INTERCULTURAL SURVEY RESEARCH: CHALLENGES AND SUGGESTED SOLUTIONS*

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1. Introduction

When conducting inter- and cross-cultural research projects, scholars face a myriad of challenges that reach beyond those encountered in domestic research. In this chapter, we describe the challenges related to doing international survey research and provide possible solutions, thus putting forward suggestions for improving the quality of international survey research.

Whereas intercultural investigation is not limited to survey research and includes a range of other quantitative and also qualitative methods of data collection (see Marschan-Piekkari and Welch, 2004 for a good overview), we focus our discussion on the collection of intercultural data through questionnaires. We will structure our discussion along the various stages of a research project, referring to study population and data access, survey development, data collection, data analysis, and finally publication of the results.

2. Study Population and Data Access

The survey population is a crucial concept in empirical research as it determines the set of entities from which the sample can be drawn and affects both the internal and external validity of a study’s results. Internal validity refers to the extent to which the manipulation of an independent variable is the sole cause of change in a dependent variable. In contrast, external validity concerns the generalisability of the results.

Internal validity is threatened if the observed results are influenced by the confounding effects of extraneous variables. To control for possible extraneous variation, it is important to select a homogenous population. In this vein, Sekaran (1983) highlights the use of matched samples that are functionally equivalent across the countries of interest. External validity is at risk if the selected sample fails to adequately represent the larger population. Using a stratified random sample can mitigate this risk, for example by ensuring relative representation of respondents across different social classes or religious groups in each country under study (e.g., Tsui, Nifadkar, and Ou, 2007).

Any research project is also dependent on access to sufficient data to address the research question(s) of interest. In an intercultural research context, data access concerns not only securing an appropriate sample, but also ensuring that all data can be feasibly collected given the additional cost that are involved in cross-border mail, telephone and fax correspondence. A systematic way to identify all organisations that form part of the target population is the use of data bases with information on company profiles and contact details. Commercial organisations such as D&B are also able to supply a list of addresses conforming to a specific set of requirements. Furthermore, international professional organisations or consulting firms can be contacted. However, compiling a comprehensive database of for instance multinational corporations is not an easy task and researchers using only a single database might well find that more than half of their questionnaires do not reach the target population.
As managing directors rotate frequently, it is advisable to confirm the personal details prior to sending out the request (Harzing, 1999). Alternatively, one can simply address the survey to “The Managing Director” or “The HRM Director”. However, this is likely to further reduce the already low response rates in “cold call” international mail surveys.

The inclusion of local collaborators in the countries of interest not only serves as an additional means to gain access to local companies but also helps to provide additional credibility to the research project in the local context (Harzing et al., 2005), manage the international data collection process and help with the interpretation of culture-specific findings (Harpaz, 2003).

**Summary of suggestions**

For the first stage of international survey research – determining the study population and gaining data access – we recommend using matched samples in combination with appropriate control variables to ensure internal validity, developing a stratified random sample to ensure external validity, accessing multiple databases with information on company profiles and respective contact details to construct the target sample, allowing sufficient time to obtain and verify these contact details, and involving local collaborators.

### 3. Survey Development

When developing a survey, three methodological issues require special attention in an international research context: (1) choice of survey type, (2) item generation, and (3) survey language(s).

#### 3.1 Survey Type

Surveys can be conducted by face-to-face interview, telephone, fax, mail and internet. In the case of large-scale international survey research, both face-to-face and telephone interviews are usually not feasible in terms of language difficulties, time differences and the costs involved. The rapidly declining fax usage means they are even less likely to be effective these days. These limitations have led the majority of international researchers to rely on either paper-and-pencil surveys administered by postal mail or internet surveys.

Traditional mail surveys are not without problems, however. Mailing times and costs can be substantial. Therefore, researchers increasingly emphasise the use of email and internet-based surveys as an effective alternative (Dillman, 2006; Hewson et al., 2003). Generally, surveys administered via the internet offer several advantages over paper-and-pencil surveys. Internet-based questionnaire distribution involves lower cost as well as higher transmission and response speed, which is of particular importance in an international research context. This is especially true if invitations to participate in the survey are sent by email. In addition, web-based surveying entails time and cost savings with regard to data entry and reduces the risk of data entry errors as respondent data can be automatically transformed into a format ready for analysis (Hewson et al., 2003).

However, potential technical problems in internet surveys should not be underestimated. Researchers need to ensure questionnaires can be read on a variety of screen sizes and in a variety of different internet browsers. Designing a survey in different languages can be challenging as different languages need different amounts of physical space. Frequent checking and double-checking by native speakers is required. Imagine for instance having to
decide whether or not Chinese characters in a scale anchor can be spread over two lines if you have no idea what they mean, or even whether they represent one word or several!

The overall conclusion from the literature on comparing response rates (e.g., Fricker and Schonlau, 2002) is that online response rates are lower than response rates to mail surveys. Given the challenges of achieving high response in international surveys, especially with managerial populations, a mixed approach might offer the best result.

3.2 Item Generation

Questionnaire design involves the decision about which items will best reflect the underlying construct the researcher wishes to measure. Although a wealth of existing scales is available for measuring constructs in the management discipline, these scales may not be easily transferable to a different cultural context. Implicit to this argument is the issue of construct equivalence in intercultural research referred to earlier (see Hult et al., 2008 for a review on construct equivalence in intercultural international business research).

In general, whether construct equivalence can be established is contingent upon the type of perspective the researcher takes towards the study of culture, namely emic or etic. The emic approach emphasises the intrinsic cultural distinctions that are meaningful to the members of a given society, whereas the etic perspective attempts to derive commonalities between cultures. Therefore, when the research project follows an emic approach, it will be restricted to uni-cultural or polycentric inquiry (Peng, Peterson, and Shyi, 1991). Ethnographic studies serve as a key method to address such research issues. In contrast, survey research is primarily useful for etic considerations as it allows for intercultural comparisons.

Even in the case of an etic research perspective, establishing construct equivalence encompasses various difficulties. For example, Adler, Campbell and Laurent (1989) failed to validly and reliably describe management behaviour in China as some of their measurement items contained the Western notion of ‘truth’ which has different connotations in Confucian philosophy. Thus, a construct can only be meaningfully measured across cultures if it is based on a universally applicable concept in these cultures, that is, is conceptually equivalent. In many cases the original scale will need to be re-constructed and existing items complemented with additional questions to appropriately capture the underlying construct. Again, the use of multinational research teams whose members are familiar with the respective local cultures may help to overcome problems related to adapting measurement scales (Harpaz, 2003). However, country-specific adaptation by necessity reduces intercultural comparability. The feasibility of modifying existing scales to accommodate for cultural specificities is therefore limited if data from a larger amount of countries are to be compared. In that case, the collection of qualitative data, for example through interviews, can compensate for the inherent limitations of survey data. Triangulation can thus increase the robustness of the data gathered.

3.3 Survey Language

The choice of survey language should be primarily determined by respondents’ language proficiencies. In the case of surveying MNCs’ managerial employees who are likely to possess a sufficient level of English, the use of single-language surveys in English may be adequate. However, research has also shown that the use of English-language questionnaires might create a language bias. Important differences between countries are obscured through reduced variance in responses between countries, caused by cultural accommodation
(Harzing et al., 2005) or by a lack of the respondent’s confidence in responding in a non-native language (Harzing, 2006). Further research even showed that the language of the questionnaire can impact not just attitudes, but also behaviours (Akkermans, Harzing, and van Witteloostuijn, 2010). Finally, translation might also have a symbolic effect. Even if respondents are comfortable with English, translation demonstrates to the respondent that the researcher has gone through the effort and expense to make responding as easy as possible. This might well influence response rates.

As many concepts and terms entail culture-specific connotations, their mere direct translation is unlikely to transport the intended meaning. Without clearly specifying the intended meaning of the concept in the translated questionnaire, the researcher risks introducing systematic bias. A meaningful translation of the original version of the questionnaire requires a researcher not only to ensure overall conceptual equivalence but also to consider vocabulary, idiomatic and syntactical equivalence (Sekaran, 1983). In this vein, Brislin (1980) has suggested to use simple sentence structures as well as clear and familiar wording as much as possible to facilitate translation.

The most frequently employed translation technique is back-translation (Brislin, 1970). In this procedure, the original version of the questionnaire is translated into the target language and subsequently translated back into the source language by a second bilingual person. The use of two independent translators increases the chances that the original meaning has been retained, ensures literal accuracy and helps to detect mistakes. However, given the earlier notion that corresponding concepts may not always exist in another language, back-translation does not guarantee overall conceptual equivalence (Peng, Peterson, and Shyi, 1991). Furthermore, the more the translation is adapted to the specific local context (emic perspective), the more the comparability between countries and questionnaire versions is compromised (etic perspective).

Harpaz (2003) identifies two additional translation techniques: bilingual method and committee procedure. The former approach involves sending the original and the translated questionnaire to bilingual individuals and subsequently correcting items based on inconsistencies in their responses. In contrast, in the latter approach a committee consisting of bilingual individuals translates the questionnaire jointly and discusses possible mistakes or difficulties. Finally, pilot testing is particularly important in international research.

**Summary of suggestions**

We recommend the following best practices in the development of international surveys. In terms of the choice of survey type, it is advisable to obtain help from native speakers in designing the survey, ask locals to check and test the survey, and combine both paper-and-pencil and online surveys to increase response rates. To generate survey items, it is important to first decide whether the research project is emic or etic in nature. Whereas the former case requires the adaptation of existing and development of new items, in the latter case this may be unfeasible when interested in intercultural comparability. Instead, researchers should collect additional qualitative data to triangulate the study results. Finally, several translation techniques exist to adapt the survey to the local language of the countries it is diffused. Simple sentence structures should be used to facilitate translation, and additional clarifications provided to better convey the intended meaning of certain questions. It is also important to pilot test the survey in each country.
4. Survey Process and Response Rates

Similar to survey development, the survey and data collection process is also likely to require substantially more time than in domestic research, as it has to be adapted to local circumstances. This is not least due to the need to manage different language versions of the questionnaire and coordinate with country collaborators. In addition, ideal times for distributing the survey may vary across countries. For example, countries have different peak holiday periods and even differ in terms of their end of financial year dates, which usually correspond to an increased workload for employees. However, the timing of data collection not only affects its overall length but can also influence the results. Research, for instance, has shown that the September 11 attacks had an impact on cultural values and the level of cosmopolitanism of U.S. university students (Olivas-Luján, Harzing, and McCoy, 2004).

A key challenge in any survey research is to maximise the study’s response rate. Overall response rates have been found to differ significantly, both across different occupational groups as well as countries. For example, evidence suggests that response rates of managerial employees are lower than those of non-managerial staff (Baruch, 1999). In a meta-analysis, Cycyota and Harrison (2006) identified an overall top manager response rate of 32%. In an international research context, these rates are likely to represent an unrealistic dream. Drawing on studies conducted between 1988 and 1994, Harzing (1997) reported typical response rates for “cold call” international mail surveys to lie between 6% and 16%. In addition, research has identified considerable cross-national differences that are partly contingent upon the researcher’s origin. Harzing (2000), for instance, showed that higher response rates were achieved when respondents were geographically and culturally closer to the research project’s originating country, were more internationally oriented and came from countries with a lower level of power distance. This home-country effect could be moderated to some extent by sending questionnaires locally rather than from one central location.

We will discuss three categories of strategies to increase response rates: strategies related to the questionnaire design, the survey process and incentives offered (Dillman, 2006). First, as survey appearance is a widely accepted determinant of response rates, questionnaires should be user-friendly and have a professional layout. It is also important to personalise the correspondence with potential respondents, by using real signatures and addressing respondents individually. However, whether a survey appears well-designed to the individual respondent may vary considerably across cultures: certain colours and pictures used on the cover page or throughout the survey can have culture-specific connotations. Again, country collaborators and pre-tests with individuals from the target culture may facilitate this process. In addition, overall questionnaire length is considered an important predictor of response rates (e.g., Tomaskovich-Devey, Leiter, and Thompson, 1994), yet may vary considerably across different languages. Before making a final decision about the number of measurement scales to include and thus the overall survey length, the original version should be translated into all required languages first.

Second, there are various strategies to increase response rates that concern the actual survey process. In general, it is beneficial to follow a multi-stage survey process that includes the circulation of an announcement letter and the distribution of reminders (Dillman, 2006). In addition to the actual questionnaire, these may also need to be translated into the local language. It is particularly important to seek sponsorship for the study given the
geographical and cultural distance between the researcher and the respondents. Sponsorship can be provided by an international or local professional organisation, a leading local business school or through an international committee of recommendations that includes local representatives from every target country (Harzing, 1999). It often takes the form of an explicit letter of endorsement that can be attached to the actual cover letter.

Third, incentives may be used to increase survey response rates. In an international research context, the inclusion of financial tokens, which have been shown to increase response rates (Dillman, 2006), is difficult to administer, due to currency differences, purchase power differences as well as possible differences in ethical perceptions. From this perspective, non-financial incentives may be preferable. This may entail the inclusion of a ‘Thank you’ note in the reminder letters, thereby thanking those who have already completed the survey. Also, promising respondents to provide them with a summary report of the overall research results and recommendations of the study is beneficial.

**Summary of suggestions**

Concerning the international survey and data collection process we recommend that researchers pay careful attention to and explicitly cater for possible cultural differences in the perception of survey design, survey administration and incentives offered to participants. Involving local collaborators and/or pilot-testing the survey can help researchers to do so. In addition, personalising the invitation and reminder letters, and obtaining sponsorship from local institutions can help increase response rates.

### 5. Data Analysis

In intercultural research, the effect of cultural differences has to be explicitly taken into account in order to draw meaningful inferences from the survey results. In this regard, several statistical approaches have been developed to test for and establish intercultural equivalence. A first set of techniques are based on item response theory which examines statistical relationships between item responses and the latent attributes that are reflected by combinations of specific items. If these statistical relationships and thus item response distributions reveal similar patterns for constructs measured in different languages, it is assumed that construct equivalence is possible (Peng, Peterson, and Shyi, 1991). In a different vein, Riordan and Vandenberg (1994) apply a covariance structure analytic procedure to test the stability and transferability of self-report measures in intercultural research. Similarly, Mullen (1995) applies Multiple Group LISREL and Optimal Scaling techniques to the diagnosis of intercultural equivalence. However, a main drawback inherent in these methods is the need to have equally-sized groups in order to model comparisons which may be difficult to achieve when multiple cultural groups are considered. As mentioned earlier, local collaborators and even other local academics volunteering to peer-review the results can serve as an important source for interpreting the findings within the scope of the local cultural and institutional context.

A rather vexing problem in cross-national research is the issue of response style differences across countries. Studies of attitudes across countries have generally relied on a comparison of aggregated mean scores to Likert-scale questions. However, people’s responses are also influenced by their response style. The most commonly cited examples of response styles
are acquiescence (ARS) or disacquiescence (DRS); that is, the tendency to agree or disagree with an item regardless of the content, and extreme response styles (ERS) versus middle response styles (MRS); that is, the tendency to use the extreme or middle response categories on ratings scales. Prior research has shown that there are differences in response styles across countries, especially for attitudinal questions such as cultural norms and values (see e.g., Harzing, 2006; Smith 2004). Harzing (2006) found middle response styles to be more frequent in collectivistic countries, whereas country level extraversion was related to extreme response styles. The same study also found extreme responses to be more likely when a respondent is responding in his or her native language, whereas middle responses were more likely when English language questionnaires were used. Harzing, Brown, Köster and Zhao (2012) found that Asian respondents showed higher MRS than Western respondents.

These results show that researchers should always test whether response styles are present before further analysing their results. What might be construed as a higher mean score about the topic in question might simply be an acquiescence bias. Alarm bells should certainly start ringing when one country group has consistently higher mean scores for any set of unrelated constructs. There are various ways to address response bias in cross-national studies; the most common of which is standardisation of responses (see Fischer, 2004). Other solutions all relate to initial questionnaire design. A use of a mixture of positive and negative statements will mitigate both acquiescence and disacquiescence. Likert scales with a larger number of scale points and the use of ranking have also been shown to reduce both response and language bias (Harzing et al., 2009) as have scale anchors that refer to mutually exclusive constructs, rather than to level of agreement (Harzing et al., 2012).

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<th>Summary of suggestions</th>
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<td>In the data analysis stage of international survey research we recommend scholars to conduct a set of measurement equivalence tests as part of the preliminary analyses and clearly explain their use in the later write-up of the article. Additionally, researchers should test whether response styles are present and deal with these biases both (1) a priori by combining positive and negative item statements, using a larger number of scale points, employing ranking instead of rating, and using scale anchors that reflect mutually exclusive constructs, and (2) post hoc through the standardisation of responses.</td>
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6. Publication of Results

An important part of international collaborative research is to establish a clear publication strategy and determine co-authorship at the outset to avoid disappointments (see Teagarden, Drost, and von Glinow, 2005). This also entails deciding on possible target journals early on in the project. It is also important to be aware of different power relations within the research team (Easterby-Smith and Malina, 1999). Although every project will require leadership by one or a few researchers, these principal researchers are in a position of power because they are often the only ones in control of the full data set and the aggregate data analyses. In contrast, local collaborators hold expert power through their control over and understanding of local data, which allows them to also publish independently of the principal researcher.
Summary of suggestions

To publish international survey research it is important to clearly determine a publication strategy and rules of co-authorship for all collaborators. In many regards, managing an international team of researchers can be likened to managing a global virtual team that requires multiple points of contact to increase mutual trust and collaboration.

7. Conclusion

Conducting meaningful international empirical research is prone to additional difficulties and complexities and can easily discourage researchers from initiating intercultural inquiry in the first place. More specifically, international researchers who collect primary data, either through questionnaires, interviews or other means, are invariably confronted with language barriers, cultural barriers, geographical distance and the liability of foreignness, which all result in higher monetary costs and a more significant time investment. This can easily lead to a lower research output compared to that of researchers who either limit themselves to the familiar domestic context, or who employ secondary data and are therefore not confronted with these obstacles. If it comes to recruitment or promotion decisions, these systemic disadvantages for international business researchers are often not sufficiently taken into account by the employing institution.

Given the particular challenges of intercultural survey research we described above, many areas in the field of intercultural management still remain largely under-researched, even though they provide ample opportunities to advance our knowledge. However, we hope that by identifying some of the key challenges in intercultural survey research and offering various solutions, we have been able to encourage and promote such future research.

References


