Lab #2

Exploratory Factor Analysis R Replication

NOTE: Each question should be a separate chunk in **R-studio’s Rmarkdown or R notebook** and using Knitr, knit your work and the output into a word document that you will upload into Canvas

1. Using “social\_fact.sav”.
   1. CIC
      1. Run a principal axis factor analysis with varimax rotation on the CIC items (CICI102 to CICI111). Include scree plot, sorted by size and suppress values less than .3.
      2. Run a PFA with promax rotation on the same items. Include the same options. CPAI.
   2. Outgroups
      1. Run a principal factor analysis with varimax rotation on the MEIM and QDI items (QDI104r to MEIMO119). Include scree plot, sorted by size, eigenvalues greater than 1 and suppress values less than .3. CPAI.
      2. Repeat ‘ii’ with promax rotation. Include the same options. CPAI.
2. Using “social2\_fact.sav”
   1. Run all of the variables (except order) through a principal components analysis. Include scree plot, sorted by size and suppress values less than .3. CPAI.
   2. Rerun ‘a’ except change it to a principal axis factor analysis. Do not CPAI. Just tell me how the results changed.
   3. Rerun again using promax rotation and extract only 6 factors. CPAI. What is your interpretation of the factors? Are they real? Or is there something else going on.
   4. Rerun once more with only three factors. CPAI only the important parts that changed. Is this any better?