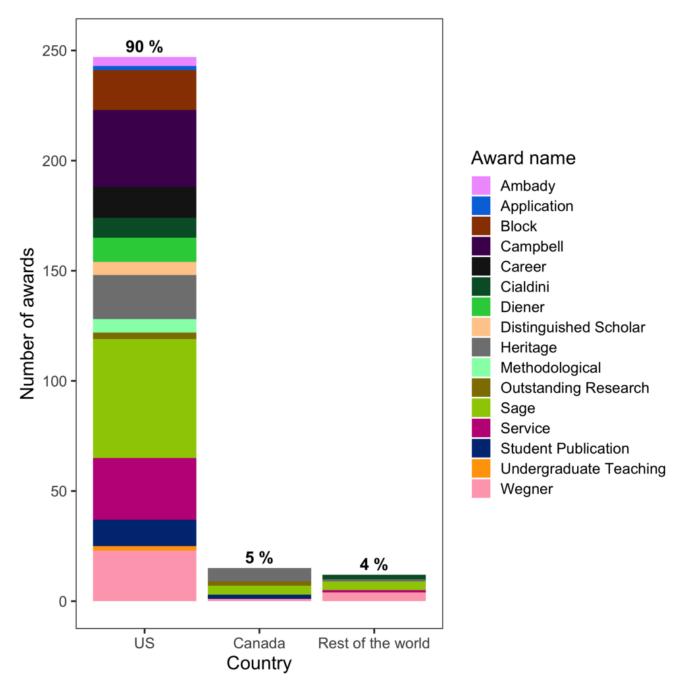
Psychological Science Needs the Entire Globe, Part 1

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In this three-part series, a team of researchers in Africa, Asia, Europe, and South America explores the underpinnings and consequences of a legacy that has long reflected and, many believe, hindered further progress in, the field: dominance by researchers in Western, educated, industrialized, rich, and democratic (WEIRD) countries. Part 1 outlines some explanations for and problems with U.S. dominance in psychological science. Part 2 discusses the more complex origins of these problems, including how the history and legacies of colonialism impact psychological science in the developing world. Part 3 argues that this problem is urgent for the survival and relevance of psychology, explore potential solutions, and ask a provocative question: Does psychological science as it currently stands even deserve the attention of brilliant prospective researchers from the developing world?

Along-heard complaint about psychological science is that study subjects and authors are predominantly White and North American (Arnett, 2008), a state of affairs that does not seem to be improving (Thalmayer et al., 2021). In widely cited international psychology journals, the literature favors samples and authors from a very narrow population, usually located in the United States and often referenced with the acronym WEIRD (Western, educated, industrialized, rich, and democratic). This U.S. dominance extends to journal editors; across scientific disciplines, most journal editors are from the United States (29%), with Great Britain (8%), Italy (7%), and China (7%) in distant second, third, and fourth places (Altman & Cohen, 2021).



Prestigious awards from the Society for Personality and Social Psychology, as counted by home universities as of June 2018. Underlying code and data available at bit.ly/spspdata. Plot created by Olivier Dujols, Hans IJzerman, and Patrick S. Forscher.

U.S. dominance is not just observed in publications and editorial-board positions. APS, which publishes this magazine, predominantly hands out its awards to researchers from North America (Fried, 2018). The most prestigious prizes from the Society for Personality and Social Psychology go to scholars from the United States (see figure, page 60). Only 35% of members of the Psychological Science Accelerator, an international research network, are from outside the United States, Canada, and Europe (Paris et al., 2020), even though these world regions comprise 86% of the world's population, and despite the fact that cultural diversity is one of the network's guiding principles. In the Society for the Improvement of

Psychological Science, an organization actively working on improving its membership's geographic diversity, 53% of members are from the United States (44%) and Canada (9%; <u>Hilgard, 2020</u>). Fewer than 1% of the organization's members are from South Asia, Latin America, the Caribbean, North Africa, the Middle East, and sub-Saharan Africa combined.

Furthermore, one of the most important social psychology journals in Europe, the *European Journal of Social Psychology*, had more submissions and a higher acceptance rate for articles submitted from Europe, Australia, or North America (939 accepted articles for 4,932 submissions; 19% acceptance rate) than for articles submitted from outside those three regions (73 accepted articles for 951 submissions; 8% acceptance rate; personal communication with Ronald Imhoff, October 2019). Of the authors who published articles in the top five developmental-psychology journals between 2006 and 2010, fewer than 3% were from countries in Central or South America, Africa, Asia, or the Middle East (Nielsen et al., 2017).

Why is psychology so U.S.-centric? Many reasons are likely contribute to the dominance of the United States (and, to a lesser extent, Europe) in psychology. One reason may simply be that the United States invests more in research than other countries. The greater availability of resources could lead to more ambitious projects and could attract researchers to move to the United States from other countries. Scientific articles are also typically published in English, so publication for native English speakers likely entails lower resources and effort (which could explain why the Dutch, who are the most proficient non-native English speakers, publish at relatively high rates). Authors from the United States could even benefit from systematic discrimination in publication decisions, funding rates, and hiring decisions.

Understanding how these explanations fit together requires investigating the origins of academic inequality. One reasonable starting place is submissions for awards and for journals. Without examining submission rates, we cannot know, for example, if non-U.S.-based researchers less frequently apply for awards. If these researchers rarely apply, then we have to start ensuring more equal participation and consider ways in which they can learn about awards, seek out nominations, and be contenders for recognition. Unfortunately, journals rarely publish self-assessments with information on which countries submitting authors are from, thus preventing accurate estimates of the number of papers submitted by and rate of acceptance for researchers from other countries. Transparency in submission procedures will be a first step in helping to fix the problems and in identifying and addressing possible biases.

Whatever the origins of U.S. dominance, it is likely to be self-reinforcing. Academic elites are often connected through coauthorships (Kristensen, 2015). This pattern is further reinforced across elite institutions within the United States, where the prestige of one's doctoral degree is a strong predictor of job placement (Clauset et al., 2015). This creates the potential for a nepotistic system in which academic elites provide favors to each other, thereby perpetuating the dominance of high-status researchers located largely in the United States.

Why is all this a problem?

U.S. dominance hurts our attempts to create generalizable psychological theories (<u>IJzerman et al., 2020</u>). Take, for example, theories of child-rearing practices (<u>Keller, 2018</u>). One of the most famous theories in psychology, attachment theory, presumes a primary relationship between the mother and the developing

child, a model that is largely based on the concept of the nuclear family. The idea of the nuclear family presumes a family structure similar to the U.S. middle-class ideal, in which parents live with their children in a home separate from their extended family. But in many cultural contexts, attachment theory may have limited applicability: Among traditional families in southern Madagascar, for instance, infants interact almost exclusively with peer groups of older children, and these older children are thus major infant caretakers (Scheidecker, 2017).

This example illustrates how theories in psychology become loaded with assumptions that are embedded in U.S. culture. This culture tends to take a highly individualistic approach; thus, psychological theories may tend to focus too much on individual-level explanations for psychological problems. When interventions are built on top of these theories, they may also target individuals at the expense of structural solutions. For example, the self-esteem movement emphasized improving self-esteem to wipe away life's problems rather than addressing systemic factors, such as poverty or lack of affordable health care. Proponents of "power posing" claimed that embodying powerful postures could make people, and especially women and racial minorities in the United States, more successful—an emphasis that contrasts with approaches that tackle other barriers to success faced by women and minorities, such as inadequate child care and systemic discrimination.

When psychology researchers are in positions to influence policymakers, the prevailing emphasis on individual causes and quick-fix solutions can have real policy consequences. For example, as the coronavirus pandemic raged across the globe, psychology researchers raced to see how they could apply their findings to combat the pandemic. One suggestion within this context was that "inducing more adaptive mind-sets about stress could increase positive emotion, reduce negative health symptoms and boost physiological functioning under acute stress" (Van Bavel et al., 2020, p. 467); one of two studies cited to support that claim tested the effects only with 124 undergraduates at an American university. Or consider the statement "fear can make threats appear more imminent" (p. 461). This claim also relied on evidence from two small studies in the United States (Study 1: N = 101; Study 2: N = 48). The publication that covered these results led to a speech at the World Health Organization and may therefore have influenced public policy worldwide. However, it is unclear whether findings from the studies we described are helpful for combating the stress of the pandemic in, say, Nigeria or Brazil, where the pandemic's devastating economic consequences could make fear a rational response and healthy mind-sets largely irrelevant. Psychological claims and theories require considerable rethinking before they are ready for application, especially if they are to be used in a variety of cultural contexts (<u>IJzerman et al., 2020</u>).

Solutions to the problem of U.S. dominance, however, may be on the horizon. Although they do not address the full scope of the problem, some solutions would be fairly simple to implement. For example, journals could institute policies obliging authors to include "Constraints on Generality" sections in their papers (Simons et al., 2017). Researchers could explicitly specify their samples in the titles of their papers, especially if they are from the United States (Cheon et al., 2020). A more comprehensive solution might be to shift to a more collaborative mode of "big team science," or science that involves large-scale collaborations among researchers across diverse labs, institutions, countries, cultures, and disciplines (Forscher et al., 2020). But this will work only if these big teams achieve adequate funding (Forscher & IJzerman, 2021) and if big-team science organizations prioritize geographic and cultural diversity in their projects and staff.

Correction: September 20, 2021: An earlier version of this article misrepresented the W in the acronyn WEIRD as White. W is for Western, per the 2010 <u>Henrich et al. article</u>. We regret the error.

Feedback on this article? Email apsobserver@psychologicalscience.org or scroll down to comment.

Coming in the November/December Observer: A deeper look at how the history and legacies of colonialism impact psychological science in the developing world.

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