Coursera Data Analysis

Assignment 1 Rubric

Does the analysis have an introduction, methods, results, and conclusions section?

0: No serious attempt to answer complete the assignment
1: None of these elements are present
2: Only one of these elements is present
3: Only two of these elements are present
4: All three of these elements are present
5: All four elements are present.

Are figures labeled and referred to by number in the text?

0: No figure at all
1: Figures are not labeled
2: Figures are poorly labeled and not referred to by number in the text
3: Figures are well labeled but not referred to by number in the text
4: Figures are well labeled and referred to by number in the text
5: Figure are exceptionally well labeled and referred to by number in the text

Is the analysis written in clear and understandable English?

0: The analysis is not written in English.
1: The analysis is written in English that is not understandable or clear
2: The analysis is written in understandable English but is not clear
3: The analysis is written in understandable English and is somewhat clear
4: The analysis is written in clear and understandable English.
5: The analysis is written in exceptionally clear and understandable English

Are the names of variables reported in plain language, rather than in coded names?

0: No variable names are used in the analysis
1: R variable names with no explanation are used in the analysis.
2: R variable names are used with explanation in the analysis
3: Plain language variable names are used but are not explained
4: Plain language variable names are used and explained
5: Variables in plain language are exceptionally clearly explained and used.

Does the analysis report the number of observations/samples?

0: The analysis does not discuss the number of observations/samples
2: The analysis does not report the number of observations/samples overall
4: The analysis reports the overall number of observations, but not the number that play a role in each analysis

5: The analysis reports the number of observations used in each analysis

Does the analysis report any missing data or other unusual features?
0: The analysis does not report on any potentially unusual features in the data
1: The analysis reports unusual features in the data but does not describe them
2: The analysis reports unusual features in the data and describes them
3: The analysis reports and explains the issues with unusual features in the data
4: The analysis reports, explains, and attempts to resolve issues with unusual features of the data
5: The analysis describes clearly unusual features in the data, the issues caused by those features, and solutions to the issues.

Does the analysis include description and justification for data transformations?
0: The analysis does not report transformations that were performed.
3: The analysis reports transformations that were performed.
5: The analysis reports transformations that were performed and justifies them.

Does the analysis include a discussion of potential confounders?
0: The analysis does not mention potential confounders.
1: The analysis mentions confounders but does not discuss their effect.
2: The analysis mentions confounders and describes their effect.
3: The analysis discusses confounders and potential avenues to address them.
4: The analysis discusses confounders and reports the approach for addressing them.
5: The analysis thoroughly discusses confounders, their effect, and the approach for addressing them.

Are the statistical models correctly applied?
0: No statistical models are applied
1: Statistical models are applied but not described.
2: Statistical models are used and described, but incorrectly applied
4: Statistical models are described and correctly applied
5: Statistical models are exceptionally well described and applied.

Are estimates reported with appropriate units and measures of uncertainty?
0: Estimates and uncertainty measures are not reported.
1: Estimates are reported but without uncertainty.
4: Estimates and measures of uncertainty are reported without units
5: Estimates and measures of uncertainty are reported with units

Are estimators/predictions appropriately interpreted?
0: Estimators or predictions are not described.
1: Estimators or predictors are described but not interpreted

2: Estimators or predictors are described and interpreted incorrectly
4: Estimators or predictors are described and appropriately interpreted.
5: Estimators or predictors are exceptionally well described and interpreted

Does the analysis make concrete conclusions?
0: The analysis does not make conclusions.
1: The analysis makes only vague conclusions.
2: The analysis makes concrete, but unsupported conclusions
5: The analysis makes concrete and well supported conclusions

Does the analysis specify potential problems with the conclusions?
0: The analysis does not discuss potential problems with the conclusions
4: The analysis discusses potential problems with the conclusions
5: The analysis discusses potential problems with the conclusions and points out possible solutions

Does the analysis include references for the statistical methods used?
0: The analysis includes no references.
1: The analysis includes references but they are not cited in the text.
3: The analysis is missing key references.
5: The analysis includes all appropriate references.

FIGURE
Is the figure caption descriptive enough to stand alone?
0: There is no figure caption
1: The figure caption is not comprehensible
2: The figure caption does not clearly explain the figure.
3: The figure caption is difficult to understand and is not enough to understand the figure
4: The figure caption is well written but is not enough to understand the figure
5: The figure caption explains the plot sufficiently to stand alone

Does the figure focus on a key issue in the processing/modeling of the data?
0: The figure is not present
1: The figure is not comprehensible
3: The figure focuses on issues irrelevant to the main analysis
4: The figure focuses on key issues in the main analysis
5: The figure exceptionally illustrates and supports key points in the analysis.

Are axes labeled in plain language and large enough to read?
***0**: There are no axis labels.*
2: The axis labels are too small to read.
3: The axis labels use R variable names instead of plain language names

5: The axis labels and legends are clear, use plain language, and are large enough to read.