

## SPSS ASSIGNMENT #9

### Chi square 80 points

(see SPSS applications at the end of chapter 11)



For this assignment, you will learn how to take a continuous variable (i.e. touch scores, daily average screen time) and convert it into a categorical one. Once these variables have been categorized, we can run chi square tests on them. Be sure to watch lab lecture 10 as this is where I will walk you through this. Essentially, we will categorize touch as low (scores of 1-2), moderate (score of 3) and high (scores 4-5). Daily average screen time will be categorized as low (scores of 0-2.499), moderate (scores of 2.50- 4.00) and high (scores of 4.01-12.00).

### Chi square goodness of fit

Are the frequencies for the different categories of touch (low, moderate, high) evenly distributed? We will need to run a goodness of fit test to find out. **(16 points)**

Value of chi square <b>2 points</b>	
Df <b>2 points</b>	
Probability of the TS <b>2 points</b>	
Significant? Y/N <b>2 points</b>	
Conclusion? (include key word) <b>4 points</b>	
Results in APA format <b>4 points</b>	

**Bonus points! Copy and paste the relevant SPSS output for the table above into a word document. Hi-light the #s used.**

### Chi square contingency test

Does screen time category (low, moderate, high) depend on participant sex? Use a chi square test of independence to find out. **(16 points)**

**IMPORTANT:** we have too few people in categories other than male and female. To omit them from this analysis, go to: Data > Select Cases > If conditioned is satisfied. Then, in the field box, type: gender<3 This will leave us with male (gender = 1) and female (gender=2) for our analysis.

Value of chi square <b>2 points</b>	
Df <b>2 points</b>	
Probability of the TS <b>2 points</b>	
Significant? Y/N <b>2 points</b>	
Are sex & screen time related? (include key word) <b>4 points</b>	
Results in APA format <b>4 points</b>	

**Bonus points! Copy and paste the relevant SPSS output for the table above into the same word document as for the previous analysis. Hi-light the #s used.**

And now for the details! **(24 points)**

% of sample within sex	Low screen time	Moderate screen time	High screen time
men			
women			

% of sample within screen time cat.	Low screen time	Moderate screen time	High screen time
men			
women			

Conclusion: Use the numbers in the first table above (i.e. the pink & blue) to explain the relationship between sex and screen time category. **(4 points)** **Note:** If the relationship between 2 variables (e.g. A and B) is not significant, then you say something like “Regardless of whether we look at \_\_category A1\_\_ or \_\_category A2\_\_, the majority of people fell into \_\_category B1\_\_”

**Bonus points! Copy and paste the relevant SPSS output for the tables above into the same word document as for the previous analysis. Hi-light the #s used. Upload this document to Canvas under “Digital Wellness Assignment 9: Bonus Points (total bonus points available = 5)**

Could we use Yates correction in this chi square contingency test? (yes or no). **(8 points)**

Fully justify your answer to the question above by referencing each of the **three criteria** for “the perfect storm” and whether each one was met (or not met) **(12 points)**