

Definition and interpretation in cross-cultural organizational culture research:

Some pointers from the GLOBE research program.

Marcus W. Dickson

Wayne State University, USA

Ram N. Aditya

Louisiana Tech University, USA

Jagdeep S. Chhokar

Indian Institute of Management, Ahmedabad, India

Address correspondence to:

Dr. Marcus W. Dickson

Psychology Department

Wayne State University

Detroit, MI 48202

Mdickson@sun.science.wayne.edu

February, 1999.

Chapter draft prepared for the Handbook of Organizational Culture and Climate (Neal Ashkanasy, Celeste Wilderom, and Mark F. Peterson, eds.). Thousand Oaks, CA: Sage Press. Forthcoming. Please do not quote or cite without permission of the authors.

Authors' footnote

We would like to thank Mark Peterson, Paul Hanges, Fred Dansereau, and Katherine Klein for their helpful comments in the preparation of this chapter. We would also like to recognize GLOBE Principal Investigator, Robert J. House, Co-Principal Investigator Paul J. Hanges, the GLOBE Coordinating Team, and all the members of the GLOBE Project, for the work they have done on leadership and culture, and for allowing us to present our perspective on and learnings from the GLOBE Project in this chapter. The opinions expressed in this chapter are those of the authors, and not necessarily those of the GLOBE Project.

ABSTRACT

Organizational culture is an elusive construct, even when examined within the context of a single society. When one begins to examine organizational cultures across societal cultures, however, the construct can become even more elusive, and the unique threats to accurate interpretation and definition at this level are often well-hidden. A central goal in such cross-cultural analysis of organizational culture seems to us to be the isolation of differences attributable to organizational culture from differences attributable to societal culture or industrial demands. Some primary difficulties in achieving this goal arise from confusion about levels of analysis and about the questions we are actually trying to answer, while others arise from the fact that manifestations of culture dimensions at the societal level can serve to mask or accentuate related dimensions at the organizational level.

In this chapter, we examine these and other issues of definition and interpretation in the light of our experiences with the Global Leadership and Organizational Behavior Effectiveness (GLOBE) research project, a cross-cultural study of leadership, societal culture, and organizational culture spanning more than 60 countries and 700 organizations. We identify common pitfalls of interpretation, show some ways in which these hidden dangers might show themselves statistically, and suggest some guidelines on how to address these issues in studying organizational culture across societies.

Definition and interpretation in cross-cultural organizational culture research:

Some pointers from the GLOBE research program.

Understanding culture as it is manifested across societies is a difficult undertaking, as is reflected in the wealth of literature on the topic. Understanding culture as it is manifested across organizations within a single society is also a difficult undertaking, as is reflected in the wealth of literature on that topic. Understanding culture as it is manifested across organizations from different societies – cross-cultural organizational culture analysis – is an extraordinarily difficult undertaking, as is reflected by the relative lack of literature on the topic.

In fact, examining organizational culture in a cross-cultural context raises the question of what precisely is organizational culture? If the differences between organizations from different countries are largely attributable to differences between the countries themselves, is this a question of organizational culture at all? Further, if the differences are attributable to differences between industries, or between regions within a country, to what extent are these issues of organizational culture?

In this chapter, we address several issues of interpretation of cross-cultural organizational culture data. We will provide some suggestions on how to deal with this data (and how not to deal with the data), and also raise some questions for researchers to ask themselves about the data they have, the goals of their research, and what they consider to be a part of the construct called “organizational culture.”

We bring to this chapter our experiences in working with the Global Leadership and Organizational Behavior Effectiveness (GLOBE) Research Project, which is a currently on-going study of the inter-relationships of leadership, societal culture, and organizational culture (House, et al., in press; Hanges, et al., 1999). The GLOBE Project’s 180 members have, to date, collected data from 64 cultures, over 800 organizations, and over 20,000 individuals. GLOBE

has developed, validated, and cross-validated scales measuring societal culture, organizational culture, and preferences for leader behaviors and attributes, and has demonstrated the construct validity of these scales. Many of our recommendations come from dealing with this multi-level data, although other experience in cross-cultural research has shaped our thinking as well.

We first briefly describe the GLOBE Research Program, in order to lay the groundwork for many of our arguments which follow. We then discuss the evolution of the culture construct, highlighting culture as a phenomenon that is enacted at multiple levels of analysis. Next, we highlight several difficulties researchers face in conducting cross-cultural organizational culture analyses. We conclude with questions and recommendations for researchers engaged in such analyses.

The GLOBE Research Program

The essence of the Global Leadership and Organizational Behavior Effectiveness (GLOBE) Research Project (House, et al., in press; Hanges, et al., 1999), originally conceived by Robert J. House in 1991, is exploration of organizational leadership and its impact on organizational effectiveness. A primary goal from the beginning of the project was to better understand the phenomenon of leadership as it is enacted in different contexts, and societal culture and organizational culture were both seen as important influences on the nature of the leadership relationship. From its very inception, therefore, GLOBE has been focused on studying the inter-relationships between societal culture, organizational culture, and effective leadership in organizations. Details of the project are available in several recent and forthcoming publications, and conference presentations, chapters, and other findings are available at the project's web site, at <http://www.bsos.umd.edu/psyc/hanges/globepag.htm>

One of the strengths of GLOBE is that the project started afresh in terms of defining and operationalizing the phenomena of interest. Culture, for example, was defined as “shared

motives, values, beliefs, identities, and interpretations or meanings of significant events that result from common experiences of members of collectivities and are transmitted across age generations” (House et al., in press). This definition of culture was adopted for both societal and organizational levels, and was arrived at consensually at a meeting of many of the participating researchers of GLOBE in a meeting in 1994. A similar approach was followed for operationalization of other leadership and culture constructs. Starting with an initial pool of over 800 items, 16 uni-dimensional leadership scales and nine uni-dimensional culture scales were developed, all of which exhibited satisfactory psychometric properties. Details of the scale development and validation are reported in Hanges et al. (1999).

Operationalization of Culture

Culture being one of the major phenomena of interest in GLOBE, its operationalization was done at several levels. First, nine attributes of culture were identified and selected based on existing theoretical and empirical literature on measurement of culture: uncertainty avoidance, power distance, the individualism-collectivism continuum, family/organizational collectivism, gender egalitarianism, assertiveness, future orientation, performance orientation, and humane orientation. These are based on the works of Hofstede (1980), Hofstede and Bond (1988), Kluckhohn and Strodtbeck (1961), McClelland (1961, 1985), and Putnam (1993), among others. Detailed definitions of these nine dimensions can be found in House, et al. (in press), and brief descriptions of the dimensions are provided in Table 1.

The second level of operationalization of culture was in terms of what may be called the content and process of culture. Culture is often manifested in two distinct ways. The first is as values, beliefs, schemas, and implicit theories commonly held among members of a collectivity (society or organization), and these are variously called the attributes or content of culture. The second is as commonly observed and reported practices of entities such as families, schools,

work organizations, economic and legal systems, political institutions, and the like, which are often referred to as the process of culture. The GLOBE program measures all the nine dimensions of culture in both these manifestations. The former are expressed as response to questionnaire items in the form of judgments of what should be, and the latter as assessments of what is with regard to common behaviors, institutional practices, prescriptions, and proscriptions.

The third and final level of operationalization focused on the unit of analysis. Since the GLOBE project was designed to assess the impact of societal culture and organizational culture on perceptions of effective leadership, society and organizations within society were considered as separate units of analysis. Therefore, culture has been measured in GLOBE at both these levels. (We discuss culture as a phenomenon at multiple levels of analysis in more detail below.)

Accordingly, items were written for all the nine dimensions of culture, as “quartets” having isomorphic structures across two units of analysis (societal and organizational) and across two manifestations of culture (As is and Should be), as shown in Figure 1.

While the four items in a quartet are similar in terms of their structure, what is different is the frame of reference which the respondent is cued to use while responding to each item. The frame of reference is changed according to the particular manifestation of culture and the unit of analysis. An example of such a quartet is shown in Figure 2, which contains essentially the same statement in four forms which are: Society As Is, Society Should Be, Organization As Is, and Organization Should Be. Items representing the nine dimensions of culture were derived from a) a review of literature on societal and organizational culture, and b) interviews and focus groups conducted in several of the participating countries. Appropriate psychometric analyses showed that grouping the items into nine scales each corresponding to one of the dimensions of culture was amply justified (Hanges, et al., 1999).

The intention with this design was to take into account varying perspectives on culture and its measurement – in the earliest days of discussion about measure development, the more anthropologically-oriented members advocated measures of values, while the more psychologically-oriented members advocated measures of practices. (One may also argue that the measures of common practices are actually measures of organizational and societal climate, while the measures of shared values are the measures of organizational and societal culture.)

GLOBE is also a multi-phase project. Phase 1, consisting of two pilot studies, psychometric analyses (such as item analysis, factor analysis, generalizability analysis), double-blind translation of items to the languages of participating countries, and review of items by Country Co-Investigators (CCIs) of participating countries, resulted in the development of valid and reliable scales for assessing societal culture, organizational culture, and perceptions of effective leadership. Phase 2 consisted of data collection and assessment of the core societal and organizational As Is and Should Be dimensions, assessment of Culturally endorsed implicit Leadership Theories (CLTs) based on the leadership scales, organizational contingencies in firms included in the sample in various countries, and respondent demographic variables. In addition, two independent sets of scales (unobtrusive measurement scales and participant observation scales) were developed to assess societal level culture dimensions qualitatively. Some of the qualitative methods used are focus groups, ethnographic interviews, non-reactive measures, and media analysis. (Details of future phases, and a more complete description of the leadership aspects of GLOBE, are available in House, et al., in press, and at the GLOBE web site.)

GLOBE is therefore a multi-phase, multi-method, and multi-culture project in which multiple investigators are co-operating to study societal culture, organizational culture, and leadership, and their interactions, over a number of years. It provides multi-level data that can be

analyzed and interpreted in a variety of ways depending on the objective of the investigation, and thus provides an excellent source of data for multiple levels of analysis in the study of organizational culture across societies.

Culture: A Phenomenon Enacted at Multiple Levels

In GLOBE, we have become even more keenly aware of the truth of Barley's (1995) assertion that culture is a "notoriously difficult concept" to define. Indeed, no less than 164 definitions of the term by anthropologists were identified by Kroeber and Kluckhohn (1952). Hofstede defined culture rather simplistically as "the collective programming of the mind." This is distinguished from the "universal" level of mental programming that is common to all humankind: The collective level is shared with some but not all other humans. The collective was defined in Hofstede's (1980) study by national borders.

Culture at the organizational level has been addressed by a number of scholars since the sixties (e.g., Blake & Mouton, 1964; Deal & Kennedy, 1982; Hofstede, Neuijen, Ohayv, & Sanders, 1990; Ott, 1989). Interest in this topic gathered momentum with the intensification of international competition in the late 1970s (Brannen & Kleinberg, this volume) and with Hofstede's (1980) seminal work on national cultures.

How do we isolate the elements of mental programming at one level of collective from that at the other? Often, the elegance of science lies in parsimony of explanation, and Hofstede's definition of culture provides the means to draw a distinction between organizational and national culture. Societal culture may be seen as the collective programming of the mind with the collective defined as a society, whereas organizational culture may be defined as the collective programming of the mind, with the collective in this case being the organization. However, the simplicity of the definition belies the complexity of the constructs; the definition sounds more

precise than it is. In a subsequent study, Hofstede, Neuijen, Ohayv, & Sanders (1990) arrived at a distinction by focusing on national culture as values and organizational culture as practices.

House, Wright and Aditya (1997) adopted a more specific definition of cultures as “distinctive normative systems consisting of modal patterns of shared psychological properties among members of collectivities that result in compelling common affective, attitudinal, and behavioral orientations that are transmitted across generations and that differentiate collectivities from each other.” Further, they proposed an experiential definition of culture as “distinctive environments of collectivities about which members share meaning and values,” resulting in the modal patterns referred to in the earlier definition. These definitions taken together allow us to distinguish the operational elements of national culture from those of organizational culture by identifying the experiential components, or environmental events, at the organizational and national levels. Ott (1989), after reviewing 38 prominent definitions of organizational culture from various sources, held that organizational culture is “a socially constructed, unseen, and unobservable force behind organizational activities.” But perhaps the one depiction of organizational culture that best captures the experiential component mentioned above is Lawson & Shen’s (1998) description of the culture of an organization as “the shared and unifying thoughts, feelings, values, and actions of organizational members in response to organizational issues and challenges.” (p.42, emphasis ours).

Organizational culture clearly revolves around organizational issues and challenges, whereas national culture does not. This suggests to us that the appropriate approach in developing survey questions or other measures regarding organizational culture is to focus on organizational events and values central to and shared by members of an organization, and that the appropriate approach in developing questions about societal culture is to focus on societal events and values central to and shared by members of a society. For example, Cameron and

Freeman (1988; cited in Meschi & Roger, 1994), in their typology of organizational culture, focus on such organization-level considerations as participation, teamwork, and sense of family; leader characteristics such as entrepreneurship, facilitative disposition, risk-taking behavior, and innovativeness; bonding factors such as tradition and sense of loyalty; and strategic emphases such as development of human resources, growth, commitment, and long-term stability versus competitive advantage.

As noted above, GLOBE takes this approach of assessing organizational culture using organizationally-focused frame of reference and societal culture using societally-focused frame of reference. In contrast, Hofstede's (1980) study of national culture used items relevant to the workplace rather than items directly assessing societal phenomena, and aggregated these to the societal level.

Dimensions of Organizational Culture

There have been several conceptualizations of the dimensions that comprise organizational culture. Ashkanasy, Broadfoot, and Falkus (this volume) review measures based on many of these conceptualizations, and so we will not review them here. Instead, we present GLOBE's conceptualization of organizational culture dimensions.

GLOBE's organizational culture dimensions

GLOBE works from the perspective that societal and organizational culture can be described using the same dimensions, recognizing that these dimensions can have somewhat different psychological meanings at the different levels of analysis. This approach makes sense when the primary goal is to understand the direct influence of societal-level variables on organization-level variables, and when one presumes that societal culture will have a main effect on organizational culture – what Lytle, Brett, Barsness, Tinsley, and Janssens (1995) refer to as “Type I hypotheses.” This does indeed describe a major goal and assumption of GLOBE.

In doing organizational culture analyses with GLOBE data, however, care has been taken to demonstrate that factors developed at the societal level, which are then assumed a priori to be meaningful at the organizational level, are in fact conceptually distinct, are uni-dimensional, and are meaningful at the organizational level of analysis. It is recognized that the factors GLOBE has used at the organizational level of analysis do not necessarily span the entire constructual domain of organizational culture, and that these dimensions are not necessarily those that would emerge from an exploratory factor analysis of the data.

The GLOBE a priori measures of organizational culture have been shown through q-sort to be conceptually distinct from each other, and through factor analysis have been shown to be uni-dimensional, though many of them are inter-correlated (Hanges, et al., 1999). The dimensions and their meanings at the organizational level of analysis are shown in Table 1.

Exploratory analysis of GLOBE data

As noted above, the GLOBE organizational culture dimensions were designed to be analogous to societal dimensions of culture, to facilitate investigation of cross-level influences. However, it is possible that a researcher is more interested in variance that is purely at the organizational level of analysis, and in such a case there is no need to constrain the dimensions of organizational culture to map onto the dimensions of societal culture.

To this end, we have also done exploratory factor analyses of the GLOBE questionnaire items at the organizational level, after first standardizing all items within culture to eliminate linear and non-linear effects of societal culture. Perhaps not surprisingly, given the inter-correlations between the a priori dimensions described above, we find a smaller number of factors. However, these factors do conceptually replicate many of the dimensions identified at the societal level. Specifically, the first factor to emerge in these exploratory organization-level analyses would be labeled as Organizational Collectivism/Commitment, the second factor as

Humane Orientation, the third factor as Assertiveness, the fourth as a combination of Uncertainty Avoidance and Future Orientation, the fifth as Gender Egalitarianism, and the sixth and final factor as Individualism-Collectivism. These dimensions show acceptable psychometric properties, and preliminary tests suggest that they relate in meaningful ways to other organizational phenomena, such as leadership styles endorsed by organizational members.

Thus, we propose that some of the broad dimensions of culture at the societal level of analysis are in fact meaningful at the organizational level of analysis, even when variance attributable to society is removed. We do not argue that these dimensions span the entire constructual domain of organizational culture, but we do find them to be conceptually, theoretically, and empirically meaningful.

Sources of Influence on Organizational Culture

Three sources of influence are widely believed to interact to create organizational culture. These are: the values and beliefs held by the founding leaders of the organization and the organization's subsequent history (e.g., Schein, 1983), the particular characteristics of the industry of which the organization is a part (e.g., Chatman & Jehn, 1994; Deal & Kennedy, 1982), and the broader society in which the organization is located (e.g., Hofstede, Neuijen, Ohayv, & Sanders, 1990). Of the three, the first two are more easily discerned.

Influence of the organizational founder, and organizational history.

The values and beliefs held by the founders on such broad issues as human nature, attitude toward work, the value of time, and interpersonal relationships influence the culture of the organization through the initial selection of staff and staff members' self-selection out of the organization if they feel they do not "fit", leading to a self-perpetuating sharing of beliefs and values among organizational members (Schneider, 1987; Schneider, Smith, Taylor, & Fleenor, 1998; Schneider, Goldstein, & Smith, 1995; Kristof, 1996). It may be detected in some of the

questions asked of a job applicant in an interview, or in conversations among members, in the stories and legends, and in rites and rituals that attend events in the organization.

A great deal has been written on this topic – indeed, most writings on sources of organizational culture limit themselves to issues related to organizational founders and history, since most organizational culture analyses occurs with organizations within a single industry within a single society. In such a case, industry and societal effects are presumed to be affecting the organizations of interest in equivalent ways, and so are essentially ignored.

Influence of the industry

The nature of the industry influences organizational culture through the constraints it places on the behavior of all persons in the organization (Gordon, 1991), including the founding members (Schein, 1992). Certain organizational practices become necessary for the organization to survive in the industry (e.g., Lawrence & Lorsch, 1967; Burns & Stalker, 1960), and these cannot be ignored even by the founders. They are shaped by the economic conditions faced by the industry, as well as the role played by the industry in the national economy. Certain organizational practices may be forged, for instance, by the existence of a strong labor union that enjoys nationwide subscription. These practices, in turn, may determine organizational members' values relating to work, creating subcultures within the corporation if necessary. Its influence, although not as easily detected, will soon become apparent to any newcomer in the process of settling into the work routine.

It is important to note, however, that even in an industry that is common across societies, industry-level constraints and the effects of those constraints may differ widely from society to society. Governmental regulation, development of the industry within a society, status as a national monopoly, and national economic system are just a few of the factors that can affect the ways in which a given industry is enacted in a given society. This was made especially clear to

one of us during a summer working in a village on one of the islands in the Bahamas, when the only telephone available in each village was at a central office. Clearly, the telecommunications industry was enacted very differently there relative to the pager and cellular-phone infested United States. Of course, the influence that societal culture may exert on economic/industrial variables of a country (e.g., McClelland, 1961) only serves to make the situation more complicated.

Influence of the societal culture.

The third source, societal culture, has the least easily discernible influence on the way things move in organizations nested within that culture. Its link to organizational culture may be, ironically enough, less apparent to a member of the nesting society than to an individual outside it. Indeed, since organizational culture is often examined within the context of a single society, society as a potentially major source of influence on organizational culture is frequently overlooked simply because it is not salient to the researchers.

Further, the question of the extent to which societal culture has an impact upon organizational culture is one of considerable debate. The literature addressing this question has been inconclusive, and even within this section of this Handbook, the various chapters addressing international issues in organizational culture analysis take different positions with regard to this relationship.

Since national culture is an integral part of the environment in which organizations function, organizational culture by implication should be influenced by the broader societal culture. Lee and Barnett (1997, p.398), following earlier theorizing such as by Emery & Trist (1965), view organizations as “open systems influenced by the environment.” They operationalized organizational culture in terms of perceived distances between pairs of concepts such as happiness, seniority, success, the self, one’s job, supervisor, money and the names of the

countries. They observed significant differences between organizational cultures of a Taiwanese, a Japanese and an American bank located in their respective countries, but found little difference between the Taiwanese bank and an American bank located in Taiwan. These findings highlight the influence of national culture, more than that of leader's values, in determining organizational culture. Additionally, Meschi and Roger (1994) report a strong linear relationship between perceived distance separating national cultures and that separating organizational cultures ($r=.71$).

GLOBE's own analyses provide some support for this perspective, as well – though with some clarifications. Using GLOBE's societal culture scales to predict the analogous organizational culture scales (e.g., Societal Uncertainty Avoidance predicting Organizational Uncertainty Avoidance), we find that values shared at the societal level account for as much as 50% of the variance in values shared at the organizational level. However, values shared at the societal level typically account for very little of the variance (5-10%) in organizational practices, presumably because organizational practices are constrained by so many other things, including industry-level demands (Hanges & House, October 1998).

Additionally, the same societal values can lead to different practices at the organizational level, as in the case when a high level of Uncertainty Avoidance in one society leads organization members to adopt many strict policies, while a high level of Uncertainty Avoidance in another society leads organization members to develop very few policies, but rather to meet and discuss each situation at length to come to clear consensus as to what to do. This would, of course, lead to a reduced level of variance explained when cross-cultural analysis is employed, because the meaning of the dependent variable changes from condition to condition.

A further difficulty in determining the extent to which societal culture will influence the organizational culture of organizations within a given society is the fact that researchers have

typically assumed (and thus looked for) direct linear relationships between the two constructs. We propose, however, that the influence of national culture on organizational culture is not uniform across dimensions nor across societies. Rather, for dimensions of societal culture for which members of a given society are in strong agreement, there is likely to be little variation at the organizational level of analysis within that culture on related organization-level dimensions. However, members of a different society, when asked about the same dimension of societal culture, may show significantly less agreement regarding the appropriate level of that dimension, and thus one may expect significantly greater variation at the organizational level of analysis on related dimensions of organizational culture, as compared to the first case.

Indeed, our preliminary analyses of data from the GLOBE Project provide evidence for this assertion. We find that, measures of societal-level agreement (specifically, r_{wg} ; James, DeMaree, & Wolf, 1984; 1993) correlate negatively with within-society between-organization standard deviation for items with absolute anchors (e.g., “20%”, “once a week”), with an average correlation of approximately $-.25$. This suggests that the higher the level of agreement on the appropriate level of a dimension of societal culture within a given society, the less the variation between organizations on the analogous organization-level dimension. (This finding does not hold with items using relative anchors (e.g., “to a great extent”), and we explain this pattern of responses below, in discussing “frame of reference effects.”)

Thus, analyses predicting organization-level values from societal values would lead us to conclude that societal culture has a significant direct effect on organizational culture, accounting for as much as 50% of the organizational variance. On the other hand, analyses predicting organization-level practices from societal values would lead us to conclude that societal culture has a very small direct effect on organizational culture, accounting for as little as 5% of the organizational variance. In other words, the strength of the direct effect of societal culture on

organizational culture appears to us to be largely determined by the process by which items are constructed, how culture is defined and operationalized at each level of analysis, and how the analyses are done. Changes in any one of these can lead to significantly different results, and the current lack of consistency in the literature on this issue is thus understandable.

Issues to Consider in Cross National Studies of Organizational Culture

Having discussed several different approaches to organizational culture, and the various sources of influence on organizational culture, we are now faced with the most perplexing of our problems: how to compare organizational culture dimension scores for organizations from different societal cultures. Practically speaking, the question is “Can we make sense of organizational culture data from organizations in different countries?”

Addressing this question reminds us of the well-known blind-men-and-elephant problem described by Hofstede, Bond, and Luk (1993), only with several more complications thrown in. In this case, there are two types of elephant, representing societal and organizational cultures. Further, the relationship between the two types of elephant is of interest. Moreover, data on the elephants have been collected from several groups of blind men, the groups representing countries in this case. Additionally, the equivalence of calibration between groups of blind men (i.e., respondents from different countries) is not known.

Under these circumstances, a number of considerations become critical when attempting to interpret the data:

Frame of reference effects

Respondents on organizational culture measures tend to base their ratings against the backdrop of other organizations within their own country. The idea is not new – Katz and Kahn (1966), for instance, suggest that people within an organization develop systems by which they filter outside information, leading to them being most attuned to events that occur and data

generated within the boundaries of their system (pp. 60-61). Thus, for example, an English electrical engineer is likely to compare her workplace with other workplaces employing electrical engineers in Great Britain, rather than considering organizations in Saudi Arabia or Canada. This will be especially true for employees who do not work for multi-national corporations.

Further, when responding to scale items with relative anchors (e.g. “to a great degree,” or “more future oriented than most”), respondents will use organizations within their own society as their high-end and low-end comparators, and will respond accordingly. For example, an organization perceived by its members as being much more future-oriented than most other organizations within its society will be rated by its members as quite high on a future-orientation scale, even though that organization may be less future-oriented than the vast majority of other organizations in the world. This is because organizations in other countries are not considered as comparators by organization members when they make their evaluations about their own organization.

Even where respondents are familiar with organizations in other cultures, perceived similarity of organizations within the national borders may influence the choice of comparators (Festinger, 1954; Adams, 1965). This suggests a need for “aligning” organizational scores across societies before meaningful comparisons can be made. In other words, we argue that interpreting raw scale scores of organizations from different societal cultures can lead to significant errors of interpretation, and that standardization of organizational scores within country is one means of providing this “alignment.”

Culturally-based response biases

Culture, being a construct deeply embedded at multiple levels of a society, often strongly influences how subjects respond to research instruments. The most common research instrument

in cross-cultural research has been the questionnaire, and is likely to continue to be used extensively (Bhagat, Kedia, Crawford, & Kaplan, 1990; Peng, Peterson, & Shyi, 1991). People respond to questionnaires on the basis of their response sets. In cross-cultural organizational culture research, therefore, some problems arise because societal cultures often differ in their response sets on the basis of which people respond to questionnaires (Hui & Triandis, 1989; Triandis, 1994). This results in a number of response biases which are culturally-based. For example, two organizations from different cultures may show similar scores and yet be different from each other, or show different scores and yet be similar to each other, because of society-level response sets. Further, when examining industry-level effects cross-culturally, differences in enactment of the industry between cultures and differences in culturally-based response sets will be difficult to tease apart.

The well-known response bias of social desirability also plays a role in cross-cultural organizational culture research: only, here the issue is compounded by the fact that what is socially desirable in one culture may not be so in another. d'Iribarne (1997), for example, mentions the US model of "fair contract", the French "logic of honor", and the Dutch "consensus" which guide organizational functioning in these three countries, thus influencing what is considered socially desirable. Organizational members' responses to organizational culture items will be conditioned by such influences, rendering direct comparisons of organizational culture scores from these three countries erroneous.

Another culturally-based response bias arises from differing use of the response format or scale. This can take varied forms such as the excessive use of the end points of the scale, called extreme response set bias (Hui and Triandis, 1989), and the failure to use the extreme ends. Though the latter is often considered to be associated with Eastern cultures, Stening and Everett (1984) found differences even within Asian cultures with the Japanese most likely and the Thai

least likely to give a mid-point response. Varying response patterns can sometimes result from the respondents' lack of familiarity with graded response formats. This could explain why Adler, Campbell, and Laurent (1989) found that more than 50 percent of their respondents from the People's Republic of China chose entirely bimodal answers on the five-point Likert scale. Lack of consistency in the use of the scale across countries also creates problems in direct comparison of organizational culture scores across countries.

Society-level Agreement and Organization-level Variability

Culturally-based response sets and frame of reference effects are not the only difficulties with direct comparison of organizational culture scores for organizations from different. An additional difficulty arises from the fact that the within-country between-organization variance on any given organizational culture dimension may vary significantly across countries, according to the degree to which the members of the society are in agreement about the appropriate level of analogous societal-level dimensions. Thus, for a societal culture dimension on which society members are in strong agreement, the true range within which organizations vary on a given dimension may be quite small, though organizational respondents may show significant variability in their organizational culture responses.

This discrepancy occurs because minute differences in expression of a deeply embedded concept may be quite noticeable to respondents, since it is highly agreed-upon within the society, thus leading to a small "just noticeable difference." Alternately, on the same dimension of societal culture but in a country where there is less agreement about the dimension, there may be significant absolute variation on analogous organizational culture dimensions, and organizational respondents may still report significant relative variability in their organizational culture responses. In this case, minute differences in the enactment of the concept may be less noticeable

to respondents, since the appropriate level of the concept is not highly agreed-upon within the society.

The end result is that, in both cases there is likely to be variability between organizations' descriptions of their own cultures. The meaning of these reports is different, however, and cannot be understood and interpreted without understanding the degree to which the society is in agreement about the appropriate level of the construct in question.

Variability in the data should be examined at both societal and organizational levels. Especially, when societal and organizational culture items are constructed in parallel, as in the GLOBE study, responses to societal culture items may exhibit low variability while organizational culture items show high variability, across cultures. This is likely to occur with "entrenched" value systems, or highly-agreed-upon societal values at extreme ends of a dimension. Such entrenched values sensitize respondents to minute deviations from the societal norm, and hence the variability in analogous organizational culture responses.

On the other hand, sometimes a dimension may actually be less salient for respondents in countries where the values on that dimension are more deeply entrenched – Schein (1992) and Lord and Maher (1991) both note that some values and beliefs are so deeply held that people are not aware of the fact that they hold the values and beliefs. Such beliefs are seen as simply reflecting "the way the world is" rather than reflecting a value on which individuals may differ. (Values which are consciously chosen and adopted, however, are likely to be quite salient.)

The end result of this is that organization scores from two such countries may appear to be similar in their distributions when in fact the underlying reasons for the distributions may be different.

Scale equivalence in items.

The overall cultural context tends to significantly influence the response to the same item in different cultures. For example, taking the expression “to break a rule” as an example based on an ethnographic study of metallurgical factories in three countries, d’Iribarne (1997, p. 44) observes “it is not unreasonable to assume that, whereas an American will tend to speak of ‘breaking a rule,’ a Frenchman might tend to speak rather of ‘interpreting the spirit of the rule intelligently.’” The difference in scores between France and United States on a question relating to rules, therefore, may not necessarily mean significantly different levels of formalization in their organizations. Statistical processes exist for evaluating different types of equivalence for both constructs and measures (Hulin, 1987; Peng, Peterson, & Shyi, 1991; Brett, Tinsley, Janssens, Barsness, & Lytle, 1997). Equivalence can often be improved by deleting problematic items identified in factor comparisons. Caution however is necessary to ensure that such deletion does not (a) render the resulting scale unusable, and (b) lose some key concepts from the instrument.

Summary of problems

We have identified several major roadblocks in the direct comparison of organizational culture dimension scores for organizations from different societal cultures, including the problem of the comparator; culturally-based response biases; the problem of level of societal agreement on related dimensions; and scale equivalence in items. Each of these phenomena serve to prevent meaningful interpretation of raw organizational culture dimension scores cross-culturally. Before addressing the issue of what researchers should do, we first describe some statistical approaches to this type of data that may at first glance seem helpful, but which seem to us to be inappropriate.

Methodological considerations

The issues discussed above raise several methodological considerations that must be addressed in understanding organizational cultures in cross national context. In this section we briefly describe several of these considerations.

Factor Analysis.

If sufficient care is exercised in the aspects listed above, then the data are more likely to lend themselves to answering a number of research questions. Currently, our understanding of organizational culture on a global scale is still at a nascent stage, and thus an initial objective might be to unearth universal dimensions of organizational culture. Under these circumstances, factor analysis can be meaningfully applied at various levels of analysis, and taken together for a better understanding of organizational culture. There exists extensive documentation of the theoretical and practical considerations involved (e.g., Chinese Culture Connection, 1987; Hofstede, 1980; Hofstede, Bond, & Luk, 1993; Leung & Bond, 1989) and will not be elaborated here, except to note the additional consideration of industry as a level of analysis. If data are obtained across several industries, then the influence of industry have to be weeded out also, besides the societal culture. The same overall philosophy and procedure applies in this case: factor analyses within industry are called for, and industry scores may also have to be taken into account in the overall exploratory factor analysis. Of course, multiple organizations are needed in the sample from each industry for these procedures to be applied.

Sample sizes.

There are several data analytic approaches that can be used in the analysis of cross-cultural organizational culture data, including the Multiple-Relationships Analysis component of Within and Between Analysis, or WABA (Dansereau, Chandrasekaran, Dumas, Coleman, Ehrlich, & Bagchi, 1986; see also Dansereau and Alutto, 1990, for an example of this, in their

discussion of psychological and organizational climate), and Hierarchical Linear Modeling (Bryk & Raudenbush, 1992). However, each of these approaches requires several cases from each hypothesized nested level. In other words, a researcher who is truly interested in understanding organizational culture in a cross-cultural context would have to have data from several cultures, data from several industries within each culture, data from several organizations within each industry, and data from several individuals within each organization. Such data sets are extremely difficult and time-consuming to gather, making individual research efforts very difficult. Without such data sets, however, interpretation of the source of variation is ambiguous at best – variation that appears to represent organizational culture could in fact be due to differences in societal cultures, differences in industries as they are enacted in different societies, or other sources of variation. Thus, cross-cultural organizational culture analysis should not be attempted, in our opinion, without securing in advance significant resources, time, and access to necessary data. This is one of the reasons that we advocate the large research-team approach for this type of research.

Level of analysis and unit of analysis.

Levels of analysis and unit of analysis errors are all too common in the study of multi-level phenomena (Klein, Dansereau, & Hall, 1994) (The level of theory problem is a related but separate, and equally important, issue about which researchers must be clear to avoid significant errors or interpretation (Brett, Tinsley, Janssens, Barsness, & Lytle, 1997).) In the “figure-ground” terminology of the study of perception, the appropriate unit of analysis becomes the figure and all the other levels of analysis becomes the background. When the purpose of analysis is understanding organizational culture across different countries, one has to be extremely alert to and control for the effects of other levels such as societal culture and industry. This alertness needs to inform all decisions including choice of instruments, if existing

instruments are to be used. If new instruments are developed, the desired units of analysis should guide decisions at every stage, including item generation, response format, and the wording of items. In the case of organizational culture, we should recognize the influence of both industry and societal cultures in constructing items. Further, simple aggregation of individual scores to the organizational or societal level is not meaningful (Sego, Hui, & Law, 1997) unless items have been constructed specifically for that level.

Toward a Better Understanding of Cross Cultural Organizational Culture:

Lessons from GLOBE

The GLOBE study, as detailed earlier, has taken a fresh perspective on the study and operationalization of organizational culture. GLOBE attempted to operationalize organizational culture by mapping theoretically established dimensions of societal culture. This approach has both strengths and weaknesses, and these are both instructive about organizational culture in a cross national context in their own ways. Our major observations are recorded below.

Practices versus values

One useful contribution of the GLOBE study was the operationalization of culture items through both practices and values. The data show that practices and values responses on the organizational culture items differ. This might be predicted from previous research (Hofstede, Neuijen, Ohayv, & Sanders, 1990). Hofstede and his associates had surmised from their study that national culture is represented by values, and organizational culture by practices. However, the GLOBE data reveal that the issue may not be as simple as that: although differences between values and practices are observed across levels (organizational and societal), there is not a consistent correspondence across dimensions between organizational and societal levels in the responses to value or practices items. These findings support the GLOBE perspective on culture, which includes both practices and values at any given level of analysis.

Society and industry influences

To accurately interpret cross-cultural organizational culture analyses, it is necessary to understand both absolute and relative aspects of organizational functioning. For instance, for organization A, “long-range planning” may mean a 2-year plan, while for organization B, it may be a 10-year plan. These absolute differences are important for predicting and understanding conflict between organizations and which organizations are likely to integrate well with each other. However, whether an organization will see 2-year plans or 10-year plans as “long-term” is a function of not only organizational culture, but that of industrial characteristics as well. For instance, power utilities have to plan 10 years ahead at the very least—for them, long range may mean two or more decades. In contrast, two years would be a very long time for the computer industry, and 20 years in that industry is much too far in the future to plan with any degree of certainty.

The above case may be seen as an example of industry influence on organizational culture, and should be distinguished from the frame of reference effects discussed as an artifact earlier. The issue is how to appropriately extract this effect from the data. The problem is analogous to the acquiescence bias discussed by Hofstede (1980; p. 77-80), only, in this case we do not want to rid the data of the influence of industry, but study it as an influence on organizational culture. The methods of standardization suggested by Hofstede (1980) and others are not appropriate to handle this problem. For these reasons, organizational culture data cannot be pooled across societies statistically, even in an exploratory factor analysis procedure, unless we can make a reasonable assumption of invariance of reference frames in item responses across cultures. The solution, as we see it in retrospect, is in prevention rather than cure—in the item construction stage. Questions intended for direct cross-cultural comparison should be constructed with rating scale anchors that are objectively defined (e.g., “Four times a week,” instead of “very

frequently”). Separate items will be needed to address the issue of what, in the example above, constitutes ‘long range planning’ for the organization.

On the other hand, it is also important to know how an organization is perceived as ranking relative to other organizations in the same country. For instance, suppose that the organizations in cultures X and Y both scored the same low score on Uncertainty Avoidance. One may conclude that these two companies are relatively low on their risk-taking propensity. However, it may turn out that the company in culture X is very high in risk-taking relative to other organizations in its own culture, while the company in culture Y is very low in risk-taking relative to other organizations in its culture. Thus, company X is likely to face problems securing bank loans within its country, while company Y will probably breeze through. Researchers, of course, have no means of understanding such differences unless they look at within-culture standing of the organizations.

Banding versus mean scores and rankings.

A common fallacy often made in cross-cultural research is to treat mean scores as representing an absolute value on a dimension or attribute, when only the relative positions of observations can be meaningfully interpreted. Even a ranking can prove tricky in interpretation when there is little variation in country mean scores. In GLOBE, a statistical “banding” procedure was borrowed from the personnel selection literature to differentiate countries from each other on dimensions of societal culture. Bands are constructed by determining how large a difference must be to be statistically significant, and then a range is calculated from the top score. Thus, countries falling within that band are not statistically different from the top score, but the first country outside of the band is statistically significantly different from the top score. This procedure, while not perfect, does at least provide some basic understanding of how much

of a difference in mean scores is necessary to be meaningful. (See Cascio, Outtz, Zedeck, & Goldstein, 1991, for a more detailed description of the banding process.)

This same procedure can be applied to organization scores (assuming a sufficient number of organizations), with the added benefit of being able to determine if organizations from one country cluster together within a single band (as might be expected for deeply embedded concepts), or range across several bands.

Use of qualitative measures to confirm construct meanings

As already noted, similar values can lead to different organizational practices, and the same construct can have different meanings in different cultures. Standardized questionnaires are not likely to uncover these phenomena, regardless of how well they are constructed. GLOBE also developed and collected data using unobtrusive measures, media analysis, participant observation, and other methodologies (analyses on these measures is presently underway). Such a multiple measures approach is critical for gaining a thorough understanding of organizational culture in a cross-cultural context. Questionnaires by themselves provide useful information, but are subject to the wide range of flaws and errors of interpretation already listed. For these reasons, other types of measures, especially more qualitative measures like media analysis, unobtrusive measures, and interviews will be invaluable in identifying differences in origins of practices and in meanings of constructs (see House, et al., in press, for details of GLOBE's unobtrusive measures).

Corrections for response biases — a cautionary note..

As noted above, the difference between some eastern and western cultures in the tendency to utilize the extreme points of a rating scale has been documented in the literature. This issue should be examined in any cross cultural data: usually it will reflect in a consistent difference in variance across all items in a questionnaire. Triandis (1994) has developed a

technique for correcting for response biases by standardizing each individual's responses on all items, but GLOBE analyses suggest that results from data thus corrected correlate highly ($r > .90$) with results from uncorrected items (Hanges et al, 1999). Thus, GLOBE's results suggest that cultural response sets may not be as serious a problem as others have suggested, although there is evidence to the contrary from other research (alluded to above). Exploration with newer approaches such as Item Response Theory, and with innovative combinations of existing approaches such as item analysis, LISREL, multidimensional scaling is likely to help in resolving this difficult issue. (See Peterson, Smith, & Tayeb (1993) as an example of such an attempt.)

Understanding differences between the cultures of organizations from different societies is a difficult undertaking, as we learned at GLOBE. It requires recognition of the differential influence on organizations of societal culture ; of the industry nested within societies; and of the history, structure, leadership and other aspects of organizations. It is clearly a more complex undertaking than the analysis of cultural differences at the societal level, and the wealth of literature on that topic shows how difficult that task has proven over the years.

We conclude by listing for researchers in this area a number of basic questions to ask themselves before embarking on a study. The answers to these could save a lot of effort later on, and could make a difference in whether results are interpretable or are hopelessly confounded.

- What phenomena are you interested in? Are you only interested in organization-level differences, or are you interested in differences between organizations in different countries which are attributable to societal culture? This will determine how you approach the data, whether you eliminate society-level variance or focus on it, whether you control for industry effects or attend to them, and how you describe what you find.

- Do you have measures available which have already been validated and for which norms are available for the societies in which you have gathered organizational culture data? If so, you will be able to make some comparisons between your findings and the norms of the society. If not, you may need to collect enough data to be able to determine norms.
- Which society-level dimensions are likely to be related (or in the case of GLOBE data, are analogous) to the organizational culture dimensions of interest? Determine if such data as means and degree of agreement within the society about the appropriate level of the dimension are available.
- Are you interested in organizational practices, values, or both? GLOBE data suggests that societal values are strongly related to organizational values, but not so strongly related to organizational practices.
- Since any single method is subject to biases, multiple methods are useful. Indeed, mono-method research may suggest linear relationships among variables, when multi-method research reveals non-linear relationships (Baltes, Lacost, Parker, Altmann, Huff, & Young, April, 1999). It is thus a good idea to team up with experts in different methodologies of data collection as well as analysis. Triangulation is especially important in this area.
- Do you have first hand knowledge and experience with at least several of the cultures you are gathering data from? In GLOBE we had the advantage of a cooperative enterprise. Others before GLOBE have also realized the fruits of cross-cultural cooperation (e.g., Peterson, Smith, & 21 authors, 1995; Chinese Culture Connection, 1987), while some cross-cultural research efforts consisting of researchers from a single culture have reported difficulties of interpretation (see Graen, Hui, Wakabayashi, and Wang, 1997, for a discussion of the importance of cross-cultural research teams).

Having worked with the GLOBE Project for five or more years, and tried to condense what we have learned about cross-cultural organizational culture analysis into a few pages, we conclude that to really understand organizational culture cross-culturally we may need to move beyond the data analytic techniques with which people are most familiar and comfortable. Quantitatively, complex analytical processes like confirmatory multi-level hierarchical linear modeling (e.g., Hanges & House, 1998) need to be used, but will provide only part of the answer. Multiple measures from multiple perspectives are needed, assessing both absolute and relative standings on dimensions. Qualitative methodologies are needed to help understand the variation in meanings that exist across societies. In our experience, no one person is likely to have all of the skills necessary to acquire a full understanding of organizational culture in a cross-cultural context. We have seen the large research team model work in GLOBE, and we encourage others to develop similar collaborative teams as we wrestle with this complex issue.

References

- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), Advances in experimental psychology. New York: Academic Press.
- Adler, N. J., N. Campbell, and A. Laurent (1984). In search of appropriate methodology: From outside the People's Republic of China looking in. Journal of International Business Studies, 20(1), 61-74.
- Baltes, B. B., Lacost, H., Parker, C. P., Altmann, R., Huff, J., & Young, S. (1999, April). A multitrait-multimethod examination of hierarchical models of psychological climate. Poster presented at the conference of the Society for Industrial/Organizational Psychology, Atlanta.
- Barley, S. R. (1995). Culture. In N. Nicholson (Ed.), The Blackwell encyclopedic dictionary of organizational behavior. Cambridge, MA: Blackwell.
- Bhagat, R. S., B.L. Kedia, Crawford, S. E., & Kaplan, M. (1990). Cross-cultural and cross-national research in organizational psychology: Emergent trends and directions for research in the 1990's. In C. L. Cooper and I. Robertson (Eds.), International Review of Industrial and Organizational Psychology, (Volume 5, pp. 59-99). New York: John Wiley.
- Blake, R. R., & Mouton, J. S. (1964). The managerial grid: Key orientations for achieving production through people. Houston: Gulf Publishing.
- Brett, J. M., Tinsley, C. H., Janssens, M., Barsness, Z. I., & Lytle, A. L. (1997). New approaches to the study of culture in Industrial/Organizational Psychology. In P. C. Earley & M. Erez (Eds.), New perspectives on international Industrial/Organizational Psychology (pp. 75-129). San Francisco: New Lexington Press.
- Bryk, A. S., & Raudenbush, S. W. (1992). Hierarchical linear models: applications and data analysis methods. Newbury Park: Sage.

Burns, T., & Stalker, G. M. (1961). *The management of innovation*. London: Tavistock Publications Ltd., Tavistock Centre.

Cameron, K., & Freeman, S. (1988). *Cultural congruence, strength, and type: Relationship to effectiveness*. Working paper. Graduate School of Business Administration, University of Michigan.

Cascio, W. F., Outtz, J., Zedeck, S., Goldstein, I. L. (1991). Statistical implications of six methods of test score use in personnel selection. *Human Performance*, 4, 233-264.

Chatman, J. A., & Jehn, K. A. (1994). Assessing the relationship between industry characteristics and organizational culture: How different can you be? *Academy of Management Journal*, 37, 522-553.

Chinese Culture Connection (1987). Chinese values and the search for culture-free dimensions of culture. *Journal of Cross Cultural Psychology*, 18(2), 143-174.

d'Iribarne, P. (1997). The usefulness of an ethnographic approach to the international comparison of organizations. *International Studies of Management and Organization*, 26(4), 30-47.

Dansereau, F., & Alutto, J. A. (1990). Level-of-analysis issues in climate and culture research. In B. Schneider (Ed.), *Organizational Climate and Culture*, (pp. 193-236). San Francisco: Jossey-Bass.

Dansereau, F., Chandrasekaran, G., Dumas, M., Coleman, D., Ehrlich, S., & Bagchi, D. (1986). *Data enquiry that tests entity and correlational/causal theories*. Williamsville, NY: Institute for Theory Testing.

Deal, T., & Kennedy, A. A. (1982). *Corporate cultures: The rites and rituals of corporate life*. Reading, MA: Addison-Wesley.

- Emery, F.E., & Trist, E. L. (1965). The causal texture of organizational environments. Human Relations, 18, 21-32.
- Festinger, L. (1954). A theory of social comparison processes. Human relations, 7, 117-140.
- Gordon, G. G. (1991). Industry determinants of organizational culture. Academy of Management Review, 16(2), 396-415.
- Graen, G. B., Hui, C., Wakabayashi, M., & Wang, Z-M.. (1997). Cross-cultural research alliances in organizational research: Cross-cultural partnership-making in action. In P. C. Earley & M. Erez (Eds.), New perspectives on international Industrial/Organizational Psychology, (pp. 160-190). San Francisco: New Lexington Press.
- Hanges, P. J., & House, R. J. (October, 1998). The relationship between societal cultures and organizational practices and values. Invited presentation to the conference of the Society for Organizational Behavior, Washington D.C.
- Hanges, P. J., House, R. J., Dickson, M. W., Dorfman, P. W., et al. (The GLOBE Project). (1998). Development and validation of scales measuring organizational culture, societal culture, and preferences for leader behaviors and attributes. Working paper, University of Maryland.
- Hofstede, G (1980). Culture's consequences: International differences in work-related values. London: Sage.
- Hofstede, G. Bond, M.H. (1988). The Confucius connection. From cultural roots to economic growth. Organizational Dynamics, 16, 4-21.
- Hofstede, G., Bond, M. H., & Luk, C. (1993). Individual perceptions of organizational cultures: A methodological treatise on levels of analysis. Organization Studies, 14(4). 483-503.

Hofstede, G., Bond, M.H., & Luk, C. (1993). Individual perceptions of organizational cultures: A methodological treatise on levels of analysis. Organization Studies, 14 (4), 483-503.

Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. Administrative Science Quarterly, 35, 286-316.

House, R. J., Hanges, P. J., Ruiz-Quintanilla, S. A., Dorfman, P.W., Javidan, M., Dickson, M. W., et. al. (in press). Cultural Influences on Leadership: Project GLOBE. In Mobley, W. (Ed.), Advances In Global Leadership, (Lead article, Vol. 1), JAI Press.

House, R. J., Wright, N., & Aditya, R. A. (1997). Cross-cultural research on organizational leadership: A critical analysis and a proposed theory. In P. C. Earley & M. Erez (Eds.), New perspectives on international Industrial/Organizational Psychology, (pp. 535-625). San Francisco: New Lexington Press.

Hui, C.H., and H. C. Triandis (1989). Effects of culture and response format on extreme response styles. Journal of Cross-Cultural Psychology, 20, 296-309.

Hulin, C.L. (1987). A psychometric theory of evaluations of item and scale translations: Fidelity across languages. Journal of Cross-Cultural Psychology, 18(2), 115-142.

James, L. R., Demaree, R. G., & Wolf, G. (1984). Estimating within-group interrater reliability with and without response bias. Journal of Applied Psychology, 69(1), 85-98.

James, L. R., Demaree, R. G., & Wolf, G. (1993). r_{wg} : An assessment of within-group interrater agreement. Journal of Applied Psychology, 78(2), 306-309.

Katz, D., & Kahn, R. L. (1966). The social psychology of organizations. New York: John Wiley & Sons.

Klein, K. J., Dansereau, F., & Hall, R. J. (1994). Levels issues in theory development, data collection, and analysis. Academy of Management Review, 19(2), 195-229.

Kluckhohn, F.R. & Strodtbeck, F. L. (1961). Variations in value orientations. New York: Harper Collins.

Kristof, A. L. (1996). Person-Organization Fit: An integrative review of its conceptualizations, measurement, and implications. Personnel Psychology, 49, 1-50.

Kroeber, A. L., & Kluckhohn, C. (1952). Culture: A critical review of concepts and definitions. Cambridge, MA: Harvard University Peabody Museum of American Archeology and Ethnology.

Lawrence, P. J., & Lorsch, J. W. (1967). Organization and environment. Boston: Harvard Business School, Division of Research.

Lawson, R. B., & Shen, Z. (1998). Organizational psychology. New York: Oxford University.

Lee, M., & Barnett, G. A. (1997). A symbols-and-meaning approach to the organizational cultures of banks in the United States, Japan, and Taiwan. Communication Research, 24(4), 394-412.

Leung, K., & Bond, M.H. (1989). On the empirical identification of dimensions for cross-cultural comparisons. Journal of Cross-Cultural Psychology, 20 (2), 133-151.

Lord, R. G., & Maher, K. J. (1991). Leadership and information processing: Linking perceptions and performance. Boston: Unwin Hyman.

Lytle, A. L., Brett, J. M., Barsness, Z. I., Tinsley, C. H., & Janssens, M. (1995). A paradigm for confirmatory cross-cultural research in organizational behavior. In L. L. Cummings & B. M. Staw (Eds.), Research in organizational behavior (Vol. 17, pp. 167-214). Greenwich, CT: JAI Press.

M.F., Smith, P.B., & Tayeb, M.H. (1993). Development and use of English versions of Japanese PM leadership measures in electronic plants. Journal of Organizational Behavior, 14, 261-267.

McClelland, D.C. (1961). The achieving society. Princeton, NJ: Van Nostrand.

McClelland, D.C. (1985). Human motivation. Glenview, IL: Scott, Foresman.

Meschi, P., & Roger, A. (1994). Cultural context and social effectiveness in international joint ventures. Management International Review, 34(3), 197-215.

O'Reilly, C., Chatman, J., & Caldwell, D. (1991). People and organizational culture: A Q-sort approach to assessing person-organization fit. Academy of Management Journal, 34, 487-516.

Ott, J. S. (1989). The organizational culture perspective. Pacific Grove, CA: Brooks/Cole.

Peng, T.K., M.F. Peterson, and Y. Shyi (1991). Quantitative methods in cross-national management research: Trends and equivalence issues. Journal of Organizational Behavior, 12, 87-107.

Peterson, M. F., Smith, P. B., (and 21 authors) (1995). Role conflict, ambiguity, and overload: A 21-nation study. Academy of Management Journal, 38(2), 429-452.

Peterson, M.F., Smith, P.B., & Tayeb, M.H. (1993). Development and use of English versions of Japanese PM leadership measures in electronic plants. Journal of Organizational Behavior, 14, 261-267..

Pinder, C. C. (1984). Work motivation: Theory, issues, and applications. Glenview, IL: Scott, Foresman.

Putnam, R. D. (1993). Making democracy work. Princeton, NJ Princeton University Press.

Schein, E. H. (1992). Organizational culture and leadership. (2nd ed.). San Francisco: Jossey-Bass.

Schein, E. H. (1983). The role of the founder in creating organizational culture. Organizational Dynamics, 12, 13-28.

Schneider, B. (1987). The people make the place. Personnel Psychology, 40, 437-453.

Schneider B., Goldstein, H. W., & Smith, D. B. (1995). The ASA framework: An update. Personnel Psychology, 48, 747-773.

Schneider, B., Smith, D. B., Taylor, S., & Fleenor, J. (1998). Personality and organizations: A test of the homogeneity of personality hypothesis. Journal of Applied Psychology, 83, 462-470.

Sego, D. J., Hui, C., & Law, K. S. (1997). Operationalizing cultural values as the mean of individual values: Problems and suggestions for research. In P. C. Earley & M. Erez (Eds.), New perspectives on international Industrial/Organizational psychology, pp. 148-159. San Francisco: New Lexington Press.

Stening, B. W., and J. E. Everett (1984). Response styles in a cross-cultural managerial study. The Journal of Social Psychology, Volume 122, pp. 151-156.

Triandis, C. H. (1994). Cross-cultural industrial and organizational psychology. Handbook of Industrial and Organizational Psychology, Volume 4, pp. 103-172. 2nd. Edition. Palo Alto, CA: Consulting Psychologists Press.

Figure 1. GLOBE's approach to culture.

Unit of Analysis	Societal	Nine Dimensions of Culture	Nine Dimensions of Culture
	Organizational	Nine Dimensions of Culture	Nine Dimensions of Culture
		As Is	Should Be
		Manifestation of Culture	

Figure 2. Example of a GLOBE item “quartet” addressing societal and organizational culture

Society	The economic system in this society is designed to maximize: 1 2 3 4 5 6 7 Individual Collective Interests Interests (Societal Practices)	The economic system in this society <u>should</u> be designed to maximize: 1 2 3 4 5 6 7 Individual Collective Interests Interests (Societal Values)
Organization	The pay and bonus system in this organization is designed to maximize: 1 2 3 4 5 6 7 Individual Collective Interests Interests (Organizational Practices)	In this organization, the pay and bonus system <u>should</u> be designed to maximize: 1 2 3 4 5 6 7 Individual Collective Interests Interests (Organizational Values)
	As Is	Should Be

Table 1. GLOBE's dimensions of organizational

Dimension	Focus of the Dimension at the Organizational level
Power Distance	The degree to which members of an organization (should) accept distinctions between members on the basis of organizational position. Includes such things as perquisites, status, decision-making power, etc.
Uncertainty Avoidance	The degree to which members of an organization (should) actively attempt to reduce ambiguity in organizational life by relying on norms, rules, and policies.
Humane Orientation	The degree to which members of an organization (should) encourage and reward individuals for being fair and kind to other organization members.
Assertiveness	The degree to which members of an organization are (should be) assertive, dominant, and demanding in their interactions with other organization members.
Gender egalitarianism	The degree to which men and women are (should be) treated equally in the organization in terms of tasks assigned and opportunities for training and advancement.
Future orientation	The degree to which an organization (should) encourages and rewards long-term versus short-term planning and projects.
Performance orientation	The degree to which an organization (should) focuses on and rewards high performance and efforts to improve quality.
Individualism-Collectivism	The degree to which an organization (should) focuses on individual accomplishment versus group accomplishment
Organizational Collectivism	The degree to which organizational members (should) take pride in being associated with the organization