

14

Writing about Multivariate Models

SUGGESTED COURSE EXTENSIONS

■ A. REVIEWING

1. Find a journal article about an application of multivariate analysis to a research question in your field. Critique the methods and results sections, using the principles in chapter 14 of *Writing about Multivariate Analysis* to check for the following:
 - a. An explanation of why a multivariate model is needed for this research question and data
 - b. Topic sentences that introduce the purpose of each table, chart, or quantitative comparison
 - c. Identification of the role of each independent variable (e.g., key variable, mediator, confounder)
 - d. Descriptions of direction, magnitude, and statistical significance of the association between the key independent variable and the dependent variable
 - e. Explanations of how specific numeric findings address the questions under study
 - f. Transition sentences that explain how one paragraph follows from the previous paragraph.
2. Find a journal article about an application of multivariate analysis to a topic in your field that involves a series of nested models. Critique the description of the nested model results, using the criteria described under “Comparing a Series of Nested Models” and “GEE Revisited” in *Writing about Multivariate Analysis* (342 and 346, respectively). Rewrite it to correct the flaws you identified in part a.
3. Find a journal article about an application of multivariate analysis to a topic in your field that involves a set of stratified models, such as the same model estimated separately by gender, region, or time period. Critique the description of the stratified model results, using the criteria described under “GEE Revisited” in *Writing about Multivariate Analysis* (346). Rewrite the description to correct the flaws you identified in part a.

■ B. WRITING

1. Write a description of one or more tables of bivariate results from your own data, using the criteria on pages 322–31 of *Writing about Multivariate Analysis*.
2. Write a description of results of one multivariate model for the same research question as in question B.1, using the criteria listed under question A.1.
3. Write a description of a series of nested models for the same research question as in question B.2, using the criteria described under “Comparing a Series of Nested Models” and “GEE Revisited” in *Writing about Multivariate Analysis* (342 and 346, respectively).
4. Write a description of a set of stratified models for the same research question as in question B.2, using the criteria described under “GEE Revisited” in *Writing about Multivariate Analysis* (346).

■ C. REVISING

1. Evaluate a description of a single multivariate model from the results section of a paper you have written previously, using the criteria listed under question A.1. Rewrite that description to rectify any problems you identified.
2. Evaluate a description of a series of nested models from the results section of a paper you have written previously, using the criteria described under “Comparing a Series of Nested Models” and “GEE Revisited” in *Writing about Multivariate Analysis* (342 and 346, respectively). Rewrite that description to rectify any problems you identified.
3. Evaluate a description of a set of stratified models from the results section of a paper you have written previously, using the criteria described under “GEE Revisited” in *Writing about Multivariate Analysis* (346). Rewrite that description to rectify any problems you identified.