ORLA 6641

Exercise 4 – Hierarchical Linear Growth Models. Due April 13 by 11:55pm on Canvas.

In Exercise 4, you are to work through the SPSS examples in Heck, Thomas and Tabata, as they give a thorough walk-through of how to run the models with their example data.

Datasets for the book can be found at (under the "Datasets" tab, click "Data Sets"): https://www.routledge.com/products/9780415817110

The idea for Exercise 4 is to give you the experience of running the models and interpreting the same results as the book, to provide you with direct experience on how to run and interpret the models. For all requests below, please provide the SPSS output.

- 1. Chapter 5: Recreate all tables and figures from Table 5.1 through Table 5.19 and Figure 5.8
 - a. For the major tables in which model results are presented, please provide the HLM equations and your interpretation in your own words (or the words of your group).
- 2. Provide a 2-3 page single spaced brief research proposal in which you argue for and justify the use of HLM growth modeling in a research topic that you are interested in. Please address the following questions in this order as you apply your new knowledge of HLM growth modeling:
 - a. What is the purpose of your study?
 - b. Is there any research literature and theory that supports this argument? How so?
 - c. Why is HLM growth modeling appropriate as a means to address this purpose?
 - d. What would be the research question(s)?
 - e. What type of dataset would you need? Is there a dataset you know of that would work?
 - f. What types of data would you be looking for?
 - g. Provide the generalized equation for the model and a brief narrative in which you specify the HLM growth model, following the examples from the readings.
 - h. What do you think you would find?
 - i. Why would this be important? What would be the implications for this research domain?

Formatting and other requirements:

Please format your response appropriately in a Microsoft Word file, using Times New Roman 12 point font, and copy and paste the appropriate SPSS output where required directly into the Word document.

When typing up your response, please make sure to first list the question number and please include the wording of the question as much as possible to make it easier for Bowers to read through the responses (where M&V give output from SPSS to interpret, just give the wording of the question please).

Please use SPSS.

Please feel free to work in groups of 3 or less on the Exercises. Please make sure to include an APA cover page at the start of your response with the names of your collaborators on the exercises.

There is no page limit, but please try to be concise where possible while fully answering the questions.