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| **Applied Stats Individual Project Evaluation** | **Possible** | **Score** |
| **Presentation of Report – 9 pts** |  |  |
| Are the title and author appropriately identified? Is the paper within the page limit with 1.5 line spacing? Are the four paper sections labeled? | 4 |  |
| How well-written is the report (e.g., correct grammar, spelling, etc.)? | 5 |  |
| **Introduction and motivation for the project – 12 pts** |  |  |
| Is the overarching question motivating the analysis clearly stated and explained? | 4 |  |
| Are specific questions this analysis will address clearly stated and explained? | 3 |  |
| Is relevant literature described and properly cited? Is the connection between the literature and this work made clear? | 5 |  |
| **Data – 14 pts** |  |  |
| Is the data source described and referenced? | 3 |  |
| Is each variable used in the analysis defined, including:   * descriptions of the levels for categorical variables * units for numerical variables | 6 |  |
| Are data preparation and cleaning procedures clearly described so that the study could be replicated by another researcher?  Is the handling of missing data/unusual observations/outliers described and is there sound rationale for it?  Is the initial and final number of observations in the analysis reported and are those that were removed accounted for? | 5 |  |
| **Methods – 7 pts** |  |  |
| Are the statistical methods to be used well-described? How did you decide on the form of the model? | 3 |  |
| Is the rationale for the selected statistical methods provided in the context of the application? | 4 |  |
| **Results – 23 pts** |  |  |
| Are descriptive summaries provided of key variables that address the research question? Are they presented in a tabular form that is concise and informative? | 4 |  |
| Were interactions, data transformations, and thoughtful variable selection explored as potentially necessary aspects of the model building? Were these included in the model when appropriate? | 5 |  |
| Are results of modeling reported in appropriate tabular form with parameter estimates, standard errors, p-values, and confidence intervals? | 4 |  |
| Are statistical analysis summaries reported and correctly interpreted in the context of the research question? What was learnt about the research question by the graphical/numerical summaries? | 5 |  |
| How well are graphics/figures/equations presented? (axes labeled, captions, placement, readable, useful, add to content) | 5 |  |
| **Discussion – 22 pts** |  |  |
| Does the discussion begin with an accurate summary statement of the major findings of the analysis? | 4 |  |
| Are the possible implications of the results discussed in the context of the research question? | 3 |  |
| Is there a thoughtful discussion of generalizability of the results? Are limitations of the study identified and is the potential impact on the conclusions stated? | 4 |  |
| Are strengths and weaknesses of the analysis identified? | 4 |  |
| Are potential confounding variables discussed? | 3 |  |
| Are suggestions for future research identified and useful? | 4 |  |
| **Overall – Report – 13 pts** |  |  |
| How well does the author demonstrate an understanding of the statistics? | 4 |  |
| Were research question(s) complex and insightful, demonstrating understanding of the research topic? | 5 |  |
| Are statements and conclusions accurate? | 4 |  |
| **(Tentative) Total** | **100** |  |
| **Supporting Materials (points to be deleted)** |  |  |
| Bibliography included; citations are stylistically consistent. | -3 |  |
| Data set submitted | -3 |  |
| Appendix submitted as a separate Word document. Includes the (commented) R code and output for the following:   * tables and figures that are informative but were not referenced in the main report, including annotation * evaluation of assumptions, including residual plots or empirical logit plots (as appropriate) * steps to deal with missing data/outliers (if necessary) * any calculations needed to go from the model output in R to interpretations in your report | -5 |  |
| Appendix also:   * describes hypothesis testing performed during model building and how the author decided on the explanatory variables that were ultimately included in the final model. * includes intermediate models that were also considered, with short comments about why variables were added/deleted. | -5 |  |
| **Grand Total** |  |  |