IAT 834 Mixed Methods in Design Evaluation

Research Design Assignment: #4. Research Proposal: Research Questions and Hypotheses.

Due: We will introduce core concepts and work on this in two classes spread over two weeks.

Email in Sunday March 1 by 5 pm.

Read: Creswell Chapters 7 and 10

Think about: Based on your purpose statement, think about the kind of information you might want to collect. Then, think about how your study may be mixed methods.

- 1. Will you design your research study to address confirmatory or exploratory questions or both?
- 2. Will you design your research study to be a predominantly experimental, labbased design or a predominantly naturalistic, field-based design, or both?
- 3. Will you use more than one type of data (i.e., quantitative or qualitative)?
- 4. Will one type of data be more dominant than the others?
- 5. Will you collect one type of data but analyze it both quantitatively and qualitatively (e.g., observational video data)?

Assignment: Using the models for mixed methods discussed in class and described in Creswell (i.e., triangulation, embedded, exploratory, explanatory designs), come up with a set of qualitative and a set of quantitative research questions and hypotheses. Follow the guidelines in Creswell for creating good questions and hypotheses. Now add a mixed methods question that explicitly relates qualitative and quantitative data. See below for details ...

First, state your **intended approach**: triangulation, embedded, exploratory, explanatory designs with details of variants, timing, weighing, mixing (see Creswell (2009) Chapter 10).

Next, write up a set of qualitative and a set of quantitative questions. Pay attention to the **order of your questions**.

For your **qualitative questions** follow the guidelines for qualitative questions that begins Creswell (2009) Chapter 7. If your research design will be predominantly qualitative, then for a Masters level project, write at most one central question followed by 1-2 subquestions. For a Ph.D. level project, write at most two central questions followed by 2-4 subquestions. If your research design is predominantly quantitative, include at most one qualitative question and 2-3 subquestions.

For your **quantitative questions** and hypotheses follow the guidelines on quantitative research questions and hypotheses in Creswell (2009) Chapter 7. Use the model for descriptive questions and hypotheses given in this chapter which describes how to write descriptive questions followed by inferential questions or hypotheses. The descriptive questions should be about the independent and dependent variables in the study. The hypotheses should compare or relate the independent and dependent variables.

Note that you should include both descriptive research questions and specific hypotheses for the quantitative questions. Be sure to consider the directionality of your hypotheses (if there is one – if not, make it clear that you are looking for correlation not causal inference).

If your research design will be predominantly quantitative, then for a Masters level project, write at most one central question and one central hypothesis, followed by 1-2 subquestions and related hypotheses. For a Ph.D. level project, write at most two central questions and related hypotheses followed by 2-4 subquestions and related hypotheses. If your research design is predominantly qualitative, include at most one quantitative question and 1-2 hypotheses. You can include fewer than these recommendations but not more.

Last, write 1-3 **mixed methods questions** that explicitly addresses how data or analysis will be mixed and why as per mixed methods sections in Creswell chapters 7 and 10.

Notes: If you think you may go with a two phase sequential design and you're not sure what the second phase questions or hypotheses might be, take your best guess. This way you have practice learning how to formulate these kinds of questions/hypotheses even if your actual questions turn out to vary.

Don't worry too much about numbers of questions. What I'm after is getting the scope right for a masters or Ph.D. level project. Since you'll have both qualitative and quantitative questions, it's easy to have too many questions to answer within the appropriate scope for a thesis. Try and make your topic as defined by your questions as tight as possible without being trivial!