

## **Nations, Cultures, and Individuals: New Perspectives and Old Dilemmas**

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# NATIONS, CULTURES, AND INDIVIDUALS

## New Perspectives and Old Dilemmas

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As an introduction to the five articles in this section that present data analyses focused at the nation level, three dilemmas pertinent to nation-level studies are discussed. First, reasons are explored as to why it is valuable for psychologists to give attention to the national contexts within which the behavior of individuals has more typically been studied. Second, there is some discussion of the extent to which causal explanations of cultural differences can be sustained. Finally, it is argued that nation-level studies have a crucial and growing role to play in explaining variations in the findings of individual-level studies conducted at different locations.

**Keywords:** cultural-level comparisons; ecological fallacy; multiple-nation samples

**This section of the journal highlights** an exciting new development within the field of cross-cultural psychology. In recent years, an increasing range of results has become available that gives details of survey responses derived from large samples of respondents located within a broad range of nations. These sources of data have made it possible to conduct secondary analyses that focus primarily on nations rather than on individuals as the units of analysis. In terms of the development of conceptual frameworks that have guided the work of cross-cultural psychologists, characterizations of nations have been influential since the publication of Hofstede's (1980) seminal work. However, an exploration of what can be achieved through analyses focused at the level of nations has necessarily awaited the availability of a fuller range of sources of data.

Analyses focused on national differences have the potential to illuminate issues that are beyond the reach of other currently popular cross-cultural research strategies that typically focus on individual-level data derived from no more than two or three nations. By way of introduction to the articles that follow, I will discuss some of the issues that confront researchers who choose to focus on nations rather than on individuals. I shall consider three issues: the reasons for focusing on nations, models of why nations are as they are, and the ecological fallacy.

### STUDYING NATIONS

First of all, how do psychologists study nations? The most typical strategy, pioneered by Hofstede (1980), has been to aggregate data obtained from individuals. Hofstede obtained data from large numbers of individuals within each nation, and responses to each item were averaged; each nation, then, became one single case, not many. Once this is accomplished,

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the nation-level relations between the variables in a survey may be explored using a full range of data analysis procedures (as illustrated by the articles that follow). Within Hofstede's study, the dimensions of nation-level variance that were identified were treated as independent variables, and their ability to predict a wide range of dependent variables has been explored both by Hofstede (2001) and by many other researchers. This, however, is not the only possible option. For instance, Georgas and Berry (1995) made an initial attempt to identify clusters of nations with similar environmental and social attributes. Here, nations are treated as unitary entities and their attributes are not derived from aggregation of individual-level psychological scores. This perspective is further developed by Georgas, Berry, and van de Vijver (2004, in this issue) in the present section.

Why should cross-cultural psychologists be interested in characterizing nations rather than individuals? Individuals comprise the subject matter of psychology and most (but not all) of the data reported in the articles in this section are derived from individuals. The culture of psychology as an academic discipline has long been one in which the prototypic study places individuals in a controlled and simplified environment, within which the researcher can study the impact of experimental manipulations. However, the types of manipulation that are practically and ethically permissible exclude many of the factors likely to be important in the socialization of individuals from different parts of the world. Consequently, researchers must take one of two paths. First, they can take as their starting point a given datum, such as that individuals have a certain type of culturally distinctive self-construal or set of values; then, they seek to show consequent effects that help us to understand cultural differences in this self-construal or these values at the individual level. As an alternative to this standard approach, they need to find different ways of investigating possible environmental effects, treating individuals' cultural orientations and behaviors as dependent measures. Nation-level studies provide one such alternative.

It is easiest to conceptualize the possible effects of proximal environmental influences, such as families and peer groups, on the individual. Things get more difficult when we consider distal influences, such as region or nation. Although it is self-evident that growing up in one part of the world as opposed to another can lead the individual down different paths and, hence, to different destinations, it is possible to argue that the distal influences on the individual are wholly or partially mediated by the proximal influences. If we take a culture as an entity in which individuals tend to give shared meanings to the events, social artifacts, and objects around them, it is possible to consider groupings at all levels of aggregation as having elements of a culture. Families, peer groups, organizations, ethnicities, regions, and nations may all be found to hold some shared perspectives. However, within the larger groupings, there will inevitably be greater heterogeneity.

Thus, by seeking to identify and understand the basis of differences between nations, we are engaged in a perilous enterprise. Our telescope is positioned in the far distance, targeting the individual, but it is subject to many intervening sources of distortion. We know that if we aggregate data derived from individuals, as, for instance, did Hofstede, we do find differences between nations that can be classified along a series of dimensions that have a psychological flavor because of their nature and their origins from individuals. What has been less clearly delineated thus far is the degree to which we can avoid providing tautological descriptions of cultural differences; after all, we have mostly been identifying nations in ways that are dependent on the individuals within them and have been using psychological measures as the initial data. The present contributors move beyond this psychologically focused approach by reporting various steps in the direction of true culture measures, drawing both on data about climate and on data about social institutions.

The contributors to the present section all treat nations (and states within the United States of America; see Allik & Realo [2004, in this issue]) as cultures. The sheer convenience of currently available databanks may force us into such simplifications. In future studies, it will be important to use multiple levels of analysis so that variability attributable to individuals, regions, or other subcultures may be taken into account before we address nation-level variance. The article by van de Vliert, Huang, and Levine (2004, in this issue) illustrates one step in this direction through its use of multiple levels of analysis.

### CAUSAL MODELS

Outside of the psychology laboratory it is rarely possible to establish unidirectional models of causal relationships concerning human behavior. The authors of the present articles have all established relations between the variables on which they focus that are based either on correlations or on more sophisticated statistical procedures that do not differ in principle from correlations. One can only infer the nature of causal processes in such circumstances if one of the variables in question clearly predates the other. Herein lies the attraction of the measures of temperature and climate that are utilized by three of the present contributors. However, none of these authors finds that these factors are by themselves satisfactory in explaining national differences in the psychological variables on which they focused. Although climatic factors may well have influenced the emergence of differing cultural patterns initially, the evolution of cultures over the past centuries has entailed a process of action and reaction between a myriad of factors.

National wealth can be considered as both a result of this evolutionary process and a cause of it. A nation's wealth, as with other aspects of a nation's culture, may be relatively uniformly spread across individuals, or it may characterize some groupings within a nation more than others. In contrast to individual-level attributes, the amount and dispersion of wealth is substantially dependent on a nation's government and historical legacy. It can have direct effects on many of the proximal-level sources of influence on individuals within a nation. GNP per capita (or perhaps "affluence," as Georgas, Berry, and van de Vijver [2004, in this issue] label their broader measure of this construct) is a clear candidate for a central place in nation-level, cross-cultural studies. It is a true nation-level measure in the sense that it cannot be arrived at by averaging of the wealth of individuals within a nation.

The present authors are not in agreement as to how to make sense of this construct however it is measured. Georgas et al. see it as a variable that intervenes between their ecocultural determinants of culture and the consequent national profiles of values and behaviors that they sought to predict. Van de Vliert et al. (2004, in this issue) give it a status equal to climate as a predictor of cultural effects. Smith (2004, in this issue) sees GNP as an integral part of a nation's culture and therefore declines to follow Hofstede's (2001) decision to partial it out of his analyses. Allik & Realo (2004, in this issue) compare the effects of partialling it out with not doing so. Allik and McCrae (2004, in this issue) find GNP to be a correlate of one of their emergent dimensions of cross-national variance in personality.

Many other candidates for culture-level attributes of nations have been advanced by the present authors as well as by other contributors to the literature. Most of these are based on aggregation of individual-level scores, either from surveys or from secondary sources. For instance, Georgas et al. (2004, in this issue) identify the percentage of a nation's respondents claiming religious affiliation as a strong predictor of national mean scores on psychological variables. Allik and Realo (2004, in this issue) identify correlates of nation-level means for

social capital, and Smith (2004, in this issue) shows how nation-level acquiescence is explicable in terms of cultural values.

Greater clarity is required regarding the nature of these types of nation-level scores. Leung and Bond (in press) define a “citizen mean” as a score based simply on aggregating data from individual to nation-level. In contrast, a “true” nation-level mean is a mean based on analysis of the manner in which a series of citizen means interrelate with one another at the nation level. Examples of true nation-level means are provided by Hofstede’s dimensions and by Allik and McCrae’s (2004) contribution in this issue. A citizen mean will often not be equivalent to a culture mean, because the attributes that go into the construction of a culture mean may relate to one another differently at different levels of analysis. A citizen mean based on aggregation of scores on a single item will be particularly vulnerable to misinterpretation because such a score gives no opportunity to explore the nomological network of meanings associated with it at the two different levels of analysis.

Hypotheses asserting causal effects of true nation-level means have greater plausibility than hypotheses asserting causal effects of citizen means. The best that we may be able to achieve with citizen means is a clearer understanding of the various attributes of nations that are consistently correlated with one another. For instance, when Allik and Realo (2004, in this issue) establish an association between cultural individualism and citizen scores for social capital, they enhance our understanding of the nature of cultural individualism.

Representativeness of sampling is a further issue that may be even more challenging to nation-level researchers than it is to individual-level researchers. In individual-level studies, a comforting assumption is often made that in sampling students from different nations, one is comparing like with like. At the nation level, such assumptions become altogether untenable. Students plainly differ from other members of their nation, and they do so in ways that vary from one location to another. In search of better ways of characterizing whole nations, secondary statistical sources are appealing, but there are few ways of determining how validly data have been recorded. Some fortunate researchers have been able to draw on surveys using representative sampling (Diener & Diener, 1995; Inglehart, Basanez, & Moreno, 1998). However, nations are not uniform entities, and we may need to draw on measures of variability as well as national means. The GINI index, estimating variations in the distribution of wealth, may prove as useful as GNP (World Bank, 2000). Variations in national value consensus are also found (Sagie & Schwartz, 1996). All of these limitations on measurement will likely continue to attenuate our ability to map correlations and to propose causal relationships at the nation level.

### **TAKING ACCOUNT OF THE ECOLOGICAL FALLACY<sup>1</sup>**

The emphasis given by the authors in this section to nation-level analyses elicits another of the key issues with which researchers have had to contend. When considering the causes and consequences of cultural differences, there is a constant temptation to test the plausibility of hypotheses by thinking about how the variables of interest relate at the individual level of analysis. However, there is no logical reason why the relationship between two variables at one level of analysis should be the same at another level of analysis (Hofstede, 1980; Leung, 1989). Numerous examples can be found which illustrate this point. As Allik and Realo (2004, in this issue) note, the determinants of life satisfaction vary between levels. Diener and Diener (1995) showed that at the nation level, the richest nations in the world are the ones in which highest happiness, or, as they define it, “subjective well-being,” is reported.

However, within each nation, it is not the case that very rich persons report greater life satisfaction than less rich persons. Diener and Oishi (2000) report weak and, in some nations, negative relations between life satisfaction and income. Furthermore, as GNP has risen over time, individuals' life satisfaction has not. Similarly, the individualistic nations are the ones in which greater job satisfaction is reported (Hui, Triandis, & Yee, 1995), but in Hong Kong, the individuals who espouse collectivist values rather than individualistic values are the ones reporting greater job satisfaction.

How can these different effects be explained? They are explicable because the variables that influence relations between variables at different levels of analysis are not likely to be the same (Robinson, 1950). Take the example of job satisfaction. At the nation level, individualistic countries are the rich countries. Employees are rather well paid and receive a wider variety of resources with which to do their job than would be available to most people in less rich countries. However, at the individual level, the availability of good pay and working conditions within a single nation will probably be much less varied than they are between nations. Other issues will be more important in determining job satisfaction. In Hong Kong, collectivist values proved to be a significant predictor, presumably because in that context, it is particularly important to be in a harmonious relationship with one's work colleagues. In another nation, the significant predictors might be different.

Relationships between variables do not always vary at the two differing levels of analysis. For instance, Allik and McCrae (2004, in this issue) report finding the individual-level Big Five personality factors replicable at the nation level. No actual harm is done if one takes hypotheses from one level and tests them at another level. The crucial point that needs to be borne in mind is that relationships between variables must always be tested at the relevant level of analysis, using measures appropriate to that level. Once this has been done, it becomes possible to test whether nation-level measures can explain variations in individual-level relationships.

One way of linking individual- and nation-level approaches is to develop parallel sets of concepts applicable to each level of analysis. The prime exponent of this approach has been Schwartz (1992, 1994). Schwartz argued that we cannot arrive at valid nation-level measures until we have shown that the concepts used in constructing these measures have equivalent meanings in all parts of the world. He has accomplished this by conducting individual-level analyses of his data within each nation sampled separately. Similar results imply similar meanings. Leung and Bond (in press) have extended this procedure to their current work on social axioms.

Using these types of comparable individual- and nation-level measures, Schwartz has demonstrated a further instance of variables that relate quite differently at each level of analysis. He found that at the individual level, persons who see "authority" as a guiding principle in their life are not the same persons as those who see "humility" as their guiding principle. Indeed, endorsement of the two values was negatively correlated. However, at the nation level, nations in which authority is strongly endorsed are the same nations as those in which humility is strongly endorsed. In other words, there are certain nations that contain an interlocking set of role relationships built around authority and humility much more than is found in other nations. Leung and Bond (in press) likewise find different item groupings for dimensions of social axioms at the individual and national levels of analysis.

If we accept the importance of clearly distinguishing levels of analysis, what is the value of the nation-level studies in this section to the broader field of cross-cultural psychology? The nations of the world may, or may not, be currently in the process of becoming more similar to one another. For now, they provide the contexts within which individuals seek to make

sense of their experience. If we neglect context, we risk misunderstanding the actions of those who inhabit each context. Where individual-level investigations yield contrasting results from persons in different nations, we need conceptual frameworks to help us identify possible reasons for these effects.

The ecocultural framework championed here by Georgas et al. (2004, in this issue) achieves the sharpest differentiation between levels because it is less reliant on aggregation. This approach enables the interpretation of psychological variables, either at the individual level or at the nation level, within a framework that clusters nations with common ecological and social elements. Focus on these elements, rather than on countries simply identified by nationhood, should help us to order nations in terms of key contextual parameters. The similarity or dissimilarity of nations on these parameters can then be employed in cross-cultural studies to generate a priori hypotheses about how and why the observed similarities and differences in psychological variables are found.

Until recently, nation-level studies have more often focused on contrasts in values. Substantial convergent validity has been established (Hofstede, 2001; House, Hanges, Javidan, Dorfman, & Gupta, 2003; Inglehart et al., 1998; Schwartz, 1994; Smith, Dugan, & Trompenaars, 1996;). Some progress has also been achieved in defining valid nation-level measures of both values and beliefs. However, the only nation-level contrast that has achieved widespread influence among researchers has been that between nations said to be individualistic and those said to be more collectivistic. The present articles encourage us to eschew individualism-collectivism as the explanation for everything. They encourage us to broaden the net; nations also differ in respect of climate, wealth, preponderance of personality types, religiosity, social capital, belief systems, acquiescence, and much more. Just as Hofstede's project has led to the spawning of a variety of individual-level measures of self-construal, each of these other aspects by which nations differ can also stimulate our conceptual development of individual-level predictors of individual effects. Some examples, such as the trust measures derived from Fukuyama's (1995) analysis of capitalist economic systems, are already in use. Continued attention to nation-level analyses may well help us to identify further promising candidates.

## NOTE

1. Parts of this section are drawn from Smith (2002).

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