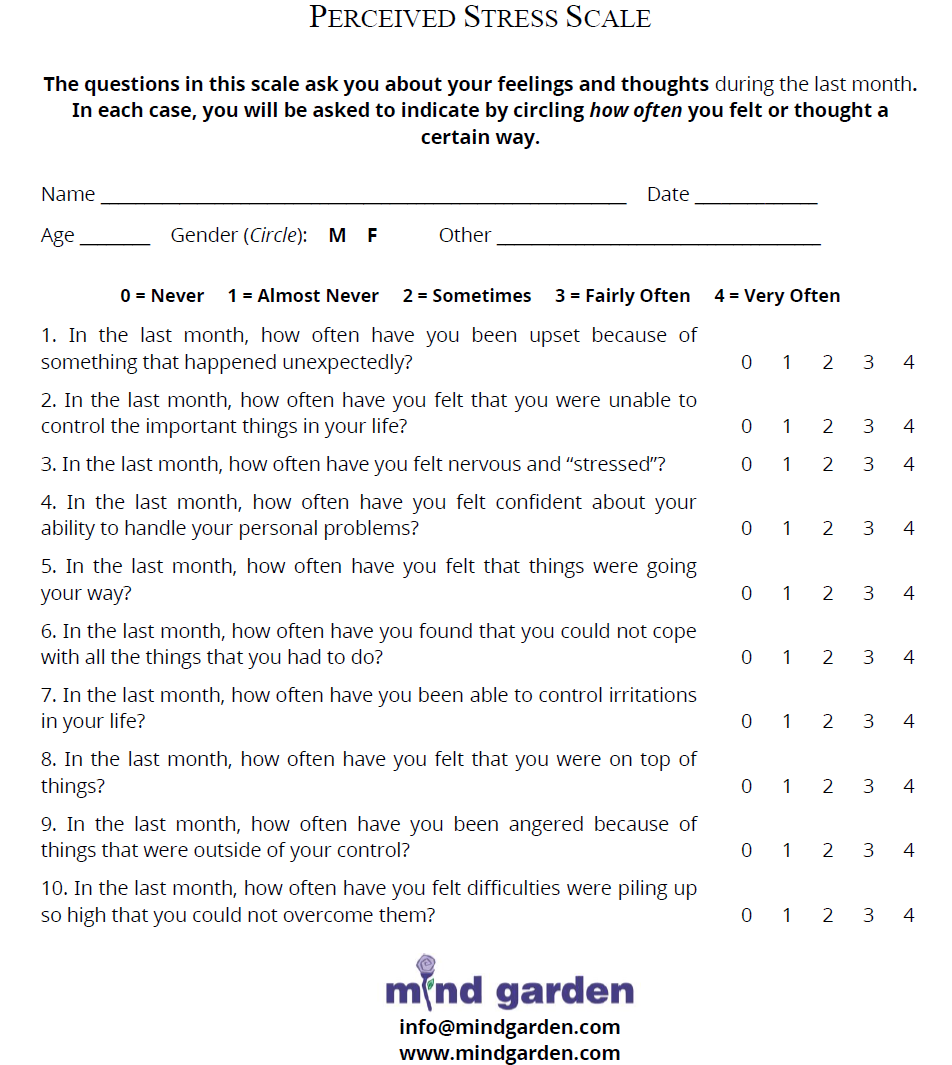
STAT 335: HW #5 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Fall 2017  
Points:

This homework will use the Perceived Stress Scale survey instrument.



Scoring for this instrument:

* Overall Score
* Two sub-scores
  + Perceived Helplessness – Questions 4, 5, 7, and 8
  + Perceived Self-Efficacy – Questions 1, 2, 3, 6, 9, and 10

Note: The perceived helplessness items are reserve coded on this survey. Thus, when an overall score is computed, adjustments must be made.

Questions:

1. What is the average inter-item correlation for the overall score? What is this value for each of the sub-scores? Provide an interpretation of each of these values?
2. Which items appear to have the strong correlation with each other? Why might it be that these two items are strongly correlated? Discuss.
3. Compute Cronbach’s alpha for the overall score. Provide an interpretation of this value. Compute Cronbach’s alpha for each of the sub-scores. Again, provide an interpretation of this value.
4. Use the split-half reliability approach to compute the Spearman-Brown corrected internal consistency correlation for the overall score. Interpret this value.
5. As discussed in class, the split-half reliability is influenced by how the items are split into the two halves. Write a small simulation study to investigate how different randomly divided splits affect this measure.