Assignment 8 – Reliability and Validity

The goal of this assignment is to provide an opportunity to interpret the reliability and validity of quantitative and qualitative data.

Part 1 Reading: The purpose of the reading is to introduce you to the ideas of validity and reliability of the data collection process.

- Read Chapter 4 from Mills (2007).

Part 2 Application to Quantitative Data: The purpose of this activity is to verify the reliability and validity of quantitative data used in your action research.

Select one possible means of collecting quantitative data for your action research project. This could be a test that you will give for a numerical score, or a survey measuring something on a scale from strongly agree to strongly disagree, or an observation counting the number of some event.

- Discuss the reliability of the data collection process. Since reliability answers the question, “Does the data consistently measure what it measures?” one way to achieve reliability of quantitative data is to provide a rubric for the data collection process.
- Discuss the validity of the data collection process. Since validity answers the question, “Does the data measure what it claims to measure?” one way to achieve validity of quantitative data is to align the data collection process with goals or objectives of the research.

Part 3 Application to Qualitative Data: The purpose of this activity is to verify the reliability and validity of qualitative data used in your action research.

Select one possible means of collecting qualitative data for your action research project. This could be a test item examined for content rather than for assigning a numerical score, or an interview question that you will ask students, or the prompts for a journal kept by you for reflection on your project.

- The issue of reliability is uncertain for qualitative data; it is not necessarily the case that the data need to be consistent in its measurement. However, it is important that the data collection process provide meaningful information. Discuss the reliability of the data collection process with respect to your efforts to ensure that the information gathered is meaningful to answering your research question.
- Based on the criteria for validity of qualitative research in Mills (2007), discuss the validity of the data collection process.

Format Requirements

- Please submit your analysis of the reliability and validity of one quantitative and one qualitative data. They should be typed and double-spaced in an appropriate font. Any supplementary information (e.g., rubrics) should be included as an appendix. Any tables should be incorporated into the text and explained in the narrative.
☐ Please include a cover page with your name, the date, the course number and credit number, the assignment number, and your current area of focus.

☐ The file name for your assignment should be Assign08.Name where Name is your last name (e.g., Assign08.Powers)

☐ You may submit the assignment via Blackboard or e-mail.

Assignment Rubric

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<td>Addresses some but not all aspects of the prompt in a mostly satisfactory way.</td>
<td>Address some but not all aspects of the prompt in a satisfactory way.</td>
<td>Addresses all aspects of the prompt, but some aspects are unsatisfactory.</td>
<td>Addresses all aspects of the prompt in a mostly satisfactory way.</td>
<td>Addresses all aspects of the prompt in a satisfactory way.</td>
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Satisfactory work includes:

☐ Completing the task on time
☐ Writing is clear and unambiguous
☐ Terminology is consistent with the course materials
☐ Answers are well-thought
☐ Answers are factually correct
☐ Opinions are supported by reason