Survey Methodology

RTI International is dedicated to understanding and improving all stages of the survey research process: development of the research design, instrument construction , translation, survey management, quality assessment and control, non-response, weighting, adaptive/responsive design, final analysis, and reporting of survey results. Our expertise enables clients and researchers to effectively design studies, implement data collection strategies, and analyze data. RTI's Center for Survey Methodology consists of two programs: Digital Technology & Society (DTS) and Program for Research in Survey Methodology (PRISM). DTS focuses on the technological issues and innovations that influence the changing world of surveys and social research while PRISM focuses on methodological issues related to the survey process.

Overview

RTI's survey methodologists have considerable training and experience in identifying and resolving methodological, measurement, and data collection issues. Our capabilities in survey methodology provide survey managers and subject matter experts with an invaluable resource to aid in the development of appropriate survey questionnaires, forms, designs, and analyses.

The Center for Survey Methodology has a strong interdisciplinary focus, with researchers from a variety of academic backgrounds using their skills to address operational challenges associated with conducting survey research. These academic fields include survey methodology, psychology, statistics, sociology, foreign languages, political science, demography, computer science, and cultural anthropology.

Research Design and Consultation

RTI staff develop methodological innovations for improving data quality and minimizing costs or time needed to conduct a study. We prepare comprehensive methodology plans that document procedures to implement these steps.

Our recommendations stem from the research literature and our wealth of applied experience conducting survey research. Some examples of our areas of expertise include the following:

- Methods for maximizing response rates
- Survey design for mobile platforms
- Innovative uses of technology to support survey research
- Development and use of advance notification
- Interview-length and user-friendly questionnaire design
- Translation issues and cultural appropriateness
- Surveys on sensitive topics
- Development of materials for low-literacy populations
- Recruitment and surveys with special or hard-to-reach populations
- Responsive/adaptive design and other uses of paradata to inform survey process and outcomes
- Mixed-mode studies
- Assessing total quality survey
- Experimental design and field experiments.

Questionnaire Design and Evaluation

We design questionnaires using best practices and the latest techniques from the survey research literature. We have skills essential for developing questionnaires to support any mode of data collection, from paper-and-pencil administration to computer-assisted interviews, including surveys for use on tablets and smart phones. We also develop surveys to be implemented in special situations, such as in prisons, in hospitals, or aboard ships.

We ensure that our questionnaires are of the highest quality by applying a variety of testing methods, including expert review, use of RTI's Questionnaire Appraisal System, behavior coding, various pretesting strategies, and field testing.

Cognitive Interviewing

Cognitive interviewing methods provide important tools for examining the thought processes that affect the quality of answers provided to survey questions. We offer special expertise in developing cognitive interviewing protocols (including probes), recruiting participants, conducting interviews, and preparing reports with findings and recommendations for improving questionnaires.

Focus Groups

Focus groups are small groups of individuals assembled to discuss a particular topic under a moderator's direction. RTI's survey methodology staff have extensive experience conducting focus groups. We prepare topics for discussion, coordinate logistics, identify and recruit participants, moderate discussions, take notes, analyze data, and prepare reports, all tailored to project needs. We also offer in-house training for those who wish to learn more about the focus group process.

Usability Testing

RTI's survey methodologists are experienced in assessing computer-assisted, web-based, and mobile survey instruments from the user's perspective. Sophisticated video processing technology allows testers to synchronize a respondent's keyboard actions, facial expressions, and comments, and captures images from the respondent's screen to replay them simultaneously for review and analysis. In-depth observation allows RTI experts to recognize respondent problems such as nonverbal cues or other behaviors that suggest confusion or distress associated with the survey.

Nonresponse Analysis

RTI designs studies that measure and reduce the degree to which nonresponse may bias survey data. We develop response propensity models, which predict the likelihood of an individual, household, or other sampled unit participating in the survey. This information is useful to target cases with special survey methods or encouragement before initiating data collection efforts.

Translation and Cross-Cultural Survey Methods

RTI methodologists have the expertise in designing and managing surveys in cross-cultural settings. We are well-versed in study design, questionnaire development/pre-testing, cross-cultural methodology, managing in-country data collection, and coordinating multi-country projects. Our language methodologists have the expertise and training to translate, edit, and proof survey materials in Spanish, Chinese Mandarin and Cantonese, Korean, and other languages on various topics including education, information technology, and health. We can administer language proficiency protocols to field and telephone interviewers, conduct cognitive interviews or focus groups, lead interviewer trainings, and respond to incoming calls from non-English speaking respondents. We can also advise clients regarding issues related to Latin American and Asian cultures.

Use of Technology to Support Surveys

We design and develop innovative methods for conducting surveys and social research incorporating advances in social media, communications, and technology. Our staff is well versed in traditional methods of data collection while utilizing the latest methods of data capture (e.g., mobile devices) and modes (e.g., virtual worlds) to yield accurate measures.

More Information

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