**Plan for PSQF 6272 HW4: Clustered Multilevel Models on Your Own Data (2 points)  
Due Monday 10/23/2023 by 11:59 PM under “assignments” in ICON  
  
Please submit this document in an editable format (e.g., .docx or .rtf extension)   
using this file-naming convention: PSQF6272\_Lastname\_Firstname\_Plan**

There are **two options** for completing HW4 (eventually worth 18 points in total):

1. **Practice detecting inaccuracies in AI text**—you will receive AI-generated responses to up to 9 prompts. Your task will be to describe in writing what is correct and what is incorrect about each answer. You may choose this option within the ICON assignment **HW4 choice**, in which case you do not need to do anything further with this document and you will not yet receive any points. Instead, **all 18 points will be based on your HW4 responses**. Your AI assignment will be made available by 10/24/23.
2. **Individual analysis of clustered data**—that option is described by the rest of this document, which should be submitted within the ICON assignment **HW4 choice**. You will earn **2 points** **once we have agreed on your analysis plan** (i.e., revisions may be needed to clarify aspects of your plan I am unsure about). The **remaining 16 points for HW4 will be based on your written report of the analyses you conducted**. More specific criteria for the written report will be made available by 10/24/23.

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**The goal of HW4 is for you to practice conducting and reporting analyses using multilevel models on real clustered data.** Ideally these analyses would focus on data you already care about in the context of your research or employment (i.e., in which these analyses could serve as the basis for a future conference presentation or manuscript to be submitted for publication). If desired, however, you can also use publicly available data, such as from these example sources:

ICPSR: <https://www.icpsr.umich.edu/web/pages/ICPSR/index.html>

Berkely archives: <https://sda.berkeley.edu/archive.htm>

Harvard archives: <https://dataverse.harvard.edu/>

Early Childhood Longitudinal Studies: <https://nces.ed.gov/ecls/dataproducts.asp>

Your analyses ideally should involve **two dimensions of sampling** (e.g., persons nested in clusters) and include **4–6 variables in total**, in which 1–2 variables would be treated as level-1 outcomes and the rest would be treated as level-1 or level-2 predictors. I would recommend choosing your data and variables based on the types of models we have already covered in this class, but I will allow additional complexity (e.g., using latent variables, using clustered longitudinal data) for participants who are sufficiently prepared to do so from other coursework.

**Please answer the questions below so that I can provide feedback on your analysis plan:**

1. Briefly describe your multilevel sample and its salient characteristics, including total sample size at each level, and the sources of nesting or crossing.  
     
   Answer:
2. Briefly describe each of the 4–6 variables of interest, including at what level it was measured, what construct it measures, its available sample size, and its format (e.g., binary, ordinal, nominal, quantitative; number of categories or range of possible values). If you are able to provide intraclass correlations for any level-1 variables, that would be helpful for me to see as well.  
     
   Answer:
3. What do you want to know with respect to these variables? Briefly describe your research questions as best you can, as well as the models you plan to estimate to answer them. I will try to help you figure out this part as needed.  
     
   Answer: