TRAINING NEEDS IN SURVEY RESEARCH METHODS: AN OVERVIEW

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A Historical Perspective

In the 1970’s I established a one-year MS in Social Statistics—the umbrella term under which survey methodology then fell—at the University of Southampton:

- Two courses in general statistics
- One course in survey sampling
- One course in survey methods

At the time a program of that type could cover the basics well.
Joint Program in Survey Methodology

- JPSM was founded in 1993 with an initial focus on an MS program.
- Consensus that all students should acquire a general understanding of all aspects of survey research.
- Two areas of concentration: Statistical Science and Social Science.
- The two areas were to share courses in: Data Collection (3); Applied Sampling (3); Practicum I and II (4); Total Survey Error I and II (4); Design Seminar (3); and Introduction to the Federal Statistical System (1).
Challenges for the JPSM Masters Program

- Total of 45 credits, of which 18 were shared courses.
- In each area, are the remaining 27 credits enough to meet the training objectives?
- What are the training objectives:
  - To equip graduates to apply the skills needed to produce high quality surveys?
  - To provide the training needed for those who want to continue to a Ph.D. degree?
  - To prepare graduates for a career in survey research, with the ability to keep up with the developments that will occur in the future?
Advances in the Past 30 Years

- *Survey Methodology* started in 1975 but became externally available only in the mid 1980’s.
- Regular edited books from conferences on aspects of survey methodology started in 1989.
- POQ and other AAPOR publications have expanded survey methodology content.
- The *Journal of Survey Statistics and Methodology* started in 2013.
- International conferences and workshops on aspects of survey methodology are now common.
Desiderata for a Survey Statistician

✓ Solid grounding in statistical theory and methods.
✓ Extensive coverage of survey sampling theory and methods – complex designs, weighting, imputation, variance estimation.

- Small area estimation
- Disclosure control
- Record linkage
- Evaluation studies
- Big data, large administrative databases
- Nonprobability sampling
Desiderata for a Survey Methodologist

- Questionnaire design: factual and opinion questions, recall issues, sensitive questions, translation into other languages
- Questionnaire evaluation methods
- Modes of data collection: F-to-F, telephone, mail, web, CASI, mixed modes
- Nonresponse
  - Paradata
  - Responsive design
  - Panel survey methods
  - Survey management
Desiderata for All

• Strong communication skills
  • Written
  • Verbal
  • Presentation
• Ethics of survey research
  • Human subjects
  • Sharing data
• Internships in survey organizations
Training Survey Researchers

• The field of survey research has grown enormously and it has become more challenging technically.

• This development might be addressed by cutting back the credit hours for courses in general survey methodology taken by all.

• This would free up some credit hours for additional courses in each area, but not enough to fully address the problem.

• An MS degree cannot cover everything needed for practical applications.
Other Possible Solutions

- A minor in undergraduate programs.
- On-the-job training.
- Webinars and short courses offered by universities or professional associations.
- Intensive summer programs.
- Web-based training courses with readings, exercises and exams (MOOCs).
- Advanced certificate training.
- Ph.D. degrees.
Continuing Education

- Major changes will undoubtedly occur in all aspects of survey research during the working lifetimes of recent graduates in survey methodology.
- The training received by these graduates needs to equip them with the skills needed to enable them to keep abreast of new developments.
- Formal continuing education programs for updating skills would be useful.
Expanding the Workforce of Trained Survey Researchers

How to attract qualified students into our profession to add to the pool of survey researchers?

• Undergraduate minors
  ➢ in survey statistics in math/stat degrees.
  ➢ in survey methods in social science degrees.
• Active recruitment from math/stat and social science undergraduate and graduate programs.
• Other outreach activities.