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MULTICENTRIC CROSS-NATIONAL RESEARCH: A TYPOLOGY AND ILLUSTRATION

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MULTICENTRIC CROSS-NATIONAL RESEARCH: A TYPOLOGY

AND ILLUSTRATION

Abstract

The aim of the paper is to focus attention on different approaches to cross-national research. The core thesis is that merely conducting a study in multiple national contexts is a necessary but not sufficient condition to ensure sound cross-national results. In contrast to recent literature which stresses the assessment of construct equivalence after the cross-national data has been collected the focus here is on the establishment of equivalence prior to data collection. A typology of multi- and ethnocentric cross-national research designs identifies different options available to handle equivalence issues. In order to demonstrate how ethnocentric bias might be overcome by using a multicentric approach in the conceptualisation and measurement development a three-country study is discussed. The purpose of this illustration is to concretize the ideas presented and to promote its critical review.
Introduction

It is common knowledge that cross-national or cross-context studies have the potential to yield greater theoretical, substantive and methodological insights than single-nation or single-context studies, despite the rarity with which they appear in the literature. Theoretically, research which spans over more than one country allows to generate findings which are more generalizable than results obtained from single country studies. Purely national findings are limited to the specific environment, because they are heavily influenced by specific conditions under which the research process is realized. Whereas cross-national research roots on a broader basis of environmental conditions and thus allow for a higher level of general insights (Boyacigiller and Adler 1991). In addition, cross-national studies offer the possibility to examine the impact of important limiting, moderating and boundary conditions that illuminate underlying theoretical mechanisms (Steenkamp and Baumgartner 1998).

Substantively, information collected in several national markets is a key ingredient in the development of successful international marketing strategies. Lack of familiarity with customers, competitors and the market environment in other countries coupled with the complexity and diversity of international markets makes it critical for managers to collect information on an international scale (Craig and Douglas 2000).

Methodologically, cross-national studies force researchers to explicitly grapple with the etic-emic dilemma and provide a more solid foundation for construct conceptualization and operationalization. Moreover, cross-national research designs are characterised by increased heterogeneity and variance and thus provide a fertile ground for conducting cross-validation of conceptual models (De Wulf, Odekerken-Schröder, and Iacobucci 2001).

Less commonly understood are issues pertaining to designing effective cross-national studies so as to optimally realize the preceding benefits. How should cross-national studies be designed? More importantly, when do cross-national studies fail to yield promised benefits? Does the efficiency of cross-national studies interfere with their effectiveness? It is the thesis of this paper that merely conducting a study in multiple national contexts is a necessary but not
sufficient condition to ensure the theoretical, substantive and methodological benefits attributed to cross-national studies. Rather, important process criteria must be satisfied to ensure the effectiveness of a cross-national study. We aim to outline these process criteria, argue that criteria constitute sufficient conditions for an effective cross-national study, and refer to cross-national studies that meet these criteria as multicentric cross-national studies. Finally, we aim to discuss a three-country study that illustrates our proposed multicentric approach in the context of the development and validation of a new construct regarding “market climate”. The purpose of this illustration is to concretize the ideas presented and promote its critical review. We begin with a framework that captures a typology of cross-national studies.

A Framework and Typology for Cross-National Studies

Identifying cross-national similarities and comparisons is a key focus of most cross-national studies. A central prerequisite for valid cross-national comparisons is the establishment of equivalence between the data collected in diverse cultural settings and the avoidance of bias (van de Vijver and Leung 1997). Equivalence is viewed as a function of the characteristics of the research design, the research instrument utilized, the data collection process, and the cultural groups or contexts compared. In cross-cultural psychology and later on in cross-national management research, a wide array of methodologies for examining and testing data equivalence have been identified (for example Sears 1961, Berry 1969, Poortinga 1975, van de Vijver and Leung 1997, Adler 1983, Sekaran 1983, Douglas and Craig 1983, Mullen 1995, Singh 1995). The discussion mainly centers around three distinct basic levels of equivalence, namely construct equivalence, measurement equivalence, and equivalence of data collection techniques (Craig and Douglas 2000). Three types of bias are identified: construct bias, method bias and item bias. Construct bias arises from differences in the construct between cultural groups, method bias stems from problems in the characteristics of a measurement instrument or its administration, while item bias results from measurement artifacts at the item level, for example, inadequate translation (Douglas and Nijssen 2001).
In management as well as marketing, attention has been typically focused on the issue of the assessment of construct equivalence after cross-national data has been collected (Mullen 1995, Steenkamp and Baumgartner 1998, Sinkovics, Salzberger, and Holzmueller 1997). Relatively less concern has been shown addressing conceptual equivalence, measurement equivalence and equivalence of data collection techniques before data collection. Singh (1995) states “equivalence assessment is only possible after the data collection stage. This should not be taken to imply that procedures that are utilised before data collection are of less importance. Rather, the aim of after procedures is to probe the degree of success of before procedures”. However, Singh (1995) provides little discussion or guidance for these so-called “before” procedures. Instead, not unlike the bulk of current literature, the “after” procedures are brought under focus and rigorous methodological approaches proposed to test equivalence. Irrespective of the fact that “after” procedures like statistical analysis can not prove whether the construct was really fully captured.

We argue that effective cross-national studies are characterized by their choice of “before” procedures, and not necessarily by the rigor and extent of “after” procedures utilized. Often, cross-national studies are designed such that (1) the conceptual model and research instrument is developed at a single location, (2) the research instrument is then translated for use in multiple national contexts with a focus on ensuring instrument equivalence to the “mother” version through iterative translation-back-translation loops, and (3) data is collected independently at multiple locations and (4) measure equivalence established through some statistical/methodological procedures. While we view such research designs for cross-national studies as efficient, we suspect that they will generally not be effective. We refer to such designs as ethnocentric research designs because of the dominance of a single context in terms of conceptual model and research instrument.

As an alternative, we propose a multicentric research design for cross-national studies that is based on the notion of “decentering” of theories and constructs (Werner and Campbell 1970) - that is, designing the “before” procedures to systematically remove the influence of a dominant
culture or philosophy within a research process. This typically requires the active participation of researchers from different cultural backgrounds and research paradigms at different stages of designing a study. Two different ways may be adopted to design a culturally balanced or multicentric study (van de Vijver and Leung 1997). A decentered approach can be adopted in which scholars from different nations meet regularly to develop the conceptual model and the research instrument to be utilized for the cross-national study. These meetings are often characterized by discussion, dissension and triangulation. Alternatively, a convergence approach could be adopted, in which a researcher from each culture designs his or her own conceptual model and research instrument. Thereafter, the researchers meet to discuss similarities and differences to arrive at a consensual conceptualization and operationalization of the model and its constructs. The consensual model and research instrument is then administered in each nation after the usual translation-back-translation procedures. Evidence of measurement equivalence is provided by analysis of instruments across contexts, while substantive differences (similarities) indicate valid and meaningful contrasts (coherence). Compared to the ethnocentric approach, the multicentric approach is time consuming, effortful, costly and difficult to realize.

Using the stages of conceptualization and measurement development and differentiating with respect to ethno- or multicentric dominance, we identify four distinct types of cross-national research designs that reflect different degrees of decentering (see Figure 1). In its simplest form, a fully ethnocentric design is indicated by an absence of any attempt to decenter (cell #1, Figure 1). Such designs are characterized by single-country dominance with respect to the theory and measure development. This is typically the case when theory and measures are developed in a single country and then translated and/or transplanted onto different national settings. The “imposed-etic” (Berry 1969) by use of “borrowed” scales (Douglas and Nijssen 2001) suppress discussion of equivalence issues “before” data is collected. Ironically, such fully ethnocentric studies may favor findings that suggest high level of “after” measure equivalence as the results may be driven by surface linguistic similarities. However, regardless of the results from the
“after” procedures, fully ethnocentric studies can not clarify whether identified differences and/or similarities are due to research artifacts or valid cultural differences.

**Figure 1: Typology of Cross-National Studies**

<table>
<thead>
<tr>
<th>Measure Development</th>
<th>Single-Country Dominance</th>
<th>Multi-Country Cooperation</th>
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<tr>
<td>Single-Country Dominance</td>
<td>Fully Ethnocentric Cross-National Study</td>
<td>Thoretically Ethnocentric, Empirically Multicentric Cross-National Study</td>
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<tr>
<td>Multi-Country Cooperation</td>
<td>Thoretically Multicentric, Empirically Ethnocentric Cross-National Study</td>
<td>Fully Multicentric Cross-National Study</td>
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Typical examples of this type of research could be found in the context of consumer ethnocentrism. Shimp and Sharma (1987) conceptualized and operationalized the CETSCALE construct in the U.S.A. and it has been used in a number of countries outside the U.S.A. (Netemeyer, Durvasula and Lichtenstein 1991, Sharma, Shimp and Shin 1995, Good and Huddeleston 1995). The results of these studies are somewhat conflicting. For instance, Netemeyer, Durvasula and Lichtenstein (1991) utilized data from the U.S.A., France, Japan, and West Germany to report evidence for internal consistency and equivalent unidimensional factor structure across all four counties. Correlation with attitudes toward the home country and the importance of buying domestic products was also found. However, relation to attitudes with
respect to buying foreign products was less strong outside the U.S.A. Likewise, Good and Huddleston (1995) report that consumer ethnocentrism predicts buying intentions in Poland, but not in Russia. This raises the question whether the underlying construct is equally relevant and applicable across the various countries under study.

An alternative design is a partially multicentric study of cell #2 (Figure 1) that is characterized by theoretically (conceptually) ethnocentric but empirically multicentric research design. In this design, cross-national studies concepts and theories originating from one culture are transferred in a culture sensitive way into locally appropriate measurements. Considerable effort is expended in adapting the operationalizations and, if necessary construct conceptualizations, to address differences in cognitive schemas, circumscribed construct domain, and language systems across the different cultures. This usually involves conducting iterative loops of translation-back-translation, “think aloud” exercises and other qualitative data collection approaches (e.g., open ended interviews along construct dimensions) in the different cultural contexts without holding any context as dominant, and joint discussion and triangulation of obtained results by the cross-national research team. However, the theoretical framework and nomological network in which the focal constructs are embedded is left intact and emanates from a single, dominated context. Although this approach might jeopardise the substantive meaningfulness of cross-cultural findings, it undoubtedly restricts the potential for confounding effects that might compromise construct measurement. Moreover, this approach explicitly confronts the etic-emic dilemma in regard to operationalization issues, and is likely to yield generalizable, credible findings in so far as construct operationalization is concerned.

An illustration of this approach is the work of The Chinese Culture Connection (1987), the collective name adopted by a team of 24 researchers, on work related values in a cross-national context. Based on the concept of work related values developed by Hofstede (1980) in the IBM studies, a non-Western instrument to measure values, the Chinese Value Survey (CVS), was developed and administered to respondents in 23 countries. The Chinese Culture Connection reported that three out of the four value dimensions identified by Hofstede were confirmed by the
results based on the CVS studies. However, the CVS studies revealed a dimension unrelated to anything found in the literature that draws heavily from Hofstede’s seminal work. This dimension relates to long-term vs. short-term orientation in the value system of respondents. Because the CVS studies did not question the notion of work values in of itself and retained the original theoretical foundation, we view this approach as partially multicentric. The multicentric orientation in the empirical work allowed the researchers to be sensitive to additional and different dimensions that correspond to the construct of work values in their context. As a result, the Chinese Culture Connection was able to expand the operationalization of the work values construct, while retaining its theoretical and conceptual foundation.

Figure 1 describes another partially multicentric study wherein the theory and conceptualization are multicentric but measure development is ethnocentric (cell #3). In such designs, the construct operationalization is developed in a single country and used as such across different international settings, but the theoretical frame is adapted to local environmental conditions by researchers from diverse cultural backgrounds. Such designs might be motivated by the use of a well-established instrument with presumption of its high measurement fidelity (e.g., CETSCALE). At the same time, adapting the conceptual framework according to local conditions, i.e., including emic aspects, might lead to a deeper understanding of national idiosyncrasies. Thus, for instance, consumer ethnocentrism may be more evident in automobile buying behavior in one national setting because its automotive industry holds a preeminent position in its economy and is under threat, while such effects are unlikely to emerge in another cultural setting where the automotive industry is nonexistent. Instead, in the latter contexts, consumer ethnocentrism may be evident in consumer shopping behaviors for agricultural and dairy products. To account for such national differences, the research team may seek to modify the dependent variables in their theoretical framework choosing different variables in different contexts that preserve the underlying theoretical mechanisms. However, the independent variable -CETSCALE in our context- is held as a sacrosanct “holy cow” that need not be open to
reconceptualization and adaptation. The “standard” measure is used after careful translation-back-translation procedures.

Finally, cell #4 of Figure 1 describes a fully multicentric study that conforms to multicentric process criteria for both theory and measure development. In this sense, a fully multicentric design includes the strengths of the both partially multicentric designs of cells #2 and 3. Neither theory nor method is a sacrosanct “holy cow.” By committing to this design, the research team commits to a journey of discovery and theory building, as well as to empirical testing and operationalization efforts that seek to guarantees a high level of cross-national comparability while allowing a simultaneous consideration of national constraints and differences. As in any scientific endeavor, outcomes of a fully multicentric study are uncertain and unpredictable. Because these designs fully and explicitly confront the etic-emic dilemma in both theory and measurement, multicentric designs do not presume that an etic framework is plausible and risk strong emic pressures. Not unlike other group efforts that are constituted to solve specific problems, multicentric design outcomes are open to influence by unpredictable group dynamics and negotiated compromises. Nevertheless, the promise of multicentric designs is that it takes nothing for granted and does not presume the superiority of any particular approach. Rather, it is a scientific discovery process that is sustained by the research team’s deep commitment to, and pursuit of meaningful knowledge. In this sense, the multicentric designs draw attention to the process of research especially during the so called “before” stage rather than merely to its outcomes at the “after” stage.

Not surprisingly, few if any studies in the literature evidence a multicentric design. However, we do not stand alone in drawing attention to multicentric designs. Researchers in other fields have begun to recognize the significance of process issues in cross-national research. For instance, in a recent study published in the Academy of Management Review, Easterby-Smith and Malina (1999) examined the methodological and philosophical implications of cross-cultural management research, comparing a qualitative field study conducted collaboratively in the United Kingdom and China with Teagards’ et al. (1995) survey-based international study.
Results confirm the importance of managing relationships within cross-cultural research teams and the need to adapt methods for different national and cultural circumstances in ways that cannot be predicted in advance. They also confirm the findings of Teagarden et al (1995) on the problems of power and politics within cross-cultural research teams. In addition they identify specific problems for cross-cultural teams that stem from different conceptions of research among scholars from different countries because of a missing common cultural and academic heritage. Finally, the importance of reflexivity in cross-cultural management research is highlighted. Reflexivity is understood as actively considering the implications of what has been observed for the observer’s own practice and the authors demonstrate that reflexivity can significantly contribute to sense-making in cross-cultural teams conducting collaborative research.

To illustrative a fully multicentric cross-national study and concretize its key ideas, we discuss the processes adopted by a research team of three tenured, full professors at Universities in Germany, the Netherlands and the United States in the efforts to conceptualize and operationalize the market climates construct. Our purpose here is not to glorify the multicentric design. Rather, we aim to discuss its positives and negatives, ups and downs, exhilarations experienced and deep frustrations endured. Thus, our description is not normative -it does not describe how multicentric studies should be conducted. Instead, we utilize a positive approach-describing how we struggled and muddled through to realize a multicentric orientation in conceptualizing and operationalizing an idea that we all deeply cared about, and somehow managed to remain excited about throughout the long ordeal.

Theory and Measures for Market Climates: A Case Study
of a Fully Multicentric Cross-National Study

The idea of cross-national study germinated inadvertently when one of the authors presented a paper on consumer discontent and alienation at a European national meeting. The key point in the presentation was two fold: (1) the widespread adoption of relationship marketing paradigm has generally neglected the implications of the long standing work on consumer
dispositions toward the marketplace including its dark side represented by consumer discontent and alienation, and (2) overall consumer dispositions (bright or dark) matter in issues of consumer loyalty and relationships involving a single firm and customer. This author was amused by the uncritical acceptance of relationship marketing ideas that firms and consumers can make happy “couples” in ongoing, mutually satisfying relationships. Serendipitously, one of the other authors was grappling with reviewers (and getting nowhere) about problems in cross-national studies with standard scales such as the CETSCALE and was drawn to the potential for cross-national variations in consumer dispositions (and another opportunity to prove the reviewers wrong). Finally, the third author of the current project saw an opportunity to build on his current stream of cross-national work that involved the study of consumer materialism within a broader scope and more direct implication for managerial practice. In the discussions that followed the presentation (often in nondescript locations), the different authors talked about linkages to their work. None had a concrete idea on how to proceed further. Paradoxically, this was the key motivation for the team to germinate and to work jointly to tackle the problem from a conceptual and empirical perspective.

Initial attempts were decidedly muddled and disorganized. Nevertheless, it involved three somewhat related steps: (1) each author assembled a set of key articles (< 5) that he felt were pertinent and had them circulated, (2) by turn, each author reviewed the key articles and outlined how these ideas may be relevant for the planned study (these were emailed), and (3) the remaining others reacted by posting their own summaries and assessments of relevance. While these attempts provided little headway in conceptualization and theoretical development, they were immensely helpful developing a bond of team spirit and building a commitment to the project. Moreover, these initial efforts provided a common foundation and knowledge base for the three authors to draw from and relate to.

Progress appeared and accelerated once the team identified two bodies of work that it felt were useful to pursue and aim to integrate -namely the literature on market orientation (Narver and Slater 1990, Kohli and Jaworski 1990) and consumer attitudes toward marketers (Barksdale...
and Darden 1972, Allison 1978, Gaski and Etzel 1986). Although both literatures utilize the individual as the unit of analysis, they focus on (a) marketers or consumers’ dispositions toward the marketplace, (b) conceptualize the role of these dispositions in terms of behaviors, actions, and practices, and (c) provide an empirical foundation for the study of consequences of such dispositions. The team collected all articles pertaining to these bodies of literature, discussed, analyzed and triangulated the findings from these articles, summarized the operational measures used in these literature and developed extensive summary tables for further analysis.

Insight followed this literature review as the team began to view the marketplace as shaped by, and one that shapes the market orientation of firms, and the disposition of consumers. Like an open organization, consumers and firms come together in the marketplace to serve a common goal—consummate exchanges to fulfill self-determined and self-interested needs and wants. Through their behaviors and dispositions, consumers and marketers develop a schema of expectations and obligations of themselves and their exchange partners. Collectives of consumers and marketers may share such schemas. Different collective schemas may characterize different markets, as well as similar markets in different cross-national contexts. Born was the notion and, more formally, the construct of “market climate”.

Specifically, the team conceptualized the “climate” for market exchanges as a (a) dyadic construct as it is defined by the interaction of the collective behaviors of the marketers and consumers, (b) dynamic as it in turn influences the behaviors of “actors” in individual exchanges (i.e., consumer, firm), (c) context-specific in that the collectives are defined with respect to a specific product-location market consisting of a common set of marketers who offer similar products/technologies and target consumers within a geographical area, and (d) heterogeneous in that different configurations of climates may be evident in any given context. More precisely and in analogy to organizational climate market climates are defined as multidimensional, individual perceptions of the actions and practices of marketers directed towards, and visible to consumers and simultaneously of different behavioral patterns that describe how collectives of consumers
interact with, and respond towards marketers in exchange relations (Singh, Nijssen and Holzmueller 2002).

The market climate construct was conceptualized to involve a simultaneous consideration of two dyadic facets whose collective behaviors, actions and practices define the climate for exchanges in any given market: the (a) marketer-facet, and (b) consumer-facet. The marketer-facet is a multidimensional representation of the actions and practices of marketers directed towards, and visible to consumers. Although many dimensions can be considered, our initial research follows from the distinction between customer-led and market-oriented behaviors drawn by Slater and Narver (1998) and involves two marketer-facet dimensions: (a) customer-oriented behaviors that place the interest of the consumers above that of the firm and evidence responsiveness to expressed needs of customers, and (b) innovation-oriented behaviors that focus on developing new products/services and delivery systems that provide new solutions to unexpressed needs of consumers.

Likewise, the consumer-facet is a multidimensional representation of different behavioral patterns that describe how collectives of consumers interact with, and respond towards marketers in exchange relationships. Following Mischel and Shoda (1999), we focus on two behavioral dimensions: (a) voice-oriented behaviors that consumers utilize to express their dissatisfaction with products/services and delivery systems and affect change in the practices of sellers/service providers, and (b) learning-oriented behaviors that express the level of expertise, involvement and/or knowledge of consumers regarding products/services available in the market.

To provide a broader scope and in response to recent calls for cross-cultural research on consumer behavior (Iacobucci and Ostrom 1996, Bagozzi 1994), cross-national variation in market climate contexts was included by conducting the research in three countries, namely Germany, the Netherlands, and the USA. These cross-national contexts differ along several characteristics that shape market processes and thus provide a fertile setting for psychometric validation of the MACS (market climates) construct. As per Hofstede’s (1980), differences exist across the three cross-national contexts with respect to core cultural dimensions including the
power distance (United States = 40, Germany = 35, and the Netherlands = 38), uncertainty avoidance (United States = 46, Germany = 65, and the Netherlands = 53), individualism (United States = 91, Germany = 67, and the Netherlands = 80), and masculinity (United States = 62, Germany = 66, and the Netherlands = 14). In addition, significant variations in competitive and legal environments exist among the three countries. With respect to the regulatory constraints, the United States represent a relatively liberal economic system, whereas Germany stands for a relatively conservative and regulated business environment. The Netherlands holds an intermediate position in regard to market regulation and competition (Keegan and Schlegelmilch 2001: 44, Czinkota and Ronkainen 1996: 152).

Beyond the theoretical goals of the study, an important initial objective of the lead researchers in each national team was to contribute to the methodological advancement of cross-national research. In contrast to the increased interest on cross-cultural management and marketing research (Sojka and Tansuhaj 1995), there is still very little work addressing cross-cultural management research problems, which is based on empirical projects (see for exemptions Teagarden et al. 1995, Easterby-Smith and Malina 1999). By embarking on a major research project in three countries it was intended to develop new forms of decentralized and multicentric cross-national research processes, which would allow to cut back the dominance of one national group as much as possible. The project was established in such a way that responsibility for funding, resources, design and execution was shared between the groups from start to finish.

Core expectations of the researchers involved centered on creating synergy effects through collaboration with scholars from different national research environments, research traditions and fields of expertise. It was anticipated that the research would be very challenging with regard to the research process as well as time and resource consuming. Each one of the local team leaders was motivated by the enjoyment of cultural diversity within a research process, new experiences that go beyond those in national collaboration, as well as co-operation and coordination over long distance. The overall effort was to confront country peculiarities and face differences. This helped overcome single country dominance and maximized convergence and
comparability. It was an intensive but rewarding process. Team building and discussion to overcome language differences was key. Time is an enemy but nevertheless the reward is sweet.

**Procedures for Achieving Construct Multicentrism in Cross-National Studies**

In order to allow adequate input from each national group to the conceptualization and measurement of MACS (market climates) scale a comprehensive step process was designed. Similar to concepts of the development of pan-European advertising strategies (Peebles, Ryan, and Vernon 1978), a series of local activities and team activities, in which all lead collaborators participated, was planned and realized (see Figures 2 and 3).

![Figure 2: Decentring Activities for Establishing Theoretical Equivalence of the MACS Construct](image-url)
Figure 3: Decentring Activities for Establishing Measure Equivalence of the MACS Scale

Team or Group Activities

- English master version of MACS scales
- Revision of the master version to account for translation issues
- Development of three national versions
- Refinement of three pre-final national versions
- Fine tuning of Dutch and German version
- Final MACS scales in Dutch, English and German

Field Activities at Individual Locations (GER, NL, USA)

- Parallel translation-back-translation into Dutch and German
- Pretesting of individual national versions
- Translation of German version into Dutch
- Comparison of the two Dutch Versions
- Pre-testing of local MACS scale
This process allowed a high level of local input and at the same time highly coordinated research procedures in each country. Thus the common denominator of a wide array of different aspects related to the MACS construct should be integrated in the final MACS scale. To guarantee a high level of coordination and standardization of processes in between the team meetings local activities were constantly monitored and coordinated by communication over e-mail and phone between the local sites.

Figure 2 shows which actions were taken on the team level, mostly in personal meetings, and in the respective individual locations as well as the sequence along the time line to achieve high levels of conceptual equivalence. After a kick-off meeting of the lead researchers, intensive literature work was done and a first draft of the research plan developed. More literature analysis and coordination over e-mail and phone led to the development of an interview protocol for the qualitative field work. Based on overall more than 40 qualitative interviews in all three cross-national contexts, the nature and scope of the MACS construct was explored using a critical incident technique (Flanagan 1957). Each interview was guided by a protocol that facilitated data on the marketer-related and consumer-related facets of the MACS construct. By interpreting the interview data in light of the literature on market orientation (e.g. Kohli and Jaworski 1990; Narver and Slater 1990) as well as consumer sentiment toward marketing (Gaski and Etzel 1986; Allison 1978; Barksdale and Darden 1972), an initial pool of potential items to measure four distinct dimensions of the MACS construct was identified. In order to purify and refine this item pool, we utilized 9 American, 13 German, and 6 Dutch judges, all of them from academia and with a management or marketing background, to assess the suitability and appropriateness of the suggested items to measure the hypothesized dimensions of the construct. This task involved randomizing the generated item pool, and having each judge independently classify each item into one of four MACS dimensions based on the conceptual definitions provided. The categorizations from the 28 judges were pooled, inter-judge reliability computed for each item, and items selected only if the reliability exceeded .80. The selected items were further refined.
based on discussions within the research team, and a preliminary MACS scale in English consisting of 24 items, with 6 items for each MACS dimension, was developed.

The English version of the MACS scale was pre-tested using student samples in all three countries. In Germany and the Netherlands bilingual respondents were asked to participate. The pre-testing phase involved “think aloud” exercise where the respondents were encouraged to think loudly as they read each survey question and developed a response to it. Interviewers in each cross-national context recorded the pretest respondents’ thoughts, and the research team analyzed these data for further refinement of the MACS scale. Minor wording changes were implemented and one item from the customers−facet was dropped because of interpretation problems resulting in a refined English MACS scale of 23 items.

Procedures for Achieving Empirical Multicentrism in Cross-National Studies

Figure 3 provides a detailed overview on the team or group activities and the corresponding field with respect to the creation of equivalent cross-national measures over time. First, the English master version was translated into German and Dutch using parallel translation-back translation procedures recommended by Brislin (1980) to ensure the functional, conceptual and instrument equivalence of the MACS scale (Sekaran 1983; Singh 1995). The outcome of the translation-back translation process was discussed with all translators by the lead researcher involved in the respective country, and the research team met jointly to revise and refine the translated instruments in order to ensure equivalence. The resulting national versions were then pre-tested using small samples consisting of marketing experts and students. After a next revision of all versions of the instrument, the German version was translated into Dutch and compared with the Dutch version derived from the English version. While a high level of equivalence was achieved, the differences identified were used to further fine tune the quality of the final German and Dutch versions of the questionnaire. After pre-testing the local versions in the respective country using small non-student samples (n = 5 to 12) additional small changes with respect to
wording and the lay out of the questionnaires were made and finally agreed on all the versions of the MACS scales.

In order to test the empirical equivalence of the multicentric MACS scale, we selected insurance products (e.g., automobile, life, home) as the focal industry. In each cross-national context, random samples of consumers were picked from commercial lists using several selection criteria to ensure experience with insurance products include age (> 35 years), and income (at and above median). The actual stratification criteria varied for each country to account for national idiosyncrasies. The surveys were administered in a total of three waves separated by 2-3 weeks between adjacent waves. In all, the number of qualified responses was as follows: 365 in the United States, 504 in Germany and 316 in the Netherlands. For illustration purposes, we provide some of the core results with respect to the “after” assessment of equivalence and measurement fidelity.

A multi-group confirmatory factor analysis of the hypothesized consumer-facet and marketer-facet dimensions across the three country contexts was calculated. In accord with procedures outlined by Steenkamp and Baumgartner (1998), we initially estimated and compared the (a) unrestricted “configural” invariant model where the pattern of factor loadings was constrained to be identical, but the corresponding factor loadings and correlations were allowed to vary across the three country contexts, and (b) a fully restricted “metric” invariant model where the pattern and magnitudes of factor loadings were constrained to be equal across the three country data. Based on this comparison, a partial invariant model was estimated that was (a) located at an intermediate point between the configural and metric invariant models, (b) provided a good fit to the data. Specifically, constraints were released based on the LaGrange Multiplier Test (p<0.05). The “configural” invariance model produced a reasonably good fit to the three country data based on the relative fit indices (NFI = .94, CFI = .97, GFI = .92, and BFI = .97), absolute fit indices (standardized RMR = .058, RMSEA = .031, 90% CI for RMSEA = .27 to .035) and an index for parsimony between statistical fit and number of parameters (NNFI = .96). The metric invariance model yielded statistics for overall fit as follows: $\chi^2 = 664.6$, df =326,
p<0.01. Compared to the configural invariance model, this indicates a significant deterioration in model fit ($\chi^2_{\text{diff}} = 86.6$, df$_{\text{diff}} = 32$, p<0.01). Based on the LaGrange multiplier test, we identified two factor loadings (out of a total of 48, or 4%) that appeared to violate the metric equivalence for the cross-sectional data sets. By releasing these constraints, we estimated a partially constrained model that provided reasonably good fit indicators including statistical fit ($\chi^2 = 622.3$, df = 322, p<0.01), relative fit (NFI = .93, CFI = .97, GFI = .91, and BFI = .97), absolute fit (standardized RMR = .072, RMSEA = .030, 90% CI for RMSEA = .27 to .034) and parsimony fit (NNFI = .96). Compared to the configural model, this partial invariant model is statistically equivalent ($\chi^2_{\text{diff}} = 44.3$, df$_{\text{diff}} = 28$, p>0.01). Because only 2 of 48 factor loadings were unconstrained to achieve this partial invariant model, we appear to have sufficient evidence to conclude that the MACS scale achieves (a) convergent validity as measures load only on their hypothesized factor, and (b) contextual validity as factor loadings are generally consistent and equivalent across disparate cross-national contexts.

Considering the multicentric steps taken “before” data collection to cut back ethnocentric dominance in the conceptualization and measurement development as well as the results derived by “after” procedures an overall high level of cross-national equivalence could be achieved. The prevailing conceptualisation of MACS and the respective measurement instrument provide a solid basis for cross-national comparisons and further more refined analysis across all countries under study.

**Discussion and Concluding Notes**

The aim of this paper has been to focus attention on different approaches to cross-national research. We take-for-granted the conventional wisdom that the potential for providing significant and unique insights for theory, boundary conditions and practice is higher for cross-national studies relative to single-nation studies. However, we reject the somewhat common perception that psychometric evidence of construct equivalence (full or partial regardless) is sufficient to realize this potential. By proposing a typology based on multi- and ethno-centric
cross-national research designs, we highlight the paradoxical trap of ethnocentrism in cross-national research designs, and open a window on fully multicentric cross-national designs as an approach to avoid ethnocentric traps. Hopefully, to most readers, our basic ideas will appear intuitive and hardly earth shaking. Yet, like us, readers will find few if any cross-national studies in the literature conducted by themselves or others that did not evidence the pressure of ethnocentrism (in research designs) and appear to have failed to achieve full multicentric status as authors succumbed to these pressures.

To be clear, we neither are nor should not be perceived as undermining the significant and long-standing tradition of construct equivalence and measurement fidelity issues in the management and marketing literature, and its comprehensive view on all steps of a research process (Barret and Bass 1976, Douglas and Craig 1984, Nasif et al. 1991, Peng, Peterson and Shyi 1991, Cavusgil and Das 1997). This is a necessary condition of cross-national research, and we have referred to these procedures as “after” analysis to indicate that the bulk of psychometric equivalence work begins after the data is collected (recognizing that translation-back-translation is an integral part of this). Our contention is merely that this is not sufficient. In this sense, we are asking cross-national researchers to do more. Specifically, we draw the attention of cross-national researchers to the potential and significance of “before” procedures—procedures used for conceptualizing the phenomenon and developing a nomological framework—and raise the possibility that, in some circumstances, a high level of “after” construct equivalence may be achieved merely due to surface linguistic similarities and may not reflect core differences in the functions and meanings of constructs. A joint consideration, and equal status of “before” and “after” procedures in cross-national designs as proposed in the multicentric approach reduces the risk of such surface equivalence and is more likely to enhance the yield of cross-national studies.

Two core tasks are related to the establishment of “before” equivalence in cross-national research, namely theory or concept development and measurement development. In order do avoid the dominance of one culture or national setting when conceptualizing cross-national research, the active participation of researchers from different cultural backgrounds is essential.
In addition it is necessary to balance the influence of the researchers on a team in order to avoid champion or guru effects (Hofstede 1991: 161). Multicentrism in the conceptualization phase allows the potential to capture idiosyncratic facets of a phenomenon or construct (emic) while following the core objective of establishing results comparable across borders (etic). The theoretical frame is developed on the grounds of different environmental conditions and via a stepwise and coordinated process condensed into theoretical or conceptual frame that is equally relevant for all countries included in the research. Multicentrism in the case of measure development increases the chances that bias due to differences in language, cognitive schemas, and fuzzy (vague) research domains are mitigated. The operationalization of constructs takes the different conditions in the countries under study into account and leads simultaneously to higher local face validity as well as psychometric equivalence.

Quite beside the potential to enhance the outcomes of cross-national studies, multicentric research designs have the potential to influence, sometimes dramatically, the process of cross-national research. At international meetings such as the present one, it is not rare to be approached by a well-known researcher from across the continent and/or national boundary with a request to “help in securing data from your country using an already developed, tested and validated survey instrument.” To many, this “have instrument, help get data” approach is a low cost entry into cross-national research with significant opportunities for publication. One of the authors recalls an incident where a researcher declined the offer to partner in a research project that was being developed from scratch but expressed great interest in collecting data once the instrument was developed and refined. The “high costs” of doing partner- or multicentric research can not be denied. Neither is it easy to discount the possibility that a calculation of publication opportunity to research cost ratio may favor the highly ethnocentric “have instrument, help get data” approach over the more involved and complicated “have idea, help build theory” approach of multicentric research designs.

While agreeing with such calculations, we disagree with their uncritical acceptance. Payoffs of cross-national research are not only in terms of publications. The quality and quantity
of insights from such studies matter as well. More importantly, the process of collaboratively building theory and working through conceptual and operational problems shapes the world view and develops the skills of the researcher involved in cross-national teams in definitive, although unpredictable, ways. At this time, valuing these benefits of multicentric designs may be difficult for the inexperienced and uninitiated. Via our illustration, we hope to provide vicarious insights into the pleasures and pains of a multicentric adventure in progress. We underscore the notion that, in addition to the pleasure of developing long term relationships with co-researchers, the pains offer unimaginable opportunities for joint problem solving that is efficacious and overwhelmingly positive. Although our work has not concluded as yet, we can report that our calculation of benefits to costs ratio confirms the poverty of “have instrument, help get data” approaches. To get rich, it appears, that cross-national research is governed by the same fundamental principle that guides basic human pursuits of economic wealth and scholarly erudition: No pain, No gain; No risk, No profit.
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