

Summary of Consulting Services and Service to the Profession

Statistical Consulting

Statistical consulting has a research nature particularly when the study involves sophisticated designs and data issues which require non-standard procedures to extract information. I would consider statistical consulting as an institutional professional service. I have been continuing to provide consulting services to clients from academia and industries for decades. Since I joined the WCU math faculty, I have conducted several formal consulting projects (i.e., with either formal or brief reports in contrast to the ad hoc consulting projects with no consulting reports) in two categories: Institutional support projects and research projects.

Consulting Services for Curriculum Support

The Department Chair asked to help with an analysis comparing the efficacy of the two mathematics placement instruments (platforms) ALKES PPL and WCU's MPE and report the results to the Provost's Office to decide on which platform to continue. The first analysis [\[link\]](#) used three semesters of data collected before the University moved completely online due to COVID-19 and three semesters of data based on online instruction. The second analysis [\[brief report link\]](#) added additional post-COVID data to adjust the impact of the change in the instructional mode. It is of interest to conduct another analysis to adjust the cut-off scores of the placement test to optimally place students in the most suitable subsequent math class to improve students' success rate.

Consulting Service for Collaborative Research

Two types of research consulting projects that I have conducted in the past few years. The exploratory / pilot projects to identify more research topics. These types may or may not result in subsequent research work immediately. Three of my listed consulting projects are in this category [\[acculturation project, Microbiome#1, Microbiome#2\]](#). The other types of consulting projects may lead to formal research publications using part of the consulting results. Two of the completed consulting projects belong to this category ([self-compassion](#), [self-compassion comparative studies](#))

Service to Profession

The way that I serve the profession is to help the community produce quality research through the peer review process for reputed journals in statistics and related fields. At the same time, I also write reviews for the most recently published research for the *Mathematical Reviews* (MR) so researchers can keep abreast of any new developments in their fields within mathematical science. I have reviewed manuscripts for 18 journals. In most of my peer-reviewed reports, I provided constructive in addition to the straightforward check of scientific correctness (see [this recent report](#)). Most of the articles I received from MR are quite technical. Some of them are theoretical. Writing a short (one-page) and understandable review needs significant abstraction. Here are two sample reviews that I have submitted to MR ([methodological review 1](#), and [theoretical review 2](#)).