**You have been hired as a consultant by three clients to perform several analyses. Complete the brief reports to the client in a concise professional manner. It is suggested that you also include an appendix for your supervisor with the relevant SPSS output outlining your findings and analysis. Your supervisor will also like to see the SPSS \*.spv file showing your executed SPSS analysis.**

***Client #1:****Mobile Phone Company Customer Segmentation (34 points)*

A mobile phone company wants to determine the different types (clusters) of customers is has based on their attitudes of service (aka segmentation). In the file [mobi.sav](https://unt.instructure.com/courses/29565/files/5035317/download?wrap=1" \o "mobi.sav), they asked 250 customers to rate the company based 24 different satisfaction criteria on a scale of 1-10 (10 being the best).

Compile a report for the senior manager outlining your analysis and findings.

* Run a separate k-means trying 4, 5, 6 and 7 clusters/groups to determine what is the best "group clustering" for this data. In other words, how many distinct customer groups do you have?
* Also, give a name to the types of customers that are in that group (like "not happy, too expensive" or "extremely happy customer," "somewhat happy, but has network issues.")

**Client #2:***Teaching Statistics Questionnaire Factor Analysis (33 points)*

UNT wants to revise its Teaching of Statistics questionnaire which is based on Blands’s theory that good researchers should have four characteristics: (1) a profound love of statistics; (2) an enthusiasm for experimental design; (3) a love of teaching; and (4) a complete absence of normal interpersonal skills. These characteristics should be related (i.e., correlated). The ‘Teaching of Statistics Questionnaire' (TOSQ) already exists. They gave this questionnaire to 239 research methods lecturers around the world to see if it supported Bland’s theory. The data is in [TOSQ.sav](https://unt.instructure.com/courses/29565/files/5669390/download?wrap=1" \o "TOSQ.sav) . Conduct a factor analysis (with appropriate rotation) to see the factor structure.  Make sure to evaluate the sampling adequacy, perform a test of sphericity.

* EXTRA CREDIT: For 5 points extra credit, evaluate the reliability of your final factors.

**Client #3:**  College / University Segmentation *(33 points)*

A manager in the education industry would like to determine how his firm should segment colleges and universities into distinct marketing segments. Using the data in the file “[college\_scorecard\_data.sav](https://unt.instructure.com/courses/29565/files/5035315/download?wrap=1" \o "college_scorecard_data.sav),” compile a report outlining your analysis and findings. Attempt to give a name to the types of schools that are in each of the groups.