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# The Nature of Personality: Genes, Culture, and National Character

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I recently had the opportunity to conduct research in a remote village in the West African nation of Burkina Faso, one of 49 countries studied by Terracciano et al. While there, I was struck by the degree to which everyone seemed so different yet so familiar at the same time. Despite dramatic differences in cultural customs and practices, the Burkinabe people seemed to fall in love, hate their neighbors, and care for their children in much the same way, and for many of the same reasons, as people in the rest of the world. Indeed, there is a core to human mentality and social behavior that cuts across nations, cultures, and ethnic groups. Even such profoundly different cultures as Burkina Faso and the United States do not differ substantially in the average personality tendencies of their people, as Terracciano and colleagues have shown (1,2).

Against this backdrop of human universals, it is quite clear that individual variability exists: some Burkinabe (or Americans) are shy and others sociable, some friendly and others disagreeable, and some driven to attain high status in their community while others lack the same drive. Of the vast array of human personality traits, the majority can be subsumed within five broad domains—extraversion-introversion, antagonism-agreeableness, conscientiousness, neuroticism, and openness to experience. Collectively, the five dimensions predict most of the outcomes that truly matter in life: health and mortality, academic success, job performance, the capacity to have a successful and lasting romantic relationship, and a wide range of personal and societal problems, including drug abuse and criminality (3,4). And these dimensions predict with as much precision as many biomedical measures predict diseases, including the prediction of heart disease by ECG stress tests, pregnancy outcomes by ultrasound exams, and breast cancer by screening mammograms (5).

What accounts for individual variability on the five primary dimensions of personality? Tensions exist in the scientific literature between explaining this variability in terms of basic physiological and genetic processes, and in terms of situational, social, and cultural contingencies that vary both within and across socio-cultural groups. An eminent psychologist, John Watson, once famously claimed, “Give me a dozen healthy infants...and my own specified world to bring them up and I'll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, merchant-chief, and yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors” (6). We now know that Watson was wrong. Genetic factors provide constraints on the way a child develops, and account for about half of the variability in personality (in typical populations and environments). Identical twins separated at birth tend to have remarkably similar personalities, despite vastly different upbringings (7). In short, people are not blank slates, on which culture-specific experiences inscribe our personalities; rather, we all come into the world with a pre-programmed set of innate mechanisms and personal proclivities (8). Using a diverse array of methods, including survey research, computer simulations, brain imaging, and population and molecular genetics, researchers have shown that personality tendencies are highly heritable; replicable across a wide range of cultures and even species; largely stable across the

lifespan; and linked (albeit weakly) to specific genes, hormones, neurotransmitters, and brain activation patterns (1-4,7,9).

The fact that individual differences in personality have a strong genetic foundation does not imply that cultural or national differences in aggregate personality scores have any genetic basis. These group differences may be, and most likely are, the result of environmental forces. And the results of Terracciano et al. effectively pull the plug on all claims that perceived differences in national character reflect genetic differences between ethnic or cultural groups. That mistaken belief has served as the basis for discrimination, intergroup conflict, and, in some tragic cases, genocide. In contrast to personality traits, which reflect actual differences in the way people think, feel, and behave, stereotypes about national character seem to be social constructions, designed to serve specific societal purposes. This juxtaposition reveals a paradox at the heart of Terracciano et al.'s findings: People are capable of providing reliable and valid assessments of a particular individual's personality (including their own) but they are unable to judge accurately the aggregate, or national, character of the people around them.

Why are stereotypes about national character inaccurate? One possibility is that national stereotypes are historically accurate, but no longer apply because of cultural changes or systematic migration patterns. A second possibility is that stereotypes grow out of particular historical conflicts between groups in which one was dominant and the other subordinate. A third possibility is that national stereotypes are accurate at a more specific level of analysis (e.g., amount of gesturing or the distance people typically establish in social interactions) but not at the level of broad personality dimensions such as extraversion. A fourth possibility is that stereotypes about the character of other nations are accurate, but the stereotypes people hold about their own nation—the stereotypes studied by Terracciano et al.—are not. Finally, a large body of research indicates that a host of cognitive processes maintain inaccurate stereotypes (10). We are less likely to notice, encode deeply, and remember information that violates our stereotypes; for the most part, when we encounter people who contradict a stereotype, we perceive them as unique individuals rather than representatives of their national or cultural group. Further research is needed to explore these possibilities. A deeper understanding of the links among personality, culture, and national stereotypes is particularly critical at this time, as countries around the world adapt to globalization, experience a “clash of civilizations,” and cope with other social changes related to intercultural understanding (and misunderstanding).

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6. J.B. Watson, *Behaviorism* (Norton, 1930).
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9. S. Gosling, O.P. John, *Curr. Direct. Psychol. Sci.*, 8, 69 (1999).
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Figure Caption: Individuals from Burkina Faso receiving rice in compensation for participating in a study of emotion recognition. Cross-cultural research suggests that expressions of sadness,

anger, happiness, pride, and other emotions are universally recognized, despite cultural differences in the conditions under which they are elicited and displayed.