

MSSP Consulting: Limited Duration Project

Description and Intended Scope

Client: Patrick Rosenberg

Department: Literacy and Language

MSSP Team: Benjamin Draves, Longhao Chen, Jiahao Xu, Site Li, Tianying Xu

Intake Date: 03/22/19

Purpose of the consulting: The purpose of this consulting arrangement is 1) to train both MSSP and PhD students on the process of statistical consultation and 2) to provide a service to improve the quantitative aspects of research/projects on Boston University's campus. Student consultants will be monitored by MSSP faculty in order to help the consultants provide their best possible service. Nevertheless, we ask that you understand that students are not (yet!) professional consultants and we thank you for your patience and cooperation in this regard.

Scope of the project: The project described below has been approved for what we call "limited duration" consultation. As the name suggests, such projects are intended to be fairly focused, with a total duration of no more than 10 student hours worth of work. Consultation will involve MSSP student consultants and PhD leaders, supervised by MSSP program faculty. An initial intake meeting should have been held in the MSSP Conference Room at 2 Cummington Mall and additional meetings, as needed, will be arranged at the mutual convenience of the client and the student consultants.

Project description:

Based on the information provided during the intake meeting, our understanding of the client project is as follows.

The client's research is on deaf children with interest on whether higher-level skills in American Sign Language(ASL) are important for both ASL comprehension and reading comprehension. The research can be divided into two sections. The first section is to find association between American Sign Language(ASL) vocabulary & syntax and ASL comprehension. The client has already conducted much work on the first section and would not mind MSSP to look at it from another perspective. The second part is to find association between ASL comprehension and reading comprehension in English.

The client came to MSSP consulting group with three original data sets, consisting of 303 deaf children, the parents of 105 children are also deaf, and the parents of 198 other children are not. The first data set is about the performance of task on ASL comprehension. The second is the type of questions used in the first data. And the third one is records of student's reading scores in SAT and MAP reading. We are aware that we need to delete data points that have the same SAT and MAP reading scores and those ID starting with "10xxx".

Initial milestone:

To address the client needs, our proposal is to provide the following by 04/12/2018.

- Review the analysis that have already been done and provide possible suggestion to improve the analysis
- Merge the first and third dataset and clean the data
- Created exploratory data analysis plots and do correlation analysis

Attribution: When the scope of the work is of 'limited duration' but nevertheless is used in any sort of academic product (e.g., presentation, project, abstract, or publication), we would ask that you please include an appropriate acknowledgment. For example, clients may include "We acknowledge the help of [NAME] of the MSSP statistical consulting service under the guidance of Professor [NAME]." as a footnote accompanying grant support and related¹.

Modification of Intended Scope of Work: At any time during this process if both parties mutually agree that the above proposal is suboptimal in addressing the client needs we leave open the possibility of holding additional discussions to alter the above proposal. Consultations anticipated to require substantially more than roughly 10 hours of work may be recommended for collaborative consulting. Evaluation of such recommendations typically will include a discussion of co-authorship on resulting end-products.

¹ We explicitly do not insist upon co-authorship for projects of 'limited duration' type -- although, of course, if the conventions of your field permit, co-authorship for at least a subset of the consulting team is always greatly appreciated. This MSSP policy is intended to allow clients maximum flexibility in seeking out and benefiting from our statistical consulting work while, at the same time, promoting best practice regarding academic intellectual property. Our perspective is informed by the [American Statistical Association's guide *When You Consult a Statistician ... What to Expect*](#), which states that any such product "should acknowledge the participation of the statistician, consistent with the value of that participation."