Chapter 1 in a Nutshell Directions
EDAD 7310: Research I Design and Methods
December 04, 2020

Your culminating assignment/project in EDAD 7310 will be comprised of an abridged, rough sketch version of your dissertation's introduction section (chapter 1). In chapter 1, you detail, in a sense, the foundations of and evidence for your particular research problem, an outline of your research questions and corresponding hypotheses, and any terms that need defining.

The following pages contain the eight sections you will address in the Chapter 1 in a Nutshell assignment. Each section contains a brief description of how you should address each section. In brief, the eight sections you will address are:

1. Research Problem
2. Background of the Problem
3. Research Questions
4. Hypotheses
5. Variables
6. Sample/Population
7. Definition of Terms
8. Limitations

1. **Research Problem**
   Briefly restate your research problem.

2. **Background of the Problem**
   Expand on your research problem by providing evidence for your identified problem. This is basically a miniature and truncated review of the literature, as of now, for your planned dissertation research.

3. **Research Questions**
   Outline all research questions. Avoid multiprong questions. If you're ultimately interested in the effects of factors A, B, C, and D on Y, break it up. Build your questions in the same way you build your statistical model--iteratively. Avoid using "how" (i.e., How do SAT scores effect freshman GPA?). Can your question be answered with quantitative data? If not, rephrase. For example, To what extent to high school SAT scores predict freshman GPA? Although it may not sound like it, the preceding question can be answered with quantitative data.

4. **Hypotheses**
   Outline all research/alternative hypotheses. This is your prediction, your guess, your expectation, as to the outcome of each question.

5. **Variables**
   List and identify all variables, their scale of measurement, type, and levels. Address how each variable will be coded, labeled, etc. Provide corresponding definitions for each. Use a table if necessary.

   Can you think of any covariates you may need to account for? Covariates are like independent variables in that they can be related to or predictive of outcome variables. Although covariates may not be the primary interest, they are often measured and accounted for in analyses due to their potential to affect the outcome variable.

   For example, imagine an experiment designed to examine the extent to which exercise intensity affects attitudes toward fitness. You randomly assign participants to either a high- or low-intensity exercise training protocol for 3 weeks. What's missing? The researcher should have also controlled for participants' baseline fitness level. It's reasonable to assume that some participants in assigned to the high-intensity training protocol will be out of shape. Likewise, it's reasonable to assume that some of the participants assigned to the low-intensity condition will be highly fit. Thus, participants' fitness level is a covariate in this example since it is not of direct interest to the researchers but is likely to influence the outcome (i.e., attitudes toward fitness).

6. **Sample/Population**
   Report major demographic characteristics (e.g., age, sex, ethnicity, SES, etc.). Report all topic-specific characteristics (e.g., first-year teachers, female high school principals, advanced practice registered nurses, etc.). Address any inclusion and exclusion criteria used among your population. Describe all procedures you plan to incorporate during participant

selection. Address specifically how you plan to recruit participants. Who are your participants? Describe your sampling method.

7. **Definition of Terms**
   List any and all terms you anticipate including in your planned dissertation research followed by a citation(s) for each. All definitions should be in your own words written succinctly and cogently enough for the general population to comprehend.

8. **Limitations**
   Finally, identify and describe any limitations you may anticipate either methodologically, demographically, etc. Use your imagination. There will be limitations. If you can identify as many limitations now, you can take most, if not all of, the sting out of addressing them in your oral qualifying exam.