Editorial: The Use of Open-ended Questions in Surveys

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Although Schuman (1966) had already recognized the advantages of implementing open-ended questions in the 1960's (in his case "random probes"), the proportion of open-ended questions administered in scientific surveys has declined significantly since the beginnings of survey research. The main reasons for this decline were that the disadvantages of collecting and, in particular, analyzing open-ended questions were thought to outweigh the advantages. On the one hand, open-ended questions are cognitively more demanding for the respondent than closed-ended questions and thus they increase the response burden (Bradburn, 1978). After all, respondents cannot rely on response categories provided to infer the question meaning (Smyth, Dillman, Christian, & McBride, 2009) or to remind them of themes they may otherwise not have thought of (Schwarz, 1999). Moreover, they have to formulate their answers in their own words (Keusch, 2014). On the other hand, open-ended questions are work-intensive for researchers because a coding schema needs to be developed and the qualitative text responses need to be coded, often manually. Thus, a general recommendation in survey research is to use open-ended questions sparingly.

In recent years, the value of open-ended questions has been rediscovered in survey research as there are various research situations where open-ended question can provide crucial information that closed-ended questions cannot deliver. To that end, Singer & Couper (2017) argued for implementing more open-ended questions and identified several fields of application: understanding reasons for reluctance or refusal; testing methodological theories and hypotheses; encouraging more truthful answers; providing an opportunity for feedback; and serving as an indicator of response quality. Additionally, they emphasized the benefit of giving respondents a voice during standardized interviews.

More recently, open-ended questions have been frequently used as part of web probing. In web probing, probing techniques derived from cognitive interviewing are implemented as (mainly) open-ended questions in web surveys. Web probing has been proven a valuable tool in evaluating comprehension and validity of questions: it allows investigating respondents' understanding of key terms or whole questions as well as their thought processes while answering (Lenzner & Neuert, 2017; Meitinger, 2017; Meitinger & Behr, 2016). In cross-cultural research, web probing has been used to assess the comparability of survey questions across different languages or cultural contexts (Behr at al., 2014; Braun et al., 2019). Responses to the open-ended probes provide vital information on respondents' potential need for clarification and how to improve the questions.

Another reason for the resurgence of open-ended questions relates to recent technological developments, which have reduced some of the challenges generally associated with open-ended questions. First and foremost, the possibility to collect data on web surveys has eliminated the need to transcribe the responses. Moreover, technological innovations help to automatically transcribe spoken language into textual responses (Revilla and Couper, 2019). Additionally, coding has been facilitated through novel technologies and software solutions that help to analyze large amounts of data (more or less) automatically (e.g., Schonlau and Couper, 2016). The full potential of these technological innovations for open-ended questions has not yet been explored. The extent to which these technologies can be successfully used for the collection and analysis of open-ended data is one of the insights we are aiming to address with this special issue. Hence, the objective of this special issue is to present and promote cutting-edge uses of open-ended questions in surveys and to understand their methodological and substantive implications.

The paper by Malte Luebker analyzes the effect of adding an open-ended probe on survey break-off and item non-response, and the meaningfulness of the answers in response to the probe. The probe was presented either on the same page as the survey question (embedded design) or separately on the following survey page (paging design). The findings revealed that the open-ended probe increased item non-response of the survey question in the embedded design and led to more survey break-offs in both the embedded and the paging design.

The paper by Alice Barth and Andreas Schmitz examines the combined effects of respondents and interviewers on response quality in open-ended questions. For their study, they use an open-ended question on associations with foreigners living in Germany from the ALLBUS 2016. They reveal that response quality in open-ended questions is driven by respondents' education, age, gender, motivation, and topic interest but is also influenced by interactions between interviewer and respondent characteristics.

The paper by Grace Kelly, Martina McKnight, and Dirk Schubotz analyzes comments of 16-year-old respondents of the longitudinal Young Life and Times

(YLT) survey on community relations in Northern Ireland. They show that a content analysis of the open-ended questions complements their quantitative findings but paints a more nuanced picture.

The paper by Zhoushanyue He and Matthias Schonlau investigates differences in how human coders and automated coders (statistical/ machine learning algorithms) code open-ended questions. They find that statistical learning algorithms and human coders make similar coding mistakes, i.e., they find the same answers difficult to code.

Overall, we believe that this special issue of MDA provides various important contributions demonstrating the various usages of open-ended questions. Moreover, we hope that it will inspire survey researchers to reflect on the benefits that open-ended questions could bring to their research.

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References

Behr, D., Braun, M., Kaczmirek, L., & Bandilla, W. (2014). Item comparability in cross-national surveys: Results from asking probing questions in cross-national web surveys about attitudes towards civil disobedience. *Quality & Quantity*, *48*(1), 127-148.

Braun, M., Behr, D., Meitinger, K., Raiber, K. & Repke, L. (2019). Using Web Probing to Elucidate Respondents' Understanding of 'Minorities' in Cross-Cultural Comparative Research. *ASK: Research and Methods* 28(1), 3-20.

Bradburn, N. (1978). Respondent burden. *Health Survey Research Methods, DHEW Publication No. (PHS), 79(3207)*, 35–40.

Keusch, F. (2014). The influence of answer box format on response behavior on list-style open-ended questions. *Journal of Survey Statistics and Methodology*, *2*(3), 305-322.

Lenzner, T., & Neuert, C. E. (2017). Pretesting Survey Questions Via Web Probing– Does it Produce Similar Results to Face-to-Face Cognitive Interviewing? *Survey Practice*, *10*(4), 2768.

Meitinger, K. (2017). Necessary but Insufficient: Why measurement invariance tests need online probing as a complementary tool. *Public Opinion Quarterly*, *81*(2), 447-472.

Meitinger, K., & Behr, D. (2016). Comparing cognitive interviewing and online probing: Do they find similar results? *Field Methods*, *28*(4), 363-380.

Revilla, M., & Couper, M. P. (2019). Improving the Use of Voice Recording in a Smartphone Survey. *Social Science Computer Review*, 0894439319888708.

Schonlau, M., Couper M. (2016) Semi-automated categorization of open-ended questions. Survey Research Methods. 10(2), 143-152.

Schwarz, N. (1999). Self-reports: how the questions shape the answers. *American psychologist*, *54*(2), 93.

Schuman, H. (1966). The random probe: a technique for evaluating the validity of closed questions. *American sociological review*, 218-222.

Singer, E., & Couper, M. P. (2017). Some methodological uses of responses to open questions and other verbatim comments in quantitative surveys. *Methods, data, analyses: a journal for quantitative methods and survey methodology (mda)*, *11*(2), 115-134.

Smyth, J. D., Dillman, D. A., Christian, L. M., & McBride, M. (2009). Open-ended questions in web surveys: Can increasing the size of answer boxes and providing extra verbal instructions improve response quality? *Public Opinion Quarterly*, *73*(2), 325-337.