT** = SAV

**OUTFILE =** ‘*your folder*\chi\_coefficients.sav'.

/\* Define macro for crosstabs procedure \*/

**DEFINE** macdef **(!POS !TOKENS**(31))

**CROSSTABS**

**/TABLES**=!1 BY course BY total

**/FORMAT=NOTABLES**

**/STATISTICS=**CMH(1)

/COUNT ROUND CELL.

**!ENDDEFINE.**

/\* end macro \*/

macdef I1 to I31 .

**OMSEND.**

/\* end OMS \*/

/\* commands to restructure data and write out file combining alpha and chi-square values \*/

/\* get file with alpha values; select alpha values; delete unneeded variables \*/

**GET FILE=**’*your folder*\MH\_coefficients.sav'.

**DATASET COPY** alpha.sav.

**DATASET ACTIVATE** alpha.sav.

**FILTER OFF.**

**USE ALL.**

**SELECT IF** (Var1='Estimate').

**EXECUTE.**

**DELETE VARS** Command\_ Subtype\_ Label\_ Var1 Var2 Var3.

**COMPUTE item** = $casenum.

**RENAME VARIABLES** (Var4=alpha).

**COMPUTE** alpha\_inv = 1/alpha.

**COMPUTE** delta = ln(alpha\_inv) \* -2.35.

**EXECUTE.**

/\* save values into new file \*/

**SAVE OUTFILE** = ‘*your folder*\alpha.sav'.

/\* get file with chi-square values \*/

**GET FILE=**’*your folder*\chi\_coefficients.sav'.

**DATASET COPY** Chi.sav.

**DATASET ACTIVATE** Chi.sav.

**FILTER OFF.**

**USE ALL.**

**SELECT IF** (Var1='Mantel-Haenszel').

**EXECUTE.**

/\* select chi-square values; delete unneeded variables \*/

**DELETE VARS** Command\_ Subtype\_ Label\_ Var1 df.

**COMPUTE** item = $casenum.

**RENAME VARIABLES** (Chisquared = chi) (AsymptoticSignificance2sided=chi\_p).

**EXECUTE.**

/\* save to new file \*/

**SAVE OUTFILE =** ‘*your folder*\chi.sav'.

/\* match files by ID; merge files; save into new file \*/

**MATCH FILES**

/**FILE=**chi.sav

/**FILE=**alpha.sav

/**BY** item.

**EXECUTE.**

**SAVE OUTFILE** = ‘*your file*\MH2.sav'

/**KEEP =** item chi chi\_p alpha alpha\_inv delta.

/\*reorder merged file so that ID is first variable \*/

**ADD FILES** file \*/keep item all.

**EXECUTE.**