PSY 315f

Assignment #3

Due Monday, Sep 30th

The data set PSY.315f.DA03Data.csv includes questions about liking of 11 types of music. This is a subset of a nationally representative sample of American adults in 1993. The 11 types of music are Bigband, Opera, Broadway musical, Classical, Folk, Blues/R&B, Jazz, Country, Bluegrass, Rap and Heavy metal. Responses are scaled from 1 = “Like very much” to 5 = “Dislike very much” for variables **bigband** (Bigband Music) to **hvymetal** (Heavy Metal Music). Any response that is not in the range of 1 to 5 should be coded as missing data. More info on GSS: <http://gss.norc.org/>

Your task is to:

1. Read in and clean the appropriate data with all 11 variables;
2. Explore and factor analyze these data;
3. Create a scale of the 11 types of music based on the analyses and justify your choices;
4. Include a comparison of males and females on music preference based on your EFA (Hint: an independent t-test of gender on one single item, such as heavy metal preference, is NOT based on your EFA);
5. write up an APA-style report of your findings. Don’t present every possible analysis but do provide a rationale for your decisions. Attach all relevant output as an appendix to your homework.

Please include at least 3 tables: (1) Descriptive statistics for all variables (mean, sd, skew, and kurtosis), (2) Full correlation matrix, (3) Factor pattern (suppress values less than .30). Also include a scree plot with parallel analysis. For all statistics please report values with 2 decimal places unless it is a p-value (e.g., *r* = .45, *p* = .032).

**Note**: this HW will have many solutions that could be deemed “correct.” It is your task to compare solutions, make any adjustments (including the removing of items if you deem it appropriate to do so), and report on the solution that you think best describes your data.