

**UTHealth Cizik School of Nursing
Center for Nursing Research
Guidelines for Statistical Consultation with Students**

Statistical analysis consultation is provided to students at the UTHealth Cizik School of Nursing to aid in their understanding and completion of assigned research projects. The project can be at any level, from dissertation research to course research projects. Consultation is given in the following areas: planning for data collection and analysis, sample size calculation, analysis of data, and interpretation of results. To adequately meet the statistical needs of all students, it is important that students and their faculty advisors understand their responsibilities in the process:

Students: Consultation is provided to students after referral from their faculty advisor. Most importantly, students will need to be prepared for each meeting with the statistician by reviewing background material and providing any requested information (hypotheses, study design, variables, etc.). In addition, students should understand that they will be responsible for managing and analyzing their own data with the guidance of the statistician.

Faculty Advisors: Ensure that students are prepared for consultation with the statistician by reviewing the student's hypotheses and study design. Consultation with experts in other substantive fields (epidemiology, research methods, etc.) may be required prior to meeting with the statistician. **Faculty advisors must attend the student's initial meeting with the statistician.**

Students will need to provide the statistician with the necessary details about their study to permit an informed review and determination of the statistical methods required. Students should also plan their projects accordingly to ensure adequate time is allowed for the various portions that require statistical services. Below is the initial information that is requested from students when they are in need of statistical consulting:

- 1.) Hypotheses (what are your research questions?)
- 2.) Study Design (for example, cross-sectional or longitudinal?)
- 3.) Variables (level of measurement, instruments and their scoring, and frequency and timing of measures)

Please note: To promote good statistical practice and proper interpretation of results, it is important to follow the data analysis plan that is created before the study begins. Additional analyses beyond those in the data analysis plan need to be carefully considered and take into account time and budgetary constraints. **Deviating from the data analysis plan and conducting numerous additional statistical tests can lead to errors in interpretation and is not good statistical practice.**