

## CH2 LAB - HYPOTHESIS TESTING

The Ultimate Test of Life Satisfaction has a mean of 15.0 and standard deviation of 2.0 for all students at UW. For 8 former 4100 students who completed the UTLS,  $MN = 17.875$ ,  $SS = 40.875$ ,  $VAR = 5.839$ , and  $SD = 2.416$ , as calculated in Lab 1:1. To prepare for the lab, open SPSS with the commands from the chapter 1 Lab to enter the data. If you do not have the syntax, copy and run the following commands to enter the data.

```
DATA LIST FREE / sat.  
BEGIN DATA  
20 17 19 15 19 18 14 21  
END DATA.
```

1. What conclusions are warranted about the life satisfaction scores of 4100 students relative to UW students at large assuming researchers had no expectation about the results?
2. Use SPSS's TTEST command to perform the preceding analysis.
3. Perform an equivalent test using MANOVA and GLM. Show correspondences to the TTEST results.
4. What conclusion would be appropriate if prior research suggests that 4100 graduates are more satisfied with their lives than other UW students?
5. A comparison group of 8 general UW students completed the UTLS:  $MN = 14.75$ ,  $SD = 4.367$ . Determine whether the two groups differ significantly in life satisfaction.
6. Copy and run the following commands to enter the data in SPSS. Perform the analysis corresponding to that completed in #5.

```
DATA LIST FREE / grp sat.  
BEGIN DATA  
1 17 1 12 1 16 1 12 1 18 1 22 1 13 1 8  
2 20 2 17 2 19 2 15 2 19 2 18 2 14 2 21  
END DATA.
```

7. Use GLM to perform the same analysis and obtain descriptive statistics for the two groups. Perform the analysis by hand and compare to the SPSS output.