FROM STUDY TO SKILLS

Survey Methodology studies sources of error in surveys—the bias and variability that affect the quality of survey data. As a field of knowledge, a profession, and a science, survey methodology seeks to link the principles of survey design, collection, processing, and analysis to an understanding of error.

Survey Methodology is an inherently multidisciplinary field. Achieving high quality survey results requires applying principles from traditional academic disciplines such as statistics and the social sciences. Statistics provides a quantitative foundation while social and cognitive psychology supplies the framework for understanding how human behavior affects accuracy in survey responses. Sociology and anthropology offer theories of social stratification and cultural diversity. Finally, computer science provides principles of database design and human-computer interaction.

Related fields include Statistics, Informatics, Sociology, Psychology, Economics, and Mathematics.

SKILLS AND ABILITIES

Every survey involves a number of decisions about design and implementation, and each decision can potentially affect the quality and validity of the results. How will the sample be chosen? What mode will be used to pose questions and collect answers? All surveys involve compromises, and the challenge for the researcher is to determine how best to use the available resources to produce, on balance, the best results.

As a student of survey methodology, you will be developing the following skills and abilities:

<table>
<thead>
<tr>
<th>Analytical Skills</th>
<th>Quantitative Skills</th>
<th>Problem Solving Skills</th>
<th>Research and Communication Skills</th>
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<tr>
<td>Applying methods to problems</td>
<td>Computer programming</td>
<td>Formulating problems</td>
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<tr>
<td>Projecting from data</td>
<td>Mathematical modeling</td>
<td>Applying logic to problems</td>
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<td>Reasoning critically</td>
<td>Designing questionnaires</td>
<td>Assessing needs</td>
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<td>Categorizing data</td>
<td>Developing sample forms</td>
<td>Distinguishing relevant/extraneous information</td>
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<td>Developing theories</td>
<td>Mathematical analysis</td>
<td>Interpreting data</td>
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<td>Designing systems for processing data</td>
<td>Applying statistical packages</td>
<td>Understanding components of complex problems</td>
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<td>Interpreting data from tables/charts</td>
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<td>Writing reports/publications</td>
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<td>Evaluating collected data</td>
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<td>Identifying areas for research</td>
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<td>Gathering data/processing</td>
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<td>Presenting alternative explanations</td>
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<td>Planning/designing project</td>
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<td>Translating theory into research plans</td>
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ADDITIONAL RESOURCES

To identify internships or job opportunities, visit Career Center Connector: careercenter.umich.edu/article/c3

To begin connecting to professionals in fields that interest you, create your own LinkedIn account: careercenter.umich.edu/article/getting-started-linkedin
FROM SKILLS TO CAREER

Graduates at the Masters and PhD levels in Survey Methodology are in high demand in government, academic, and private industry jobs. Government agencies, such as those in the U. S. federal statistical system (e.g., Bureau of the Census, Bureau of Labor Statistics) spend approximately $4 billion annually on economic and social information collection and dissemination and employ 12,000 staff. The commercial sector presents job opportunities in survey research firms and market research, with annual gross revenues of $10-15 billion and more than 45,000 technical staff. Academic survey centers and, recently, survey methodology education programs, seek staff and faculty with specialization in survey methodology.

The following is a selected list of occupations compiled from information about Michigan graduates and from national data.

### Analytical Skills
- Economist
- Policy analyst
- Census Bureau analyst
- Interviewer
- Sales forecaster
- Operations research analyst
- Health policy analyst
- Risk management analyst

### Quantitative Techniques
- Statistician
- Survey statistician
- Program statistician
- Survey manager
- Research administrator

### Problem Solving Skills
- Employment specialist
- Opinion pollster
- Organizational consultant
- Hospital Risk Management

### Research and Communication Skills
- Research Assistant/Associate
- Research Scientist
- Legislative Researcher
- Professor
- Marketing research
- Lobbyist
- Media (TV, Radio, Newspaper, Internet)

For more career information, see O*NET at [online.onetcenter.org](http://online.onetcenter.org)

### ACADEMIC PROGRAMS

Several programs are housed within the Institute for Social Research which train and educate students and professionals in methodology and skills of social science research. Together, these programs offer courses covering most aspects of survey research with a wide variety of methodological and substantive topics.

**The SRC Summer Internship Program** offers a paid summer internship for undergraduates who have completed sophomore year (or higher) and graduate students with an interest in social science research. [src.isr.umich.edu/content.aspx?urlid=1039](http://src.isr.umich.edu/content.aspx?urlid=1039)

**Program in Survey Methodology** offers programs of study at the doctoral, master’s and certificate levels. [psm.isr.umich.edu, 734-764-0038](http://psm.isr.umich.edu)

**Survey Research Center (SRC) Summer Institute in Survey Research Techniques** provides rigorous and high quality graduate training in all phases of survey research. It is also open to advanced undergraduates. [si.isr.umich.edu, 734-764-6585](http://si.isr.umich.edu)

**Inter-University Consortium for Political and Social Research (ICPSR) Summer Program in Quantitative Methods** is recognized throughout the world as the preeminent forum for basic and advanced training in the methodologies and technologies of social science research. [icpsr.umich.edu/sumprog, 734-763-7400](http://icpsr.umich.edu/sumprog)

For more information, contact:

**Institute for Social Research**
426 Thompson Street
Ann Arbor, MI 48106-1248
734-615-4883
[isr.umich.edu](http://isr.umich.edu)

THE CAREER CENTER

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