# Afterword: Future Directions in Multinational, Multiregional, and Multicultural (3MC) Survey Research

Julie de Jong, Kristen Cibelli Hibben, and Jennifer Kelley
*University of Michigan*

Dorothée Behr
*GESIS – Leibniz Institute for the Social Sciences*

Language is central to the human experience, and its diversity and range of forms and expressions has produced a wealth of cultural output over the course of history. However, with this linguistic diversity come many challenges of communicating across cultural and linguistic groups. As noted by the editors in the preface of this volume, language is the medium through which the entire survey life cycle is carried out. The role of language and issues of language are particularly salient for multinational, multiregional, or multicultural (3MC) comparative surveys that are designed to collect data and compare findings from two or more populations (Johnson, Pennell, Stoop, & Dorer, 2019).

By their nature, 3MC surveys nearly always involve collecting data in more than one language, and the number of languages involved can be extensive. In this volume, Lau, Eckman, Kreysa, and Piper offer such an example, with case studies highlighting the experience of three linguistically diverse countries on the African continent in implementing the Afrobarometer survey. As most large societies have cultural and linguistic minorities, with considerable diversity among these groups and their relative sizes throughout the world (Harkness, Stange, Cibelli, Mohler, & Pennell, 2014), it is impossible to overstate the centrality of language and issues of language to achieving comparable results in cross-national and within-country cross-cultural survey research.

Much of the existing literature related to issues of language in the context of 3MC surveys has focused on translation and subsequent testing (e.g., Harkness, Van de Vijver, & Mohler, 2003; Harkness, Braun, et al., 2010; Park & Goerman, 2019; Goerman, Meyers, Sha, Park, & Schoua-Glusberg, 2019; Zavala-Rojas, Saris, & Gallhofer, 2019). The production of comparable

translations is an essential step in the process of collecting comparable survey data, with its own complexities that are often underestimated (for discussion, see the forthcoming report of the American Association for Public Opinion Research (AAPOR) and the World Association for Public Opinion Research (WAPOR) Task Force on Comparative Survey Quality). However, language and culture are deeply intertwined throughout each step of the survey process; several stages of the survey life cycle are particularly vulnerable to measurement error resulting from comparability issues, and issues of language at other stages of the survey life cycle have begun to receive more attention. For example, a chapter in a recent volume on advances in 3MC survey methods addresses the issue of survey languages and how the choice of interview language is handled (Andreekova, 2019), and another addresses the language of administration in surveys of bilingual, bicultural respondents (Peytcheva, 2019). The chapters in the current volume reflect further advancement in this area and highlight the critical need to consider a range of issues pertaining to language at various aspects and stages of 3MC survey design and implementation.

In the following, we relate each of the chapters to the main aspect or stage of the survey life cycle addressed, note the key findings or take-away points, suggest next steps or new approaches from the authors, and offer additional possibilities for expanding the research agenda and innovation in methods. We conclude with a discussion of developments vis-à-vis language in the field of 3MC survey research.

## Theory

Work by psychologists and survey methodologists on the cognitive and communication processes underlying survey response contributed essential theoretical groundwork for the field of survey methodology (see, for example, Schwarz, 1999; Sirken, Schechter, Schwarz, Tanur, & Tourangeau, 1999; Sudman, Bradburn, & Schwarz, 1996; Tourangeau, Rips, & Rasinski, 2000). Later efforts integrated cross-cultural concerns by examining cultural differences in how information is processed and its implications for survey response (Schwarz, Oyserman, & Peytcheva, 2010; Uskul, Oyserman, & Schwarz, 2010). However, missing in these discussions is specific mention of the role that language may play in influencing cognition and relevant aspects of the survey response. In Chapter 1, Peytcheva fills this gap by presenting a theoretical framework that maps cognitive mechanisms related to language, such as cultural frame switching and language-dependent recall, to the

survey response process**,** concluding that these mechanisms "may simultaneously play a role at each step" of the response process. She notes several practical recommendations, including the need for better understanding of the different response strategies at play, which are dependent on the cultural identity primed by the language of interview, as well as further investigation to test some of the associated theories. Becoming ever more common, survey research in multicultural and multilingual societies stands to benefit greatly from this line of research.

More broadly, further development of theory is crucial to the future of 3MC surveys, as discussed in a recent volume on 3MC survey methods (Johnson et al., 2019) and the forthcoming AAPOR/WAPOR Task Force Report on Comparative Survey Quality. Work is needed to develop and test a generalizable model or framework of how cultural variations in cognition, social norms, and language may interact with external variables such as characteristics of the interviewer, the interview setting, the sponsoring and implementing organizations, and the language of the interview to affect survey response and error processes. Theory developed by Schwarz et al. (2010) and Uskul et al. (2010) integrating culture in survey response models and by Peytcheva (this volume) addressing cognitive mechanisms related to language in survey response are important first steps. Yet we are still in the early stages. Fundamental theoretical debate continues about how culture should be conceptualized, the dimensions of culture, and the extent to which culture can be viewed as an explanatory variable or variables (Wyer, 2013). For more detailed discussion, see Pennell and Cibelli Hibben (2016) and the forthcoming report of the AAPOR/WAPOR Task Force on Comparative Survey Quality.

The relationship between culture, language, and thought also remains an important topic (Imai, Kanero, & Masuda, 2016). Researchers in cultural psychology, cognitive psychology, linguistics, and related disciplines grapple with similar big picture questions, but communication and collaboration across disciplines is rare. Only recently, for example, have cultural psychology and cognitive psychology begun to see more collaboration in work and sharing of ideas on the relationships between culture, language, and thought (Imai et al., 2016). Similar further collaboration between survey methodologists, cultural psychologists, and researchers in related fields is required to create interdisciplinary theoretical frameworks for the survey response process and other stages and areas of the survey life cycle to

strengthen the theoretical underpinnings, science, and in turn, practice of 3MC surveys.

## Study Design

The challenge in 3MC surveys is to determine the optimal balance between local implementation of a design within each country or culture that will also optimize comparison across countries or cultures, while assessing the limitations posed by available resources, budget, and research capacity of individual study countries (for further discussion, see Pennell, Cibelli Hibben, Lyberg, Mohler, & Worku, 2017; and Pennell & Cibelli Hibben, 2016). One such decision concerns the number of languages in which a survey is offered and the resulting implications on the extent to which the data are representative of the population. The definition of the target population and the associated issue of language in a 3MC study can affect multiple potential sources of both measurement and representation errors within the total survey error (TSE) framework and comparability (for a general discussion of TSE, see Groves et al., 2009; for TSE in the context of 3MC, see Pennell et al., 2017; and Smith, 2011, 2018). Some countries may exclude language groups at the sampling stage, thereby introducing noncoverage error. Others may exclude these populations at the data collection stage, thereby introducing nonresponse error (Lepkowski, 2005). Differences in how members of language groups are handled can result in sample designs with highly divergent coverage properties.

In Chapter 6, Heck-Grossek and Dardha analyze data from European Social Survey (ESS) contact information sheets in several countries to examine potential differences in dwelling and area characteristics between sampled units with and without a language barrier, determining that, overall, households with at least one person who has a language barrier are more likely to live in lower socioeconomic conditions than those with no language barrier. The results demonstrate that exclusions due to language barriers could be a potential source of bias for some ESS estimates. The authors suggest expansion of future analysis to other ESS data and additional collection of auxiliary data on excluded units to assess inclusion feasibility. Future research design may also include a nonresponse bias study, whereby interviewers return to a sample of excluded households and administer an abbreviated version of the full questionnaire. The shortened questionnaire would focus on measures on which nonresponding households could be expected to differ from responding households, with the instrument

translated into the most common languages spoken by those with language barriers. In practice, Heck-Grossek and Dardha's work demonstrates the importance of considering potential adverse effects of language barriers depending on the particular survey topic and outcomes of interest.

## Questionnaire Design and Translation

The understanding of how language and culture affect the response process has led to the introduction of new methodologies to evaluate commonly used translations. In Chapter 4, Lee, Hu, Liu, and Kelley explore the impact of translation on conceptual understanding of response scales, demonstrating how such experimental data can be used for evaluating translation through quantitative methods rather than the more oft-used qualitative approach. Moreover, their research shows (in line with Chapter 1) that the interview language of bilinguals impacts survey data. Side-stepping, to some extent, the issue of translation altogether, Sedley, Yang, and Paxton (Chapter 12) offer another approach to the challenge noted by Lee et al. through the use of pictorial scales with emojis as anchoring points rather than written language. While there has been limited research on similar approaches in monolingual studies (Cernat & Liu, 2019; Emde & Fuchs, 2012; Stange, Barry, Smyth, & Olson, 2018), results have been mixed. However, this approach has the potential to minimize measurement error introduced during the translation process in 3MC surveys. Additional experimental research on construct validity in a comparative setting, and particularly among respondents with varying degrees of literacy, would be beneficial in understanding the full utility of this pictorial approach and what disadvantages might arise vis-á-vis translated response categories.

The use of appropriate translation procedures and adequately skilled translation teams is crucial for producing high-quality and comparable translations. State-of-the art translation procedures (e.g., Harkness, 2003; Pan & de la Puente, 2005) include team-based methods focusing on the translation itself, thereby excluding back translation. Using back translation, nevertheless, is a prevalent translation approach. Both Lor and Gao (Chapter 9) and Congost-Maestre and Lor (Chapter 10) provide critiques of this approach. The former demonstrate how back translation is an ineffective method for evaluating the translation of qualitative interview questions, while the latter share similar evidence from an assessment of a widely used health survey. The authors argue that a better understanding of the impact of different translations on the resulting data will lead to improved translation

processes and ultimately higher data quality. These chapters add to a growing consensus that back translation provides limited or misleading insights (Behr, 2017; Bolaños-Medina & González-Ruiz, 2012; Colina, Marrone, Ingram, & Sánchez, 2017; Douglas & Craig, 2007; Harkness, 2003; Harkness, Pennell, & Schoua-Glusberg, 2004; see also the forthcoming report of the AAPOR/ WAPOR Task Force on Comparative Survey Quality). Nonetheless, calls have been made for further research to investigate empirically different translation and translation assessment procedures (e.g., various TRAPD implementations or the use of back translations in certain situations) and to assess the extent to which these procedures can contribute to translation quality and comparability (e.g., through quality rating or empirical tests and by applying a sociolinguistics framework). Further assessment of the translations of widely used survey instruments, particularly in the area of health research, is critical to improving data quality.

## Pretesting

In the effort to increase comparability across populations, pretesting plays an essential role by allowing identification and potential reduction of measurement error in 3MC surveys. In Chapter 7, Aizpurua reviews a number of pretesting methods commonly used in 3MC surveys and distinguishes among methods that strive to account for heterogeneity of language, while also noting the lack of agreement regarding best practices for pretesting design and implementation. Establishing minimum standards for pretesting in 3MC surveys and investigating the relative effectiveness of question evaluation methods or combinations thereof in detecting problems in the 3MC context are much needed. Further, research-specific approaches that combine quantitative and qualitative pretesting methods and investigate the possibilities of transitioning from qualitative identification of problems to quantification of prevalence are also needed in 3MC research.

In Chapter 8, Sha, Park, Pan, and Kim consider the role that language plays in the specific pretesting method of the focus group. By conducting both quantitative and qualitative analyses to illustrate focus group participants' verbal behaviors, they uncovered observable patterns of interaction across different language groups that may, in turn, affect the efficacy of the focus group as a means of pretesting in a 3MC context. The authors provide practical recommendations for how these differences can be mitigated to

increase the effectiveness of focus groups. Furthermore, they argue that understanding the resultant impact on quality with particular language or cultural groups is essential. As noted previously, it would also be beneficial to compare the effectiveness of focus groups with other forms of pretesting in the 3MC context.

## Respondent/Interviewer Interactions

Language barriers have the potential to affect interviewer/respondent interaction and rapport. In addition, they also impact how (or whether) the interviewer is able to complete their key tasks such as contacting the household, selecting the respondent, motivating the respondent to participate, and accurately recording the respondent's answers, among others.

In Chapter 2, Kapousouz, Johnson, and Holbrook examine interviewer- and respondent-level variables that can predict whether respondents ask for clarification on deliberately problematic questions in a cross-cultural study, as well as differences that may exist depending on whether the primary or secondary language is used and the level of acculturation to American culture. The authors intend to conduct future exploratory analyses examining cultural similarities and differences in the survey response process. In Chapter 5, Lau, Eckman, Sevilla-Kreysa, and Piper investigate the choice of interview language in relation to the respondent's and the interviewer's first language. Future research should examine other ways in which language can impact the respondent's and interviewer's behavior during both the interview and the contact process and any implications for error. Finally, research should focus on development of interviewer training and protocols to standardize how interviewers navigate language challenges and language choice in interviews in 3MC surveys.

Dandapani offers a possible alternative solution to language challenges in her review of the chatbot survey in Chapter 11. A chatbot survey can be seen as harnessing a new type of language and communication style and can provide a consistent and documented interaction with the respondent. However, while there has been limited research in monolingual surveys on other technologies that try to remove the effect of the interviewer (Conrad & Schober, 2008; Conrad et al., 2008, 2015; Lind, Schober, Conrad, & Reichert, 2013), little is known about whether such technology can be successfully implemented in other cultures and whether there will be any systematic introduction of measurement error, particularly in 3MC surveys.

## Nonresponse and Data Quality

Language can lead to differences in use of survey mode when multiple data collection modes are offered, potentially leading to bias in the statistics of interest and lower data quality. In Chapter 3, Smalley explores the effects of the household language on mode and finds significant difference in mode choice by language group. This finding supports the argument of de Leeuw, Suzer-Gurtekin, and Hox (2019) that 3MC mixed-mode surveys where multiple languages are offered are likely to increase measurement error due to the additive complexity when multiple modes and languages are combined. One could also argue that it is not only languages that should be taken into account when selecting mode, but other culturally relevant factors (e.g., literacy rates, culturally sensitive topics) that could differentially impact measurement error depending on the type of mode selected and survey languages offered.

## Future Directions

Many strategic regional and global decisions on important societal issues, including health, poverty, economics, education, and family planning, are based on 3MC data. Yet ample evidence suggests that the comparability of such data is not optimized and in some cases is even significantly jeopardized, in part due to challenges presented by linguistic and cultural heterogeneity. Fortunately, important work is currently underway to address these issues, as there is growing recognition of the urgent need to expand the research agenda regarding issues of language throughout the survey life cycle.

The Comparative Survey Design and Implementation (CSDI) initiative arose nearly two decades ago in a coordinated effort to establish an annual workshop on comparative survey. CSDI has met annually since 2003 and has fueled the advancement of ideas such as TRAPD as a leading approach to translation (Harkness, 2003; Harkness et al., 2004; Harkness, Villar, & Edwards, 2010; Mohler, Dorer, De Jong, & Hu, 2016). Other initiatives generated by the CSDI executive committee include two large international conferences on survey methods in 3MC contexts, with a resulting monograph in 2010 (Harkness, Braun, et al., 2010) that won the 2013 AAPOR book award and another monograph in 2019 (Johnson et al., 2019). CSDI members also produced a free, comprehensive online resource, the Cross-Cultural Survey

Guidelines (http://ccsg.isr.umich.edu/) and a series of short online courses on international survey research (https://ccb.isr.umich.edu/) hosted by the Survey Research Center at the University of Michigan.

The momentum created by CSDI also led 3MC research to be recognized as an important topic by major national and international organizations. Both the National Center for Education Statistics and the Organisation for Economic Co-operation and Development have organized seminars in the past two years revolving around the challenges of 3MC surveys. Moreover, in its annual meeting, AAPOR now has a session stream labeled 3MC and a cross-cultural and multilingual affinity group and has jointly initiated a task force on 3MC survey quality with WAPOR. On a regional level, a European initiative called Synergies for Europe's Research Infrastructures in the Social Sciences (SERISS) was formed to bring together European 3MC survey networks, with funding from the European Union's Horizon 2020 research program. The objective of SERISS was to address key challenges facing cross-national data collection in Europe by focusing on practical issues rather than theory building. Meanwhile, work has begun on the successor to SERISS—The Social Sciences and Humanities Open Cloud (SSHOC), also funded by the European Union. Issues surrounding the role of language have featured across all of these resources and initiatives.

There is ample evidence that 3MC surveys are increasing in number, geographic spread, and topic coverage (Cibelli Hibben, Pennell, Hughes, Lin, & Kelley, 2019; Smith, 2010; Smith & Fu, 2014). The potential impact of the data collected in 3MC surveys is perhaps more significant than ever (Johnson et al., 2019). Large-scale surveys and harmonized data studies provide cross-national data and official statistics for key public domains, including education testing, health, labor statistics, population demographics, and economic indicators (Lyberg, Japec, & Tangur, 2019; Smith, 2010). The comparability of data collected in 3MC surveys is essential for advancing social science research, isolating the role of contextual factors in explaining complex human behaviors and attitude formation, and establishing "ranking" of the participating sites (e.g., countries) so that local needs are identified and local interventions are implemented. As globalization further diversifies populations, researchers' needs for tools to address the challenges arising from culture and language when studying these issues will only intensify.

# References

Andreekova, A. (2019). How to choose interview language in different countries. In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)* (pp. 295–324). Hoboken, NJ: John Wiley & Sons.

Behr, D. (2017). Assessing the use of back translation: The shortcomings of back translation as a quality testing method. *International Journal of Social Research Methodology*, *20*(6), 573–584.

Bolaños-Medina, A., & González-Ruiz, V. (2012). Deconstructing the translation of psychological tests. *Meta: Journal Des Traducteurs/Meta: Translators' Journal*, *57*(3), 715–739.

Cernat, A., & Liu, M. (2019). Radio buttons in web surveys: Searching for alternatives. *International Journal of Market Research*, *61*(3), 266–286.

Cibelli Hibben, K. L., Pennell, B.-E., Hughes, S. M., Lin, Y., & Kelley, J. (2019). Data collection in cross-national and international surveys: Regional case studies. In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)* (pp. 521–532). Hoboken, NJ: John Wiley & Sons.

Colina, S., Marrone, N., Ingram, M., & Sánchez, D. (2017). Translation quality assessment in health research: A functionalist alternative to back-translation. *Evaluation & the Health Professions*, *40*(3), 267–293.

Conrad, F. G., & Schober, M. F. (Eds.), (2008). *Envisioning the survey interview of the future*. Hoboken, NJ: John Wiley & Sons.

Conrad, F. G., Schober, M. F., Jans, M., Orlowski, R., Nielsen, D., & Levenstein, R. (2008, May). *Features of animacy in virtual interviewers*. Presented at the American Association for Public Opinion Research Annual Conference, New Orleans, LA.

Conrad, F. G., Schober, M. F., Jans, M., Orlowski, R. A., Nielsen, D., & Levenstein, R. (2015). Comprehension and engagement in survey interviews with virtual agents. *Frontiers in Psychology*, *6*, 1578.

de Leeuw, E. D., Suzer-Gurtekin, T. Z., & Hox, J. J. (2019). The design and implementation of mixed-mode surveys. In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)* (pp. 387–408). Hoboken, NJ: John Wiley & Sons.

Douglas, S. P., & Craig, C. S. (2007). Collaborative and iterative translation: An alternative approach to back translation. *Journal of International Marketing, 15*(1), 30–43.

Emde, M., & Fuchs, M. (2012). Exploring animated faces scales in web surveys: Drawbacks and prospects. *Survey Practice*, *5*(1), 1–6.

Goerman, P. L., Meyers, M., Sha, M., Park, H., & Schoua-Glusberg, A. S. (2019). Working toward comparable meaning of different language versions of survey instruments: Do monolingual and bilingual cognitive testing respondents help us uncover the same issues? In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)* (pp. 251–269). Hoboken, NJ: John Wiley & Sons.

Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2009). *Survey methodology*. Hoboken, NJ: John Wiley & Sons.

Harkness, J. A. (2003). Questionnaire translation. In J. A. Harkness, F. J. R. Van de Vijver, & P. Ph. Mohler (Eds.), *Cross-cultural survey methods* (pp. 35–54). Hoboken, NJ: Wiley-Interscience.

Harkness, J. A., Braun, M., Edwards, B., Johnson, T. P., Lyberg, L. E., Mohler, P. Ph., … Smith, T. W. (Eds.). (2010). *Survey methods in multinational, multiregional, and multicultural contexts*. Hoboken, NJ: John Wiley & Sons.

Harkness, J. A., Pennell, B.-E., & Schoua-Glusberg, A. (2004). Survey questionnaire translation and assessment. In S. Presser, J. M. Rothgeb, M. P. Couper, J. T. Lessler, E. Martin, J. Martin, & E. Singer (Eds.), *Methods for testing and evaluating survey questionnaires* (pp. 453–473). Hoboken, NJ: John Wiley & Sons.

Harkness, J. A., Stange, M., Cibelli, K. L., Mohler, P. Ph., & Pennell, B.-E. (2014). Surveying cultural and linguistic minorities. In R. Tourangeau, B. Edwards, T. P. Johnson, K. Wolter, & N. Bates (Eds.), *Hard-to-survey populations*. Cambridge, UK: Cambridge University Press.

Harkness, J., Van de Vijver, F. J. R., & Mohler, P. Ph. (Eds.). (2003). *Cross-cultural survey methods*. Hoboken, NJ: Wiley-Interscience.

Harkness, J. A., Villar, A., & Edwards, B. (2010). Translation, adaptation, and design. In J. A. Harkness, M. Braun, B. Edwards, T. P. Johnson, L. E. Lyberg, P. Ph. Mohler, B.-E. Pennell, & T. W. Smith (Eds.), *Survey methods in multinational, multiregional, and multicultural contexts* (pp. 115–140). Hoboken, NJ: John Wiley & Sons.

Imai, M., Kanero, J., & Masuda, T. (2016). The relation between language, culture, and thought. *Current Opinion in Psychology*, *8*, 70–77.

Johnson, T. P., Pennell, B.-E., Stoop, I. A. L., & Dorer, B. (Eds.). (2019). *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)*. Hoboken, NJ: John Wiley & Sons.

Lepkowski, J. M. (2005). Non-observation error in household surveys in developing countries. In *Series F No. 96. Household sample surveys in developing and transition countries* (pp. 149–169). New York, NY: United Nations.

Lind, L. H., Schober, M., Conrad, F. G., & Reichert, H. (2013). Why do survey respondents disclose more when computers ask the questions? *Public Opinion Quarterly*, *77*(4), 888–935.

Lyberg, L., Japec, L., & Tangur, C. (2019). Prevailing issues and the future of comparative surveys. In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)* (pp. 1055–1077). Hoboken, NJ: John Wiley & Sons.

Mohler, P. Ph., Dorer, B., De Jong, J., & Hu, M. (2016). *Translation: Overview* (Guidelines for best practice in cross-cultural surveys). Survey Research Center, Institute for Social Research, University of Michigan. Retrieved from http://www.ccsg.isr.umich.edu/

Pan, Y., & de la Puente, M. (2005). *Census Bureau guidelines for the translation of data collection instruments and supporting materials: Documentation on how the guideline was developed*. Washington, DC: US Bureau of the Census, Statistical Research Division.

Park, H., & Goerman, P. L. (2019). Setting up the cognitive interview task for non-English speaking participants in the U.S. In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)* (pp. 227–249). Hoboken, NJ: John Wiley & Sons.

Pennell, B.-E., & Cibelli Hibben, K. L. (2016). Surveying in multicultural and multinational contexts. In C. Wolf, D. Joye, T. W. Smith, & Y. Fu (Eds.), *Handbook of survey methodology* (pp. 157–177). London, UK: SAGE.

Pennell, B.-E., Cibelli Hibben, K. L., Lyberg, L., Mohler, P. Ph., & Worku, G. (2017). A total survey error perspective on surveys in multinational, multiregional, and multicultural contexts. In P. Biemer, E. De Leeuw, S. Eckman, B. Edwards, F. Kreuter, L. Lyberg, C. Tucker, & B. T. West (Eds.), *Total survey error in practice*. New York, NY: John Wiley & Sons.

Peytcheva, E. (2019). Can the language of survey administration influence respondents' answers? In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)* (pp. 325–340). Hoboken, NJ: John Wiley & Sons.

Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist*, *54*, 93–105.

Schwarz, N., Oyserman, D., & Peytcheva, E. (2010). Cognition, communication, and culture: Implications for the survey response process. In J. A. Harkness, M. Braun, B. Edwards, T. P. Johnson, L. Lyberg, P. Ph. Mohler, B.-E. Pennell, & T. W. Smith (Eds.), *Survey methods in multinational, multiregional, and multicultural contexts* (pp. 175–190). Hoboken, NJ: John Wiley & Sons.

Sirken, M., Schechter, S., Schwarz, N., Tanur, J., & Tourangeau, R. (Eds.), (1999). *Cognition and survey research*. New York, NY: John Wiley & Sons.

Smith, T. W. (2010). The globalization of survey search. In J. A. Harkness, M. Braun, B. Edwards, T. P. Johnson, L. Lyberg, P.-Ph. Mohler, B.-E. Pennell, & T. W. Smith (Eds.), *Survey methods in multinational, multiregional, and multicultural contexts* (pp. 477–484). Hoboken, NJ: Wiley.

Smith, T. W. (2011). Refining the total survey error perspective. *International Journal of Public Opinion Research*, *23*(4), 464–484.

Smith, T. W. (2018). Improving multinational, multiregional, and multicultural (3MC) comparability using the total survey error (TSE) paradigm. In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional, and multicultural contexts (3MC)* (pp. 13–43). Hoboken, NJ: John Wiley & Sons.

Smith, T. W., & Fu, Y.-C. (2014). *The globalization of surveys* (Cross-National Report No. 34). The General Social Survey. Chicago, IL: National Opinion Research Center.

Stange, M., Barry, A., Smyth, J., & Olson, K. (2018). Effects of smiley face scales on visual processing of satisfaction questions in web surveys. *Social Science Computer Review*, *36*(6), 756–766.

Sudman, S., Bradburn, N. M., & Schwarz, N. (1996). *Thinking about answers: The application of cognitive processes to survey methodology.* San Francisco, CA: Jossey-Bass.

Tourangeau, R., Rips, L. J., & Rasinski, K. A. (2000). *The psychology of survey response*. Cambridge, UK: Cambridge University Press.

Uskul, A. K., Oyserman, D., & Schwarz, N. (2010). Cultural emphasis on honor, modesty, or self-enhancement: Implications for the survey-response process. In J. A. Harkness, M. Braun, B. Edwards, T. P. Johnson, L. Lyberg, P. Ph. Mohler, B.-E. Pennell, & T. W. Smith (Eds.), *Survey methods in multinational, multiregional, and multicultural contexts* (pp. 191–201). Hoboken, NJ: John Wiley & Sons.

Wyer, R. S. (2013). Culture and information processing: A conceptual integration. In R. S. Wyer, C. Chiu, & Y. Hong (Eds.), *Understanding culture: Theory, research, and application*. New York, NY: Psychology Press.

Zavala-Rojas, D., Saris, W. E., & Gallhofer, I. (2019). Preventing differences in translated survey items using the Survey Quality Predictor. In T. P. Johnson, B.-E. Pennell, I. A. L. Stoop, & B. Dorer (Eds.), *Advances in comparative survey methods: Multinational, multiregional and multicultural contexts (3MC)* (pp. 357–384). Hoboken, NJ: John Wiley & Sons.