Critical Issues in the Hofstede and GLOBE National Culture Models

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Purpose – The purpose of this paper is to clarify critical issues underlying the national culture dimensions of Hofstede and GLOBE, demonstrating their irrelevance to international marketing decision-making.

Design/methodology/approach – In-depth discussion of the theoretical and empirical logic underlying the national culture dimension scales and scores.

Findings – Hofstede and GLOBE national culture scores are averages of items that are unrelated and which do not form a valid and reliable scale for the culture dimensions at the level of individuals or organizations. Hence these scores cannot be used to characterize individuals or sub-groups within countries. The national culture dimension scores are therefore of doubtful use for marketing management that is concerned with individual- and segment-level consumer behavior.

Practical implications Hofstede and GLOBE dimension scores should not be used to infer individual level behavior and preferences.

Originality/value – The paper follows a recent article in IMR which was the first to discuss the common misunderstanding of the Hofstede and GLOBE national culture scales and scores, and their misapplication at the level of individuals and organizations by scholars and practitioners. Here we further expand and clarify the issues.

Keywords – National culture, Hofstede, GLOBE, international marketing.

Paper type – Viewpoint

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Introduction

In a recent article, Brewer and Venaik (2012) show how the Hofstede and GLOBE national culture dimensions are misapplied through the use of their dimension scores in analysis relating to individuals, usually managers, and organizations. It explains that the national nature of the culture constructs mean that their characteristics cannot validly be projected onto individuals or organizations in the countries concerned. In one sense this should not be a surprise to researchers as Hofstede (2001, p. 17) and GLOBE (Hanges & Dickson, 2004, p. 127) have both made the same point in their original research manuscripts. Yet there are many examples of such invalid projections made by researchers and educators over many years in the research literature and teaching materials. This problem has occurred primarily because the researchers concerned do not seem to understand the purely national nature of the Hofstede and GLOBE dimensions. Many journal editors and reviewers also seem ill informed in this respect.

De Mooij's (forthcoming) commentary on the Brewer and Venaik (2012) article agrees with some of their assertions, disagrees with others, and extends the debate to include comparative comments on the Hofstede and GLOBE national culture models. We are grateful for the opportunity to respond to De Mooij. Our article is structured as follows. First, we explain how the concept of "average" characteristics is not the same as the Hofstede and GLOBE national culture dimensions. In doing so, we provide more clarification with regard to the national level of the Hofstede and GLOBE dimensions and explain why they do not apply to individuals nor organizations. Second, we address both De Mooij's comments on the desired versus the desirable aspects of culture values, and the issue of inconsistent dimension definitions and measures in Hofstede and GLOBE. Third, we critically examine the methodology used by Hofstede and GLOBE to arrive at the national culture scores, and the implications of cultural banding in GLOBE for cross cultural research. Finally we show how

the national culture dimensions are irrelevant for marketing decision making and conclude with some remarks emphasizing why researchers and practitioners need to be very cautious in applying the national culture models of Hofstede, GLOBE and others in their own work.

The concept of averaging and the national culture dimensions: the two are not the same thing

The "levels of analysis" issue in cross cultural research is at the core of Brewer and Venaik (2012) article. Because of the nature of the Hofstede and GLOBE national culture dimensions, in particular, because the questionnaire items that reflect these constructs are correlated at the mean national level but are not significantly correlated at the individual or organizational level, they do not represent constructs of individual or organizational characteristics and therefore cannot be applied to individuals. In De Mooij's response there is evidence of some misunderstanding of this fact. Whilst she says (De Mooij, forthcoming, p. XX):

> "Although Brewer and Venaik (2012) are correct in stating that dimensions of national culture do not apply to individuals, their objections to the way findings are reported in the Hofstede and GLOBE studies miss the point and suggest that they did not understand the logic of analysing the same data at different levels of aggregation. Scores on national dimensions cannot be used to predict the behaviour of a particular individual, but as long as authors are clear about reporting frequencies or averages, using the word *individuals* is not problematic. They should even less object to referring to *people* which is a collective."

And later, "It is perfectly okay to refer to characteristics of individuals that in such a culture are relatively more frequent or more likely." (De Mooij, forthcoming, p. XX). So it appears De Mooij is against using the national culture measures for an individual but thinks it okay for groups of individuals within a country. In fact we object to the use of Hofstede and GLOBE scores for "individuals" and for "people" and for any other collective grouping of human beings except "nation" or "society", which is the sample boundary used to define the national culture dimensions in the Hofstede and GLOBE studies. De Mooij's comment is an invalid defense of the use of Hofstede and GLOBE scores in management that we often find in scholarly research and it merits a clear response.

The essence of De Mooij's argument is that the Hofstede and GLOBE national culture dimensions cannot be applied to *an* individual but can be applied to *groups* of individuals, because, while no group characteristic can be expected to apply to an individual in that group with any certainty, by definition it clearly does apply to the group as a whole, and therefore can be applied to individuals (plural) or subgroups in that group as a generalisation. An analogy for this argument is that if the average income of senior managers in Australia is $200,000 p.a. this does not mean that any particular individual manager earns $200,000 p.a., but there is a strong tendency for these managers to receive around $200,000 p.a. And therefore we can generalise at the very least that these people are high income earners. But this represents a complete misunderstanding of the nature of the Hofstede and GLOBE national culture dimensions. In our income analogy above the concept of "income" applies to the group (as an average) and also to individuals in the group (as his/her particular income). This is not the case in the Hofstede and GLOBE culture models since their national culture dimensions specifically *do not exist* for individuals or organizations, as discussed below.[2]

Why the national culture dimension scales and scores cannot be used for individuals

Hofstede identified four dimensions of national culture through post hoc analysis of national average values of IBM employees (Hofstede, 1980). However, the items used to measure these national culture dimensions are not related at the level of individuals. For example, the intercorrelations among the three items used to measure Uncertainty Avoidance, namely, rule orientation, employment stability, and stress, are low and even negative at the individual level (0.14, 0.00, and -0.11) but high and positive at the national level (0.58, 0.46, and 0.44) (Hofstede, 2001, p. 184). Accordingly, Minkov and Hofstede (2011, p. 12) conclude: "Hofstede's dimensions of national culture were constructed at the national level. They were underpinned by variables that correlated across nations, *not across individuals* or organizations." (Italics added).

Unlike Hofstede, House et al.'s (2004) GLOBE national culture dimension measures are based on extensive theoretical and empirical research. Notwithstanding their theoretical underpinnings, the GLOBE scales are also found to be unreliable and invalid at the individual level analysis within countries. For example, the factor loadings for the four items used to measure Uncertainty Avoidance in GLOBE have very low reliability (well below the required 0.7 cut-off level) for within country analysis (0.37, 0.45, 0.58, and 0.39), but have high reliability (above the required 0.7 cut-off level) for between country analysis (0.70, 0.88, 0.93, and 0.78) (Hanges & Dickson, 2006, p. 531).

De Mooij (forthcoming, p. XX) offers the following explanation for the difference in the item-intercorrelations between individual and national levels of analysis:

> "This means that in national societies that score high on uncertainty avoidance we find *more* rule oriented people, *more* people seeking stable employment, and *more* stressed people, but that **these are not the same individuals**. Individuals in a national society are like the pieces in a jigsaw puzzle; while each being unique, they fit together and produce a meaningful national picture. In describing the national culture, it is perfectly okay to refer to characteristics of individuals that in such a culture are relatively more frequent or more likely." (Bold original, italics added.)

However, the argument that "these are not the same individuals" is the main reason *against* (not for) using the Hofstede and GLOBE national culture dimension scales and scores to characterize individuals and sub-groups within countries. We provide an empirical example below to resolve De Mooij's "jigsaw puzzle" and show that it is *not* "perfectly okay" to characterize individuals in a country on the basis of responses to unrelated survey items. The Appendix contains hypothetical data for the three item measures of Hofstede Uncertainty Avoidance dimension (hereafter UA), namely, rule orientation, employment stability, and stress, for five hypothetical countries and fifteen cases in each country. Table 1 contains the country average scores for the three measures of Hofstede UA based on the data in the Appendix. The country Uncertainty Avoidance score in the last column is simply the mean of the three average measures of UA. Table 2 contains the correlations among the three Hofstede

UA measures, both at the individual level within each of the five countries, and at the country

level based on the country average item scores (using data in the Appendix and in table 2

respectively).

Table 1   Country average scores for the three measures of Uncertainty Avoidance in Hofstede (2001) (based on the hypothetical data in the Appendix)

Country	Average rule orientation	Average employment stability	Average stress	Uncertainty Avoidance[a]
1	4.0	4.0	4.0	4.00
2	3.8	3.8	3.8	3.80
3	4.2	4.2	4.2	4.20
4	3.8	4.2	4.2	4.07
5	3.8	3.8	4.2	3.93

[a] For each country, the Uncertainty Avoidance score is the mean of the three average measures of UA, namely, rule orientation, employment stability and stress.

Table 2   Correlations among the three measures of Uncertainty Avoidance in Hofstede (2001) (based on the hypothetical data in Table 2 and Appendix)

Correlations	Individual level within country[a]					Country level[b]	
	1	2	3	4	5	1-3	1-5
Rule orientation X Employment stability	-0.50	-0.46	-0.46	-0.50	-0.46	1.00	0.56
Employment stability X Stress	-0.50	-0.46	-0.46	-0.46	-0.40	1.00	0.56
Stress X Rule orientation	-0.50	-0.46	-0.46	-0.50	-0.50	1.00	0.25

[a] Individual level correlations are based on individual item scores in the Appendix.
[b] Country level correlations are based on country average item scores in Table 1 for countries 1-3 and 1-5 respectively.

As seen in Table 2, the correlations among the three item measures of UA are negative

within each of the five countries, but positive at the country average level. The negative

correlations among the items at the individual level arise due to the fact that the individuals

who score high on one of the three items score lower on at least one of the other two measures

of UA. For example, as shown in the Appendix, the first 5 cases in country 1 have a high

score of 7 on rule orientation but low scores of 4 and 1 on employment stability and stress

respectively. A similar pattern of individual level scores is found for the next two sets of five

cases each, albeit with one difference. The second set of five cases score high on employment

stability but low on stress and rule orientation. Likewise, the third set scores high on stress, but low on rule orientation and employment stability. Notwithstanding the significant differences in the pattern of individual level scores across the three measures of UA, the average score at the country level for all the three items is the same (i.e., 4), resulting in a UA score of 4 for country 1.

The individual score patterns for countries 2 and 3 are slightly different. For country 2, fewer cases (four instead of five in country 1) have a high score of 7 on the each of the three UA measures, resulting in lower country average score for each of the three items as well as for overall UA, at 3.8 (see table 1 and Appendix). In contrast, for country 3, more cases (six instead of five in country 1) have a high score of 7 on each of the three measures of UA, resulting in higher average scores for the three items and for UA overall than country 1 (4.2 instead of 4) (see table 1 and Appendix). Consequently, even though the items are negatively correlated within each of these three countries, at the country level they are correlated positively ($r = 1$) (see table 2). Thus, the result accords with De Mooij (forthcoming, p. XX), "that in national societies that score high (low) on uncertainty avoidance we find more (less) rule oriented people, more (less) people seeking stable employment, and more (less) stressed people, **but that these are not the same individuals**." However, as we show next, national societies can score higher or lower under completely different patterns of individual level item scores. For example, in country 4, four cases have a high score on rule orientation, and six cases each have high scores on employment stability and stress, resulting in a country average score of 3.8, 4.2 and 4.2 respectively across the three measures, and a national UA score of 4.07. In this instance, a *higher* societal UA score has resulted from *fewer* rule oriented people than in country 1, which is inconsistent with De Mooij quote above that in higher UA societies, we find more people with high scores on each of the three measures of UA. Similarly, country 5 has a *lower* societal UA score (3.93) even though it has *more* stressed

people than in country 1. These examples show that the national averages not only mask but also misrepresent the underlying pattern in the data, and grossly oversimplify the fine-grained details that are often required for in-depth understanding and managerial decision-making.

Our examples further show why the three items used to construct the UA dimension do not constitute the UA scale at the individual level, but do so only at the national level, as posited by Hofstede (2001) and House et al. (House et al., 2004). We therefore agree with De Mooij (forthcoming, p. XX) that the "Scores on national dimensions cannot be used to predict the behavior of a particular individual". However, we disagree with De Mooij (forthcoming, p. XX) that "as long as authors are clear about reporting frequencies or averages, using the word *individuals* is not problematic." In practice, authors often simply use the Hofstede and GLOBE national culture dimension scores to stereotypically characterize individuals in different countries (e.g. Jin, Park & Kim, 2008)[3]. Cultural researchers in management rarely collect primary data using the Hofstede or GLOBE scales, nor are "The *average values* or *frequencies* of priorities of individual members of one society are compared with the *average* value priorities or *frequencies* of priorities of individual members of other societies." as De Mooij (forthcoming, p. XX) suggests. But even if they did so, we could at best associate the individuals in countries, even in an averaging sense, with the *items* that have a high or low average or frequency in the country, but *not* with the national culture *dimension* formed by combining multiple items that are not related at the individual level. A score created with unrelated items is as meaningless in describing individuals as would be a scale that is created, for example, by adding an individual's age, height and income. To sum up, we believe there is no logical or empirical basis for using the Hofstede and GLOBE national culture dimensions to characterize individuals separately, or grouped in any form other than as a total population in a country as discussed in the next section. All studies that do so, in marketing, management and elsewhere, are fundamentally flawed.

Why the national culture dimension scales and scores cannot be used for organizations

In response to Brewer and Venaik (2012), De Mooij (forthcoming, p. XX) states that: "Scores on national dimensions cannot be used to predict the behavior of a particular individual… They should even less object to referring to *people*, which is a collective." The last sentence in the De Mooij quote suggests that the Hofstede scales and scores could potentially represent the characteristics of "a collective", "people" or "a group of individuals" within a country. However, according to Hofstede (1980, p. 13), "The word (culture) is reserved for describing entire societies; for groups within societies, "subculture" is used." This implies that the Hofstede national culture dimensions, scales and scores cannot be used to characterize sub-groups such as firms and organizations within countries. Minkov and Hofstede (2011, p. 12) also state that the "Hofstede's dimensions of national culture were constructed at the national level. They were underpinned by variables that correlated across nations, not across individuals *or organizations*." (Italics added.) Unfortunately, unlike the individual level correlations that Hofstede provides for UA to show the inapplicability of his national culture dimension scales and scores to individuals, Hofstede does not provide any empirical evidence to show his national culture dimensions are also inapplicable to organizations. For this, we turn to GLOBE.

In the GLOBE study, House et al. (2004) measured nine dimensions of culture, in the form of both practices and values, and at the level of both nations and organizations. Even though the items used to measure the national and organizational culture dimensions are similar, their reliabilities are vastly different at the two levels. Hanges and Dickson (Hanges & Dickson, 2004, p. 134) show that only two of the nine *organizational* culture *practices* scales have internal consistency/reliability above the accepted cut-off level of 0.70, compared with seven of the nine scales for *national* culture practices. Similarly, for the *organizational* culture *values* scale, none of the nine scales are reliable, whereas seven of the nine societal culture

values scale having an internal consistency at or above the 0.70 level. In sum, these results show that the GLOBE as well as the Hofstede national culture dimensions scales and scores are invalid measures of culture not only at the individual level, but also at the level of sub-national groups and collectives such as firms and organizations.

Desired versus desirable aspects of culture values

Following Hofstede (2001: 7), De Mooij (forthcoming: XX) discusses with examples the difference between the "desired" and "desirable" aspects of values. We do not want to go further into this discussion except to say that their description and analysis is not quite accurate. According to the dictionary, "desired" means "wish for", and desirable means "worth seeking/doing". It is therefore reasonable to expect people to desire the desirable. However, De Mooij (forthcoming, p.XX) provides the following example to illustrate that the desired and the desirable are often the opposite: "Answers to questions to individuals about how people in general in a society should behave will be *different* from answers resulting from questions about their own preferred state of being. *The personal desire to be a powerful leader doesn't include the wish that all others are also powerful leaders.*" (Italics added.). However, one can easily find counter-examples. For example, a person expressing the desire to be good and honest (a personal preference) will also likely wish that all others are also good and honest (how people in society should behave). This shows that we can find examples to support either argument, that the desired and the desirable can be similar (as our example shows), and also that they can be different, as De Mooij suggests. When concepts, such as desired and desirable, can be interpreted in opposite ways, then these are indeed very poor concepts not really amenable to scientific discussion and enquiry that requires precise definitions of constructs and falsifiable hypotheses about relationships between constructs.

Misinterpretation of conceptual content of dimensions

De Mooij correctly points out the difficulty and confusion caused by culture dimensions which have the same labels but different content or meaning (as with Hofstede and GLOBE). She provides the example of the Hofstede and GLOBE Uncertainty Avoidance (UA) dimensions. Although they are called the same thing, these dimension country scores are highly negatively correlated for the 50 countries which are common to both Hofstede and GLOBE practices (r = -0.69). This issue is discussed at length and explained in Venaik and Brewer (2010). Rather than designating one of the dimensions as right and the other as wrong, we recommend relabeling the dimensions to UA-stress for the Hofstede construct and UA-rule orientation for the GLOBE dimension, differentiating between the two UAs and thus better reflecting the item content of the constructs. Clarification has also been provided in respect of Hofstede and GLOBE collectivism (Brewer & Venaik, 2011) and future/long term orientation (Venaik, Zhu & Brewer, forthcoming).

Of course, the argument is largely only theoretical because, as we pointed out earlier, UA and the other Hofstede and GLOBE dimensions do not describe individuals' behaviour anyway and therefore their practical usefulness is open to doubt. In fact the application of these dimensions to understanding the way the world is can be highly misleading. De Mooij (forthcoming, p.XX) points out that "whereas frequent use of the computer is found more in cultures that score low on Hofstede's (UA) dimension, it is found less in cultures that score low on GLOBE's (UA) dimension.", thus implying that UA influences computer use. This difference in computer use across countries is easily explained; the relationship between UA and computer use are spurious. Computer use is prevalent in rich countries (rich countries are low UA in Hofstede and high in GLOBE) and low in poor countries (poor countries are high UA in Hofstede and low UA in GLOBE). Such usage has nothing to do with UA or culture generally, as everyone logically would like to use computers. It is simply a reflection of

whether people in different nations generally can afford to buy and use computers. De Mooij's (and Hofstede's) claim that UA mediates computer use supports Breidenbach and Nyiri's (2009: 9) view that, "Culture - or rather cultural difference – is now held to be the main explanation for the way the human world functions". Hofstede's citations of correlations between his national culture dimension scores and other national level variables to validate their national dimensions do not tell us anything particularly useful. Such correlations may well be spurious given factors such as national wealth and other non-cultural determinants of behavior are generally not controlled for.

Hofstede national culture scores and GLOBE transnational culture bands

Another critical issue in national culture dimensions research relates to the methodology used to calculate the national culture dimension scores, especially in the case of the Hofstede study. Hofstede measured culture on 5-point scales using items that varied somewhat across the different versions of his Values Survey Modules (VSMs) (Hofstede, 2001). The latest version of VSM08 is available online at http://www.geerthofstede.nl/vsm-08 (accessed 6th March 2013). Unlike GLOBE, Hofstede does not report the national average scores on items used to measure his national culture dimensions. Instead, Hofstede transformed the raw scores on the measures of each national culture dimension into an index ranging from 0 to 100. For example, the formula for national Individualism is $IDV = 35(m04 – m01) + 35(m09 – m06) + C(ic)$, where $m04$ is the mean country score for question 04, etc., and $C(ic)$ is an arbitrary number to fit the IDV score for all countries between 0 and 100. There are three problems with this approach. One, scaling the national culture dimension scores from 0 to 100 give a false perception of a 0 to 100 per cent scale, with a country scoring 0 on individualism often perceived as zero per cent individualistic and thus one hundred per cent collectivistic, and vice versa for a country scoring 100 on this scale. But that is not the case. The countries are arbitrarily differentiated and placed along a 100 unit continuum which does not accurately

represent their relativities. The second problem is that the index formula artificially inflates differences between countries even when in fact all or most countries in the world may have a very similar (low or high) average score on one or more measures as well as for the culture dimension overall. For example, House et al. (2004) found that low Power Distance is a universally desired value (ranging between 2.04 and 3.65 on a 7-point scale across the 61 countries in GLOBE). Thirdly, the Hofstede national culture scores do not take into consideration random measurement error and scale unreliability issues, which may further exacerbate country differences erroneously, as shown in House et al. (2004) which we discuss next.

Unlike Hofstede (2001), House et al. (2004) present the average score (rather than a formula based index on a 0-100 scale) for each country on each of the eighteen national culture dimensions (practices and values) in GLOBE. The national culture dimension score in turn is simply the mean of the country average scores for the items used to measure the respective dimension. Furthermore, they group the countries into relatively homogeneous bands on each dimension "to minimize the possibility that society rank orderings will be over-interpreted." (Hanges, Dickson & Sipe, 2004, p. 221). The rationale for banding is that "Random error can result in two or more societies appearing different on the obtained cultural scale scores (and thus being ranked differently) even though these societies are in actuality essentially equivalent on the construct of interest." (Hanges, Dickson & Sipe, 2004, p. 220). Thus, GLOBE's banding process "groups test scores into bands in which the scores within a particular band are considered as being not meaningfully different." (Hanges, Dickson & Sipe, 2004, p.220). As shown in Table 3, all the 61 countries in GLOBE can be grouped into just three to five bands on each of the eighteen national culture practices and values dimensions. Furthermore, across all the eighteen practices-values dimensions, 95% of the countries fall within three bands, five per cent in band 4, and only 0.5 per cent in band 5. This

shows that nearly 95% of the world in GLOBE can be classified into 3 culture blocs, and 42% within a single bloc (band 2).

Table 3   GLOBE national culture dimension bands

GLOBE National Culture Dimension	No. of bands	Number of countries in each band					
		1	2	3	4	5	Total
Performance Orientation Practices	3	19	30	12			61
Performance Orientation Values	5	12	26	16	5	2	61
Future Orientation Practices	4	8	23	27	3		61
Future Orientation Values	4	24	24	12	1		61
Gender Egalitarianism Practices	3	28	31	2			61
Gender Egalitarianism Values	4	29	22	7	3		61
Assertiveness Practices	3	29	29	3			61
Assertiveness Values	3	12	42	7			61
Institutional Collectivism Practices	4	14	32	14	1		61
Institutional Collectivism Values	4	20	18	20	3		61
In-Group Collectivism Practices	3	32	17	12			61
In-Group Collectivism Values	3	13	35	13			61
Power Distance Practices	4	28	26	4	3		61
Power Distance Values	5	4	11	29	16	1	61
Humane Orientation Practices	4	6	19	25	11		61
Humane Orientation Values	5	4	32	23	1	1	61
Uncertainty Avoidance Practices	4	12	20	23	6		61
Uncertainty Avoidance Values	5	18	23	12	6	2	61
Total		312	460	261	59	6	
%		28.4	41.9	23.8	5.4	0.5	100

Another interesting finding is that these culture blocks are not necessarily comprised of geographically proximate countries, calling into question the fundamental basis of national culture studies that are largely founded on geographic differences. For example, USA and Japan, the two countries that by far are most studied, compared and contrasted with regard to their seemingly irreconcilable national culture differences are in fact in the same band in eight out of the eighteen national culture dimensions in GLOBE (three practices dimensions of Future Orientation, Gender Egalitarianism and Power Distance, and five values dimensions of Future Orientation, Institutional Collectivism, Power Distance, Humane Orientation, and Uncertainty Avoidance). The evidence in GLOBE indicates that the choice of national

political geography as a cultural differentiator is more based on convenience rather than theory or evidence.

In sum, the GLOBE national culture bands suggest that it may be inaccurate to regard countries within the same band to be culturally different even if their national culture scores are different. This is a critical issue that is largely ignored by scholars using the national culture scores for their own research.

Irrelevance of national culture scores for marketing

The core purpose of marketing is to fulfill the needs of individuals and groups, not nations per se. And groups or market segments are identified based on homogeneity on characteristics of interest to marketers, both within and across nations. For example, if we look at the hypothetical data in the Appendix, we find that within country 1, there are three different segments of customers based on the three levels of rule orientation, low (=1), medium (=4) and high (=7). However, the segments based on the other two aspects of UA, namely, employment stability and stress for the same three levels are completely different and mirror image of the segments based on rule orientation. Hence, the choice of a market segment based on the rule orientation characteristic will be completely different from that based on employment stability or stress characteristics. Oddly, all three segments merge into a single segment based on the UA score formed with the average score of the three UA measures. This paradox arises because of the negative correlation among the UA measures at the individual level. Our example further illustrates how the Hofstede national culture dimension scales and scores that are related at the national level but not at the individual level can be misleading for marketing decision making.

On the other hand, we find segments, for example, people with a rule orientation score of 7 across multiple countries. Thus, from a specifically marketing point of view, a culture of high rule orientation could be seen as a characteristic that is shared by a group of people

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whose boundary does not coincide with the political boundaries of nations (Breidenbach & Nyíri, 2009; Gjerde, 2004; McSweeney, 2009). In a world of increasingly global economies and social media, people across the globe are more and more subject to certain common influences. Thus, the core idea in learning about culture is to approach individuals and groups with an open mind with few pre-conceived notions, biases and stereotypes. If students and managers are interested in the culture of groups of people in different countries, it is best to understand the culture of the specific groups of interest, rather than simply ascribe the same national culture dimension characteristic to everyone in the country. In a nutshell, we strongly advocate that marketing managers interested in cultural differences should focus on specific individuals or groups of people that are relevant to their own particular business decisions, such as particular consumer segments, exporters and importers, distributors, manufacturers, government officials, business partners, as the case may be, either in a country or countries or globally. Such an approach will enable managers to better understand exactly if, and how, the individuals that they are dealing with in another group are different from themselves, and develop appropriate strategies to manage these real and contemporary rather than stereotypical and historical differences and, for that matter, similarities.

Where to from here?

Notwithstanding the caveats of both Hofstede and GLOBE, many researchers seem to continue to believe that both the Hofstede and GLOBE scales can be applied to individuals and organizations. One reason for this view is that the national culture dimensions are intuitively appealing and seem logically applicable across all levels. Second, both Hofstede and GLOBE themselves interpret and use their dimensions as if they apply to individuals and organizations. Consequently, the national culture dimensions continue to be used widely in management and marketing, resulting in poor theory and flawed practitioner guidelines.

If the national culture dimension labels such as "Uncertainty Avoidance" or "Individualism-Collectivism" seem useful and meaningful for individual and organizational level phenomena, then, before these can be applied in practice, it is critical that scholars go back to basics and design and test culture scales that are valid at the level at which they are theorizing, either individuals or organizations. Further, these scales must be validated across diverse groups in different countries across a large number of studies over a long period of time, to establish their robustness across diverse contexts in space and time. There are many ways of identifying culture and the resulting behaviour in individuals, for example, the immersion and observation techniques made famous by Kluckhohn and Strodbeck (1961). It is also an essential requirement in statistical analysis that the items used to reflect and measure a construct at a certain level be significantly correlated at that level (Coltman, Devinney, Midgley & Venaik, 2008). Identifying and confirming such item correlations is a key purpose of factor analysis. Unfortunately, this is not what many culture researchers do in their studies. Instead of reexamining the validity and reliability of Hofstede, GLOBE or other culture scales and finding support or otherwise for their generalizability, cross cultural scholars have uncritically accepted the Hofstede and GLOBE national culture scores as if they apply to all groups and individuals in different countries. This has resulted in weak culture theory and inaccurate stereotypes about consumer attitudes based on "national cultural values".

Conclusion

The focus of our paper has been to examine critically and in depth the Hofstede and GLOBE national culture dimensions, scales and scores, and show how their unreliability and invalidity at the individual and organizational levels undermine their usefulness for management theory and practice. The items used to measure Hofstede and GLOBE national dimensions are not positively and significantly correlated at the individual or organizational level and therefore

do not measure an individual or organizational level construct/characteristic, cultural or otherwise. In addition, a detailed examination of the score construction methodology in Hofstede and GLOBE shows that the international culture differences are exaggerated. We therefore recommend that scholars and practitioners should be cautious in using the national culture models for their own research at least until the dimensions are refined through further academic research to ensure greater clarity, precision and congruence among the culture constructs and definitions, and the items used to measure these constructs. This is not to suggest that individuals or groups do not vary on say individualism/collectivism, power distance or other values and characteristics. But these differences, or for that matter, similarities, need to be empirically examined with scales that are valid at the respective levels of analysis, and in the specific contexts of our interactions with other individuals and groups of different nationalities, rather than simply assumed in a stereotypical manner based on the national culture scores as is the general practice currently in the management discipline.

Notes

1. Both authors contributed equally to the paper and are solely responsible for all errors and omissions.

2. Importantly, we do not argue that characteristics such as Power Distance do not exist at the individual level, but rather that the specific Hofstede and GLOBE national culture dimensions measured with their respective items, including their Power Distance, do not exist at the individual or organizational level.

3. We recognise not all researchers invalidly use the Hofstede or GLOBE scores, some conduct their own individual level analysis of culture within their samples.

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APPENDIX

Hypothetical individual level data for the three item measures of Uncertainty Avoidance in Hofstede (2001)

Country	Case (person)	Rule orientation	Employment stability	Stress
1	1	7	4	1
1	2	7	4	1
1	3	7	4	1
1	4	7	4	1
1	5	7	4	1
1	6	1	7	4
1	7	1	7	4
1	8	1	7	4
1	9	1	7	4
1	10	1	7	4
1	11	4	1	7
1	12	4	1	7
1	13	4	1	7
1	14	4	1	7
1	15	4	1	7
2	1	7	4	1
2	2	7	4	1
2	3	7	4	1
2	4	7	4	1
2	5	4	4	1
2	6	1	7	4
2	7	1	7	4
2	8	1	7	4
2	9	1	7	4
2	10	1	4	4
2	11	4	1	7
2	12	4	1	7
2	13	4	1	7
2	14	4	1	7
2	15	4	1	4
3	1	7	4	1
3	2	7	4	1
3	3	7	4	1
3	4	7	4	1
3	5	7	7	1
3	6	1	7	4
3	7	1	7	4
3	8	1	7	4
3	9	1	7	4
3	10	1	7	7
3	11	7	1	7
3	12	4	1	7
3	13	4	1	7

3	14	4	1	7
3	15	4	1	7
4	1	7	4	1
4	2	7	4	1
4	3	7	4	1
4	4	7	4	1
4	5	4	7	1
4	6	1	7	4
4	7	1	7	4
4	8	1	7	4
4	9	1	7	4
4	10	1	7	7
4	11	4	1	7
4	12	4	1	7
4	13	4	1	7
4	14	4	1	7
4	15	4	1	7
5	1	7	4	1
5	2	7	4	1
5	3	7	4	1
5	4	7	4	1
5	5	4	4	1
5	6	1	4	4
5	7	1	7	4
5	8	1	7	4
5	9	1	7	4
5	10	1	7	7
5	11	4	1	7
5	12	4	1	7
5	13	4	1	7
5	14	4	1	7
5	15	4	1	7