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January 8, 2013 Andrea Estrada

Study by Anthropologists Suggests 'Universal' Personality Traits May Not Be Universal After All

For decades, consensus among psychologists has held that a group of five personality traits — or slight variations of these five — are a universal feature of human psychology. However, a study by anthropologists at UC Santa Barbara raises doubt about the veracity of that five-factor model (FFM) of personality structure as it relates to indigenous populations. Their findings appear in the current issue of the American Psychological Association's Journal of Personality and Social Psychology.

Studying the Tsimane, an isolated indigenous group in central Bolivia, Michael Gurven, a professor of anthropology at UCSB and lead author of the paper, found they did not necessarily exhibit the five broad dimensions of personality — openness, conscientiousness, extraversion, agreeableness, and neuroticism. While previous research has found strong support for what experts refer to as the "Big Five" in more developed countries and across some cultures, Gurven and his team, which includes Christopher Von Rueden, a postdoctoral scholar in anthropology at UCSB and co-author of the paper, discovered more evidence of a Tsimane "Big Two" — prosociality and industriousness. These combine elements of the traditional Big Five, and may represent unique aspects of highly social, subsistence societies.

"Similar to the conscientiousness portion of the Big Five, several traits that bundle together among the Tsimane included efficiency, perseverance, and thoroughness,"

said Gurven, who is also co-director of the Tsimane Health and Life History Project, a collaboration between UCSB and the University of New Mexico, with co-director and co-author Hillard Kaplan. "These traits reflect the industriousness of a society of subsistence farmers.

"However," Gurven continued, "other industrious traits included being energetic, relaxed, and helpful. In small-scale societies, individuals have fewer choices for social or sexual partners, and limited domains of opportunity for cultural success and proficiency. This may require abilities that link aspects of different traits, resulting in a trait structure other than the Big Five."

The Tsimane live in communities ranging from 30 to 500 people dispersed among approximately 90 villages. Since the mid-20th century, they have come into greater contact with the modern world, although fertility and mortality rates remain high, the study noted. With formal education available to few Tsimane, the literacy rate is below 25 percent. Some 40 percent speak Spanish in addition to their native language. They live in extended family clusters that share food and labor, and they usually limit contact with outsiders unless absolutely necessary, the authors said.

The researchers translated into the Tsimane language a standard questionnaire that assesses the Big Five personality traits, and interviewed 632 adults from 28 villages. Women comprised 48 percent of the sample, with an average age of 47 and little more than a year of formal education.

In addition, the researchers conducted a separate study to gauge the reliability of the self-report interviews by instead focusing on reports by peers. For that study, they asked 430 Tsimane adults, including 66 people from the first study, to evaluate their spouse's personality. The second study revealed that the subject's personality as reported by his or her spouse also did not fit into a Big Five framework.

The researchers controlled for education level, Spanish fluency, gender, and age. Previous research has suggested that formal schooling and greater interaction with others, such as when villagers venture to markets in other towns, can lead to more abstract reflection and may be one reason why the Big Five replicates in most places, according to the authors. However, there were no significant differences between the less educated, Tsimane-only speakers and the more educated bilingual participants.

While recent research on personality variation has demonstrated that the Big Five personality traits may be lacking in some developing cultures — particularly in Asia and Africa — Gurven noted that theirs is the first study of a large sample of an exclusively indigenous population completed with rigorous methodological controls. He suggested that personality researchers expand beyond the limited scope of more Western, industrialized, and educated populations.

"The lifestyle and ecology typical of hunter-gatherers and horticulturalists are the crucible that shaped much of human psychology and behavior," he said. "Despite its popularity, there is no good theory that explains why the Big Five takes the form it does, or why it is so commonly observed. Rather than just point out a case study where the Big Five fails, our goal should be to better understand the factors that shape personality more generally."

Other contributors to the article include Maxim Massenkoff of UCSB and Marino Lero Vie of San Borja, Beni, Bolivia.

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