Overview

The Statistical Consulting Center at Florida State University is a research assistance facility for the students, faculty, and staff at FSU. The Center is a function of the graduate program within the Department of Statistics at Florida State University. The Statistical Consulting Center is a free service for members of the FSU community. When requested, clients from outside the FSU community are given at least a one-hour consultation. The Statistical Consulting Center also holds walk-in hours to assist clients on a first-come first-serve basis. Currently, the Consulting Center is also expanding to serve as analysts for grants needing statistical support. Services included but are not limited to:

Translating research questions and hypotheses into statistical terms
Designing sampling procedures
Choosing appropriate statistical methods
Interpreting computer output
Phrasing statistical results
Referrals to other statistical help
The Statistical Consulting Center generally does not perform actual analyses.

Walk-in hours for the 2012-2013 academic year were held on Monday, Tuesday and Thursday afternoons in a Strozier Library Consultation Room. Consulting appointments were planned to accommodate both the consultant's and the clients' specific scheduling needs. The meetings were held during the week to best accommodate the clients schedules.

Summary of Business Activities

Graduate students Michael Rosenthal, Wade Henning, Eric Aspinwall (Fall), Steve Chung (Fall), and Collin Witt (Spring) served as the consultants for the academic year. Wade was the lead consultant, and everyone shared walk-in hours and consulting appointments.

On average, consultants had 3-4 appointments each week, for a total of about 100 appointments over the course of the two semesters. The demand was relatively consistent across the months, with slight increases at the beginning and end of the semester, and close to important dates such as submission deadlines for research proposals or dissertations.

Consulting Appointments

The majority of the 30 appointment clients this year were graduate students seeking assistance for the quantitative aspect of their research. However, faculty members from throughout the university also requested consulting.   In 2012-2013, we have made it the consulting center's goal to see our clients' analytical needs through to a resolution. Historically, a typical consultation would consist of a single one hour meeting with little advance knowledge of the clients' needs and little follow up regarding their outcomes. Now, a typical consultation process is as follows:

1. The client provides a detailed summary of their problem via email prior to the meeting.
2. An hour is spent in scheduled, in-person consulting.
3. The meeting is followed by additional follow-up via email.
4. Additional meetings are scheduled as needed

At least one meeting was done via Skype, and this may become more common in the future.

Typical Cases

Graduate Student
One client was interested in determining how the quality of instruction contributed to science and reading achievement of students. This individual measured the performances of researchers and teachers from videos. In order to determine how the quality of instruction effects student achievement, some preliminary results were studied, including checking for variability between classes, instructors, ethnicity and gender. We assisted this individual with use of SPSS and interpretation of inferences drawn from ANOVA.

Graduate Student
This individual's research involved fitting a Hierarchical Bayesian model using Jaggs. The research involved identifying the cognitive levels of pauses made by students during a standardized test. We assisted this individual by discussing the theoretical aspects of the model, the meaning of certain aspects of the R code, and we helped with minor debugging issues. This client's research was rather advanced and technical compared to our usual clients.

Faculty
This individual had a well thought out questionnaire, and he also had a good understanding of inferences made from sampled survey data. He even had the method of sampling figured out, and it appeared to be a very large survey spanning several continents and universities. The only barrier seemed to be uploading his survey to Qualtics. After looking at his survey questions we were able to show him how to efficiently upload it to Qualtics.
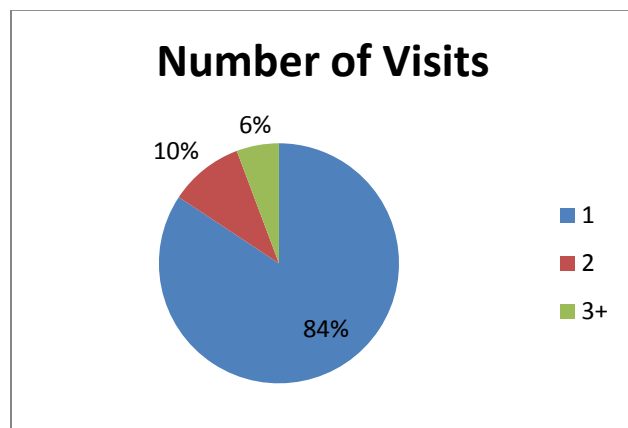
Faculty
This individual wanted to predict whether or not employees in a health center would get a flu shot, and then use this information to target low probability employees for an education program. She had multiple years of questionnaires from the employees, including information regarding whether or not they received a flu shot in each of the years. We assisted with modeling and analysis over a period of many weeks, and the results were published in a peer-reviewed journal.

Walk-in Summary

There were 70 walk in consults, split evenly between research and coursework. Model selection, random variable identification and data analysis were common research related topics, with statistical power, ANOVA, logistic regression, linear regression, and t-tests being commonly discussed topics.

In reviewing previous years' annual reports, it seems like more of the walk-in traffic is research driven than in the past. This often necessitates longer consults and follow-up emails than one would expect from coursework related questions

Department

Accounting	Social Work
Art Education	Statistics
Arts & Sciences	Teacher Education
Biology	Urban Planning
Business	Unknown Others
Communication	
CON	
Criminology	
Economics	
Education	
Educational Leadership	
Educational Psychology	
Finance	
Higher Education	
Inspector General	
Mathematics	
Medicine	
Meteorology	
Nutrition	
Nursing	

Psychology

Reflections

As our efforts have moved toward helping clients find resolutions to their analytical problems, our communications with them have increased. This creates more work for the consultants, but results in a better experience for both the client and consultant. We are currently investigating open source customer relationship management software to help us better keep track of our clients and to provide more thorough and up-to-date reporting.