**ILE in Biostatistics**

**Secondary Data Analysis Project Rubric**

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| **Required Element** | **Met** | **Not Met** | **Feedback (if element is “not met”, student is required to address in revision)** |
| **Structured Abstract (Background, Methods, Results, Conclusions)** | | | |
| 1. Provides context of the study and main research question |  |  |  |
| 1. Describes the source of the data, measurement of exposure and outcome, and statistical approach |  |  |  |
| 1. Describes the major study findings |  |  |  |
| 1. Describes the conclusions/implications of the study |  |  |  |
| 1. Provides three key words representing the study topic |  |  |  |
| 1. Length is 250 words or fewer |  |  |  |
| **Introduction/Background** | | | |
| 1. Describes the public health problem being investigated |  |  |  |
| 1. Provides data/statistical evidence that reveals the magnitude and potential health impacts of the problem |  |  |  |
| 1. Describes the population(s) affected by the public health problem |  |  |  |
| 1. Summarizes findings from previous research related to the problem |  |  |  |
| 1. Discusses the gaps or limitations in previous studies and how the presented study addresses these gaps |  |  |  |
| 1. Section ends with research question(s), study objectives or hypotheses |  |  |  |
| **Methods** | | | |
| 1. Describes the study design |  |  |  |
| 1. Describes how the study sample was obtained (sampling technique, inclusion and exclusion criteria, how the final analytic sample was reached, years of data being used, sample size) |  |  |  |
| 1. Describes how the primary outcome was defined in the study |  |  |  |
| 1. Describes how the primary exposure factor was defined in the study |  |  |  |
| 1. Describes how potential confounders were defined in the study |  |  |  |
| 1. Describes ethical considerations (IRB approval for study/use of data) |  |  |  |
| 1. Describes the statistical methodology used in the study including statistical software used and techniques for descriptive and multivariable adjusted analyses. |  |  |  |
| **Results** | | | |
| 1. Uses tables or figures to help convey findings |  |  |  |
| 1. Each table or figure is described in words in the Results section |  |  |  |
| 1. Tables/figures have detailed titles and can “stand alone” (the reader should be able to understand the table or figure without reading the Results section) |  |  |  |
| 1. Describes the analytic sample in terms of age, sex, race/ethnicity |  |  |  |
| 1. Describes differences in the primary outcome by descriptive characteristics |  |  |  |
| 1. Describes differences in the primary exposure factor by descriptive characteristics |  |  |  |
| 1. Presents the findings of a multivariable-adjusted model of the primary outcome |  |  |  |
| **Discussion** | | | |
| 1. Provides a statement summarizing whether the results of the study supported the hypothesis |  |  |  |
| 1. Provides comparison of study findings to previous research |  |  |  |
| 1. Describes the pathophysiologic mechanism linking the exposure factor to the primary outcome |  |  |  |
| 1. Describes the strengths of the study (some examples may be: sample size/power, population or subpopulation studied, methodology, novelty of research question) |  |  |  |
| 1. Describes the limitations of the study (some examples may be: potential sources of unmeasured bias or confounding, sample size/power, representativeness of sample, limits to generalizability of findings) |  |  |  |
| 1. Outlines policy implications of the findings including 2-3 strategies of how findings can be used to advocate for political, social, or economic policies and programs to improve the health of diverse populations |  |  |  |
| 1. Provides recommendations for future research |  |  |  |
| **Organization and Mechanics** | | | |
| 1. The paper is scholarly, of high quality, and Grammarly finds no spelling and grammar errors |  |  |  |
| 1. Title page is included that follows the template provided on the ILE course site |  |  |  |
| 1. 1-inch margins, font either Arial or Times New Roman 11 pt. with 1.5 line spacing. No spaces between paragraphs. Indent new paragraphs. |  |  |  |
| 1. References in AMA format |  |  |  |
| **Competencies Reflected in Work Product** | | | |
| 1. (FC2) Select quantitative and qualitative data collection methods appropriate for a given public health context |  |  |  |
| 1. (FC19) Communicate audience-appropriate (i.e., non-academic, non-peer audience) public health content, both in writing and through oral presentation. |  |  |  |
| 1. (BIOS CC1) Apply statistical inference methods to evaluate public health research hypotheses. |  |  |  |
| 1. Demonstrated synthesis and integration of the competencies listed above |  |  |  |