Psychological Science Needs the Entire Globe, Part 3

December 29, 2021



This article concludes a three-part series in which a team of researchers in Africa, Asia, Europe, and South America explores the longtime dominance of psychological science by researchers in countries characterized as Western, educated, industrialized, rich, and democratic (WEIRD). Part 1, published in the September/October 2021 Observer, explored the problems with U.S. dominance specifically. Part 2, in the November/December issue, addressed the legacy of colonialism and the challenges of psychological science in the developing world.

The "WEIRD problem" in psychological science—the problem that North Americans and Europeans predominate among researchers, article authors, and participant samples—is not new. Nor is the nature of the problem hard to grasp: You cannot learn about the psychology of humans by studying a narrow slice of them. Yet, despite a huge array of commentaries that advance these very arguments (Henrich, Heine, & Norenzayan, 2010; Hruschka et al., 2018; Rad, Martingano, & Ginges, 2018; Sears, 1986), and despite a similar volume of commentaries outlining potential solutions (Urassa et al., 2021; Onie, 2020; Dutra, 2020; Medin et al., 2017), little has changed to address the problem (Arnett, 2009; Rad et al., 2018; Thalmayer, Toscanelli, & Arnett, 2020; see also our first post in this series).

The lack of action on this problem is puzzling. The charitable interpretation is that solving the WEIRD problem requires collective action, so sustained change would require the simultaneous coordinated

efforts of many people and institutions (Medin et al., 2017; Forscher et al., 2020). However, there is a less charitable interpretation of the lack of action: Most practicing psychologists simply do not care enough about the WEIRD problem to do anything about it. If true, this explanation would suggest an attitude of complacency: Psychological scientists are doing well enough with their ad hoc studies on undergraduates and MTurkers to satisfy the developed world's appetite for think pieces, YouTube videos, and pop psychology books. Meanwhile, there are classes to teach, grants to write, committees to chair, and senior theses to supervise. Is solving the WEIRD problem really worth the effort?

We think yes. Our answer is motivated not only because solving this problem is good for science, as we have asserted in the other posts in this series. Nor is our answer just motivated by ethical considerations. We think psychological science's long-term viability also may depend on it.

We make our argument in three parts. First, we argue that psychological science is a "substitutable good" in the sense that other occupations and disciplines can fulfill its functions. Second, we argue that the world's future lies with the world regions typically labeled "non-WEIRD": To secure its future, psychological science needs to compete for talent in those regions. Third, we argue that effectively competing for non-WEIRD talent means doing away with the non-WEIRD label and considering the unique history, culture, and politics of each region. We close with some reflections on whether psychological science, as it's currently constituted, is good for society and for researchers outside of the developed world.

Psychological science is a substitutable good

Economics has a concept called "<u>substitutability</u>." Two goods are substitutable if they fulfill a similar function for consumers. This allows consumers to select the good that brings them better utility through, for example, higher performance or lower price.

Psychological science is a substitutable good. Psychological science promises to provide insight into human psychology. Some psychological scientists also promise to use this insight to solve human problems. Yet psychological scientists are far from the only people who make these two promises. For insight into human psychology, the public can also rely on literature, spiritual leaders, internet influencers, and movies. For solutions to human problems, the public can turn to advice columns, friends and family, social workers, nurses, and self-help gurus. Even if we focus only on academic disciplines, psychological science is potentially substitutable with economics, history, sociology, neuroscience, data science, anthropology, public health, and political science.

Psychological science is, in other words, replaceable: The services it provides to the general public can in principle be provided by other sources. To keep from being replaced, psychological scientists must make the case that the insights and solutions they generate are competitive with those offered by these other sources. But given psychology's dubious replicability, excessive use of unvalidated and ad hoc measures, and overreliance on convenience samples, this is a difficult case to make even in North America and Europe. It is still more difficult to make in world regions that are both largely neglected by psychological science and funded with less expansive research budgets than are typical in North America and Europe. This is especially true in regions such as Africa, where no country dedicates 1% or more of its GDP to research and development (UNESCO, 2021). However, even in countries such as

India, which has a somewhat higher research budget than the average African country, psychological science may take a back seat to research that could support urgent governmental priorities, such as curbing India's high maternal death rate.

Here psychology's competitive disadvantage relative to its prospective replacements really comes to the fore. Because while psychological scientists continue to conduct one-off MTurk studies on esoteric topics, some of the potential substitutes for psychological scientists—say, economists—will be only too happy to evaluate the effectiveness of Indian public health initiatives for impoverished postpartum mothers (Agarwal et al., 2019), combat caste-based discrimination (Thorat & Neuman, 2012), analyze the effects of gender quotas on Indian women's leadership (Beaman et al., 2009), and guide Indian monetary policy (Patra & Kapur, 2011). If policymakers in a given country cannot see the relevance of psychological science to their priorities, they will turn to potential substitutes for which the relevance is more obvious.

The world's future is "non-WEIRD," and psychology should compete for this talent

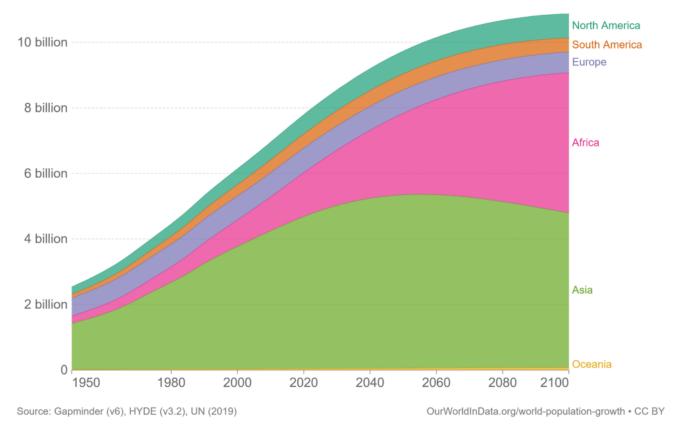
Psychology's substitutability highlights how the worth of psychological science is not inherent: It must be *substantiated* via the services the discipline provides. Among other audiences, the prospective psychological scientists of the future must be convinced of this worth. Most of these people are in the countries typically labeled "non-WEIRD."

To see why this is the case, consider the graph from <u>Our World in Data</u> of the past, present, and future global population broken down by world region. North America and Europe currently constitute about 17% of the global population—a small fraction of the global total. By 2100, that percentage is projected to shrink to 13%, with the majority of population growth occurring in Africa.

World population by region

Projected population to 2100 is based on the UN's medium population scenario.





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Meanwhile, regions outside of North America and Europe are experiencing <u>rapid economic growth</u>, which will increase their available funds for science and innovation. If psychological science continues to show a studied disinterest in the psychological processes and problems that matter to those in the world regions experiencing the greatest growth in science, how long can it remain a viable and competitive scientific discipline?

Psychological science should be actively interested in tapping the vast reservoirs of talent outside North America and Europe—not just because doing so carries scientific benefits, and not just because it is an ethically good thing to do, but also because doing so will better secure the continued health of psychological science as a discipline.

To expand psychology research in a region, you need to know that region

If we accept that recruiting non-WEIRD researchers should be a high strategic priority, we should also recognize that non-WEIRD researchers are not a monolith. It is hard to make a compelling case to someone to join your profession when you treat them as largely interchangeable with the 86% of the world that falls in the non-WEIRD grouping.

In this sense, the WEIRD problem is not a WEIRD problem at all. It is a Kenya problem, an India problem, and a Philippines problem; a Cameroon problem, a Brazil problem, and a Colombia problem; a Vietnam problem, an Uzbekistan problem, and a Turkey problem.

Each of these countries, and the many others throughout the world, have their own histories and cultures, their own political circumstances, and their own higher education sectors. All these features interact to produce different relationships between psychology research and the general population and must be taken into account to grow psychology as a discipline.

For example, in Kenya, where one of the authors of this series (Dana Basnight-Brown) lives, psychological science barely exists as a discipline. In fact, when Dana started a lab at her local institution, she learned that it was the only lab dedicated to the study of human cognition in East Africa. Another major player in the area is the Busara Center for Behavioral Economics, a behavioral science consultancy that emerged out of a desire to create a local lab to facilitate decision-making research. Based on this local example, solving the "Kenya problem" will involve making the case to universities that psychology is a scientific discipline with the potential to add value to Kenyan higher education and national research goals; ensuring that those universities are able to recruit professors; supporting those professors as they establish their research labs; and ensuring that the research they produce is visible to important national and international audiences.

To take another example, the Philippines, where another author (Miguel Silan) lives, has a strong presence of research psychologists. Philippine research psychology is strongly influenced by the indigenous psychology research tradition (see Part 2 of this series), which emphasizes qualitative approaches, especially in research with hard-to-reach populations (e.g., Relis et al., 2016; Santos et al., 2019). In addition, the Philippine journal system is less robust than the system in the United States and Europe. For example, the country's top journal, the *Philippine Journal of Psychology*, has an inconsistent publication timetable. Other journals have small readerships, which incentivizes local researchers to publish in non-Philippine journals with larger international audiences. Furthermore, the reforms developed in psychology's credibility revolution have not gained much traction, either in journals or in academic departments, and the Philippine research scene as a whole does not have a clear set of shared research priorities. Solving problems related to the low presence of Philippine researchers on the global scientific stage is complex and will likely require a multilevel intervention targeting infrastructure, Philippine and non-Philippine academic institutions such as funders and scientific journals, and pedagogy within academic departments.

As these examples illustrate, the state of psychology varies tremendously across Kenya and the Philippines, and across countries more generally. Beyond affecting the local infrastructure and scientific institutions, this variability also affects the relevance of psychological science to local conditions. If psychological science wishes to make the case that it is relevant to these different populations, it may need to grow beyond the topics that currently dominate its journal space.

In some regions, relevance is even enshrined by the decision-making institutions that determine whether projects take place. In East Africa, for example, many ethics boards and funders approve proposals based on how they will impact local communities, with less emphasis on gaining knowledge just for knowledge's sake. If psychological science can demonstrate that it is relevant to making progress on broad human development targets such as the United Nations' <u>Sustainable Development Goals</u>, the

discipline may find itself on more competitive footing in East Africa relative to other disciplines. Psychological science has the potential to assist in reaching these targets; good health and well-being is one of the Sustainable Development Goals, and psychological processes are integral to good health and well-being (<u>Lund et al., 2018</u>). To demonstrate its relevance to East Africa, psychological science need only demonstrate its relevance to concerns such as these.

Conclusion

Despite the urgency of the problems relating to psychology's lack of national and cultural diversity, the progress toward solving them has been glacial (Arnett, 2008; Rad et al., 2018; Thalmayer et al., 2020). Given changing global demographics, we think these problems rise to the level of existential threats. North American and European researchers need to acknowledge that increasing national diversity is worth their time, as the "dominance of one culture of knowledge" compromises the advancement of the whole planet (Auerbach, 2021). In the same vein, responsibility for advancing these goals also lies outside of North American and European contexts too, and local governments in many developing research societies will need to invest in their local research cultures with stronger budgets, less bureaucracy, and more emphasis on rigor. Finally, given the diversity in research questions and priorities across different countries, fully addressing these problems will require assessing and understanding the state of psychological science on a region-by-region basis rather than treating all regions outside North America and Europe as a monolith.

Addressing these problems may also require a re-examination of what psychology is for. Psychological science promises to give insight into human psychology, yet human psychology likely differs, perhaps substantially, across world regions. Psychological science also promises to use its insights to solve human problems, yet the specific problems that humans face vary substantially according to varying economic, social, historical, and political circumstances throughout the world. A psychological science that lives up to its promises should recognize these forms of variability.

When psychological scientists discuss diversity issues in the discipline, they often assume that psychological science is a gift that is either graciously dispensed to or viciously withheld from those who wish to enter the discipline. This outlook is mistaken. We should not assume that academic psychology as it is currently constituted is a good place for the many brilliant prospective scholars who are scattered throughout the globe. Nor should we assume that *society* would be better off with more psychological scientists of the type that our discipline currently produces. Yet we have a chance to improve the discipline and thereby substantiate our value, both to the many different societies on Earth and to the brilliant prospective scientists we may have the opportunity to recruit. A psychological science that conclusively substantiates its value will be better and stronger than the one in which we work today.

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