**Assignment 7: La France & Hecht SPSS**
Due: Friday, October 31st at midnight.

## READING

→ LaFrance & Hecht summary: http://onlinestatbook.com/case_studies_rvls/smiles/index.html

## SPSS

1) Open the Excel file labeled LaFrance&Hecht (1995) in SPSS.
-Open SPSS → File → Open → Data

2) Use VARIABLE VIEW to check the status of the variables: TYPE and MEASURE
-**SmileTypeNumber:** TYPE = numeric; MEASURE = scale
-**Leniency:** TYPE= numeric; MEASURE = scale
-**SmileType:** TYPE = string; MEASURE = nominal
Note: The labels for **SmileType** are weird: the "false smiles" are labeled with 0

3) Click DATA →SELECT CASES
-Click "If condition is satisfied"
-Click "IF…"
-Double click **SmileTypeNumber,** or use arrow to move **SmileTypeNumber** into box.
-Enter **SmileTypeNumber**=0
→Click CONTINUE → Click OK

4) Look at the data file
-All the entries except those for **SmileTypeNumber** of 0 will be crossed out
→ Only the **SmileTypeNumber** 0's have been selected

5) Click ANALYZE → Click DESCRIPTIVE STATISTICS → Click DESCRIPTIVES
-Move **Leniency** over to the box on the right (via arrow or double-click)
→Click OPTIONS
→Check: MEAN; STD. DEVIATION; VARIANCE; S.E. MEAN
→Click OK

6) Go back to Steps 3-5, and repeat for each category of **SmileTypeNumber**
→**SmileTypeNumber**=1
→**SmileTypeNumber**=2
→**SmileTypeNumber**=3

***Note****: You should end up with 4 Descriptive Statistics Tables before moving onto the next step.*
*-One table for each category (false=0, felt=1, miserable=2, neutral=3)*

7) Click DATA → Click SELECT CASES → Click ALL CASES → Click OK

8) Click GRAPHS → LEGACY DIALOGS → LINE
→Click SIMPLE, and click SUMMARIES FOR GROUPS OF CASES
→Click DEFINE

→Click "OTHER STATISTIC (e.g., mean)"
→Move **Leniency** into the VARIABLE box.
→Move **SmileType** (string variable) into the CATEGORY AXIS box.

→Click OPTIONS
→Check DISPLAY ERROR BARS
→Click CONFIDENCE INTERVALS
→ Fill in LEVEL (%): 95.0
→ Click CONTINUE → Click OK.

***Note**: This should give you a graph with all 4 group means and error bars that represent the 95% confidence interval for each group.*

9) Click DATA → Click SELECT CASES → Click ALL CASES → Click OK

10) Click GRAPHS → Click LEGACY DIALOGS → Click LINE
→Click SIMPLE → Click SUMMARIES FOR GROUPS OF CASES
→Click DEFINE

-Click OTHER STATISTIC (E.G., MEAN)"
→Move **Leniency** into the VARIABLE box.
→Move **SmileType** (string variable) into the CATEGORY AXIS box.

→Click OPTIONS
→Check DISPLAY ERROR BARS
→Click STANDARD ERROR
→ Fill in MULTIPLIER: 1.0
→ Click CONTINUE, then click OK.

***Note**: This step should give you a line graph with all 4 group means and error bars that represent the SEM. Most of the graphs you see in journal articles will display +/- 1 SEM. Only rarely will a graph display the 95% confidence interval.*

11) Click GRAPHS → Click LEGACY DIALOGS → Click BAR
→Click SIMPLE → Click SUMMARIES FOR GROUPS OF CASES
→Click DEFINE

-Click OTHER STATISTIC (E.G., MEAN)"
→ Move **Leniency** into the VARIABLE box.
→ Move **SmileType** (string variable) into the CATEGORY AXIS box.

→Click OPTIONS
→Check DISPLAY ERROR BARS
→Click STANDARD ERROR
→ Fill in MULTIPLIER: 1.0
→ Click CONTINUE, then click OK.

12) Look at the output
-Click FILE → Click EXPORT → Click OK
-Open .doc file and review SPSS Output
-Delete any extra output so only the following is present:
(A) 4 Descriptive Statistics Tables
(B) Line Graphs
i) Confidence Intervals: 95%
ii) Standard Error of the Mean: Multiplier 1.0
(C) Bar Graph
i) Standard Error of the Mean: Multiplier 1.0
-Upload the .doc to Canvas

***Note**: Do not blindly upload all SPSS output. This will indicate that you do not know what you are looking at, and you will not receive full credit for the assignment.*

**ASSIGNMENT 7 IS DUE ON OCTOBER 31ST AT MIDNIGHT.**