Survey participation and response

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Questionnaire-based data collection, relying either on classical ‘paper-and-pencil’ or on Internet-based survey approaches, is an economic and valuable means of eliciting information from respondents. Surveys are used in various research contexts, ranging from studies addressing very specific issues in small samples to those collecting representative, large-scale data with a view to deriving conclusions about prospective public policy measures. Typical examples of the latter – that is, of surveys that have potentially far-reaching implications for society – are the European Social Survey (ESS), which measures the attitudes, beliefs and behavior patterns of diverse populations in more than thirty countries; the European Values Study (EVS), a longitudinal survey research program on basic human values; and the OECD’s Programme for the International Assessment of Adult Competencies (PIAAC), which measures the key competencies needed for individuals to participate in society and for economies to prosper.

Regardless of the specific aim and scope of a survey, its quality depends on how well the whole process of survey participation and response is understood and duly addressed to optimize both the representativeness (i.e., external validity) and the measurement quality (i.e., construct validity) of the data collected. Accordingly, this special issue is devoted to selected topics pertaining to the two main sources of error in surveys that negatively impact quality: representativeness-related biases and systematic biases.

The first three articles in this special issue focus on survey (non-) participation as one representativeness-related source of error. “Implementation of the forced answering option within online surveys: Do higher item response rates come at the expense of participation and answer quality?” by Jean Philippe Décieux, Alexandra Mergener, Kristina Neufang, and Philipp Sischka demonstrates that forcing respondents to provide specific answers to survey questions can increase dropout rates and faking.

In their contribution entitled “The role of word frequencies in detecting unfamiliar terms and their effect on response quality,” Ana Slavec and Vasja

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Vehovar provide experimental evidence that the use of unfamiliar terms increases both the subjective perception of survey difficulty and dropout rates.

In their article “Person-fit statistics, response sets and survey participation in a population-based cohort study,” Jörg Michael Müller, Petra Hasselbach, Adrian Loerbroks, and Manfred Amelang describe an innovative statistical approach to evaluating the quality of responses and predicting future survey participation. In particular, the authors suggest using person-fit statistics to identify respondents whose answers are biased by response styles and to predict participation in follow-up studies.

In sum, a number of important recommendations for facilitating participation in surveys can be derived from this first set of articles: (1) Respondents should not be forced to provide specific answers to survey items, even if technology allows this to be done; (2) due care should be taken to use language appropriate to the survey population of interest; and (3) inter-individually varying response styles should be considered as an early indicator of future participation.

The second set of contributions, encompassing four articles, focuses on the quality of responses in surveys. In their article entitled “Investigating response order effects in web surveys using eye tracking”, Jan Karem Höhne and Timo Lenzner use contemporary unobtrusive eye tracking technology to investigate the occurrence and causes of response order effects in horizontal and vertical rating scales. Their data reveal that, when processing survey scales, respondents pursue satisficing strategies because they did not read all category labels, nor did they pay equal attention to all category levels. While the overall response order effects in rating scales were small in general, they tended to be more likely to occur in vertical rather than horizontal rating scales.

The contribution entitled “The use and positioning of clarification features in web surveys” by Anke Metzler, Tanja Kunz and Marek Fuchs addresses the question of where explanations of items should be positioned. The authors’ experimental findings indicate that clarification features are most effective when they are positioned after the question item stem, whereas placing clarification features before the question stem does not appear to be an effective strategy to improve the quality of responses.

The article “Controlling acquiescence bias in measurement invariance tests” by Julian Aichholzer demonstrates that acquiescence – that is, the tendency to agree to items regardless of their content – can bias responses and data quality. Based on two representative samples, the author demonstrates that measurement invariance tests cannot detect acquiescence and that it should therefore be controlled by other means, such as latent variable modelling.

In their article “The impact of frequency rating scale formats on the measurement of latent variables in web surveys - An experimental investigation using a measure of affectivity as an example” Natalja Menold and Christoph Kemper adopt an experimental approach and demonstrate that the response format of an item affects the reliability and validity of responses.

Overall, the following recommendations for improving the measurement quality of surveys can be derived from the second set of articles: (1) Horizontal
rating scales should be used by default, and account should be taken of the fact that respondents tend to process category labels superficially; (2) clarification features should be positioned at the end of a question stem; (3) rather than employing measurement invariance tests to detect acquiescence, approaches such as latent variable modeling should be used; and (4) the effects of response formats on reliability and validity should be taken into consideration.

Readers of psychology journals will most certainly find the seven articles in this special issue valuable. However, they might expect more theoretical reasoning and therefore conclude, in line with Goyder (1987, p.11), that “survey methodologists number among the least theoretically oriented of social scientists”. Yet, by focusing on the practical importance and hands-on conclusions from the findings of survey-based data collection, these contributions are fully in line with the prevailing pragmatic orientation in survey methodology. We see this orientation as an asset for methodologists in all fields of the behavioral and social sciences, and we are confident that this special issue will advance the goal of providing guidelines. Moreover, we hope that these articles will stimulate further discussion of the issues addressed and new research to fill the remaining gaps in the knowledge base.

As avenues for future research on issues related to survey participation and response, we recognize a need to take into account two streams of development: First, survey projects tend to increasingly enlarge their scope towards cross-national, cross-regional and cross-cultural research. Accordingly, increasing scholarly attention is being devoted to research on how to design items for multilingual contexts and on the extent to which data collected in different countries, regions, and cultures can actually be assumed to measure the intended constructs. A number of solutions have been developed. They include (1) the TRAPD approach (Harkness, 2003; Harkness et al., 2010) to developing multilingual survey questions, and (2) approaches to assessing the comparability of survey data across countries, regions, and cultures, such as structural equation modeling (Chen, 2007; Vandenberg & Lance, 2000) or Bayesian structural equation modeling (Davidov, Meuleman, Cieciuch, Schmidt, & Billiet, 2014; Muthen & Asporouhov, 2012). However, they all leave room for further improvement.

A second stream of development is the increasing use of access panels – that is, pools of individuals who have declared their willingness to participate in surveys (Callegaro, Baker, Bethlehem, Krosnick, & Lavrakas, 2014). Because most of these access panels are based on self-selected samples, concerns about sample quality have been raised, which have prompted the establishment of access panel infrastructures relying on random probability samples (see, for example, Blom et al., in press). The optimal design of these probability-based panels in view of different strategies of sample recruitment and survey mode implementation, and the best way to address measurement-related issues that emerge as a consequence of participants’ being engaged in surveys on a regular basis, represent new challenges for survey methodology (Bosnjak, Das, & Lynn, in press).
References


