15 Years a Consultant
The Shocking True Story of UCLA Statistical Consulting

Phil Ender

UCLA Statistical Consulting Group (Ret.)

Stata Conference Columbus - July 30, 2015
Disclaimers

- There isn’t actually anything shocking in this presentation.
Disclaimers

- There isn’t actually anything shocking in this presentation.
- This presentation is mostly true.
I studied Psychology at UC Riverside
I studied Psychology at UC Riverside
Where I was trained to use SPSS
I studied Psychology at UC Riverside
Where I was trained to use SPSS
I switched to SAS in 1978 when I started at UCLA
- I studied Psychology at UC Riverside
- Where I was trained to use SPSS
- I switched to SAS in 1978 when I started at UCLA
- I began using Stata in 1999 ...
• I studied Psychology at UC Riverside
• Where I was trained to use SPSS
• I switched to SAS in 1978 when I started at UCLA
• I began using Stata in 1999 ...
• when I was hired by Michael N. Mitchell to work for UCLA Statistical Consulting in 1999
Phil Ender

15 Years a Consultant
Free walk-in consulting
UCLA Statistical Consulting Services

- Free walk-in consulting
- Email consulting
Free walk-in consulting
Email consulting
Focused research projects (fee for service)
- Free walk-in consulting
- Email consulting
- Focused research projects (fee for service)
- Periodic presentations on campus
Free walk-in consulting
Email consulting
Focused research projects (fee for service)
Periodic presentations on campus
Stat Consulting webpages (www.ats.ucla.edu/stat/)
UCLA Statistical Consulting Services

- Free walk-in consulting
- Email consulting
- Focused research projects (fee for service)
- Periodic presentations on campus
- Stat Consulting webpages (www.ats.ucla.edu/stat/)
- Library of statistics books
Who do we help?

- UCLA researchers and instructors, including...
Who do we help?

- UCLA researchers and instructors, including ...
- Faculty
Who do we help?

- UCLA researchers and instructors, including ...
- Faculty
- Staff researchers
Who do we help?

- UCLA researchers and instructors, including ...
- Faculty
- Staff researchers
- Graduate students
Who do we help?

- UCLA researchers and instructors, including...
- Faculty
- Staff researchers
- Graduate students
- Course TA's
Who does not qualify for help?

- Undergraduates

Non-UCLA researchers

Phil Ender
15 Years a Consultant
Who does not qualify for help?

- Undergraduates
- Students working on homework problems
Who does not qualify for help?

- Undergraduates
- Students working on homework problems
- Non-UCLA researchers
Where do our clients come from?

- All of the academic departments on campus
Where do our clients come from?

- All of the academic departments on campus
- Medical Center
Where do our clients come from?

- All of the academic departments on campus
- Medical Center
- Medical School
Where do our clients come from?

- All of the academic departments on campus
- Medical Center
- Medical School
- Dental School
Where do our clients come from?

- All of the academic departments on campus
- Medical Center
- Medical School
- Dental School
- School of Nursing
Where do our clients come from?

- All of the academic departments on campus
- Medical Center
- Medical School
- Dental School
- School of Nursing
- Law School
Where do our clients come from?

- All of the academic departments on campus
- Medical Center
- Medical School
- Dental School
- School of Nursing
- Law School
- Graduate School of Management
Where do our clients come from?

- All of the academic departments on campus
- Medical Center
- Medical School
- Dental School
- School of Nursing
- Law School
- Graduate School of Management
- Graduate School of Education
What Stat Packages do we support?

- Stata
What Stat Packages do we support?

- Stata
- SAS
What Stat Packages do we support?

- Stata
- SAS
- SPSS
What Stat Packages do we support?

- Stata
- SAS
- SPSS
- R
What Stat Packages do we support?

- Stata
- SAS
- SPSS
- R
- Mplus
What Stat Packages do we support?

- Stata
- SAS
- SPSS
- R
- Mplus
- HLM
What Stat Packages do we support?

- Stata
- SAS
- SPSS
- R
- Mplus
- HLM
- SUDAAN
What kinds of help do we provide?

- Research planning
What kinds of help do we provide?

- Research planning
- Research design
What kinds of help do we provide?

- Research planning
- Research design
- Data management
What kinds of help do we provide?

- Research planning
- Research design
- Data management
- Stat package use
What kinds of help do we provide?

- Research planning
- Research design
- Data management
- Stat package use
- Applied statistics
What kinds of help do we provide?

- Research planning
- Research design
- Data management
- Stat package use
- Applied statistics
- Data analysis

Phil Ender 15 Years a Consultant
What kinds of help do we provide?

- Research planning
- Research design
- Data management
- Stat package use
- Applied statistics
- Data analysis
- Graphical presentation of data and results
Who are the Stat Consultants?

- Four full-time FTE, with new full-time consultant starting in September
Who are the Stat Consultants?

- Four full-time FTE, with new full-time consultant starting in September
- Three trained in psychology

Hypothesis: They have better options

Phil Ender
15 Years a Consultant
Who are the Stat Consultants?

- Four full-time FTE, with new full-time consultant starting in September
- Three trained in psychology
- One trained in epidemiology

Hypothesis: They have better options

Phil Ender 15 Years a Consultant
Who are the Stat Consultants?

• Four full-time FTE, with new full-time consultant starting in September
• Three trained in psychology
• One trained in epidemiology
• One part-time graduate student
Who are the Stat Consultants?

- Four full-time FTE, with new full-time consultant starting in September
- Three trained in psychology
- One trained in epidemiology
- One part-time graduate student
- Why no statisticians or economists?
Who are the Stat Consultants?

- Four full-time FTE, with new full-time consultant starting in September
- Three trained in psychology
- One trained in epidemiology
- One part-time graduate student
- Why no statisticians or economists?
- Hypothesis: They have better options

Phil Ender  
15 Years a Consultant
Walk-in consulting

- Monday through Thursday from 1:00 pm-4:00 pm
Walk-in consulting

- Monday through Thursday from 1:00 pm-4:00 pm
- First come - first served
Walk-in consulting

- Monday through Thursday from 1:00 pm-4:00 pm
- First come - first served
- Maximum of two visits per week
Walk-in consulting

- Monday through Thursday from 1:00 pm-4:00 pm
- First come - first served
- Maximum of two visits per week
- On a busy day there can be up to 12 to clients wanting help
Help the client to do their own data analyses
- Help the client to do their own data analyses
- Get them started
- Help the client to do their own data analyses
- Get them started
- Show them an example
Help the client to do their own data analyses
Get them started
Show them an example
Work through one analysis with them
Help the client to do their own data analyses
Get them started
Show them an example
Work through one analysis with them
Have them do one analysis on their own
UCLA Stat Consulting Model

- Help the client to do their own data analyses
- Get them started
- Show them an example
- Work through one analysis with them
- Have them do one analysis on their own
- Give them homework
www.ats.ucla.edu/stat/
- www.ats.ucla.edu/stat/
- Online classes and seminars (including movies)
www.ats.ucla.edu/stat/
Online classes and seminars (including movies)
Frequently Asked Questions
- www.ats.ucla.edu/stat/
- Online classes and seminars (including movies)
- Frequently Asked Questions
- Data Analysis Examples
www.ats.ucla.edu/stat/
Online classes and seminars (including movies)
Frequently Asked Questions
Data Analysis Examples
Annotated Output
www.ats.ucla.edu/stat/
Online classes and seminars (including movies)
Frequently Asked Questions
Data Analysis Examples
Annotated Output
What’s New on Our Web
www.ats.ucla.edu/stat/
Online classes and seminars (including movies)
Frequently Asked Questions
Data Analysis Examples
Annotated Output
What’s New on Our Web
Approx 1M hits per month
The tricky part about consulting

The questions that clients ask are often not the real problem. The tricky part of consulting is trying to figure out what is the "real" problem.
Mediation analysis is a hot topic on campus. Questions include basic mediation analysis, mediation with binary or nominal mediators, multilevel mediation, conditional indirect effects, mediation with complex survey data, and any combination of these.
Biggest problems with graduate students

- They don’t know their own data
Biggest problems with graduate students

- They don’t know their own data
- They do bizarre data entry in Excel
Biggest problems with graduate students

- They don’t know their own data
- They do bizarre data entry in Excel
- Students who come in twice a week for 3 hours at a time for many months
- They don’t know the analysis they are trying to perform
- In fact, they don’t know much statistics at all
- They don’t want to learn about their analyses
- They just want us to run the analyses for them
- They don’t care about the statistics

Phil Ender
15 Years a Consultant
Biggest problems with graduate students

- They don’t know their own data
- They do bizarre data entry in Excel
- Students who come in twice a week for 3 hours at a time for many months
- They don’t know the analysis they are trying to perform
Biggest problems with graduate students

- They don’t know their own data
- They do bizarre data entry in Excel
- Students who come in twice a week for 3 hours at a time for many months
- They don’t know the analysis they are trying to perform
- In fact, they don’t know much statistics at all
Biggest problems with graduate students

- They don’t know their own data
- They do bizarre data entry in Excel
- Students who come in twice a week for 3 hours at a time for many months
- They don’t know the analysis they are trying to perform
- In fact, they don’t know much statistics at all
- They don’t want to learn about their analyses
Biggest problems with graduate students

- They don’t know their own data
- They do bizarre data entry in Excel
- Students who come in twice a week for 3 hours at a time for many months
- They don’t know the analysis they are trying to perform
- In fact, they don’t know much statistics at all
- They don’t want to learn about their analyses
- They just want us to run the analyses for them
Biggest problems with graduate students

- They don’t know their own data
- They do bizarre data entry in Excel
- Students who come in twice a week for 3 hours at a time for many months
- They don’t know the analysis they are trying to perform
- In fact, they don’t know much statistics at all
- They don’t want to learn about their analyses
- They just want us to run the analyses for them
- They don’t care about the statistics
Biggest problems with graduate advisors

- They don’t understand the analysis they are requiring their students to perform
Biggest problems with graduate advisors

- They don’t understand the analysis they are requiring their students to perform
- They tell students to ask Stat Consulting what analyses to do for their dissertations
Biggest problems with graduate advisors

- They don’t understand the analysis they are requiring their students to perform
- They tell students to ask Stat Consulting what analyses to do for their dissertations
- They require analyses that are ahead of current technology, e.g., multiple mediation analysis with binary mediators for complex survey data using multiple imputation to handle missing data
This Concludes the Presentation