DESCRIPTION

Featuring a timely presentation of total survey error (TSE), this edited volume introduces valuable tools for understanding and improving survey data quality in the context of evolving large-scale data sets.

This book provides an overview of the TSE framework and current TSE research as related to survey design, data collection, estimation, and analysis. It recognizes that survey data affects many public policy and business decisions and thus focuses on the framework for understanding and improving survey data quality. The book also addresses issues with data quality in official statistics and in social, opinion, and market research as these fields continue to evolve, leading to larger and messier data sets. This perspective challenges survey organizations to find ways to collect and process data more efficiently without sacrificing quality. The volume consists of the most up-to-date research and reporting from over 70 contributors representing the best academics and researchers from a range of fields. The chapters are broken out into five main sections: The Concept of TSE and the TSE Paradigm, Implications for Survey Design, Data Collection and Data Processing Applications, Evaluation and Improvement, and Estimation and Analysis. Each chapter introduces and examines multiple error sources, such as sampling error, measurement error, and nonresponse error, which often offer the greatest risks to data quality, while also encouraging readers not to lose sight of the less commonly studied error sources, such as coverage error, processing error, and specification error. The book also notes the relationships between errors and the ways in which efforts to reduce one type can increase another, resulting in an estimate with larger total error.

This book:
• Features various error sources, and the complex relationships between them, in 25 high-quality chapters on the most up-to-date research in the field of TSE

• Provides comprehensive reviews of the literature on error sources as well as data collection approaches and estimation methods to reduce their effects

• Presents examples of recent international events that demonstrate the effects of data error, the importance of survey data quality, and the real-world issues that arise from these errors

• Spans the four pillars of the total survey error paradigm (design, data collection, evaluation and analysis) to address key data quality issues in official statistics and survey research

Total Survey Error in Practice is a reference for survey researchers and data scientists in research areas that include social science, public opinion, public policy, and business. It can also be used as a textbook or supplementary material for a graduate-level course in survey research methods.

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