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ABSTRACT

Henrich et al.'s critical review demonstrating that psychology research is over-reliant on WEIRD samples is an important contribution to the field. Their stronger claim that “WEIRD subjects are particularly unusual” is less convincing, however. We argue that WEIRD people's apparent distinct weirdness is a methodological side-effect of psychology's over-reliance on WEIRD populations for developing its methods and theoretical constructs.

Weirdness is In the Eye of the Beholder: Commentary on Henrich, Heine, and Norenzayan

In their important article Henrich, Heine, and Norenzayan offer both weak and strong versions of an argument against the widespread use of research with WEIRD (Western, Educated, Industrialized, Rich, and Democratic) people as a means to learn about general human psychology. The weak version critiques the over-reliance on such samples and reviews an extensive body of literature across domains to establish that widespread cross-cultural differences exist for many of the psychological findings researchers have assumed were species universal. We are 100% convinced of the weak argument and strongly endorse its attendant plea for moving beyond WEIRD samples. Their review is a major contribution to the literature and we thank the authors for it.

The strong version of the argument makes the additional point that WEIRD people are literally weird, atypical of humankind at large. On this account, it is psychology's ironic misfortune that of all samples to study they should have picked this one. This strong argument is intriguing and Henrich et al. present extensive evidence suggesting that this narrow slice of humanity indeed is a cultural outlier. For reasons that form the basis of our commentary, however, we remain skeptical with respect to this strong argument.

The evidence for the distinctness of WEIRD samples comes from studies that generally take the following form: findings originally conducted on the WEIRD population are assessed with a different population and a different pattern of results emerges. When a broader range of groups is considered, the WEIRD population tends to be at the extreme in their responses. For example, Henrich et al. cite Segall and colleagues' replication of the well-known Müller-Lyer illusion. Segall et al. not only find a wide distribution of the magnitude of the illusion across cultures, but also that the U.S. sample is the most extreme in magnitude (see their Figure 1). Other phenomena they review demonstrate a similar trend.

Base rates provide one clue that there might be something amiss with the argument that the group with which we are most intimately familiar is also the most distinctive. If there are 1,000 potential samples then the probability that the first selected is the most deviant is one out of a thousand.

We think the apparent extremity of WEIRD populations can best be explained by two factors contributing to what we have called “the home-field disadvantage,” the tendency for research developed in one's “home-culture” and subsequently co-opted for cross-cultural comparison to result in one-sided conclusions about the nature of cross-cultural differences (Medin, Bennis, & Chandler, in press).

The first factor is the similarity between researcher and researched. Variations across cultures may reflect both adaptations to particular environments (e.g. Nisbett and Cohen, 1996) and “niche construction” (environmental adaptations that favor and reinforce cultural characteristics; Laland, Odling-Smee, & Feldman, 2000). For example, it may not matter whether people drive on the left or right side of roads but once there is a consensus in a given culture, it is adaptive to conform to it. Researchers may have privileged insight in their own culture into what is important or what

experimental manipulations are likely to achieve interesting and reliable results, and they may find it natural to study these sorts of things. But the very fact that they are important, interesting, or reliable in one's home culture makes it more likely that one's culture represents an extreme with respect to it (see Medin and Bang, 2008).

The other main factor reinforcing apparent extremes among WEIRD samples is their status as the originating research population. Research methods and theoretical constructs are calibrated to the populations they have been selected and designed for: in psychology's case, WEIRD people. A side-effect is that these same tools are less well fit or even ill-fit to other populations in much the same way that any adaptation evolved for a particular niche will not function as well in other niches. For example, imagine a literature on sense of humor evolved from studies with undergraduates at major US universities. Jokes that proved to be effective would tend to appear in later studies and ones that fell flat would tend to go by the wayside. If one then got the bright idea of doing a cross-cultural comparison, it may seem natural to use the same jokes favored by US college students, with the more or less inevitable consequence that other populations wouldn't find these jokes quite so funny and the US college sample would appear to be an extreme.

Consider the Müller-Lyer illusion mentioned above and discussed in the target article. That particular illusion is a classic of Western psychology, taught in any introductory class discussing perceptual illusions. And it is taught because it is so readily demonstrated, a fact that reveals both general properties of the perceptual system and a response to the perceptual environment in which Westerners live. Small wonder that the effect is weaker in populations exposed to a different perceptual environment. Similarly some novel perceptual illusion discovered in some other population is likely to be smaller in magnitude when tested with our WEIRD sample. But that's just our point—overwhelmingly, psychological research originates with the WEIRD sample and then is applied

elsewhere—the converse pattern is rare. We believe that this habit of using research methods and theoretical constructs (stimuli, procedures, models, etc.) for cross-cultural comparisons that originated with WEIRD samples, coupled with insider information about what those WEIRD samples find important and which experimental manipulations are likely to achieve interesting and reliable results, may well account for the apparent extremity of the WEIRD population. Had psychology started with Chinese rice farmers studying members of their own community and then later their research protocols and theoretical constructs were exported for cross-cultural comparison and tested for universal validity, then, on our account, Chinese rice farmers would be the cultural outliers and WEIRD people would look more like everyone else.

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