Homework assignment 03

Use black text (if possible) for everything you include in this document. Keep both your answers and the original questions. Save this document in PDF format and submit it on Canvas. Please follow the general requirements described in the grading rubric.

1. Show a documentation header. Include your name, the purpose of the program, and the conditions under which others may or may not use your results.

2. Import the file bf.csv into SPSS. Refer to the data dictionary if needed. Display the first ten rows of data below.

3. Compute and interpret the appropriate statistics for feed\_type, age\_stop, and mom\_age.

4. Display boxplots for age\_stop and mom\_age for the two levels of feed\_type. Considering feed\_type as the treatment variable, age\_stop as the outcome variable, and mom\_age as a covariate, is there any evidence of covariate imbalance.

5. Create an indicator variable for feed\_type and conduct an unadjusted analysis of age\_stop. Display the parameter estimates and interpret them.

6. Now adjust for mom\_age in an analysis of covariance model. Display the parameter estimates and interpret them.

7. Draw a scatterplot of the residuals on the y-axis and the predicted values on the x-axis. Does this graph provide any evidence for nonlinearity or unequal variances?

8. Draw a Q-Q plot for the residuals and interpret it.